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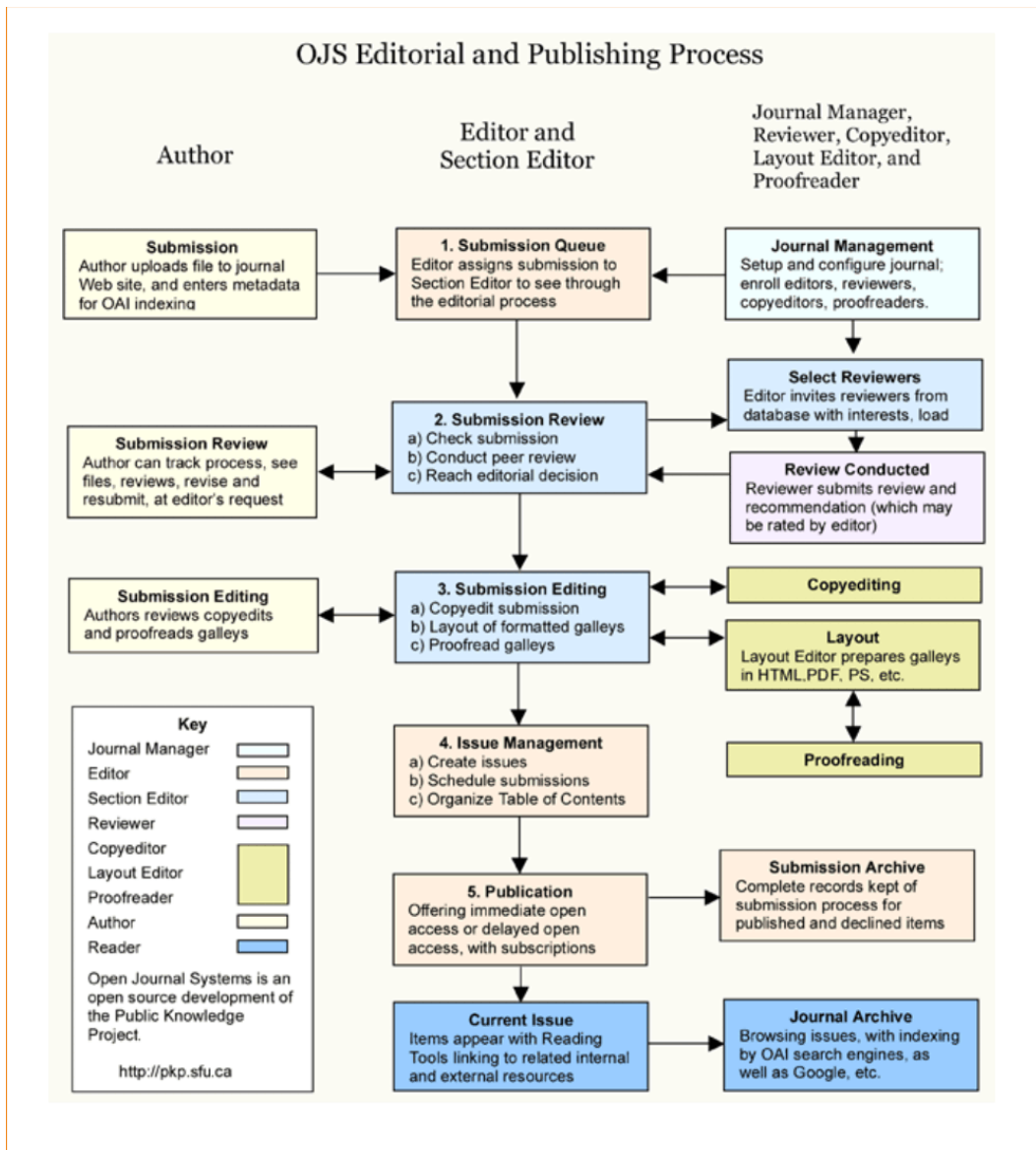
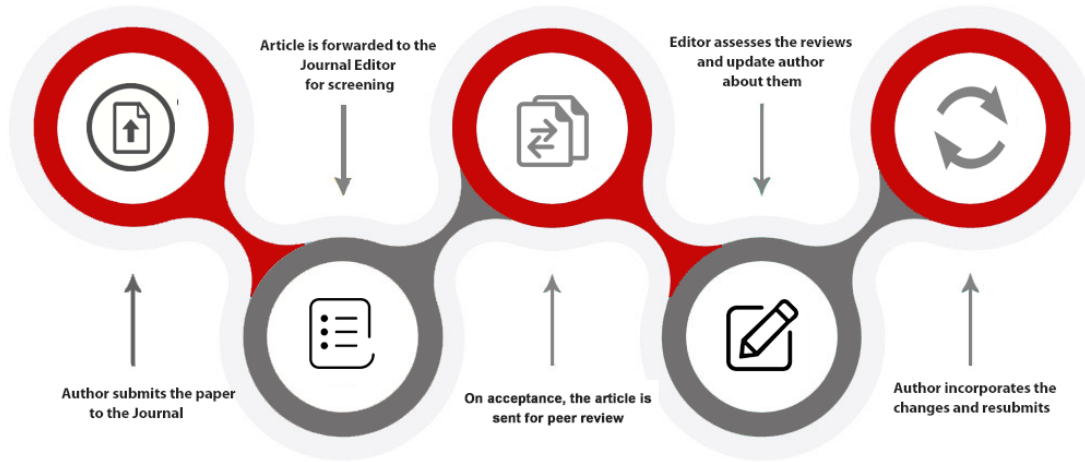
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# A Systematic Review of Challenges Experienced by Cross Border Investments in Developing Countries. A Case of Multinational Companies Expanding into the African Region E

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## ABSTRACT

**Purpose:** This paper provides a systematic review of challenges faced by multinational companies in developing countries, in particular the African region.

**Design/methodology/approach:** This paper review relevant literature aimed at addressing the research question: “What are the challenges faced by cross border investments as they expand into Africa? The paper discusses the findings and proposes various recommendations to the challenges with the aim of improving the investment environment in developing countries to boost economic activity.

**Findings:** Major challenges identified to be impacting cross border investments in developing countries are Political environment, regulatory environment, diversity and multicultural challenges, Leadership, Governance and Economic environment. For the purposes of literature review, the term cross border investments may be interchanged with Multinational Companies. The paper concludes by highlighting areas for future research.

**Paper type:** Review Paper

**Keyword:** Cross Border Investments, Challenges, Developing Countries

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## I. INTRODUCTION

Many companies are diversifying their businesses by expanding into foreign markets. This has resulted in significant increase in capital flow across borders and uplift in regional and international trade. Multinationals and regional companies face an array of challenges when they want to expand into other territories. This is negatively impacting the potential investments in most developing countries and also resulted in very high cost of capital charges in the event that capital is deployed. The aim of this research paper is to focus on the challenges being faced by these companies and also having deep insight into those companies that have failed or lost capital through regional expansion. The intention of this paper is to have a clear understanding of the African investment environment and be able to come up with a model that positions Africa as a safe investment destination.

In recent decades, cross-border money flows have significantly increased in size and significance. Foreign investment is a substantial source of funding for emerging economies and accounts for a sizeable share of the global GDP in many nations (Lane and Milesi-Ferretti, 2007). Numerous researchers have examined various drivers of bilateral capital flows, ranging from macroeconomic conditions and geographic proximity to institutional quality.

While all investments are exposed to political uncertainty, foreign investment is burdened with additional layers of rules and regulations associated with national boundaries such as capital controls and differential tax treatments. Furthermore, foreign investments are subject to expropriation risk, culture shocks and governance challenges.



## **A. Literature Review**

### **1. Political Challenges**

In terms of conflict, courts in destination countries may be biased in favour of native companies and investors (Bhattacharya et al., 2007). Since the foreign investor has little protection from the legal and political institutions of the host nation, Dixit (2011) emphasizes that cross-border investment is more vulnerable to the political climate than domestic investment. FDI is thought to be the form of cross-border capital flow that is most susceptible to political instability and institutional changes. According to Stokey (2016), businesses adopt a wait-and-see strategy when tax policy is in flux but is expected to be clarified soon. Businesses postpone irreversible investment until the ambiguity is cleared up, and then they proceed with the postponed initiatives, sparking a brief increase in investment.

Rodrik (1991) simulates the decisions made by private foreign investors in the context of political unpredictability, whereby foreign investors delay making investments until a significant level of ambiguity over the outcome of political reform is cleared up. Political leaders' choices can have an impact on a variety of issues, including taxation, labour regulations, raw material costs, transportation infrastructure, educational systems, and many more.

### **2. Diversity and Multicultural Challenges**

Other equally significant obstacles to cross-border investment include the capacity to adapt to cultural variations, standards, and practices, Sauvart, et al (2009).

### **3. Varied Demographics**

MNCs frequently make the serious error of assuming that African consumers are uniformly homogeneous, Cui (1999). Regional differences in consumer preferences exist even within the same nation. Local expertise is necessary for cross-border investments to succeed in the market, but it can be difficult to acquire, particularly if the company is run by an expat.

It can be difficult for an MNC to open offices all over the region Sungmala & Verawat (2021). In order to prevent offense and promote harmonious teamwork, they must strike a balance between allowing employees to express their opinions and educating everyone about cultural diversity.

### **4. Localizing Company Culture**

French employees were perplexed by Google's emphasis on positive comments when the business first opened headquarters in France Meyer (2015). That was because Google's "American" organizational culture emphasizes providing positive feedback quite regularly, in contrast to the French culture, which values criticism more than acknowledgment. In most cases, the terms "localization" and "globalization" are used to describe the process of tailoring a product to the market in which it is sold, respectively. These ideas also apply to organizational culture, Meyer (2015). Leaders should be encouraged to localize that culture where appropriate, even while multinationals have a broad global culture that embraces their principles.

### **5. Language Barriers**

The languages used in the nations you want to expand into while conducting business internationally are crucial to take into account, Zander et al (2012). Does the messaging for your product translate well into another language? This can be a major setback for a company as it tries to position its products in the market. One example of a product that was "lost in translation" is Mercedes-Benz, a high-end automobile manufacturer, Chiang & Mi, (2009). The business picked the moniker Bensi, which is Mandarin Chinese for "Benz," when it entered the Chinese market. Mandarin Chinese translation of the moniker is "rush to death," which was not the image Mercedes-Benz wanted to make on its new audience. The business swiftly changed its name to Benchi, which means "run quickly, speed, or gallop," in Chinese, Catherine Cote (2020).

### **6. Financial and Economic Challenges**

#### **a. Price Centric Customers**

According to Cant & Scheers (2012) Africans have a special, price-focused mentality that is frequently cited as one of the issues cross border investments encounters. Statistics show that Africans are more price conscious than brand loyal. Balancing cost and quality; recognizing the importance of institutions including the legal, political, and educational systems; and blending traditional local culture with contemporary global culture (Zainulbhai, 2005).

Emerging markets are characterized by high price sensitivity, regional demands, and low purchasing power Prahalad & Lieberthal, (1998). Transactional risks, income risks from operations, income risks from financing, and accounting risks resulting from changes in the rate of exchange of the local currency are additional risks for

MNCs. They also face inflation threats, bank instability, and legal exposures, Prahalad & Lieberthal, (1998). Currencies are different from one country to the other and exchange rates also do differ from one nation to another.

### **b. Leadership and Human Capital Challenges**

Given Africa's talent pool and the resources accessible to cross border investments, Meyer & Xin (2018) one would think hiring new employees would be simple, but in fact, hiring new employees remains one of the difficulties foreign businesses in Africa confront. First of all, the major global corporations are competing with one another to hire the best candidates. Secondly, the crème of Africa's best institutes is no longer satisfied with working for a brand, they want to develop their own. Research has shown that national values and conventions typically take precedence over organizational procedures when analyzing the relationship between a company's culture and those of its country markets, Meyer & Xin (2018). This has a big impact on how motivated individuals are at work, and as a result, leaders encounter opposition when implementing company-wide initiatives rather than obtaining local support.

### **c. Managing Global Teams**

Managing personnel who are located all over the world is another difficulty faced by multinational corporations, Zander (2012). It can be challenging to take into consideration time zones, language difficulties, cultural variations, and various levels of technology access and dependency while attempting to work as a team.

In terms of organisation structure, for example, Asian managers may be more directive to their subordinates, with the latter possessing a lower degree of expectation when it comes to flexibility to pursue directions on their own volition, Cote (2020). Conversely, in the West, employees are entrusted with greater flexibility to make independent choices but may tend to be more focused on personal achievement than devotion to their bosses. The way one's message is received by international co-workers may also vary when it comes to communication. In order to ensure that the content is understood as intended while presenting across cultures, it is crucial to modify the delivery style, Cote (2020).

### **d. Cognitive bias**

Although avoiding biases when working with, managing, or selling in foreign nations may be particularly challenging, it is crucial to be aware of these tendencies and steer clear of them wherever feasible, Cote (2020). Also, when entering Asian markets, miscommunication and other difficulties can result from the East and Anglo-Saxon cultures' various cognitive orientations, Cote (2020). Although these differences may result in more serious disputes, they also give rise to a wider range of options and viewpoints.

### **e. Governance Challenges**

Globalization may be a reality, but it is still extremely unstable, one of the most significant difficulties faced by governments and corporate leaders alike is bridging the gaps in global governance frameworks and integrating global market forces into common ideals and institutionalized practices Kell & Ruggie, (1999). Industrial infrastructure is ineffective, there is no protection for intellectual property rights, there are high tariffs, expensive bureaucracy, ambiguous rules and regulations, monopolistic practices, control over distribution systems, unreliable and subpar suppliers, and there is general industrial manipulation, Gutierrez, Spencer & Zhu, (2012).

The business climate in emerging nations is fraught with hazards of various kinds, including bribery, corruption, facilitation fees, improper gratuities, and gift-giving. In the case of emerging markets, other behaviours such commercial bribery, vendor collusion, conflicts of interest, asset misappropriation, and fake financial reporting have been recorded, Boets, (2008).

### **f. Regulatory Challenges**

Other significant problems in the emerging markets include the lack of specialized intermediaries, a regulatory framework, and means for enforcing contracts. Khanna, Palepu & Sinha, (2005). Even though this model significantly expands the pool of possible clients, it also necessitates those businesses are familiar with local customs and regulatory obligations. Various countries have differing rules regarding competitiveness, environmental resources, and human rights, which could result in either more profits or bigger problems, Backer (2015).

Repatriation of capital, income, and dividends is another issue for MNCs, assert Moosa and Kardak (2006). Around 50% of IMF members have implemented limitations during the past ten years, blocking remittances from multinational corporations. These limitations sometimes take the form of temporarily preventing subsidiaries from sending royalties, fees, and/or profit back to their parent company's headquarters. Survey results and actual evidence point to how these constraints impact cross border investments. One of the top three variables influencing decisions to make direct investments is repatriation limits, according to Moosa and Kardak's (2006) study of 300 MNCs.

**g. Market entry and positioning strategy**

According to Zainulbhai (2005), other significant challenges MNCs in developing countries face include appropriate market segmentation, dealing with the low purchasing power of the majority of the market, and establishing successful marketing techniques to use in various segments of the changing society.

Guarino (2010) argues that military coups, hyperinflation, and debilitating foreign debt were all fairly typical in emerging countries not too long ago. When emerging markets develop, common hazards include contract non-compliance, intellectual property theft, violation of rules and regulations, product counterfeiting, and gray marketing of high-margin or high-value goods, Boets (2008).

## II. METHODS

The perusal of papers used for this systematic review was done between January 2023 and March 2023. The following sources were used to select papers and examine the relevant references that are consistent with the problem statement, namely: Science Direct, Economic Literature (Econlit), Google Scholar, Research Papers in Economics (RePEc) and the mainstream search engine of Google.

## III. RESULTS AND DISCUSSION

Good ideas fail at times, as history has demonstrated, so firms must exercise extra caution when venturing into uncharted seas.

### 1. Political and Regulatory Challenges

In recent years, multinational companies have been criticized. Over Years They have begun to participate with the internal political relations of the countries in which they work in order to protect their rights. Multinational businesses are willing to invest every amount, Stokey (2016) and pay for the bribe to preserve their rights. These allegations have resulted in stringent laws and regulations being enforced on cross border investments.

Regulation is also tightened on cross border investments as these companies are generally accused for avoidance of taxation. In countries with the lowest tax rate, several multinationals set up businesses. They funnel benefit into the countries with the lowest tax rates for companies.

Multinational corporations are usually vertically integrated, and they have been accused of transfer pricing challenges. Companies set prices arbitrarily to have to pay fewer taxes in host country, Barker (2015). To reflect smaller profits made in Africa, they intentionally raise the transfer prices for intermediate products (i.e., components) manufactured in their parent country or by their foreign affiliates. They are successful in avoiding paying corporate income tax as a result.

### 2. Culture and Diversity

Depending on complexity of the job and specialty knowledge required, companies should give preference to local leadership instead of expats in order to align company culture and host country culture. These individuals are more knowledgeable about what it takes to be successful in their market and are familiar with both the market dynamics and the cultural makeup of the nation.

### 3. Leadership and Human resources

Soft skill development is very essential in the success of cross border investments. Leaders should spend more time aligning the company culture and the cultures of their personnel. Most companies in Africa that have seconded expats to lead their new foreign investments have, in some instances, struggled to instil a winning culture within these companies.

The respect and emotional intelligence required to conduct business successfully can be projected by demonstrating that you have taken the time to understand their cultures when managing teams in foreign offices.

### 4. Financial and Economic Challenges

At times cross border companies do not give themselves time to learn about the currency exchange rates between their home nation and the countries with which they intend to conduct business. On pricing, some MNCs adopt their home nation pricing strategy which may result in them being uncompetitive in host countries.

It's also critical to keep an eye on inflation rates, which can be volatile and catastrophic to the companies' international investments. The cost of materials and labour can be affected by the inflation rates that differ between nations and may result in the business becoming unsustainable.

Understanding and keeping an eye on these two variables might help businesses gain important information about the future market worth of the products they sell.

## IV. CONCLUSION

### A. Recommendations

Given the variety and complexity of the risks faced by cross border investments in emerging markets, Boets (2008) contends that establishing a risk culture, properly aligning organizational structure and risk management procedures, and improving communications can build a solid foundation for better risk management in any market. MNCs have the following options for managing risks:

providing host customers with excellent products and services at fair prices; investing in regional markets, collaborating with the local government, advocacy organizations, and corporate players.

Management Challenge: It can be challenging to run a business successfully in a developing market for a number of reasons. According to Boets (2008) the general management challenges faced by cross border investments fall into three categories:

1. The management principles that the MNCs has adopted, such as choosing to hire managers from one's own nation rather than the host nation or other countries.
2. An organizational structure with mechanisms for operational control, such as how the parent company and its subsidiaries are related and how decision-making authority is distributed.
3. Controlling corporate culture (i.e., home country versus host country management techniques, styles, and work culture). It involves either imposing one's own culture on that of the host country, accepting local culture, or fusing the two together. It's also quite important to look at the languages that the team members of your organization who work in overseas offices speak. Again, using interpreters can help make sure that your business continues to run smoothly.

To build and maintain a strong working relationship, encourage regular check-ins with your international staff, preferably via video conferencing software so you can speak in real time. According to Gallup research, employees who routinely check in with their superiors are three times more likely to be engaged at work than those who don't.

Overall, cross border investments should invest in feasibility studies to fully understand their targeted territories. They should engage local consultancies who have full understanding of the macro-economic environment and the targeted industry.

For future studies, I recommend employing primary research data collection to gather feedback from those companies that have gone regional. This data gathering will bring a better understanding on the market entry and positioning strategies, challenges encountered and how they were resolved.

This paper examines challenges that are faced by cross border investments in developing countries. The results from the systematic literature review shows that there are various challenges, ranging from macro-economic challenges, industry challenges and firm specific challenges. It is of paramount importance for these firms to embark on thorough market research to have a deep understanding of the targeted market before deploying resources. More success stories of cross border investments will result in more companies pursuing regional and international investments resulting in more capital flow, increased economic activity and improved livelihood.

## REFERENCES

- Backer, L. C. (2015). Regulating multinational corporations: Trends, challenges, and opportunities. *Brown J. World Aff*, 22(1), 153–173.
- Bass, A. E., & Chakrabarty, S. (2014). Resource security: Competition for global resources, strategic intent, and governments as owners. *Journal Of International Business Studies*, 45, 961-979.
- Cahen, F. R. (2015). Internationalization of state-owned enterprises through foreign direct investment. *Revista de administração de empresas*, 55, 645-659.
- Cant, M., & Scheers, L. V. (2012, January). Identifying the correlation between the gender and knowledge of the South African consumer in the selection of grocery products. In *2nd International Conference on Economics, Trade and Development* (Vol. 36).
- Chiang, S. Y., & Mi, H. (2009). Glocalization through Global Brand Transposition. *Imagining Globalization: Language, Identities, and Boundaries*, 45-59.

- Choudhury, P., & Khanna, T. (2018). *Toward resource independence—Why state-owned entities become multinationals: An empirical study of India's public R&D laboratories* (pp. 145-173). Springer International Publishing.
- Christiansen, H., & Kim, Y. (2014). State-invested enterprises in the global marketplace: Implications for a level playing field.
- Cote, C. (2020). 5 Common challenges of international business you should consider. *Harvard Business School Online*, available at: <https://online.hbs.edu/blog/post/challenges-of-internationalbusiness> (accessed 17th March 2022).
- Cuervo-Cazurra, A., Inkpen, A., Musacchio, A., & Ramaswamy, K. (2014). Governments as owners: State-owned multinational companies. *Journal of international business studies*, 45, 919-942.
- Cui, G. (2014). Segmenting China's consumer market: A hybrid approach. In *Consumer Behavior in Asia* (pp. 55-76). Routledge.
- Duanmu, J. L. (2014). State-owned MNCs and host country expropriation risk: The role of home state soft power and economic gunboat diplomacy. *Journal of International Business Studies*, 45, 1044-1060.
- Estrin, S., Meyer, K., Nielsen, B., & Nielsen, S. (2012). The internationalization of state owned enterprises: The impact of political economy and institutions. *London Business School*.
- Goldstein, A. (2009). New multinationals from emerging Asia: the case of national oil companies. *Asian Development Review*, 26(2), 26.
- Gouri, G. (1996). Privatisation and public sector enterprises in India: Analysis of impact of a non-policy. *Economic and Political Weekly*, M63-M74.
- Gupta, N. (2005). Partial privatization and firm performance. *The Journal of Finance*, 60(2), 987-1015.
- Lane, P. R., & Milesi-Ferretti, G. M. (2007). The external wealth of nations mark II: Revised and extended estimates of foreign assets and liabilities, 1970–2004. *Journal of international Economics*, 73(2), 223-250.
- Li, M. H., Cui, L., & Lu, J. (2018). Varieties in state capitalism: Outward FDI strategies of central and local state-owned enterprises from emerging economy countries. *State-Owned Multinationals: Governments in Global Business*, 175-210.
- Meyer, K. E., & Xin, K. R. (2018). Managing talent in emerging economy multinationals: Integrating strategic management and human resource management. *The International Journal of Human Resource Management*, 29(11), 1827-1855.
- Meyer, E. (2015). When culture doesn't translate. *Harvard Business Review*, 93(10), 66-72.
- Moosa, I. A., & Cardak, B. A. (2006). The determinants of foreign direct investment: An extreme bounds analysis. *Journal of Multinational financial management*, 16(2), 199-211.
- Ramamurti, R. (1987). State-owned enterprises in high technology industries: Studies in India and Brazil. (No Title).
- Sungmala, N., & Verawat, A. (2021). The impact of socio-demographic factors on employee engagement at multinational companies in Thailand. *Journal of Multidisciplinary in Humanities and Social Sciences*, 4(2), 694-711.
- Vernon, R. (1979). The international aspects of state-owned enterprises. *Journal of International Business Studies*, 10, 7-14.
- Zander, L., Mockaitis, A. I., & Butler, C. L. (2012). Leading global teams. *Journal of World Business*, 47(4), 592-603.

# Overview of Women Entrepreneurship in The Eastern Cape Province of South Africa: A Literature Review

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## ABSTRACT

**Purpose:** This article aims to review prior research on women entrepreneurship and recommend/propose future research opportunities for South Africa's women's entrepreneurship research agenda.

**Design/methodology/approach:** A literature review technique was used, and all studies between 2002 and 2022 that addressed the issues pertaining to women entrepreneurs in the Eastern Cape were searched and analysed. To successfully do this, a review of literature consisting of 14 studies was undertaken.

**Findings:** The literature review pertaining to women entrepreneurship in the Eastern Cape Province yielded five ensuing themes: gender bias within the entrepreneurial discourse, motivation for women entrepreneurs, contribution of women entrepreneurs, barriers facing women entrepreneurs, and support required by women entrepreneurs.

**Research limitations/implications:** Women entrepreneurship research in South Africa is still growing, which presented a limit to the number of studies that were used in carrying out the review.

**Practical implications:** The study encourages women business owners to develop their professional skills and familiarise themselves with entrepreneurial capabilities that have a positive impact on their productivity.

**Paper type:** Literature review

**Keyword:** Women entrepreneurs, Women entrepreneurship, Eastern Cape Province, South Africa, Literature review

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## I. INTRODUCTION

The growth of women entrepreneurs has been hailed as the most significant economic and social development globally (Henning & Akoob, 2017). Over the past 30 years, women's businesses have grown quickly, and today they represent a very visible sector of the economy, offering a wide range of goods and services (Ngek, 2018). Women entrepreneurs boost a nation's economy by an exponential amount (Welsh et al., 2016). Given the surge in women-headed families throughout the developing world and their significant contributions to the welfare of their households and communities, Visser (2020) argues that women entrepreneurs in developing country contexts are attracting greater scholarly attention. They are effectively exploiting a variety of chances and possibilities to achieve their personal as well as business goals and objectives. Previous studies showed that women business owners make significant contributions to the economic, social, and political development of many nations (Afshan et al., 2021; Ngek, 2018). Furthermore, Christensen (2023) reported that, in Africa, women entrepreneurship makes up 58% of self-employment and contribute about 13% of the continent's GDP. The Research National Foundation for Business Owners' Director noted the following (Jalbert, 2000:14):

*'Entrepreneurship offers tremendous opportunities for women across the world by opening doors to greater self-sufficiency, self-esteem, education, and growth – not only for the women themselves but also for their families and their employees. And women are changing the face of business ownership internationally; between one-quarter and one-third of the world's businesses are owned by women. As their numbers grow and as their businesses prosper, they will change the way the world does business.'*

As such, most developing nations have made women's entrepreneurship (WE) development a top priority on their development agendas, and its advancement is inextricably tied to positive developmental outcomes (Visser, 2020). Any nation's advancement depends on the rise of women entrepreneurs, and this is one of the ways to realise economic growth that is sustainable (Derera, Croce, Phiri & O'Neill, 2020). If a nation intends to compete successfully on the world stage, it must do this. In accordance with Storey and Greene (2010), encouraging more women to actively participate in entrepreneurship is the single most important step a nation can take to boost the rate of entrepreneurial activity. Women's status in society, as well as their contributions to national and local development, are improved as a result (Osirim, 2001).

In social systems that prioritise men, women have long been marginalised (Henning & Akoob, 2017). But since the 1970s, a new perspective that is growing slowly but increasingly quickly suggests that women may be able to revive the stagnant global economic growth (McAdam, 2013). Numerous renowned academics in this discipline have been researching entrepreneurship for decades. However, the first endorsed study on women entrepreneurship was not released until 1976 by Eleanor Schwartz under the title "Entrepreneurship: A New Women Frontier" (Meyer, 2018). This created new avenues for research into women entrepreneurship and its promotion. Despite this, there is still a lack of data and information pertaining to the significant role that women play in the entrepreneurial sector in South Africa. Much of the data available simply discusses corporate development as a whole and makes no mention of gender (Meyer & Synodinos, 2019). Meyer (2018: 159) argues that, "because gender studies have become more advanced and influential over the past few decades, the importance of studying women entrepreneurship development as a separate research field is increasing".

Due to women's formal entry into entrepreneurship in recent years and the entrepreneurship literature historically being based on men, there is currently little research on women entrepreneurship as a distinct focus of study in South Africa. However, leading specialists in the field have already discovered this gap in the early 2000s (c.f., Botha, Nieman & Van Vuuren, 2006; Ojong, 2005; O'Neill & Viljoen, 2001; Van der Merwe & Nieman, 2003) as they all discovered that there is a significant disparity in the volume of research on women entrepreneurship in South Africa that has been published. In this article, the researchers intend to review prior research on women entrepreneurship and contribute to the available body of literature on women entrepreneurship, particularly in the Eastern Cape Province of South Africa, between 2002 and 2022. The review was guided by the following objectives:

1. To identify emerging themes on women entrepreneurship research within the Eastern Cape context.
2. To contribute to the expansion of women entrepreneurship research in the Eastern Cape Province by recommending new avenues of future research.

Prior research in South Africa (c.f., Chinomona & Maziriri 2015; Henning & Akoob 2017; Phillips, Moos, & Nieman, 2014) has mainly focused on providing general insights into the performance of women-owned businesses. However, little attention has been given to how the geographical characteristics in which these businesses operate have an impact on women entrepreneurial development (e.g., rural vs urban). Ghouse, Durrah and McElwee (2021), as well as Makandwa, de Klerk & Saayman (2022), point out that geographical characteristics have an impact on women's aspirations to become entrepreneurs and have a more significant impact on how well women-owned small businesses perform. To the best of the researchers' knowledge, an overview of women entrepreneurship in the Eastern Cape Province, which is mostly rural has not been adequately conducted using a literature review approach. Past available literature review studies (c.f., Erwee, 1987; Ahwireng-Obeng, 1993; O'Neill & Viljoen, 2001; Halkias & Anast, 2009; Derera, 2011; Mandipaka, 2014; Rena, 2016; Irene, 2019; Swartz, Amatucci & Marks, 2019; Swartz, Scheepers & Amatucci, 2022) have mainly focused on South Africa in general.

The remainder of the article is organised as follows. The article starts by giving a general summary of the Eastern Cape economy. Second, while establishing the issue within the context of women's involvement in small businesses, the theoretical approaches to entrepreneurship discourse are explored. The methodology is then explained, and the results, which are arranged into five themes, are discussed. Finally, recommendations and suggestions are offered for further studies on women entrepreneurs.

### **A. A look into the Eastern Cape economy**

With a population of about 6, 6 million, the Eastern Cape Province is the third Province in the country by density, at 39 people per square kilometre (EC Provincial Website, 2023). The Eastern Cape Province has a mostly rural character due to the significant percentage (more than 65%) of Africans who live there (Tetana, 2016). This is also attributed to the fact that this Province now includes two of the formerly rural "TBVC states" (Transkei & Ciskei) (Robinson, 2015). While this is happening, women dominate the gender structure in Eastern Cape, making up 57% of people in the 15 to 64 age range, significantly more than the country's average of 51% (Luvalo, 2019).

As claimed by the Eastern Cape Main Budget Speech (2022), the Eastern Cape economy shrank by 1.8% in the third quarter of 2021, mirroring the 1.5% decline of the country's economy in the same period. In Q3 of 2021,

the Province also noticed a downturn in many of its economic sectors. Manufacturing fell by 4.1%, wholesale and retail trade by 6.6%, transport and communication by 2.9%, and agriculture fell by 13.4%. However, it is anticipated that the Eastern Cape's economy will expand marginally, averaging 1.8% in 2022 and 1.3% on average in 2023. (Eastern Cape Main Budget Speech, 2022). The Eastern Cape is a region that is both modern and severely underdeveloped, with a rising industrial sector. This is especially apparent in the Transkei and Ciskei, former homelands where there are a number of dualisms between a struggling sustenance agricultural sector and an established commercial farming sector (Nguza-Mduba, 2020). Although it has the potential to significantly contribute to the Province's commercial growth, the agricultural sector is not yet operating at its full potential. In the Buffalo City Municipality and, the automotive sector predominates manufacturing to such a magnitude that it may create possible vulnerability (Awoyemi, 2014).

Analysis of poverty data shows that the Eastern Cape would need at least R881.5 million per year to combat poverty, with 43% of the Province's population falling into this category (Nguza-Mduba, 2020). Despite numerous interventions, poverty in the Eastern Cape is still widespread. This is due to the Province's complete reliance on subsistence agriculture and the fact that it was founded out of old homelands with high levels of poverty. Fiseha, Kachere and Oyelana (2019), reported that in 2015, the Eastern Cape's population, which was primarily made up of rural residents, had a poverty rate of about 67 per cent. These people lack access to necessities like food, clean water, sanitation, education, healthcare, and energy (Hamann & Tuinder, 2012). Black South Africans, particularly those with the lowest levels of education, children, and households headed by women consistently experience high levels of poverty. Therefore, as a cushion against poverty within the Eastern Cape Province, there is a need for entrepreneurial activities to be put in place (Fiseha *et al.*, 2019). In particular, supporting women entrepreneurs is crucial, especially given the socio-economic situation of the Province and the fact that women constitute over half of the population (Awoyemi, 2014; Ngorora & Mago, 2018).

The lack of financial tools to support the small business sector in the Eastern Cape has been criticised for far too long (Rungani & Potgieter, 2018). The provincial government is currently developing a structure for a development fund to address this, which will have a good effect on its extra imperatives, which are poverty reduction, socio-economic development, and economic growth (Eastern Cape Main Budget Speech, 2022). Furthermore, due to the devastating consequences of COVID-19, particularly on small businesses, the Eastern Cape provincial government approved an economic rebuilding and recovery strategy with the goal of assisting small businesses in preserving jobs and enduring the COVID-19 outbreak and its aftermath (Makaula, 2021). Ngorora and Mago (2018) suggest that fostering entrepreneurship will be the most effective strategy to lower the levels of poverty observed in the Eastern Cape. Additionally, studies show that for every person helped on the path to entrepreneurship, numerous others benefit (Fiseha *et al.*, 2019). This benefits not only individuals but the Province, through a decrease in social handouts, an increase in employment, a decrease in crime, and a drop in poverty levels (Ngorora & Mago, 2018).

## **B. Entrepreneurship**

Market uncertainties are a result of the emergence of globalisation and the use of cutting-edge technology in corporate operations and management (Etim, Tengeh & Iwu, 2018). Governments all over the world are turning to this phenomenon to build their economies and create jobs since the dynamic of the marketplace implies that entrepreneurship conveys new connotations (Wube, 2010). People's decision to pursue self-employment through entrepreneurship has been supported by several arguments. These are associated with "internal locus of control, drive for independence, prospects for achievement; greater avenue for income generation; the ability to overcome challenges; the flexibility that comes with enterprise formation and greater and quality time for family" (Etim & Iwu, 2019: 4). These variables have been described as pull and push factors theoretically (Ghatak & Bhowmick, 2021; Özsungur, 2019).

Although there are several definitions of entrepreneurship, different academics have not yet come to any notable consensus (Bruyat & Julien, 2001; Venkataraman, 2019). For the purpose of this paper, the description proposed by Ronstadt (Etim & Iwu, 2019: 5) would be appropriate:

*"Entrepreneurship is the dynamic process of creating incremental wealth by individuals who assume major risks in equity, time and career commitments to providing value for products and services. The products and services may or may not be new, but value must be infused as part of the larger picture by the entrepreneur, by receiving and allocating the necessary skills and resources."*

The adoption of this criterion is justified by the setting of emerging economies and women commencing from a low capital foundation. In line with Etim and Iwu (2019), women in underdeveloped nations are typically forced into "survival-mode" businesses out of necessity; as a result, entrepreneurship is the only path to independence and wealth creation.

## **C. Women entrepreneurship**



Women creating new businesses is what is generally meant by the terms women or women's entrepreneurship. Women entrepreneurs are women in business who have successfully established, developed, and expanded a business enterprise after recognising an opportunity (Jennings & Brush, 2013). In other words, they have transformed a potential into a commercial reality using creative, pragmatic, and innovative approaches. Women entrepreneurs engage in similar activities and processes as men do. Essentially, it has to do with the identification of opportunities, the management of resources to create new initiatives, and the expansion and profitability of such ventures. Jalbert (2000:31) observed that "women entrepreneurs possess certain characteristics that promote their creativity and generate new ideas and ways of doing things. They are highly motivated and self-directed and they also have a high internal locus of control and achievement". Women business owners also attribute their success to their capacity to focus intensely.

There are a variety of push and pull factors that can motivate women to start their own enterprises, as expressed by Heilman and Chen (2003). Push factors can be described as "the more negative factors such as unemployment and retrenchment, which force people to become entrepreneurial in order to survive" (Maas & Herrington, 2006: 19). Pull factors, as considered by women, are the elements that are more supportive to entrepreneurship, such as government funding and positive role models. Only a few women are reportedly drawn to entrepreneurship by pull factors as alluded by Aliyu (2013). The rest are encouraged to commence their enterprises by push factors. As per recent studies, women can considerably contribute to the increased entrepreneurial phenomenon and economic growth (Rashid & Ratten, 2020; Thareja & Kumar, 2014). Resultantly, there is an urgent need to examine all facets of women entrepreneurship and to broaden the current theoretical conceptions.

## II. METHODS

A literature review approach was applied in this study. A literature review is a "planned technique of locating, gathering and appraising a collection of writings on a particular phenomenon to discover any interpretable patterns or trends with respect to a phenomenon" (Etim & Iwu, 2019: 3). In essence, a literature review seeks to methodically identify, assess, and combine all pertinent research on a particular subject (Booth, Sutton, Clowes & Martyn-St James, 2021). This approach will evaluate, past research critically, rigorously, and transparently to acquire insight into women entrepreneurship in the Eastern Cape Province.

The methodological practices of management and business scholars (c.f., Etim & Iwu, 2019; Hung, 2006; Linnenluecke, 2017) who view the literature review method as a crucial route for locating high-quality reference materials that aid in understanding and interpreting an existing phenomenon support the researchers' decision to use the literature review approach. Although Podsakoff, MacKenzie, Bachrach and Podsakoff (2005) believed that only journal articles are considered genuine scientific works, in order to conduct a fair and accurate analysis, this review is not limited to only journal articles as it integrated theses and abstracts as well. Additionally, as women entrepreneurship research, particularly within the South African context, is still evolving, the researchers were induced to include any Google Scholar source that judiciously addresses the topic as recommended by Eriksson and Lindström (2007) as well as Etim and Iwu (2019).

The current review started by compiling a set of documents between the years of 2002 and 2022 utilising the Google Scholar search engine, specifically articles, theses, and abstracts. In searching the documents, the following keywords were used: "*women entrepreneurs, women entrepreneurs, women small business owners, women enterprises, Eastern Cape Province and South Africa*" Thereafter, the researchers characterised the documents in line with the study's focus, i.e., women entrepreneurship in the Eastern Cape Province. Initial retrieval yielded a total of 23 studies. Only 14 studies (see Table 2) were determined to be appropriate for the study after an examination of the abstracts and titles of the studies that were retrieved. The 14 studies were then examined using content analysis to identify the Eastern Cape Province's women entrepreneurs' study themes.

## III. RESULTS AND DISCUSSION

The examination of the 14 documents yielded five themes (see Table 3). The ensuing themes were found: Gender bias within the entrepreneurial discourse, Motivation for women entrepreneurs, Contribution of Women entrepreneurs, Barriers facing women entrepreneurs, and Support required by women entrepreneurs. The themes were examined considering the greater body of research on women's entrepreneurship in the Eastern Cape Province and generally.

*Table 1. Themes identified from literature review analysis*

<i>Source</i>	<i>Themes</i>				
	<i>Gender bias within the entrepreneurial discourse</i> (1)	<i>Motivation for women entrepreneurs</i> (2)	<i>Contribution of Women entrepreneurs</i> (3)	<i>Barriers facing women entrepreneurs</i> (4)	<i>Support required by women entrepreneurs</i> (5)
<i>Sokabo (2007)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>
<i>Buyambo (2012)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>
<i>Mbaco (2012)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	-
<i>Mandipaka (2014)</i>	<i>x</i>	-	<i>x</i>	<i>x</i>	<i>x</i>
<i>Awoyemi (2014)</i>		<i>x</i>	<i>x</i>	<i>x</i>	-
<i>Sekeleni (2014)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>
<i>Hlanyane and Acheampong (2017)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>
<i>Nomnga (2017)</i>	<i>x</i>	-	<i>x</i>	<i>x</i>	<i>x</i>
<i>Tola and Chimucheka (2018)</i>	<i>x</i>	-	<i>x</i>	<i>x</i>	<i>x</i>
<i>Mdluli (2020)</i>	<i>x</i>	-	<i>x</i>	<i>x</i>	<i>x</i>
<i>Chimucheka and Magadla (2021)</i>	<i>x</i>	-	<i>x</i>	<i>x</i>	<i>x</i>
<i>Nomnga (2021)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>
<i>Tlapana and Mngeni (2021)</i>	<i>x</i>	-	-	<i>x</i>	<i>x</i>
<i>Shava and Chinyamurindi (2022)</i>	<i>x</i>	<i>x</i>	<i>x</i>	<i>x</i>	-

Source: Own compilation

1. Theme 1: Gender bias within the entrepreneurial discourse

A 2019/2020 Global Entrepreneurship Monitor (GEM) Report claims that women could add \$28 trillion to the global GDP if given identical roles as men in the labour market (Baldegger, Gaudart & Wild, 2020). However, women need capital to start businesses, and gender inequality might be severely stopping that from happening (Kabeer, 2021; Ghaderi, Tavakoli, Bagheri & Pavee, 2023). Although it is acknowledged that the impact of

gender on entrepreneurial actions and intentions has recently been recognised as a key issue, it is still difficult for the government to develop legislation that protects women's rights in commerce and entrepreneurship (Nomnga, 2017; Swartz, Scheepers & Toefy, 2022).

As mentioned by Buyambo (2012), there has not been much done to advance women's empowerment and equality in the small business sector. In fact, research has shown that women entrepreneurs frequently focus on competitive, occasionally unprofitable, and women-dominated industries, which has a negative impact on their potential to grow in terms of employment, sales, profitability, and market share (Sapleton, 2014). In addition, Ahmad (2011) states that, compared to males, women are less likely to be involved in the development of new products and processes, their enterprises are smaller, and their entrepreneurial activity is less likely to result in the creation of new jobs. Resultantly, this mirrors broad patterns of the existing gender bias in entrepreneurship (Hlanyane & Acheampong, 2017; Nomnga, 2017; Tola & Chimucheka, 2018). On another note, a male-dominated industry creates the ideal of a perfect businesswoman, which creates a very high standard of competition for women entrepreneurs who must overcome many obstacles without becoming discouraged at the same time (Al-Qahtani, Fekih Zguir, Al-Fagih & Koç, 2022, Hebert, 2018).

The current literature revealed that women business owners were keenly conscious of the gender inequality concerns influencing the growth of entrepreneurship in the Eastern Cape Province (Awoyemi, 2014; Hlanyane & Acheampong, 2017; Sekeleni, 2014). This is due to societal beliefs which identify the role of women as being primarily domestic (Mdluli, 2020; Nomnga, 2021; Tlapana & Mngeni, 2021). Considering this, fostering women's businesses becomes crucial as it reduces women's dependency and helplessness in the Eastern Cape (Mdluli, 2020). Mbaco (2012) established that women in the Eastern Cape had dramatically different access to loans and savings through credit institutions than men, which had an impact on their demand for financial services. Literature demonstrates that women-driven entrepreneurship exhibits gender-based discrimination from an entrepreneurial standpoint (Buyambo, 2012; Mandipaka, 2014; Mbaco, 2012; Shava & Chinyamurindi, 2022; Sokabo, 2007). Therefore, to oppose gender-oppressive regimes, a collectivist strategy is required. For instance, the government and other stakeholders ought to raise public awareness of the need for gender equality in SMMEs owned equally by men and women. This will change the long-held belief that SMMEs owned by women are less significant than SMMEs owned by men (Chimucheka & Magadla, 2021). Therefore, women's economic exclusion is a problem that cannot be left up to market forces, and women entrepreneurs must take a stand and push for change.

Collective activism has been and can continue to be a potent tool for empowering women in the face of gender-oppressive systems (Parpart, 2013). For instance, as specified by a study done in the Eastern Cape Province by Mandipaka (2014), women entrepreneurs have formed women's society groups where they provide one another with mentorship programs to combat gender discrimination. Beyond South Africa, other studies have also demonstrated the importance of women society groups in driving women entrepreneurship performance, such as those conducted in India (Andriani & Kalam, 2022), Oman (Abd El Basset, Bell & Al Kharusi, 2022) and Jordan (Banihani, 2020).

## 2. Theme 2: Motivations for women entrepreneurs

Charles and Gherman (2013) stated that pull and push factors can be used to classify the causes that drive women to establish businesses. The pull or positive influences are connected to features of choice and the desire for entrepreneurial aspirations (Gódány, Machová, Mura & Zsigmond, 2021). The pull factors are linked with the "desire for independence, self-fulfilment, wealth creation, social status and power, desire for a flexible lifestyle and personal development using creative skills" (Derera *et al.*, 2020: 7). Conversely, push factors are components of necessity and are associated with strong urges that are controlled by external, unfavourable reasons (Daries, Marine-Roig, Ferrer-Rosell & Cristobal-Fransi, 2021). Examples of push factors include; "insufficient family income, dissatisfaction with a salaried job, difficulty in finding work, desire for flexible work schedules because of family responsibilities, frustration, lack of control and perceived lack of opportunity for career advancement" (Orhan & Scott, 2001: 6).

Understanding the motivational elements that drive women to start businesses is crucial since it enables one to examine various support networks for entrepreneurship (Kumar & Patrik, 2018). An individual's motivation is the process that explains their level of commitment, focus, and perseverance in pursuing a goal (Ncube & Zondo, 2018). While general motivation focuses on the effort made toward any objective, we will focus specifically on entrepreneurship in this article to reflect our unique interest in the components that encourage women to pursue entrepreneurship. When beginning a business, women are far more likely than men to be motivated by necessity globally (Solesvik, Iakovleva, & Trifilova, 2019). Given that there are fewer jobs or other possibilities for income generation in developing economies, the majority of women participate in entrepreneurial activity out of sheer necessity rather than opportunity (Derera *et al.*, 2020). In contrast to most women in developed nations, where the majority establish a business because they locate opportunities, women in emerging economies are crowded in the informal economy and control less than a quarter of formal sector firms (Kaushal, Negi & Singhal, 2014).

However, recent evidence (e.g., Adikaram & Razik, 2023; Al-Qahtani, Fekih Zguir, Al-Fagih & Koç, 2022) shows that when economies develop and thrive and job possibilities become available, the gender disparity in entrepreneurship determined by motive may eventually disappear.

Unfortunately, it can be claimed from the research on women entrepreneurs in the Eastern Cape Province that the majority of them seem to be up against push factors, including a lack of employment opportunities, a lack of education, a rise in family size, and job losses (Buyambo, 2012; Mbaco, 2012; Shava & Chinyamurindi, 2022; Sokabo, 2007;). Ngqangweni, (2007) argues that women are obliged to engage in any business activity out of necessity to support the family because employment creation in the Eastern Cape Province and the country has not kept up with population growth. Their ultimate objectives are to construct SMMEs that offer a variety of options to create employment and household income (Nomnga, 2021). For instance, an analysis of the difficulties experienced by women owners of bed and breakfasts in the Eastern Cape found that the need for money and the lack of other viable employment opportunities are what drive women to start businesses (Hlanyane & Acheampong, 2017). In other research, the primary driving forces behind women entrepreneurs were the need for financial and economic support to supplement their family's income, elevate their social position, and end unemployment (Awoyemi, 2014; Sekeleni, 2014; Jacob, Thomas & George, 2023; Banu & Baral, 2022). The income that women make from their business endeavours not only helps to support their families' needs but also boosts their self-esteem (Derera *et al.*, 2020; Chakraborty & Biswal, 2022).

### 3. Theme 3: Contribution of women entrepreneurs

In order to promote prosperity and welfare, small businesses operated by women have been identified as the latest growth drivers of economies in emerging nations (Tende, 2016; Egere, Maas & Jones, 2022). They have been cited by a range of stakeholders as a substantial “untapped source” of economic development and growth (Aladejebi, 2020; Hechavarría, Bullough, Brush & Edelman, 2019; Minniti & Naudé, 2010). As proffered by McGowan, Redeker, Cooper and Greenan (2012), despite the difficulties and hurdles, women are now an important part of entrepreneurial endeavours and can balance the needs of their families and their businesses. In particular, women's entrepreneurship development aids women-owned enterprises in generating income that may subsequently be used to assist their households and enhance family welfare outcomes (Ahmad, 2011; Awoyemi, 2014; Buyambo, 2012; Mbaco, 2012; Mandipaka, 2014; Sekeleni, 2014; Sokabo, 2007). This income can assist women in starting and expanding their enterprises, which will enable them to provide jobs for others in their community.

Ivanka Trump, then senior advisor to the former President of America at GEM-2017, highlighted that “when women work, it creates a unique multiplier effect, women are more likely than men to hire other women and give them access to capital, mentorship, and network. They are more likely to reinvest their income back into families and communities” (Kumar & Patrik, 2018: 68). The rise in women entrepreneurship has a beneficial impact on the GDP and Gross National Income (GNI) of a nation (Misango & Ongiti, 2013). As per available statistics, women who are self-employed, notably in micro and small-sized firms, contribute more than 30% of the nation's GDP (Asad, Hameed, Irfan, Jiang & Naveed, 2020).

Women who launch or manage new small enterprises in the Province not only create jobs for themselves but they also create jobs for others (Hlanyane & Acheampong, 2017; Mdluli, 2020; Nomnga, 2017; Nomnga, 2021). In support, Chimucheka and Magadla (2021) proffer that women's entrepreneurship advances women's professional advancement as well as self-realisation and influences the entrepreneurial mindset of imminent generations. Whereas, Mdluli (2020) advances that women-owned businesses in the Province are increasingly acknowledged as making a significant contribution to social mobility, economic prosperity, and human development. Furthermore, from the survey carried out by Awoyemi (2014), women entrepreneurship contributes significantly to Eastern Cape's Local Economic Development (LED) and can be an additional effective means of boosting economic growth and reducing unemployment.

Pertaining to job creation, Sokabo (2007) found out that women entrepreneurship contributes immensely to the Eastern Cape's rural employment and is quickly replacing the few work options that are available. As such, women's businesses are considered essential to society's development, employment creation, and household income growth (Nomnga, 2021; Franzke, Wu, Froese & Chan, 2022). Sriram and Mersha (2010) posit that women can contribute significantly to economic stability in many nations that are struggling with low GDP generation. Furthermore, by giving women entrepreneurs opportunities, entrepreneurial thinking and entrepreneurship can easily be promoted in light of the current global economic conditions (Tlapana & Mngeni, 2021; Filimonau, Matyakubov, Matniyozov, Shaken & Mika, 2022).

### 4. Theme 4: Barriers facing women entrepreneurs

Women are establishing enterprises in historic numbers, yet they encounter numerous barriers to entrepreneurship (Hlanyane & Acheampong, 2017). The severity of the effects of these barriers on women varies. However, in underdeveloped economies such as the Eastern Cape Province, the difficulties are more severe.

Existing literature lists a few of the challenges as including; low educational background, a lack of business training, expensive business infrastructure, a strict regulatory environment, business experience, technology and domestic obligations (Chinomona & Maziriri, 2015; Gakobo, 2013; Wu, Li & Zhang, 2019). High production costs, political instability, a lack of an efficient and growing ICT infrastructure, a poor connection to support services, a disconnect between implementation and policy, as well as hostile environments are further challenges (Derera *et al.*, 2020).

Despite the contribution that women entrepreneurs make to economic growth, a number of barriers have been recognised as problems for women entrepreneurs in the literature. These barriers also affect women entrepreneurs in South Africa and the Eastern Cape Province (Awoyemi, 2014; Muchineripi, Chinyamurindi & Chimucheka, 2019). Lack of funding has been identified in the literature on women's entrepreneurship in the Eastern Cape Province as a significant barrier to the expansion and development of women's businesses (Buyambo, 2012; Mbaco, 2012; Nomnga, 2017; Nomnga, 2021; Tola & Chimucheka, 2018; Shava & Chinyamurindi, 2022; Tlapana & Mngeni, 2021). Research has also shown that women business owners in the Province have relatively low turnover, which is mainly caused by poor access to finance. Additionally, the Eastern Cape is one of the South African Provinces with a persistent build-up of socio-economic disadvantage (Baiyegunhi & Fraser, 2011; Olawuyi & Mushunje, 2023). As a result of apartheid, the Province still has a structurally imbalanced economy (Awoyemi, 2014).

The views of families and communities that show a general lack of respect for women as business owners also emerged as a socio-cultural barrier that negatively affects women's entrepreneurship in the Province. Diko (2014) states that The Eastern Cape Province still displays features of being a largely patriarchal society, which in certain instances has resulted in circumstances where women's involvement in business has been undermined because of a culture that favours men. For instance, women struggle to combine domestic and professional responsibilities, making it harder for them to effectively balance between the two roles (Hlanyane & Acheampong, 2017; Mandipaka, 2014; Sekeleni, 2014; Sokabo, 2007). Luvalo (2019) argues that even though South Africa has a constitution that is among the world's most progressive and democratic, patriarchy is a problem that is deeply ingrained not only in the Eastern Cape Province but also in the country.

##### 5. Theme 5: Support required by women entrepreneurs

A study by Mdluli (2020) established that it is crucial to determine whether the support promised by the government to small businesses is sufficient, given the ineffective support services available for women entrepreneurs who own bed and breakfast establishments in the Eastern Cape, particularly in Grahamstown. To increase the resources and competencies of women entrepreneurs, support services and functional systems must be in place so that they can maximise their competitive advantage for their businesses to remain sustainable (Tola & Chimucheka, 2018; Setyaningrum & Muafi, 2022). However, concern should be expressed since it appears that the support services are not adequately fulfilling their mandate because they are not appearing to be reaching women small business owners in the way they should.

Based on the extent literature pertaining to the Eastern Cape Province (Chimucheka & Magadla, 2021; Mdluli, 2020; Nomnga, 2021; Tlapana & Mngeni, 2021; Tola & Chimucheka, 2018), there is evidence that women entrepreneurs need assistance in the crucial areas of access to capital and business skills. Study findings suggest that women enterprises would benefit from training that stresses developing business skills in a competitive environment, the capacity to analyse an industry for possible market possibilities and niches, as well as the capacity to utilise information to strengthen an organisation's competitive edge. Mandipaka (2014) also avers that training and development could help women business owners acquire management abilities, such as those in creating business strategies, marketing, and financial management, which could also close the gap in the discrimination pertaining to financial institutions' awarding of credit. Training may also play a significant role in the development of entrepreneurial skills and has a good impact on the success of women-owned SMMes (Chimucheka & Magadla, 2021). As such, women entrepreneurs should always take advantage of skills development support programmes offered to enhance their entrepreneurial competencies (Tola & Chimucheka, 2018; Lingappa, Rodrigues & Shetty, 2023).

As earlier indicated, one of the biggest challenges for women business owners in the Eastern Cape Province and South Africa at large is the gender gap in funding. As such, the need for financial support for Eastern Cape's women-owned small businesses was noted as of essence in literature (Buyambo, 2012; Hlanyane & Acheampong, 2017; Mandipaka, 2014; Nomnga, 2017; Sekeleni, 2014; Sokabo, 2007). Other support necessary for women entrepreneurs include; business counselling, pro-women entrepreneurship policies, legal support and support in terms of marketing and promotion of business. Hlanyane and Acheampong (2017) caution that, the economic rift that currently occurs between the Province and other Provinces like the Western Cape and Gauteng, where standards of living are significantly better, will take the Eastern Cape some time to narrow if inadequate support is not given to women-owned businesses.

#### IV. CONCLUSION

In order to understand the state of the field, literature reviews have been recommended as the number of studies on women entrepreneurs has steadily increased (Vossenbergh, 2013; Yadav & Unni, 2016). One of the main tenets of this article is that, even though our understanding of women's entrepreneurship has grown significantly, not enough research has been done on women entrepreneurs operating in South Africa's poor provinces. There is currently very little literature on women-driven entrepreneurship, and the Eastern Cape Province is no exception (Hlanyane & Acheampong, 2017; Sekeleni, 2014). Resultantly, this review sought to organise and synthesise previous work and pinpoint areas that should be addressed, with a special emphasis on the Eastern Cape Province. The review yielded five ensuing themes relating to women entrepreneurship in the Eastern Cape province: Gender bias within the entrepreneurial discourse, Motivation for women entrepreneurs, Contribution of Women entrepreneurs, Barriers facing women entrepreneurs, and Support required by women entrepreneurs. As such, the study advocates for women's growth and development as entrepreneurs must be fostered and promoted for them to take part in the development of entrepreneurship; otherwise, this would remain a far-fetched dream.

Considering the results of the literature review, it is apparent that In the Eastern Cape Province, assisting women entrepreneurs is essential for social and economic reasons in addition to addressing gender bias. In actuality, the advancement of any country's economy and society depends also on the success of women-owned enterprises (Derera *et al.*, 2020). Therefore, both the provincial and national governments of South Africa should discover ways to unleash the potential of women entrepreneurs and implement policies that improve the performance of women-owned small enterprises in conjunction with the private sector and non-governmental organisations. Particularly, policies supporting economic diversification, as specified in the Provincial Growth and Development Programme (PGDP, 2004-2014), need to be implemented properly. Furthermore, to ensure that women-owned small businesses in the Eastern Cape are effectively managed and prepared for long-term growth, business development programs should be established. The programs should be designed to support the development and sustainability of women-owned small businesses in the Province, help them professionally run while increasing their administrative effectiveness and regulatory compliance. While the study shows interesting results, it also has some limitations. For instance, it is important to point out that the review was only limited to studies conducted in the Eastern Cape Province, which might affect the generalisability of the study findings. Furthermore, women entrepreneurship research in South Africa is still growing, which presented a limit to the number of studies that were used in carrying out the review.

#### REFERENCES

- Abd El Basset, F., Bell, R. and Al Kharusi, B. (2022). Reducing barriers to female entrepreneurship in Oman: does family matter? *Journal of Enterprising Communities: People and Places in the Global Economy*. [https://doi.org/10.1108/JEC-01-2022-0009]
- Adikaram, A. and Razik, R. (2023). Against all odds: women's motivation to become STEM entrepreneurs in Sri Lanka. *Journal of Business and Socio-economic Development*. [https://doi.org/10.1108/JBSED-09-2022-0101]
- Afshan, G., Shahid, S. and Tunio, M.N. (2021). Learning experiences of women entrepreneurs amidst COVID-19, *International Journal of Gender and Entrepreneurship*, Vol. 13 No. 2, pp. 162-186. [https://doi.org/10.1108/IJGE-09-2020-0153]
- Ahmad, S. (2011). Evidence of the characteristics of women entrepreneurs in the Kingdom of Saudi Arabia: An empirical investigation, *International Journal of Gender and Entrepreneurship*, Vol. 3 No. 2, pp. 123-143. [https://doi.org/10.1108/17566261111140206]
- Ahwireng-Obeng, F. (1993). Gender, entrepreneurship and socio economic reparation in South Africa. *The review of Black political economy*, 22(2), pp.151-165. [ https://doi.org/10.1007/BF02689948]
- Aladejebi, O. (2020). 21st century challenges confronting women entrepreneurs in Southwest Nigeria. *Archives of Business Research*, 8(3), pp.261-280. [https://www.researchgate.net/publication/340455800\_21st\_Century\_Challenges\_Confronting\_Women\_Entrepreneurs\_in\_Southwest\_Nigeria/link/5e8b17f4a6fdcca789f84534/download]
- Aliyu, S.M. (2013). An assessment of women entrepreneurship performance in Nigeria. *Malaysian Management Journal*, 17, pp.1-12 [ https://e-journal.uum.edu.my/index.php/mmj/article/view/8990 ]
- Al-Qahtani, M., Fekih Zguir, M., Al-Fagih, L. and Koç, M. (2022). Women entrepreneurship for sustainability: Investigations on status, challenges, drivers, and potentials in Qatar. *Sustainability*, 14(7), p.4091. [https://doi.10.3390/su14074091]

- Andriani, L., Lal, S. and Kalam, A.A. (2022). Entrepreneurial activities and women empowerment in rural India between microfinance and social capital. *Strategic Change*, 31(2), pp.227-237. [https://doi.org/10.1002/jsc.2492]
- Asad, A., Hameed, W.U., Irfan, M., Jiang, J. and Naveed, R.T. (2020). The Contribution of Microfinance Institutes in Women-Empowerment and role of Vulnerability. *Rev. Argent. Clín. Psicol.*, pp.223-238 [ https://doi.10.24205/03276716.2020.715]
- Awoyemi, O. (2014). The Participation of Women Entrepreneurs in Local Economic Development in Nelson Mandela Bay (Doctoral dissertation, Nelson Mandela Metropolitan University). [ https://vital.seals.ac.za/vital/access/manager/Repository/vital:9179?site\_name=GlobalView&view=null&f0=sm\_creator%3A%22Awoyemi%2C+Oluwabunmi%22&sort=null ]
- Baiyegunhi, L.J.S. and Fraser, G.C.G. (2011). Vulnerability and poverty dynamics in rural areas of Eastern Cape Province, South Africa. *Ghana Journal of Development Studies*, 8(2), pp. 84-100. [ DOI: https://dx.doi.org/10.4314/gjds.v8i2.6 ]
- Baldegger, R., Gaudart, R. and Wild, P., (2020). Global entrepreneurship monitor 2019/2020 (No. REPORT\_SBM). School of Management Fribourg [ https://www.heg-fr.ch/media/cntnuss4/gem-report\_switzerland2019-2020.pdf ]
- Bambeni, N., (2013). Challenges faced by the state-funded rural women's co-operatives in reducing poverty in the Mbhashe area, Eastern Cape Province (Doctoral dissertation, University of Pretoria). [ https://repository.up.ac.za/bitstream/handle/2263/36810/Bambeni\_Challenges\_2013.pdf?sequence=1&isAllowed=y ]
- Banihani, M. (2020). Empowering Jordanian women through entrepreneurship. *Journal of Research in Marketing and Entrepreneurship*, 22(1), pp. 133-144. [https://doi.org/10.1108/JRME-10-2017-0047]
- Banu, J. and Baral, R. (2022). Career choice, growth and well-being of women entrepreneurs' community: insights on driving factors in India. *Journal of Enterprising Communities: People and Places in the Global Economy*, 16(5), pp. 781-807. [ https://doi.org/10.1108/JEC-12-2020-0206]
- Booth, A., Sutton, A., Clowes, M. and Martyn-St James, M., (2021). Systematic approaches to a successful literature review. SAGE.
- Botha, M., Nieman, G.H. and Van Vuuren, J.J. (2006). Evaluating the women entrepreneurship training programme: A South African study. *International Indigenous Journal of Entrepreneurship, Advancement, Strategy and Education*, 2(1), p. 1. [ https://www.researchgate.net/publication/237775102 ]
- Bruyat, C. and Julien, P.A. (2001). Defining the field of research in entrepreneurship. *Journal of business venturing*, 16(2), pp.165-180. [ https://www.researchgate.net/publication/222705048 ].
- Buyambo, N. (2012). An Enabling Environment for Women Agri-entrepreneurs in the Tsitsikama Area (Doctoral dissertation, Nelson Mandela Metropolitan University). [ https://vital.seals.ac.za/vital/access/manager/Repository/vital:8786?site\_name=GlobalView&view=null&f0=sm\_creator%3A%22Buyambo%2C+Ntombentsha%22&sort=null ]
- Chakraborty, U. and Biswal, S.K. (2022). Psychological empowerment of women entrepreneurs: a netnographic study on twitter. *Management Research Review*, 45(6), pp.717-734. [https://doi.org/10.1108/MRR-01-2021-0046]
- Charles, V. and Gherman, T. (2013). Factors influencing Peruvian women to become entrepreneurs. *World Applied Sciences Journal*, 27(10), pp.1345-1354. [ http://www.idosi.org/wasj/wasj27(10)13/17.pdf ]
- Chinomona, E. and Maziriri, E.T.(2015). Women in action: Challenges facing women entrepreneurs in the Gauteng Province of South Africa. *International Business & Economics Research Journal (IBER)*, 14(6), pp.835-850. [ https://doi.org/10.19030/IBER.V14I6.9487?sid=semanticscholar ]
- Daries, N., Marine-Roig, E., Ferrer-Rosell, B. and Cristobal-Fransi, E., (2021). Do high-quality restaurants act as pull factors to a tourist destination? *Tourism Analysis*, 26(2-3), pp.195-210. [ https://doi.org/10.3727/108354221X16079839951466 ].
- Derera, E. (2011). A review of government initiatives to stimulate women entrepreneurship in South Africa: 1955-2009 (Doctoral dissertation). [ https://ukzn-dspace.ukzn.ac.za/handle/10413/9285 ]
- Derera, E., Croce, F., Phiri, M. and O'Neill, C. (2020)., 'Entrepreneurship and economic empowerment in Zimbabwe: Research themes and future research perspectives', *The Journal for Transdisciplinary Research in Southern Africa* 16(1), a787. [ https://doi.org/10.4102/td.v16i1.787 ]
- Diko, N. (2014). Women in educational leadership: The case of hope high school in the Eastern Cape Province, South Africa. *Educational Management Administration & Leadership*, 42(6), pp.825-834. [ https://doi.org/10.1177/1741143214537228 ]
- Dzisi, S. (2008). Women entrepreneurs in small and medium enterprises (SMEs) in Ghana (Doctoral dissertation, Swinburne University of Technology, Australian Graduate School of Entrepreneurship). [

- <https://researchbank.swinburne.edu.au/file/d0542ed8-6162-4402-9a28-f21b6522a015/1/Smile%20Dzisi%20Thesis.pdf> ]
- Eastern Cape Main Budget Speech .(2022). Eastern Cape 2022 budget speech. [Online]. Available at: [https://ecsecc.org.za/datarepository/documents/eastern-cape-2022-budget-speech\\_cyz8f.pdf](https://ecsecc.org.za/datarepository/documents/eastern-cape-2022-budget-speech_cyz8f.pdf). [Accessed on: 12/05/2022].
- EC Provincial Website. (2023). The Eastern Cape – home of legends. [Online]. Available at: <https://ecprov.gov.za/the-eastern-cape.aspx>. [Accessed on: 24/08/2023].
- Egere, O.M., Maas, G. and Jones, P. (2022). A critical analysis of the Nigerian entrepreneurial ecosystem on transformational entrepreneurship. *Journal of Small Business Management*, pp.1-32. [https://dx.doi.org/10.1080/00472778.2022.2123109]
- Eriksson, M. and Lindström, B. (2007). Antonovsky’s sense of coherence scale and its relation with quality of life: a systematic review. *Journal of Epidemiology & Community Health*, 61(11), pp.938-944. [ http://dx.doi.org/10.1136/jech.2006.056028 ]
- Erwee, R. (1987). Entrepreneurship as a career option for woman: An overview of research. *South African Journal of Business Management*, 18(3), pp.152-162. [ https://hdl.handle.net/10520/EJC-6606664d2 ]
- Etim, E. and Iwu, C.G. (2019). A descriptive literature review of the continued marginalisation of female entrepreneurs in sub-Saharan Africa. *International Journal of Gender Studies in Developing Societies*, 3(1), pp.1-19. [ http://www.inderscience.com/storage/f835711101241962.pdf ]
- Etim, E.S., Tengeh, R.K. and Iwu, C.G. (2018). Integration of information and communication technology into women entrepreneurship in Uyo, Nigeria. *Journal of Economics and Behavioural Studies*, 10(4 (J)), pp.118-134. [ https://doi.org/10.22610/jeb.v10i4(J).2413 ]
- Filimonau, V., Matyakubov, U., Matniyozov, M., Shaken, A. and Mika, M. (2022). Women entrepreneurs in tourism in a time of a life event crisis. *Journal of Sustainable Tourism*, pp. 1-23. [https://doi.org/10.1080/09669582.2022.2091142]
- Fiseha, G.G., Kachere, W. and Oyelana, A.A. (2019). The role of rural entrepreneurship in alleviating poverty in the Eastern Cape. *Journal of Human Ecology*, 68(1-3), pp. 203-212. [ https://doi.org/10.1108/JEC-01-2021-0016 ]
- Franzke, S., Wu, J., Froese, F.J. and Chan, Z.X. (2022). Female entrepreneurship in Asia: a critical review and future directions. *Asian Business & Management*, 21(3), pp. 343-372. [https://doi.org/10.1057/s41291-022-00186-2]
- Gakobo, J.M. (2013). Effects of Transformational Leadership and Prior Knowledge on Growth of Women Owned Micro and Small Enterprises in Kasarani Division, Nairobi County, Kenya. Nairobi County. [ http://thesisbank.jhia.ac.ke/id/eprint/2584 ]
- Ghaderi, Z., Tavakoli, R., Bagheri, F. and Pavee, S. (2023). The role of gender equality in Iranian female tourism entrepreneurs’ success. *Tourism Recreation Research*, pp. 1-15. [https://doi:10.1080/02508281.2023.2168857]
- Ghatak, A. and Bhowmick, B. (2021). Should I Start My Own Venture? Moderating Effect of Pull Factors on the Relationship of Push Factors with Women Entrepreneurial Intentions. *Entrepreneurship Research Journal*. [ https://doi.org/10.1515/erj-2021-0062 ]
- Ghouse, S.M., Durrah, O. and McElwee, G. (2021). Rural women entrepreneurs in Oman: Problems and opportunities. *International Journal of Entrepreneurial Behaviour & Research*. [ https://doi.org/10.1108/IJEBR-03-2021-0209 ]
- Górány, Z., Machová, R., Mura, L. and Zsigmond, T., 2021. Entrepreneurship motivation in the 21st century in terms of pull and push factors. *TEM Journal*, 10(1), p.334. [DOI:10.18421/TEM101-42]
- Halkias, D. and Anast, J. (2009). Female immigrant entrepreneurship in South Africa post 1994 a brief review of the literature. *African Journal of Business and Economic Research*, 4(2\_3), pp. 25-33. [ https://hdl.handle.net/10520/EJC10451 ]
- Hamann, M. and Tuinder, V. (2012). Introducing the Eastern Cape: A quick guide to its history, diversity and future challenges. Stockholm: Stockholm Resilience Centre, Stockholm University. [ https://sapecs.org/wp-content/uploads/2013/11/Eastern-Cape-Background-Report.pdf ]
- Hebert, C. (2018). Mind the gap: gender stereotypes and entrepreneur financing. Available at SSRN, 3318245. [ https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=3318245 ]
- Hechavarria, D., Bullough, A., Brush, C. and Edelman, L. (2019). High-growth women’s entrepreneurship: Fueling social and economic development. *Journal of Small Business Management*, 57(1), pp.5-13. [ https://www.tandfonline.com/doi/abs/10.1111/jsbm.12503 ]
- Heilman, M.E. and Chen, J.J., (2003). Entrepreneurship as a solution: the allure of self-employment for women and minorities. *Human Resource Management Review*, 13(2), pp. 347-364. [ https://doi.org/10.1016/S1053-4822(03)00021-4 ]



- Henning, S. and Akoob, K. (2017). Motivational factors affecting informal women entrepreneurs in North-West Province. *The Southern African Journal of Entrepreneurship and Small Business Management*, 9(1), pp.1-10. [ <https://hdl.handle.net/10520/EJC10451> ]
- Hlanyane, T.M. and Acheampong, K.O. (2017). Tourism entrepreneurship: the contours of challenges faced by female-owned BnBs and Guesthouses in Mthatha, South Africa. *African Journal of Hospitality, Tourism and Leisure*, 6(4), pp. 1-17. [ [http://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_50\\_vol\\_6\\_4\\_2017.pdf](http://www.ajhtl.com/uploads/7/1/6/3/7163688/article_50_vol_6_4_2017.pdf) ]
- Hung, R.Y.Y., (2006). Business process management as competitive advantage: a review and empirical study. *Total quality management & business excellence*, 17(1), pp. 21-40. [ <https://doi.org/10.1080/14783360500249836> ]
- Irene, B.N.O. (2019). Technopreneurship: a discursive analysis of the impact of technology on the success of women entrepreneurs in South Africa. In *Digital Entrepreneurship in Sub-Saharan Africa* (pp. 147-173). Palgrave Macmillan, Cham. [ [https://link.springer.com/chapter/10.1007/978-3-030-04924-9\\_7](https://link.springer.com/chapter/10.1007/978-3-030-04924-9_7) ]
- Jacob, T., Thomas, V.R. and George, G. (2023). Female Entrepreneurship: Challenges Faced in a Global Perspective. In *Female Entrepreneurship as a Driving Force of Economic Growth and Social Change* (pp. 90-110). IGI Global.
- Jalbert, S. E. (2000). *Women Entrepreneurs in the Global Economy*. Washington, DC: Center for International Private Enterprise. [ <https://numerons.files.wordpress.com/2012/04/17women-entrepreneurs-in-the-global-economy.pdf> ]
- Jennings, J.E. and Brush, C.G. (2013). Research on women entrepreneurs: challenges to (and from) the broader entrepreneurship literature? *Academy of Management Annals*, 7(1), pp.663-715. [ <https://doi.org/10.5465/19416520.2013.782190> ]
- Kabeer, N. (2021). Gender Equality, Inclusive Growth, and Labour Markets. In *Women's Economic Empowerment* (pp. 13-48). Routledge.
- Kaushal, M.D., Negi, A. and Singhal, M.C. (2014). The gender gap in entrepreneurship and how to overcome it: A study of women entrepreneurship promotion in Uttarakhand State. *Global Journal of Finance and Management*, 6(2), pp.157-164. [ [http://www.ripublication.com/gjfm-spl/gjfmv6n2\\_12.pdf](http://www.ripublication.com/gjfm-spl/gjfmv6n2_12.pdf) ].
- Kumar, S. and Patrik, H. (2018). Motivating factors that influence women entrepreneurs. *International Journal of Research in Business Management (IMPACT: IJRBM)* ISSN (P), pp.2347-4572. [ <https://www.researchgate.net/publication/346789064> ].
- Lingappa, A.K., Rodrigues LR, L. and Shetty, D.K. (2023). Women entrepreneurial motivation and business performance: The role of learning motivation and female entrepreneurial competencies. *Industrial and Commercial Training*, 55(2), pp.269-283. [ <https://doi.org/10.1108/ICT-06-2022-0042> ]
- Linnenluecke, M.K. (2017). Resilience in business and management research: A review of influential publications and a research agenda. *International Journal of Management Reviews*, 19(1), pp.4-30. [ <https://doi.org/10.1111/ijmr.12076> ]
- Luvalo, L.M. (2019). Patriarchy and Ubuntu philosophy: the views of community elders in the Eastern Cape Province. *e-Bangi*, 16, pp.1-10. [ <https://ejournals.ukm.my/ebangi/article/view/34318/9708> ]
- Maas, G. and Herrington, M., (2006). *Global Entrepreneurship Monitor (GEM) South African Report*. Cape Town: University of Cape Town. [ [https://www.researchgate.net/publication/282859861\\_Global\\_Entrepreneurship\\_Monitor\\_-\\_South\\_African\\_report\\_2006](https://www.researchgate.net/publication/282859861_Global_Entrepreneurship_Monitor_-_South_African_report_2006) ]
- Makandwa, G., de Klerk, S. and Saayman, A. (2022). Culturally-based community tourism ventures in Southern Africa and rural women entrepreneurs' skills. *Current Issues in Tourism*, pp.1-14. [ <https://doi.org/10.1080/13683500.2022.2052267> ]
- Makaula, N. (2021). Eastern Cape is well on its way in Implementing the Economic Recovery Plan. [Online]. Available at: <https://www.linkedin.com/pulse/eastern-cape-well-its-way-implementing-economic-recovery-makaula/> . [Accessed on: 27 November 2022].
- Mandipaka, F. (2014). An investigation of the challenges faced by women entrepreneurs in developing countries: A case of King Williams' Town, South Africa. *Mediterranean Journal of Social Sciences*, 5(27 P3), p.1187. [ <https://www.mcser.org/journal/index.php/mjss/article/viewFile/5196/5013> ].
- Mandipaka, F. (2014). Overview of women entrepreneurs in South Africa. *Mediterranean Journal of Social Sciences*, 5(9), pp.127-127. [ <https://www.richtmann.org/journal/index.php/mjss/article/view/2620> ].
- Mbaco, M.M. (2012). *Assessing Funding Availability for Small and Medium Enterprises for Women Entrepreneurs in Nelson Mandela Bay Metro* (Doctoral dissertation, Nelson Mandela Metropolitan University). [ <https://core.ac.uk/reader/145047930> ].
- McAdam, M., (2013). *Female entrepreneurship*. Routledge.
- McGowan, P., Redeker, C.L., Cooper, S.Y. and Greenan, K. (2012). Female entrepreneurship and the management of business and domestic roles: Motivations, expectations and realities. *Entrepreneurship & Regional Development*, 24(1-2), pp.53-72. [ <https://doi.org/10.1080/08985626.2012.637351> ].

- Mdluli, L.S. (2020). An investigation of support services available for black female owners of bed & breakfasts in Makhanda (Doctoral dissertation, Rhodes University). [ <https://hdl.handle.net/10962/177181> ].
- Meyer, N. and Synodinos, C. (2019). Entrepreneurial skills, characteristics and intentions amongst unemployed individuals in the Vaal-Triangle region of South Africa. *Journal of Contemporary Management*, 16(2), pp.1-22. [ <https://hdl.handle.net/10520/EJC-16d82b4d9c> ].
- Meyer, N., (2018). Research on female entrepreneurship: Are we doing enough? *Polish Journal of Management Studies*, 17. [ <https://bibliotekanauki.pl/articles/405131> ].
- Minniti, M. and Naudé, W., (2010). What do we know about the patterns and determinants of female entrepreneurship across countries? *The European Journal of Development Research*, 22(3), pp.277-293. [ <https://doi.org/10.1057/ejdr.2010.17> ].
- Misango, S.B. and Ongiti, O.K., (2013). Do women entrepreneurs play a role in reducing poverty? A case in Kenya. *International Review of Management and Business Research*, 2(1), p.87. [ <https://dl.wqtxts1x7le7.cloudfront.net/38334947> ].
- Muchineripi, J., Chinyamurindi, W. and Chimucheka, T. (2019). A narrative analysis of barriers encountered by a sample of immigrant entrepreneurs in the Eastern Cape province of South Africa. [ <https://repository.nwu.ac.za/handle/10394/35419> ]
- Ncube, T.R. and Zondo, R.W., (2018). Influence of self-motivation and intrinsic motivational factors for small and medium business growth: A South African case study. *South African Journal of Economic and Management Sciences*, 21(1), pp.1-7. [ <https://doi.org/10.4102/sajems.v21i1.1994> ]
- Ngek, N.B., (2018). Challenges and performance of women-owned informal businesses in South Africa: A family embeddedness perspective. In Proceedings, 19th International Academy of African Business and Development Conference (pp. 170-180). [ <https://www.researchgate.net/publication/329059872> ].
- Ngorora, P.G. and Mago, S. (2018). Prospects of entrepreneurship in South Africa's rural areas: A case study of Eastern Cape Province's Nkonkobe Municipal Area. *African Journal of Hospitality, Tourism and Leisure*, 7(2), pp.1-16. [ [https://www.ajhtl.com/uploads/7/1/6/3/7163688/article\\_40\\_vol\\_7\\_2\\_2018.pdf](https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_40_vol_7_2_2018.pdf) ].
- Ngqangweni, S.S. (2007). Promoting income and employment growth in the rural economy of the Eastern Cape through smallholder agriculture (Doctoral dissertation, University of Pretoria). [ <https://repository.up.ac.za/handle/2263/30459> ].
- Nguza-Mduba, B. (2020). Intuitive competitive intelligence: the entrepreneurial path to success for small and medium-sized enterprises (SMEs) in the tourism sector in the Eastern Cape Province (Doctoral dissertation). [ <https://ukzn-dspace.ukzn.ac.za/handle/10413/20325> ].
- Nomnga, V.J. (2017). Unlocking the potential of women entrepreneurs in the tourism and hospitality industry in the eastern Cape Province, South Africa. *Journal of Economics and Behavioral Studies*, 9(4 (J)), pp.6-13. [ [https://doi.org/10.22610/jebs.v9i4\(J\).1817](https://doi.org/10.22610/jebs.v9i4(J).1817) ].
- O'neill, R.C. and Viljoen, L. (2001). Support for female entrepreneurs in South Africa: Improvement or decline? *Journal of Consumer Sciences*, 29. [ <https://www.ajol.info/index.php/jfec/s/article/view/52807> ]
- Ojong, V.B.A. (2005). Entrepreneurship and identity among a group of Ghanaian women in Durban (South Africa) (Doctoral dissertation, University of Zululand). [ <https://uzspace.unizulu.ac.za/handle/10530/199> ].
- Olawuyi, S.O. and Mushunje, A. (2023). Distribution pattern of households' income inequality in Eastern Cape, South Africa: Application of regression-based decomposition of inequality. *International Journal of Research in Business and Social Science* (2147-4478), 12(5), pp.237-247. [ <https://doi:10.20525/ijrbs.v12i5.2548> ]
- Orhan, M. and Scott, D., (2001). Why women enter into entrepreneurship: an explanatory model. *Women in management review*. [ <https://doi.org/10.1108/09649420110395719> ].
- Osirim, M.J. (2001). Making good on commitments to grassroots women: NGOs and empowerment for women in contemporary Zimbabwe. In Women's studies international forum (Vol. 24, No. 2, pp. 167-180). Pergamon. [ [https://doi.org/10.1016/S0277-5395\(01\)00154-6](https://doi.org/10.1016/S0277-5395(01)00154-6) ].
- Özsunur, F. (2019). A research on women's entrepreneurship motivation: Sample of Adana Province. In Women's Studies International Forum (Vol. 74, pp. 114-126). Pergamon. [ <https://doi.org/10.1016/j.wsif.2019.03.006> ].
- Parpart, J.L. (2013). Choosing silence: Rethinking voice, agency and women's empowerment. In Secrecy and silence in the research process (pp. 34-48). Routledge. [ <https://www.taylorfrancis.com/chapters/edit/10.4324/9780203927045-10/7-telling-bipasha-ahmed> ].
- Phillips, M., Moos, M. and Nieman, G. (2014). The impact of government support initiatives on the growth of female businesses in Tshwane South Africa. *Mediterranean Journal of Social Sciences*, 5(15), pp.85-85. [ <https://www.richtmann.org/journal/index.php/mjss/article/view/3210> ].

- Podsakoff, P., MacKenzie, S., Bachrach, D. and Podsakoff, N. (2005). 'The influence of management journals in the 1980s and 1990s', *Strategic Management Journal*, Vol. 26, No. 5, pp.473-488. [ <https://doi.org/10.1002/smj.454> ].
- Rashid, S. and Ratten, V. (2020). A systematic literature review on women entrepreneurship in emerging economies while reflecting specifically on SAARC countries. *Entrepreneurship and organizational change*, pp.37-88. [ [https://link.springer.com/chapter/10.1007/978-3-030-35415-2\\_4](https://link.springer.com/chapter/10.1007/978-3-030-35415-2_4) ].
- Rena, R. (2016). Women and Entrepreneurship Development–The Case of South Africa. In *Introduction to Gender Studies in Eastern and Southern Africa* (pp. 177-195). Brill. [ [https://link.springer.com/chapter/10.1007/978-94-6300-558-6\\_10](https://link.springer.com/chapter/10.1007/978-94-6300-558-6_10) ]
- Robinson, J. (2015). Fragments of the past: Homeland politics and the South African transition, 1990–2014. *Journal of Southern African Studies*, 41(5), pp.953-967. [ <https://doi.org/10.1080/03057070.2015.1064297> ]
- Rungani, E.C. and Potgieter, M. (2018). The impact of financial support on the success of small, medium and micro enterprises in the Eastern Cape Province. *Acta Commercii*, 18(1), pp.1-12. [ <https://journals.co.za/doi/abs/10.4102/ac.v18i1.591> ]
- Sappleton, N.A., (2014). The segregation stereotyping bind: social networks and resource acquisition among men and women business owners in gender typical and atypical sectors (Doctoral dissertation, Manchester Metropolitan University). [ [https://e-space.mmu.ac.uk/332952/1/Final%20thesis\\_Sappleton.pdf](https://e-space.mmu.ac.uk/332952/1/Final%20thesis_Sappleton.pdf) ].
- Sekeleni, N. (2014). Women-driven entrepreneurship within the information and communication technology sector: a grounded analysis of small, micro, and medium enterprises in the Eastern Cape Province (Doctoral dissertation). [ <https://core.ac.uk/download/pdf/43176958.pdf> ].
- Setyaningrum, R.P. and Muafi, M. (2022). The effect of creativity and innovative behaviour on competitive advantage in womenpreneur. *SA Journal of Human Resource Management*, 20, p.9. [ <https://sajhrm.co.za/index.php/sajhrm/article/view/2069/3124> ]
- Shava, H. and Chinyamurindi, W. (2022). Barriers of growth within an informal sector business: narratives of women subsistence entrepreneurs in South Africa. *African Journal of Economic and Management Studies*. [ <https://doi.org/10.1108/AJEMS-08-2021-0354> ]
- Sokabo, N. (2007). Identification and analysis of the factors that influence the development of female entrepreneurs in the informal sector (Doctoral dissertation). [ <https://open.uct.ac.za/handle/11427/12753> ].
- Solesvik, M., Iakovleva, T. and Trifilova, A. (2019). Motivation of female entrepreneurs: a cross-national study. *Journal of Small Business and Enterprise Development*. [ <https://doi.org/10.1108/JSBED-10-2018-0306> ]
- Sriram, V. and Mersha, T. (2010). Stimulating entrepreneurship in Africa. *World Journal of Entrepreneurship, Management and Sustainable Development*. [ <https://doi.org/10.1108/20425961201000020> ]
- Storey, D.J. and Greene, F.J. 2010. *Small business and entrepreneurship*. Pearson.
- Swartz, E., Scheepers, C. and Amatucci, F. (2022). Women entrepreneurs creating value in a democratic South Africa-emerging beyond the informal sector. In *Research Handbook of Women's Entrepreneurship and Value Creation*. Edward Elgar Publishing. [ <https://doi.org/10.4337/9781789901375.00027> ]
- Swartz, E.M., Amatucci, F.M. and Marks, J.T. (2019). Contextual embeddedness as a framework: the case of entrepreneurship in South Africa. *Journal of Developmental Entrepreneurship*, 24(03), p.1950018. [ <https://doi.org/10.1142/S1084946719500183> ]
- Swartz, E.M., Scheepers, C.B. and Toefy, T. (2022). Women entrepreneurs' opportunity identification of digital platform start-ups: emerging evidence from South Africa. *International Journal of Gender and Entrepreneurship*, 14(3), pp.352-374. [ <https://doi.org/10.1108/IJGE-06-2021-0096> ]
- Tende, S.B. (2016). The impact of women entrepreneurs towards national development: selected study on Taraba state. In *Information and Knowledge Management* (Vol. 6, No. 6, pp. 30-43). [ <https://iiste.org/Journals/index.php/IKM/article/view/31034/0> ]
- Tetana, T. (2016). Assessing the risk factors of Coronary heart disease among rural adults in the Joe Gqabi District: Eastern Cape. (Masters). [ <https://core.ac.uk/download/pdf/270044069.pdf> ]
- Thareja, R. and Kumar, V. (2014). What makes women to enter into entrepreneurship? *Academicia: An international multidisciplinary research journal*, 4(6), pp.158-170. [ <https://www.indianjournals.com/ijor.aspx?target=ijor:aca&volume=4&issue=6&article=016> ]
- Tlapanana, T. and Mngeni, Z. (2021). The challenges faced by African females in the construction industry. evidence from a selected metropolis of the Eastern Cape. *Modern Management Review*, 26(4), pp.107-117. [ <https://doi.org/10.7862/rz.2021.mmr.28> ]
- Tola, Z. and Chimucheka, T. (2018). The importance of entrepreneurial competencies on the performance of women entrepreneurs in South Africa. *Journal of Applied Business Research* (JABR), 34(2), pp.223-236. [ DOI <https://doi.org/10.19030/jabr.v34i2.10122> ].

- Van der Merwe, M. and Nieman, G.H. (2003). Women entrepreneurs and their needs in terms of financial assistance and products and services offered by commercial banks in South Africa. Measuring the effectiveness of the women entrepreneurship programme on potential, start-up and established women entrepreneurs in South Africa. *South African Journal of Economic and Management Sciences*, 10(2), pp.163-183.
- Venkataraman, S. (2019). The distinctive domain of entrepreneurship research. In *Seminal ideas for the next twenty-five years of advances*. Emerald Publishing Limited.
- Visser, B.L.,(2020). Women entrepreneurship development in South Africa: Towards transformative innovation. (Masters) [Stellenbosch University <https://scholar.sun.ac.za> ]
- Welsh, D.H., Memili, E. and Kaciak, E., (2016). An empirical analysis of the impact of family moral support on Turkish women entrepreneurs. *Journal of Innovation & Knowledge*, 1(1), pp.3-12. [ <https://doi.org/10.1016/j.jik.2016.01.012> ]
- Wu, J., Li, Y. and Zhang, D., (2019). Identifying women's entrepreneurial barriers and empowering female entrepreneurship worldwide: a fuzzy-set QCA approach. *International Entrepreneurship and Management Journal*, 15(3), pp.905-928. [ <https://doi.org/10.1007/s11365-019-00570-z> ]
- Wube, M.C., (2010). Factors affecting the performance of women entrepreneurs in micro and small enterprises. Retrieved May, 18(2013). [ <https://unevoc.unesco.org/e-forum/thesis%20final.pdf> ]

# Marketing and Motivational Factors that Influence Attitude Towards Consumption of Vegan Food Products Among Young Consumers

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## ABSTRACT

**Purpose:** The influence of veganism in the food market is growing. This study aims to investigate the impact of marketing (perceived value and product attributes) and motivational (subjective norms and health consciousness) factors in driving consumers vegan food purchase intention in a market that has an increasing demand of vegan food – South Africa.

**Design/methodology/approach:** Structural equation modelling was used to test the five hypotheses based on the validated survey data gathered from 283 young consumers in Johannesburg, South Africa.

**Findings:** The results suggested that subjective norms, health consciousness, perceived value, product attributes and attitude have positive effects on young consumer's vegan products consumption behaviour.

**Research limitations/implications:** This study provided an understanding of consumer's perspective regarding their purchase intention of vegan food products, which will help marketers, researchers, and food producers to achieve marketing strategies for the development of these products.

**Practical implications:** This study contributes to the literature of and practice of vegan food products consumption by identifying the various marketing and motivational factors that can influence vegan food products purchase intention. It provides marketers insights into important factors to focus on while developing marketing strategies for vegan consumers.

**Paper type:** Literature review

**Keyword:** South Africa, Youth, Vegan products, Attitude, Health consciousness

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## I. INTRODUCTION

Consumers are increasingly shifting their food habits and lifestyles towards vegan food (Martinelli and De Canio, 2021). Healthier lifestyles have become a current social trend with significant influence on marketing across the world (Martinelli & De Canio, 2021). Several authorities have found that the rising number of individuals who take interest in their well-being, strive to maintain a healthy lifestyle, by using products that ameliorate their overall health (Cooper, Dedehayir, Riverola, Harrington & Alpert, 2022). With society producing an influx of information surrounding contradictory healthy lifestyle options, most individuals are not scientifically equipped to evaluate these options, and thus can be socialised into adopting different eating habits (Kiely, 2021; Arroyo, Liñan & Martínez, 2020; Su, Khaskheli, Raza & Yousufi, 2022). Examples of common alternative healthy eating options are functional foods, where the healthfulness of a food product is enhanced by adding or removing certain ingredients (Voedingscentrum, 2016) and organic foods, which are foods free from food additives, chemical fertilizers, antibiotics, artificial pesticides and genetic modification (Song, Safari & Mansori,

2016). Amongst these alternatives, one such diet gaining prominence is a plant-based diet, most known as veganism. As a recent trend, veganism has been increasing in popularity around the world (Park & Kim, 2022).

Vegan is defined as the exclusion of items that exploit animal or animal by-products in the manufacturing process or something that is naturally plant-based (The Vegan Society, 2019). The term vegan is therefore not only confined to that of edible and functional products but can also be defined as a person who does not consume animal products, including meat, fish, seafood, eggs and dairy. In this study vegan foods denote foods that substitute animal products with plant-based alternatives.

The Food Revolution Network (2018) claims that the global shift towards plant-based foods and away from animal products is being driven by millennials. Thus, the current study will assess young consumers in South Africa, to gauge the attitudes towards consumption of vegan foods by this important segment.

### **A. Problem Statement**

The worldwide vegan food market grew from \$14.44 billion in 2020 to \$15.77 billion in 2021 and is predicted to continue growing for the next several years (Hemi, 2022). This has been largely driven by the increasing preference of healthier food. Young consumers are more than ever, demanding alternative healthier eating practices than previous generations (Maarsman 2016) with veganism at the forefront of this healthy eating demand (Food Revolution Network, 2018). While the number of individuals adopting veganism internationally continues to rise (Food Revolution Network, 2018).

There have been numerous studies conducted on consumer's attitude towards purchase intention of non-conventional products (Maarsman, 2016; Teng & Wang 2015; Mhlophe, 2016) to ameliorate overall health both in South Africa and abroad. Majority of studies found has been concentrated on the consumption of organic products as studies of veganism, specifically in a South African context are thin on the ground. Teng & Wang (2015) conducted a study on decisional factors driving organic food consumption to understand the generation of consumer purchase intention in South Africa. Where Mhlophe (2016) investigated the insights into consumer purchase intentions towards organic food in South Africa and Song, Safari & Mansori (2016) researched the effects of marketing stimuli factors on consumer's perceived value and purchase intention of organic food in Malaysia. These studies were aimed at assessing the purchase behaviour of consumers as well as the factors influencing the consumer's attitude towards purchase intention or consumption of organic foods. More recent studies have been done in Holland (Maarsman, 2016) on the underlying motives for food choices and how these motives contribute to healthy food choices. Despite healthy eating being on the rise, there is a paucity of research regarding the purchasing behaviour, attitudes and values of these individuals, particularly amongst young consumers, in an emerging economy like South Africa towards the adoption of veganism. The objective of this study is to assess the marketing and motivational factors that lead to purchase intention of vegan foods. In particular young consumers who internationally are demanding vegan lifestyles.

### **B. Theoretical Framework**

This section discusses the main theoretical concepts underlying the present study.

#### **1. Stimulus-Organism-Response Theory (S-O-R)**

The Stimulus-Organism-Response Theory (S-O-R) (Mehrabian & Russell, 1974) explains the development and subsequent changes of individual's needs and thus, the resulting purchase decisions. The three elements contained within the basic S-O-R model; stimuli, organism and response. Stimuli are generally regarded as external to the individual, while the internal states which arise from the environmental stimuli are referred to as the organism.

#### **2. Theory of Planned Behaviour (TPB)**

The Theory of Planned Behaviour (TPB) (Ajzen, 1991) postulates that three predictor variables significantly determine behavioural intention. These variables are attitude towards behaviour, subjective norm and perceived behavioural control (Ajzen, 1991). Where consumer purchase intention is concerned, this model has proven reliable (Holst & Iversen, 2011).

### **C. Literature Review**

#### **1. Subjective Norms**

Ajzen (1985) defines subjective norms as the promulgated social influence of an individual's significant others, on the individual's perception regarding a behaviour. It is because of this social influence which, in turn, causes an individual to engage or avoid specific behaviours, which led to subjective norms gaining recognition as an integral factor when determining the power of social influence on behavioural intention (Ajzen & Fishbein, 1980). The notion of subjective norms, translated to a food selection process, will expect an individual to select

food influenced by the behaviours of others. This is because food is generally consumed in social situations, the surrounding social cues and opinions may influence the item of food selected (Maarsman, 2016).

When researching the relationship of subjective norms and attitudes in the context of alternative healthy eating options, a significantly positive relationship was identified between the subjective norms of a consumer and their subsequent purchase intention of organic foods (Teng & Wang, 2015). Meaning, that if it is believed by consumers, that positive attitudes towards organic foods are held by those significant to them, there is a stronger likelihood of the consumer displaying positive intentions to purchase organic foods (Teng & Wang, 2015).

## **2. Health Consciousness**

A key indicator in the purchase intentions of consumers for non-conventional products are health related issues (Mhlophe, 2016). Currently consumers are more sensitive regarding the state of their health, their nutritional intake and the value of the food they consume. Health consciousness is a measure of a consumer's willingness to undertake actions constructive to their health (Michaelidou & Hassan, 2008). While most research points to the role between health consciousness and consumer purchase intention, there is evidence given that these health motivations indirectly influence the purchase intention of consumers (Mhlophe, 2016). This could be because of the diffusion of literature on what constitutes a healthy diet (Maarsman, 2016). In a book published by Amato and Partridge (1998), it is found that practitioners of plant-based diets live longer and contract fewer health problems than meat-eaters (Maarsman, 2016). On the contrary, Elmadfa and Meyer (2017), state that because of the amino acid pattern and easy digestibility of animal-based protein, this protein source is of a higher quality for humans.

Although the motivation to purchase healthier food items is consistently displayed among consumers that are health conscious (Mhlophe, 2016), this likelihood of consumers purchasing vegan foods due to the contradictory literature from other researchers or medical doctors is questionable.

## **3. Perceived Value**

The consumers evaluated differences of the benefits in relation to the costs of an available offering against the perceived alternatives of another offering is what is known as perceived value (Kotler and Keller, 2011). Prior research postulates that consumers engage in healthy food choices because of their concern for their appearance (Maarsman, 2016). Foods that are beneficial for one's physical appearance such as body, skin, nails, teeth and hair which increase perceived physical health and one's attractiveness may appeal more to consumers than alternative foods. This is indicative of the fact that consumers are value maximisers and will act on the offer they assume delivers them maximum benefits (Kotler and Keller, 2011) which can be deduced, based on research previously mentioned, that consumers will value products that they believe enhance their physical and physiological beauty over alternative options (Maarsman, 2016).

There are various perceived values associated with adopting a vegan lifestyle. The implication of eating a vegan diet is that the variety of plant foods consumed is much wider than the diet of omnivores, which is expected to have clear health benefits in the aspects mentioned above (Cole, 2008). The Physicians Committee (2018) states that veganism aids in weight loss and increased metabolic functions. In their book, Nelson and Nelson (2018) go into detail on how a plant-based vegan diet clears skin problems and restores one with a glowing complexion.

## **4. Product Attributes**

Product attributes - the additional tangible and intangible attributes of a product - are standard factors in persuading a consumer to purchase a specific product (Song et al., 2016). It was found that consumers will consider the nutritional and weight benefits of a product in relation to the degree they live a healthy lifestyle (Maarsman, 2016) and opt for the healthier version. Product attributes play a considerable part in a consumer's ultimate purchase decision of a product (Maarsman, 2016) and understanding what product attributes consumers look for when exploring food options will give valuable insight into their subsequent product purchase. Song, Safari and Mansori (2016) confirmed that perceived benefits of a product were positively influenced by product attributes. Consumers considered organic produce to be more enjoyable and taste better while also being safer than conventional products and are more enjoyable and taste better than the available conventional products (Michaelidou & Hassan, 2008). It was also found that certification and labelling (Ponsanam, Napompech & Suwanmaneepong, 2014) of organic food increased the perceived benefits associated by consumers with organic foods.

## **5. Attitude**

Generally understood as a predisposition to react in a consistent manner to a stimulus, favourably or unfavourably, attitudes are learned or acquired rather than an innate quality (Hughes, 1971). From the knowledge and reasoning of communicated experience by others or an individual's personal experience, an individual's attitude is formed (Fishbein, 1975). An individual's value system also contributes to the formation of an individual's attitude (Lamb et al, 2015). A consumer's attitude is a key determinant of the consumers behavioural

intention; the more favourable the behavioural attitude, the stronger the intention to perform the behaviour (Teng & Wang, 2015). With regards to TRA, the consumers' attitude will result in a specific behavioural intention which in turn will affect the purchase intention of the product. For the purpose of this study, attitude towards behaviour will be evaluated.

In a study by Ares & Gámbaro (2007) on the perceived value and willingness to sample functional food, it was found that a positive attitude was held by younger people towards functional foods (Maarsman, 2016). Functional foods are food with added or removed ingredients to increase the nutritional benefit of the product (Voedingscentrum, 2016; Maarsman, 2016). Teng and Wang (2015) found that if a consumer's significant others held a positive attitude towards organic foods, there was a stronger likelihood of the consumer displaying positive intention to purchase organic food. Meaning, the subjective norms of a consumer's significant others significantly affect a consumer's attitude towards a product and subsequent purchase intention.

## **6. Purchase Intention**

The notion that purchase intention of a specific product is commonly related to behaviour, perceptions and attitudes of consumer is outlined in the Theory of Reasoned Action, which states that an individual's attitude leads to behavioural intention which leads to actual behaviour (Ajzen & Fishbein, 1980). In a similar manner, the above components including a factor of perceived behavioural control are incorporated in the TPB, in an attempt to explain the combined effect on the behavioural intention of an individual (Ajzen & Fishbein, 1980). A fundamental antecedent of actual behaviour by the individual is behavioural intention and is identified in both the TRA and the TPB. There is an assumption that based on the information available to an individual will aid in their rational decision making. This assumption is the basis for the relationship between behavioural intentions and actual behaviour. Therefore, an individual's behavioural intention towards the performance or lack of performance of a behaviour signals an immediate determinant of an individual's actual behaviour (Ajzen & Fishbein, 1980).

In this study, behavioural intention is the consumer's intention to purchase vegan foods or rather purchase intention of vegan foods. Research on alternative health practices found that organic food consumption confirmed a significant positive relationship between the attitudes of an individual and their subsequent purchase intention (Teng & Wang, 2015).

Additionally, an individual's purchase intention is hindered by the intensity of another person's subjective norm and how strong the individual's motivation to comply with the subjective norm is (Teng & Wang, 2015). However, investigating consumers purchase intention of vegan foods may not translate to actual purchase of vegan foods by the consumer.

## **D.Hypotheses development**

### **1. Subjective Norms and Attitude towards Consumption of Vegan Foods**

A study by Al-Swidi et al., (2014) examined the role of subjective norms in the theory of planned behaviour within the context of organic food consumption. The study found that subjective norms significantly influence attitude toward buying intention. In many previous studies we again find a strong causal link between subjective norms and attitude formation (Al-Swidi, Huque, Hafeez, Shariff, 2014; Tarkiainen and Sundqvist, 2005). As explained by Ajzen (1985), an individual's attitude about a particular behaviour is significantly influenced by the attitudes of their significant others. This could affect the performance or avoidance of a particular behaviour by an individual because of the socialised attitude they have formed towards the behaviour (Maarsman, 2016).

The most important finding of Tarkiainen and Sundqvist (2005) research on subjective norms, attitudes and intentions of Finnish consumers in buying organic food, the subjective norms through attitude, affected purchase intention of organic food. With the findings presented, it is predicted that if the subjective norms, of those significant to the consumer, are positive towards vegan foods, the consumer will have a positive attitude towards consumption of vegan foods and thus subsequent purchase intention vegan foods. Therefore, it is hypothesized that:

H1: There is a positive relationship between subjective norms and attitude towards consumption of vegan foods.

### **2. Health Consciousness and Attitude towards Consumption of Vegan Foods**

Researcher Nagaraj (2021) investigated the direct and indirect impact of health consciousness on attitude towards organic food products in India and found that health consciousness has direct and significant impact on attitude. In a study by Schifferstein & Oude Ophuis (1998), to improve health, organic food consumers were willing to switch to purchasing organic foods since they were aware of the fact that their health is affected by their food intake (Michaelidou & Hassan, 2008). Researchers Magnusson et al., (2001) showed that health consciousness predicted attitudes, intention and purchase intention of organic foods. In other research by Paul & Rana (2010), consumers who displayed a higher concern towards health-related issues were found to hold favourable attitude towards purchasing organic foods. We therefore hypothesize that:



H2: There is a positive relationship between health consciousness and attitude towards consumption of vegan foods.

### **3. Perceived Value and Attitude towards Consumption of Vegan Foods**

Prior research postulates that consumers engage in healthy food choices because of their concern for their appearance (Maarsman, 2016). Foods that are beneficial for one's physical appearance and which increase perceived physical health and one's attractiveness may appeal more to consumers than alternative foods. This is indicative of the fact that consumers are value maximisers and will act on the offer they assume delivers them maximum benefits (Kotler and Keller, 2011).

Consumer's attitude towards a certain product is improved depending on the favourability with which they perceive the value of the product, so if consumers perceived values are positive, this will lead to a positive effect on attitude (Wu & Chang, 2016). A study by Shaharudin, Pani, Mansor, Elias (2010) found that perceived value had a noteworthy effect on a customer's willingness to purchase organic foods while Song, Safari and Mansori (2016) found where strong positive relationship between consumers perceived value had actual purchase of organic foods. Although there is scarce literature on perceived value of vegan foods, this construct nevertheless remains an important construct to the study, and thus we hypothesize that:

H3: There is a positive relationship between perceived value and attitude towards consumption of vegan foods.

### **4. Product Attributes and Attitude towards Consumption of Vegan Foods**

Product attributes play a considerable part in a consumer's ultimate purchase decision of a product (Maarsman, 2016) and understanding what product attributes consumers look for when exploring food options will give valuable insight into their subsequent product purchase. It was found that consumers will consider the nutritional and weight benefits of a product in relation to the degree they live a healthy lifestyle (Maarsman, 2016) and opt for the healthier version.

Studies indicate that the attribute of taste of organic produce, was considered by a consumer's, to be more enjoyable and taste better (Michaelidou & Hassan, 2008) while Padel and Foster (2005) found the safety attribute of organic food to be perceived by consumers to be safer than conventional products. Although previous research on how product attributes influence the attitude towards consumption of vegan foods or even organic foods, we none the less hypothesize that:

H4: There is a positive relationship between product attributes and attitude towards consumption of vegan foods.

### **5. Attitude towards Consumption of Vegan Foods and Purchase Intention of Vegan Foods**

The relationship between attitude towards consumption and purchase intention has been extensively researched in literature in multiple contexts (Martinelli & De Canio, 2021; Mhlophe, 2016; Teng & Wang, 2015). This relationship is founded from the conventional wisdom of Fishbein & Ajzen (1975), where the duo researched that the attitude centered around a particular behaviour, has a causal link in the intention to perform that behaviour. According to Ajzen (1991), the more favourable attitude displayed by the individual in regard to the behaviour, so the individual's behavioural intention strengthens.

Several authorities have found that within the context of organic food purchases, attitudes explained purchase intention (Tarkiainen and Sundqvist, 2005; Magnusson et al, 2001). Similarly, upon reviewing related literature in relation to the purchase intention of organic food, attitudes regarding organic food attributes are identified as crucial antecedents influencing consumer decision making (Teng and Wang, 2015).

Since attitude is about the personal belief that a certain action by an individual will lead to a desired outcome it can be said that an individual's attitude towards purchasing vegan food in order to ameliorate health has a significant effect on the purchase intention of individuals who engage in purchasing healthy food items. Therefore, we hypothesize that:

H5: There is a positive relationship between attitude towards consumption of vegan foods and purchase intention of vegan foods.

## **II. METHODS**

In this Methodology section, the research design, sampling technique, data collection and data analysis are presented.

**A. Research design**

The current study utilised a quantitative approach. The aim of quantitative research is to establish a relationship between existing variables within the population/representative sample by way of statistical techniques to propose a concluding course of action that can applied to other populations.

**B. Sampling**

Convenience sampling technique was used. The survey was distributed to 300 participants and only 283 were fully completed.

**C. Data collection**

Empirical data was collected by means of a structured questionnaire. The questionnaire consisted of two sections. Section A included demographic questions and Section B included the constructs of the study.

**D. Analysis of data**

Descriptive statistics was used to analyse the respondent demographic information using SPSS version 25. For Inferential statistics, Confirmatory Factor Analysis and Structural Equality Modelling using AMOS 25 were employed in data analysis.

**III. RESULTS AND DISCUSSION****A. Results**

This section provides an overview of the respondent profile, the scale accuracy analysis, the model fit and hypotheses results.

**1. Respondents profile**

The demographics of the study shows that females constituted most young people sampled (59.0%). Young people between the ages of 18 to 22 constituted the majority of age segments sampled (80.9%), as shown in Table 1.

*Table 1. Profile of respondents*

<i>Variables</i>	<i>Descriptions</i>	<i>(%)</i>
<i>Gender</i>	<i>Male</i>	38.5
	<i>Female</i>	59.0
	<i>Prefer not to say</i>	0.7
<i>Age</i>	<i>18–22</i>	80.9
	<i>23–25</i>	13.8

**2. Scale accuracy analysis**

The scale accuracy analysis is presented in Table 2 and followed by a discussion of the measurement scale reliability and validity.

*Table 2. Accuracy analysis scale*

Research Construct		Descriptive Statistics				Cronbach's Test		CR Value	AVE Value	HSV Value	Factor Loading
		Mean Value	Standard Deviation	Item-total	$\alpha$ Value						
SN	SN1	2.11	2.25	1.046	1.08	0.472	0.694	0.69	0.38	0.254	0.760
	SN2	2.22		1.045		0.546					0.756
	SN5	2.46		1.133		0.456					0.480
	SN6	2.20		1.105		0.441					0.368
HC	HC3	2.96	3.02	1.151	1.14	0.807	0.893	0.89	0.80	0.516	0.888
	HC4	3.07		1.137		0.807					0.901
PV	PV1	3.05	3.33	1.085	1.09	0.684	0.802	0.82	0.62	0.563	0.848
	PV2	3.16		1.109		0.771					0.898
	PV4	3.77		1.065		0.507					0.571
PA	PA1	2.30	3.16	1.064	0.96	0.403	0.756	0.61	0.29	0.432	0.556
	PA2	3.05		1.023		0.568					0.745
	PA3	3.35		0.871		0.612					0.439
	PA4	3.45		0.859		0.500					0.301
	PA5	3.43		0.925		0.418					0.312
	PA6	3.38		1.005		0.507					0.685
ATT	ATT1	3.03	2.77	1.107	1.11	0.700	0.829	0.82	0.54	0.230	0.850
	ATT2	3.09		1.142		0.652					0.856
	ATT3	2.35		1.053		0.654					0.598
	F5	2.59		1.118		0.621					0.599
PI	PI1	3.23	3.17	1.079	1.10	0.448	0.742	0.73	0.36	0.254	0.551
	PI2	3.13		1.095		0.495					0.761

PI3	3.02	1.080	0.533	0.461
PI4	2.78	1.144	0.513	0.416
PI5	3.67	1.101	0.537	0.725

SN – Subjective Norms, HC – Health Consciousness, PV – Perceived Value, PA – Product Attributes, ATT – Attitude towards Consumption of Vegan Foods, PI – Purchase Intention of Vegan Foods.

NB: CR = Composite Reliability and AVE = Average Variance Extracted.

Source: Field data (2019)

**3. Reliability and validity assessment**

The Cronbach’s alpha test ( $\alpha$ ) alpha test reached the required reliability threshold of 0.6 as recommended by (Hair *et al.*, 2017). All the study measures had factor loadings and composite reliability values above the recommended threshold values of 0.50 and 0.70, respectively (Nunnally, 1967). Furthermore, average variance extracted (AVE) of different study constructs was also higher than 0.50 as suggested by Bagozzi and Yi (1988). (Table 2). SEM returned good model fit ( $X^2/df = 2.547$ ,  $CFI = 0.905$ ,  $NFI = 0.856$ ,  $TLI = 0.871$ ,  $GFI = 0.879$ ,  $RMSEA = 0.074$ ).

**4. Correlations between constructs**

Table 3 the correlations among constructs of the study.

*Table 3. Inter construct correlation matrix*

	SN	HC	PV	PA	ATT	PI
SN	1					
HC	0.407	1				
PV	0.444	0.718	1			
PA	0.472	0.477	0.558	1		
ATT	0.499	0.677	0.750	0.657	1	
PI	0.504	0.327	0.470	0.436	0.480	1

Source: Field data (2019)

Note: SN – Subjective Norms, HC – Health Consciousness, PV – Perceived Value, PA – Product Attributes, ATT – Attitude towards Consumption of Vegan Foods, PI – Purchase Intention of Vegan Foods.

**5. Hypotheses testing and path coefficients.**

Table 4 below presents the results of the hypotheses and path coefficients followed by a discussion thereof.

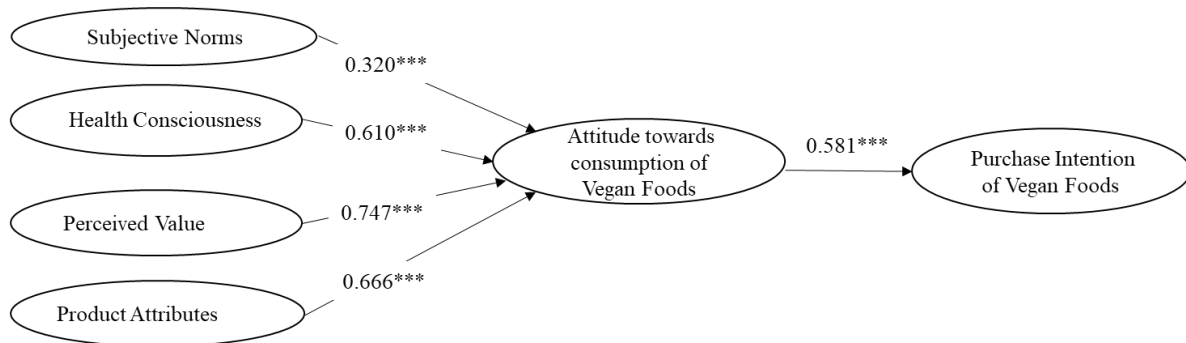
*Table 4. Structural model results*

Proposed hypothesis relationship	Hypothesis	Path Coefficient	P Value	Outcome
SN → ATT	H1	0.320	***	Supported and Significant

<i>HC → ATT</i>	<i>H2</i>	<i>0.610</i>	<i>***</i>	<i>Supported and Significant</i>
<i>PV → ATT</i>	<i>H3</i>	<i>0.747</i>	<i>***</i>	<i>Supported and Significant</i>
<i>PA → ATT</i>	<i>H4</i>	<i>0.666</i>	<i>***</i>	<i>Supported and Significant</i>
<i>ATT → PI</i>	<i>H5</i>	<i>0.581</i>	<i>***</i>	<i>Supported and Significant</i>

Note: \*\*\* =  $p < 0.01$

SN – Subjective Norms, HC – Health Consciousness, PV – Perceived Value, PA – Product Attributes, ATT – Attitude towards Consumption of Vegan Foods, PI – Purchase Intention of Vegan Foods.



Note: Effect size significant at \*\*\* =  $p < 0.01$

Figure 1: Tested Conceptual model for the study

In Figure 1, the coefficient of H1 Subjective norms → Attitude towards consumption of vegan foods was 0.32, and this suggests a significant positive relationship. This reinforces the influence of social norms and supporting the Theory of Planned Behaviour (TPB) (Ajzen and Fishbein, 1980). Thus, the results for H1 are similar to that of prior research analysing consumer behaviour towards plant-based meat and dairy alternatives market in Sweden (Mousel & Tang, 2016) where subjective norms were found to influence people’s opinions of plant-based companies as consumers of these products are influenced by the positive feedbacks from their significant others. The current study’s findings add vegan foods to the list of attitudes towards consumption of alternate healthy eating products which are influenced by subjective norms (Teng & Wang, 2015; Mhlophe, 2016).

The coefficient of H2 Health consciousness → attitude towards consumption of vegan foods. The coefficient of H2 was 0.61, and this suggests a significant positive relationship. Thus, the findings of the current study build on the majority of past studies, in which it was found that health consciousness was an important motive for clarifying attitudes towards organic foods (Padel & Foster, 2005). The results also went against a study conducted by Michaelidou & Hassan (2008) that claimed there was a weak relationship between health consciousness and attitudes. These findings suggest that young consumers are conscious about their health and keep abreast of changes responsible for the state of their health and thus associate more health benefits with vegan foods with likely attitude to consume such products.

The coefficient of H3 (Perceived value → attitude towards consumption of vegan foods) was 0.747 demonstrating a positive robust relationship. Prior literature with regards to the relationship between perceived value and attitude has revealed that consumer’s attitude towards a certain product is improved depending on the favourability with which they perceive the value of the product, so if consumers perceived values are positive, this will lead to a positive effect on attitude (Wu & Chang, 2016). The results of the current study are in line with those conducted by Wu & Chang (2016) by building on evidence that the more favourable perceived value students have of vegan foods, the more positive their relationship attitudes towards consuming vegan foods and thus marketing the benefits consumers perceive is vital in ensuring subsequent purchase intention.

The coefficient of H4 (Product attributes → attitude towards consumption of vegan foods) was 0.666, and this suggests a strong relationship. Finally, the coefficient of H5 (Attitude towards consumption of vegan foods

→ purchase intention of vegan foods) was 0.581, and this suggests a strong relationship. This is in line with the findings from research studies conducted by Teng and Wang (2015), whereby it was found that consumers attitude towards consumption had a positive effect on consumers purchase intention of organic foods. As well as a study conducted by Mousel and Tang (2016) who found that attitude towards purchasing plant-based meat and dairy alternatives, positively affected their purchase intention of such alternatives.

## **B. Discussion**

The study hypothesised that subjective norms, health consciousness, perceived value and product attributes influence attitude towards consumption and purchase intention of vegan foods amongst youth in South Africa. All five hypotheses (H1-H5) were supported, therefore indicating that subjective norms, health consciousness, perceived value and product attributes have an important effect on attitude towards consumption and purchase intention of vegan foods amongst youth in South Africa.

## **IV. CONCLUSION**

The study proved that there is a positive relationship between subjective norms, health consciousness, perceived value, product attributes, attitude towards consumption and purchase intention of vegan foods amongst youth in South Africa. The outcome of the study is in line with the hypotheses put forward. The empirical results from the study supported all research hypotheses in a significant way. All five hypotheses are supported, with results indicating a positive relationship between subjective norms 0.320, health consciousness 0.610, perceived value 0.747, product attributes, 0.666 and, attitude towards consumption. The relationship between attitude towards consumption and purchase intention of vegan foods amongst youth in South Africa also indicated positive relationship of 0.581. The study provided evidence to validate the applicability of the Stimulus- Organism-Response theory (S-O-R) and the Theory of planned behaviour (TPB), which form the theoretical framework of this study.

### **1. Implications of the study**

There are several management implications that follow from this study. The marketing contribution aims of this study were in order for producers, retailers and marketers of vegan foods to aid in the planning, formulation and implementation of marketing strategies. This study helped in identifying young consumers as customers with favourable attitudes and purchase intention of vegan foods. Thus, vegan food companies and marketers know who to better target their products towards. As there is a general feeling that non-conventional foods/ vegan foods/foods deemed to be healthier contain a price premium, driving the price up and the demand down, policy makers can assist in advising policy makers to impose subsidy programmes or new policies in order to enhance the growth of the vegan food market in South Africa.

Furthermore, companies could contemplate connecting themselves in order to have a stronger influence on grocery stores to stock vegan foods because currently the plant-based alternatives are only stocked in selected stores and cover a small portion within that store.

### **2. Limitations and areas of future research**

This study has certain shortcomings. First, only university students were respondents to the survey. The fact that some students were not aware of veganism or vegan foods, or not be responsible for household food purchases may have affected the response provided by participants in this study. Second, the current study utilized survey items that were extracted from previous research which examines functional or organic foods and modified in order to address vegan foods as a means of ameliorating overall health. Third, the current study is limited to measuring the attitude towards consumption and purchase intention of vegan foods in order to improve health; there is no measurement of actual buying or consuming behaviour. Therefore, the study does not gain insight as to whether these respondents attitude lead to actual purchase of vegan foods to improve their overall health. Lastly, this study was limited to purchase intention of vegan foods for health benefits, where moral, ethical and environmental concerns can also cause an individual to purchase vegan foods.

Upcoming research could examine each variable in depth as well as other factors which would influence consumer's attitudes to consumption of vegan foods. An interesting area for future research would be to examine, the ethical and environmental motivations for purchasing vegan foods, how the media positions plant-based foods and the subsequent influence it causes, lastly, research on the prejudices towards vegans and plant-based foods could be done.

**REFERENCES**

- Ajzen, I. & Fishbein, M., (1980). *Understanding attitudes and predicting social behaviour*. Prentice Hall, Englewood Cliffs, NJ.
- Ajzen, I. (1991). The Theory of Planned Behaviour, *Organisational Behaviour and Human Decision Processes*, 50(2): 179-211
- Al-Swidi, A., Huque, M. R., Hafeez, M. H., & Shariff, M. N. M. (2014). "The role of subjective norms in theory of planned behavior in the context of organic food consumption", *British Food Journal*, [Online] 116(10), 1561-1580. Accessed from: [https://doi.org/10.1108/BFJ-05-2013-0105\\_13](https://doi.org/10.1108/BFJ-05-2013-0105_13) October 2021]
- Arroyo, P. E., Liñan, J., & Vera Martínez, J. (2020). Who really values healthy food? *British Food Journal*, 123(2), 720-738.
- Cole, M. (2008). Asceticism and hedonism in research discourses of veganism. *British Food Journal*. 110(7), 706-716.
- Cooper, K., Dedehayir, O., Riverola, C., Harrington, S., & Alpert, E. (2022). Exploring consumer perceptions of the value proposition embedded in vegan food products using text analytics. *Sustainability*, 14(4), 2075.
- Elmadfa, I & Meyer, A. L. (2017). Animal Proteins as Important Contributors to a Healthy Human Diet. *Annual Review of Animal Biosciences*. [Online]. 5, 111-131. [Internet: <https://doi.org/10.1146/annurev-animal-022516-022943>; downloaded on 27 September 2021].
- Food Revolution Network (2018). *Why the Global Rise in Vegan and Plant-Based Eating Isn't A Fad (600% Increase in U.S. Vegans + Other Astounding Stats*. [Internet: <https://foodrevolution.org/blog/vegan-statistics-global/>; downloaded on 6 October 2021]
- Hair, J., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017). An updated and expanded assessment of PLS-SEM in information systems research. *Industrial management & data systems*, 117 (2017), pp. 442-458.
- Hemi, K. (May 13, 2022). Is Veganism Becoming More Popular? Using Data to Track the Growing Trend. [Internet: <https://sentientmedia.org/increase-in-veganism/>; downloaded on 6 June 2022].
- Kiely, M. E. (2021). Risks and benefits of vegan and vegetarian diets in children. *Proceedings of the Nutrition Society*, 80(2), 159-164.
- Lamb, C. W. Jr., Hair, J. F. Jr., McDaniel, C., Boshoff, C., Terblanche, N., Elliott, R. & Klopper, H. (2015) *Marketing*. 4<sup>th</sup> Edition. South Africa, Oxford University Press.
- Maarsman, P. (2016). *A Quantitative Study to the Underlying Motives for Food Choices: And How Do These Motives Contribute to Healthy Food Choices Among Dutch Young Adults?* Communication Studies (MSc). University of Twente. [Online]. [Internet: [https://essay.utwente.nl/71051/1/Maarsman\\_MA\\_Faculty%20of%20Behavioural,%20Management%20and%20Social%20Sciences.pdf](https://essay.utwente.nl/71051/1/Maarsman_MA_Faculty%20of%20Behavioural,%20Management%20and%20Social%20Sciences.pdf); downloaded on 23 August 2021].
- Magnusson, M. K., Avrola, A., Hursti Koivisto U. K., Aberg, L., & Sjoden, P. O. (2001). Attitudes towards organic foods among Swedish consumers. *British Food Journal*, 103(3), 209-226.
- Martinelli, E., & De Canio, F. (2021). Non-vegan consumers buying vegan food: the moderating role of conformity. *British Food Journal*, 124(1), pp.14-30.
- Mehrabian, A., & Russell, J. (1974). *An approach to environmental psychology*. Cambridge, MA: MIT Press.
- Mhlophe, B. (2016). Consumer Purchase Intentions Towards Organic Food: Insights from South Africa. *Business & Social Sciences Journal*, 1(1), 1-32.
- Michaelidou, N. and Hassan, L.M., (2008). The Role of Health Consciousness, Food Safety Concern and Ethical Identity on Attitudes and Intentions towards Organic Food. *International Journal of Consumer Studies*. [Online] 32(2), pp.163-170. [Internet: [https://dspace.stir.ac.uk/bitstream/1893/828/1/IJCS\\_Michaelidou%20%20Hassan%20Role%20of%20health%20consc.pdf](https://dspace.stir.ac.uk/bitstream/1893/828/1/IJCS_Michaelidou%20%20Hassan%20Role%20of%20health%20consc.pdf); downloaded on 16 May 2021].
- Mousel, T. & Tang, X. (2016). *Analysis of Consumer Behavior Towards Plant-Based Meat and Dairy Alternatives Market in Sweden*. Masters Thesis. Uppsala University.
- Padel, S. & Foster, C. (2005). Exploring the gap between attitudes and behaviour: understanding why consumers buy or do not buy organic food. *British Food Journal*, 107 (8), pp606-626
- Park, E., & Kim, S. B. (2022). Veganism during the COVID-19 pandemic: Vegans' and nonvegans' perspectives. *Appetite*, 175, 106082-106082.
- Paul, J., & Rana, J. (2012). Consumer behavior and purchase intention for organic food. *Journal of Consumer Marketing*, 29(6), 412-422.
- Physicians Committee (2018). *The Health Benefits of Going Vegan with Dr. Neal Barnard*. [Online]. [Internet: [https://www.youtube.com/watch?v=zLasU\\_5RmRA](https://www.youtube.com/watch?v=zLasU_5RmRA); downloaded on 27 September 2021].
- Song, B. L., Safari, M., Mansori, S. (2016). The Effects of Marketing Stimuli Factors on Consumers' Perceived Value and Purchase of Organic Food in Malaysia. *Journal Pengurusan*, 47(10), pp119 -130.

- Su, Y., Khaskheli, A., Raza, S. A., & Yousufi, S. Q. (2022). How health consciousness and social consciousness affect young consumers purchase intention towards organic foods. *Management of Environmental Quality: An International Journal*, (ahead-of-print).
- Suhr, D. (2006). The Basics of Structural Equation Modelling. [Online]. [Internet: <https://www.lexjansen.com/wuss/2006/tutorials/TUT-Suhr.pdf>; downloaded on 21 August 2021].
- Tarkiainen, A., & Sundqvist, S. (2005). Subjective norms, attitudes and intentions of Finnish consumers in buying organic food. *British Food Journal*, 107 (11), 808-822.
- Teng, C.C. & Wang, Y.M. (2015). Decisional factors driving organic food consumption: Generation of consumer purchase intentions, *British Food Journal*, [Online], 117(3), 1066-1081. Available from: <https://doi.org/10.1108/BFJ-12-2013-0361>; downloaded on 10 April 2021].
- The Vegan Society. (2019). [Internet: <https://www.vegansociety.com/go-vegan/definition>; downloaded on 25 May 2019].
- Wu, S. H. Chang, H. L. (2016). The Model of Relationship between the Perceived Values and the Purchase Behaviors toward Innovative Products. *Journal of Management and Strategy*. [Online]. 7(2). [<https://doi.org/10.1108/07363761211259223>].



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# The Role of International Trade on Economic Growth in Somalia

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## ABSTRACT

**Purpose:** This paper investigated the role of international trade on economic growth in Somalia, the main objective of the paper is to find out the role of export and import on economic growth in Somalia and to determine the relationship between international trade and economic growth in Somalia.

**Design/methodology/approach:** Somalia's major exports are livestock, bananas, skins, fish, charcoal, and scrap metal, the major export partners included the United Arab Emirates, Yemen, and Oman. The studies in 2020 indicated that Somalia was the number 173 economy in the world in terms of total exports and number 140 in total imports.

**Findings:** In 2021, Somalia exported a total of 482million USD, making it the number 168 exporter in the world, during the last five reported years, the exports of Somalia have changed by 149million USD from 631million USD in 2016 to 482million USD in 2021. Furthermore, the economy is described as a very open economy according to the ratio of imports plus exports to GDP which is 91.5 percent, the 7th highest in Sub-Saharan Africa and 45th highest in the world.

**Practical implications:** The major export of Somalia is livestock which is accompanied by its products i.e. hides and skins though the country deliberately depends on imports of food and non-food items. On the contrary, imports start from neighboring countries including Gulf countries, in South East Asia, and Somalia's exports for 2021 were \$1.53B, a %30.05 increase from 2020, Contribution of livestock to the national economy is estimated at %60-65.

**Paper type:** Literature review

**Keyword:** Exports, Imports, International trade, Economic growth

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## I. INTRODUCTION

No country in the world today produces all the commodities it requires, every country, therefore, tries to produce those commodities and services which go through comparative advantage. It exchanges part of those goods and services with the goods and services produced by other countries comparatively more efficiently. The relative difference in factor capacity, technology, tastes, etc and among the world's countries, has greatly widened the basis of international trade (Adedeji, 2015).

International trade simply refers to the exchange of commodities and services between countries of the world, which means that at least two countries should be having in the activities, the total of activities relating to trading between merchants across countries and borders. Some countries are more endowed in these resources than others, even, many countries that are adequately blessed with good resources may not have the ability to manage and channel them to their advantage, hence, denying them the opportunity of achieving the necessary growth, development, and good standard of living for their citizenry (United Nations, 2014). The significance of international trade stems from the reality that there is no country can produce all commodities and services which people require for their use mostly owing to resource differences and challenges

As a result, this trade relationship recommends that economies require to export commodities and services in order to generate revenue to finance. Thirty-two years later, the country's Gross Domestic Product has been estimated to be \$7.628B (World Bank & Ministry of National Planning and Development 2021). Moreover, with an estimated population of 18 million, the country's GDP Per Capita Income is estimated to be \$446 in 2021 and the 2021 average based on 175 countries was 16224.73 US dollars. The largest value was in Luxembourg, \$135682.8 and the lowest value was in Burundi \$236.8. Trade plays a very vital role as export levies and import taxes play the main part of over 50 percent of the revenue in 2012.

Somalia's economy is outlined as a very open economy according to the ratio of imports plus exports to GDP which is 91.5 percent, the 7th highest in Sub-Saharan Africa and 45th highest in the world (World Bank & Ministry of National Planning and Development 2014). This ratio gives a rough estimation of economic interdependence among nations (Salvatore 2013). The country's tariff levels are similar to those in sub-Saharan Africa, said to be effective with import tariffs of 4.15 percent and export tariffs of 3.34 percent respectively. Berbera Port is the economic engine of the northern region of the country (Somaliland) and provides all import and export services (Berbera Port Authority 2016). The major reasons international trade has a getting place are differences in the presence of government policies, the presence of economies of scale, information technology, resource, and demand.

### **A. Objectives of the Study**

The main objective is to find out the role of export and import on economic growth in Somalia and to determine the relationship between international trade and economic growth in Somalia

### **B. Literature Review**

This will go through and provide the existing literature about the role of international trade on economic growth in Somalia, it will highlight the concepts, Ideas, and Opinions from Authors, Experts, and secondary data sources and also describes the related studies.

#### **1. International Trade**

International trade is an exchange relating goods or services between at least two different nations, the substitute can be imports and exports, and an import is goods or services brought into the local market country, while an export mentions to goods and services sold to other than the domestic market. Traders attract to economic activities for the objectives of profit maximization bring about by differentials among the international economic environment of countries (Adedeji, 2015). The theory of comparative advantage makes us get more comprehensive that nations trade with each other in commodities and services because of the idea of differentials in the financial capital, natural resources, human capital, and technical capabilities perform of countries.

#### **2. Economic Growth**

The measuring of economic growth can be used in several factors including, Growth Domestic Product and Growth National Product which are the common factors used for measuring economic growth. Gross domestic product regards the aggregate value of goods and services manufactured within a nation's borders. Gross National Product measures the entire value of goods or services made by a nation's national in their place, and these measures bring a general overview of a nation's economic growth (Tamplin, 2023).

#### **3. Exports**

A notable feature of the developing nations, especially Sub-Saharan African countries is that they mostly depend on the exports of not manufactured items including Mineral and agricultural exports (Todaro & Smith 2012). Though they have been recently shifting to exporters of manufactured goods (Krugman & Obstfeld 2009). As the local output is still weak and insignificant, Somalia's exports are primarily unmanufactured goods. Somalia mainly exports livestock with primary species of camels, cattle, sheep, and goats – and its byproducts including hides and skins together with frankincense (Ministry of National Planning and Development 2015). The country's economy heavily depends on livestock production which employs over 70 percent of the Country's population.

Livestock production also contributes 60 percent of the GDP and over 85 percent of the country's foreign export earnings (Ministry of National Planning and Development 2011). Nonetheless, the livestock trade market is vulnerable to external forces, as can be seen from the two embargoes of Somali livestock imports, by Somalia's trade partners in the Arabian Peninsula in 1997 and 2000 respectively (Academy for Peace and Development 2002). Also, it faces significant disadvantages due to high taxes, lack of a financial system, dependence on foreign markets, and fluctuations in market prices. Livestock is the main source of family and national wealth in Somalia, and the export-oriented pastoralist production system is an important source of livelihood and resilience. Many areas in Somalia provide little livelihood other than livestock production and marketing. Livestock provides a source of income, and household consumption of meat and other animal products is an important source of food

security. Pastoralist communities obtain most of their calories from milk and meat consumption, which supplement cereal and non-cereal diets, which are often financed by income from the sale of livestock and milk. Livestock also plays an important role in Somali culture, with animals exchanged to consolidate social ties and reciprocal relationships. The livestock trade considerably plays an important part in the economy, it faces a number of challenges and losses due to the absence of a strong financial system, dependency on a single foreign market, and having several taxations

About 26 percent of the population is grouped as nomads, according to the most recent population estimates (UNFPA 2014). Many others living in both rural and urban areas derive major parts of their livelihoods from the livestock subsector, bringing the total number of people benefiting directly from the sector to 65 percent. In 2011–14, the livestock subsector accounted for about 75 percent of total exports. The figure has fluctuated, interrupted by droughts and international export bans, in the last three decades. Many traditional constraints associated with livestock production have intensified in recent decades. In the third quarter of 2020, Somalia's northern port (Berbera port) exported 595,861 heads of livestock, representing a significant 108% and 58% increase from the number exported in the second quarter and first quarter respectively. However, this was shown lower than the number exported in the same period in 2019 and 2018, 3<sup>rd</sup> quarter export in 2020 was 57% lower than the number registered at the same time in 2019 and 45% lower than in 2018, so, in between January and September 2020, Somalia exported a total of 1,064,170 heads of livestock compared to the 1,745,771 registered in the period of 2019, indicating a significant 39% decrease. This decline mostly originated from Sheep & Goat export which was specifically low in July and August with %58 and %82 in comparison to the same period in 2019, respectively. Studies showed the composition of livestock export in the first 9 months of 2020 and 2019, with Sheep and Goats accounting for %87 and %92 of total exports. There is a need to improve the technical skill levels of the country's workforce by delightful them in technical and vocational training plans in both public and private institutions of higher learning, this can indirectly increase the magnitude of exports, which then enhance the economic growth of the country.

#### **4. Imports**

Due to the less local production, consumer and manufacturer goods are mostly imported from outside countries, imports mostly through Muqdisho, Berber, Bosaso and Kismaayo Ports are classified into food items such as sugar, rice, wheat flour, wheat, cooking oil, dates, pasta, biscuits, etc. And nonfood items include petrol, diesel, clothes, cars/trucks, spare parts, cigarettes, soap, building materials, etc. (Ministry of National Planning and Development 2015). Nevertheless, other import channel is Beled-xaawo customs at Kenya Somalia border, Wajaale customs at the Ethiopia-Somalia border, and Muqdisho Airport, where food and nonfood items

Both food and nonfood items are monthly imported through Muqdisho, Berbera, Bosaso, and Kismaayo Ports. Sugar, rice, and wheat flour contribute the largest share of food items with hundreds of thousands of tons monthly while dates and biscuits account for the smallest share. On the other hand, fuel, clothes, and vehicles are constantly imported with thousands of tons, and M3.

#### **5. Trade with the Rest of the World**

International trade is defined as the exchange of goods and services across borders, growth of international trade and investment in recent decades resulted in more interdependence among nations which also gives international economic problems prominence in debates over public policy (Markusen et al. 1995).

The flow of goods, services, labor, and capital across national borders reveals this economic interdependence (Salvatore 2013). Gains from trade is regarded as mutual and according to the 19th-century British economist David Ricardo, as long as some pattern of comparative advantage exists, there will be gains from trade regardless of whether one country has an absolute advantage in all goods (Markusen et al. 1995). Although international trade has both positive and negative, economists overall trust that the benefits of trade exceed the costs. For case, even though more trade enables consumers to enjoy lower prices and greater choices, it also results in more competition for firms as well as for workers. Although there is a very strong confidence that openness to the world economy is a superior policy to closing, in accordance with historical beliefs, economic theory, and statistical evidence together, there is concrete support that open economies commonly grow rapidly and prosper more than closed ones (Gerber 2014)

According to Carbaugh (2005), trade enables firms and nations to specialize in the production of goods they have a relative advantage and spend the earnings to purchase goods they produce at higher costs; trade leads to the international competition which forces local producers to enhance the quality of their products; trade abates monopolies; and on the contrary, globalization makes the economy susceptible to external shocks. Somalia heavily depends on imports of food and non-food items as well as export earnings got about by livestock, hides and skins, frankincense, and other sorts of gums. As the ratio of imports plus exports to GDP is 91.5 percent, Somalia is regarded as a very open economy, and according to its geographical location in international markets, it can be considered as a small strategic open economy. Since nations are expected to trade more with nations with more

open economic systems (Salvatore 2013), the openness of Somalia's economy probably attracts more trade which in turn leads to growth and prosperity. The strategic geographical location of Berbera Port along the southern coast of the Gulf of Aden is an advantage to Somalia's international trade. It is a potential regional entrance particularly to the neighboring landlocked Ethiopia and to foreign investment (Azam 2010) and Ministry of National Planning and Development 2011).

## 6. Role of International Trade and Economic Growth

Trade is major in elevating world poverty, nations that are ready and open to international trade tend to grow faster, innovate, improve output, and provide higher income and more opportunities to their citizens. Open trade also gets benefits lower-income households by contributing to consumers' more fair low-cost commodities and services. Integrating with the world economy through trade and global value chains supports and drives economic growth and reduces poverty locally and internationally. International trade not only results in increased efficiency but also allows countries to participate in a global economy, encouraging the opportunity for foreign direct investment (FDI). In theory, economies can thus grow more efficiently and become competitive economic participants more easily.

## II. METHODS

This study used secondary data, the study deploys both qualitative and quantitative methods. A notable feature of the developing nations, especially Sub-Saharan African countries is that they mostly depend on the exports of not manufactured items including Mineral and agricultural exports (Todaro & Smith 2012), though they have been recently shifting to exporters of manufactured goods (Krugman & Obstfeld 2009).

*Table 1. Livestock exports through Berbera Port: 2010 – 2014 per heads*

<i>Month</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Total</i>
<i>Jan</i>	211,839	95,002	141,303	235,022	228,319	911,485
<i>Feb</i>	70,666	109,647	271,882	149,750	146,733	748,678
<i>Mar</i>	46,566	144,127	131,150	118,143	178,716	618,702
<i>Apr</i>	83,377	119,658	116,103	83,839	156,338	559,315
<i>May</i>	60,620	72,313	87,602	143,863	81,428	445,826
<i>Jun</i>	103,424	181,199	209,768	212,906	284,483	991,780
<i>Jul</i>	190,601	345,969	232,800	272,172	252,747	1,294,289
<i>Aug</i>	179,234	216,452	182,231	220,993	287,543	1,086,453
<i>Sep</i>	275,124	202,994	294,012	953,484	1,322,588	3,048,202
<i>Oct</i>	552,579	1,254,636	1,594,136	616,984	104,647	4,122,982
<i>Nov</i>	966,692	387,903	64,386	37,713	200,310	1,657,004
<i>Dec</i>	69,760	232,999	187,229	121,690	162,715	774,393

<i>Total</i>	2,810,482	3,362,899	3,512,602	3,166,559	3,406,567	16,259,109
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*Table 2. Hide and skin exports through Berbera Port: 2010 – 2014 per pieces*

<i>Month</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>
<i>Jan</i>	505,347	862,255	314,490	227,049	108,456
<i>Feb</i>	257,850	2,368,945	223,891	340,500	106,513
<i>Mar</i>	432,847	3,127,508	249,612	66,588	256,083
<i>Apr</i>	306,555	791,100	391,854	131,415	417,436
<i>May</i>	492,864	1,918,757	329,033	82,350	254,778
<i>Jun</i>	151,222	1,143,535	115,776	211,737	328,900
<i>Jul</i>	196,950	1,796,932	181,954	56,800	426,500
<i>Aug</i>	575,235	225,400	352,180	144,715	178,700
<i>Sep</i>	124,664	604,100	1,070,058	270,257	218,736
<i>Oct</i>	563,738	242,976	199,336	245,647	283,251
<i>Nov</i>	1,005,800	244,154	269,843	257,195	384,300
<i>Dec</i>	2,290,974	316,685	278,004	145,990	231,085
<i>Total</i>	6,904,046	13,642,346	3,976,031	2,180,243	3,194,738

Due to the lack of local manufacturing, consumer and manufacturers are mostly imported from foreign countries, so imports basically through Berbera Port are classified into food items and non-food items. (Ministry of National Planning and Development 2015).

*Table 3. Imports of food items through Berbera Port: 2010 – 2014 per tones*

<i>Year</i>	<i>Sugar</i>	<i>Rice</i>	<i>w/flour</i>	<i>Wheat</i>	<i>c/oil</i>	<i>Pasta</i>	<i>Dates</i>	<i>Biscuits</i>
<i>2010</i>	133,500	60,270	71,650	56,052	17,949	28,589	3,749	6,064
<i>2011</i>	94,956	86,827	71,511	20,500	17,656	34,998	6,570	6,887
<i>2012</i>	118,440	83,846	75,925	64,767	19,888	34,401	4,855	10,185

2013	115,929	79,822	82,519	11,656	13,125	28,717	6,851	9,370
2014	181,227	94,296	111,579	4,985	28,101	45,054	7,552	6,641

*Table 4. Imports of nonfood items through Berbera Port: 2010 – 2014 per tones and M3*

Year	Petrol	Diesel	Clothes	C/trucks	s/parts	Cigarettes	Soap	O/building	Other	Total
2010	6,454	52,401	20,514	13,179	3,478	6,872	9,992	203,162	128,988	446,391
2011	7,168	56,392	10,183	10,774	2,294	7,124	9,581	45,313	147,199	296,995
2012	10,741	56,022	9,484	11,365	3,315	9,011	9,148	56,015	197,715	363,858
2013	16,162	69,408	10,684	15,077	5,232	7,528	10,925	49,751	191,828	378,071
2014	20,237	99,077	13,303	18,291	6,887	5,482	9,783	55,487	250,304	479,742

The top imports of Somalia are \$577 million in Rolled Tobacco, \$262 million in Raw Sugar, \$248 million in Other Vegetables, \$206 million in Rice, and \$150 million in Broadcasting Equipment, imported mostly from the United Arab Emirates \$1.28 Billion, \$893 million China, \$544 million India, \$294 million Ethiopia, and \$274 million Turkey

The top exports of Somalia were \$111 million from Gold, Sheep, and Goats \$35million, \$25.8million Insect Resins, \$21.1million from other Animals, and \$21.1million from other Oily Seeds, \$146million exported mostly to United Arab Emirates, \$39.2million Saudi Arabia, \$16.5million Japan, \$11.7million Bulgaria (\$11.7M), and \$7.68million from China

### III. RESULTS AND DISCUSSION

As the volume of international trade has been increasing over the years and resulted in more interdependence among nations, Somalia’s economy heavily depends on international trade. In 2021, Somalia exported a total of 482million USD, making it the number 168 exporter in the world, during the last five reported years, the exports of Somalia have changed by 149millionm USD from 631million USD in 2016 to 482million USD in 2021. Furthermore, the economy is described as a very open economy according to the ratio of imports plus exports to GDP which is 91.5 percent, the 7th highest in Sub-Saharan Africa and 45th highest in the world.

However, given the fact that the country’s imports outweigh its exports, the trade deficit is considerable, financed by remittances and aid contributions. Livestock is the major export of Somalia accompanied by its byproducts i.e. hides and skins while the country heavily depends on imports of food, fuel, and manufactured products. Muqdisho Port is the country’s main Port and Berbera Port is the second country’s main seaport and Bosaso is the third Port providing both importing and exporting services.

When exports exceed imports, net exports are positive, which indicates that the nation has a trade ratio, and when exports are less than imports, net exports are negative, which indicates that the nation has a trade deficit. The government should include in its economic strategy an improvement in the imports of capital goods, which can in turn enhance the manufacturing capability of the economy and finally significantly impact the export size and economic growth. Somalia’s exports primarily end up in Arabian Peninsula while its imports come from neighboring countries. Gulf countries, South East Asia, and beyond. Furthermore, Somalia’s livestock trade faces substantial losses due to multiple taxations, the absence of a financial system, the dependency on a single foreign market, and market price fluctuations.

For export, the Somalia Government should have established policies to support export, such as investment incentives, and taxes incentive, and support the enterprises to set up and expand their business to the other area by creating policies and loans with the zero-interest rate.

#### IV. CONCLUSION

As a result, this trade relationship recommends that economies require to export commodities and services in order to generate revenue to finance. International trade between different nations plays an important role and create a very important factors in raising the country's standard of living, creating employment opportunities, and enabling consumers to enjoy a different of goods and service. Exports and imports play an important role in economic growth because together they make up the balance of national trade, which can lead to the overall health of the economy, a healthy economy, both exports and imports show continuous activity and usually stands for durable and strong of the nation's economic system.

#### REFERENCES

- Academy for Peace and Development (2002). *Regulating the Livestock Economy of Somaliland*. Hargeisa: Academy for Peace and Development.
- Asir, M. H., Mukhongo, A., & Datche, E. (2019). *Effect of international trade on economic development of Mogadishu, Somalia. The Strategic Journal of Business & Change Management*, 6 (2), 1225 –1240.
- Azam, J.-P. (2010). *A State is Born: Transport Infrastructure and Democracy in Somaliland Political Economy and Development*. Paris: Paris School of Economics
- Berbera Port Authority (2016). "About Berbera Port" <http://berberaseaport.net/> (Accessed 24 January 2016).
- Observatory of Economic Complex (2020). <https://oec.world/en/profile/country/som> (Links to an external site.) accessed 28 Mar-2023).
- Bradbury, M., Abokor, A. Y., & Yusuf, H. A. (2003). *Somaliland: Choosing politics over violence". Review of African Political Economy*, 30(97), 455-478.
- Carbaugh, R.J. (2005). *International Economics*" (10th edition, Mason: Thomson South-Western.
- Elbeydi, K. R., Hamuda, A. M., & Gazda, V. (2010). *The relationship between export and economic growth in Libya Arab Jamahiriya. Theoretical and Applied Economics*,1, 69.
- Gerber, J. (2014). *International Economics*. 6th edition, Boston: Pearson.
- Grossman, G. M., & Helpman, E. (1991). *Innovation and Growth in the Global Economy*.
- Gerritze, M (2021). *Does trade cause detrimental specialization in developing economies? Evidence from countries of the Suez Cannal*. Journal of Developmental Economics Cambridge: MIT Press.
- Hassan, S.M., (2022). *Comparison of Somalia and the East Africa Community in terms of economic and competition*. SSRN <https://dx.doi.org/10.2139/SSRN.4259594>
- Krugman, P. R., & Obstfeld, M. (2009). *International Economics Theory and Policy*. 8th ed. Boston: Addison Wesley.
- Islam, F., Qazi, M., & Hye, A. (2011). *Imports-Economic Growth Nexus: ARDL Approach to Cointegration MPRA Paper No. 28462*. <http://mpra.ub.uni-muenchen.de/28462/>
- Markusen, J. R., Melvin, J. R., Kaempfer, W. H., & Maskus, K. E. (1995). *International Trade Theory and Evidence*. Boston: McGraw-Hill.
- Salvatore, D. (2013). *International Economics*. 11th edition Hoboken, Wiley.
- Samatar, A., Salisbury, L., & Bascom, J. (1988). *The political economy of livestock marketing in northern Somalia. African Economic History*, (17), 81-97.
- Todaro, M. P., & Smith, S. C. (2012). *Economic Development*. 11th edition, Boston: Addison Wesley.
- World Bank and Ministry of National Planning and Development (2014). *Growth and Unemployment. Somaliland Economic Conference*. Hargeisa: The World Bank.
- World Bank and Ministry of National Planning and Development (2014). *Poverty and Inflation: Somaliland Economic Conference*. Hargeisa: The World Bank.

# Analysis of the Effect of Work Discipline and Work Motivation to Employee Performance at PT. Falcon Berkat Indonesia

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## ABSTRACT

**Purpose:** Within the scope of an organization or company, Human Resources (HR) is an integral part and system of the organization. Human Resource Management plays an important role in government organizations, industry, education, and so on. If human resources in an organization or company are managed well, the organization will run optimally. Human resource management plays an important role in increasing the effectiveness and efficiency of an organization in achieving its goals.

**Design/methodology/approach:** The data source used in this research was obtained from the research object by providing questionnaires given to employees. This research uses a descriptive method by collecting data, processing and analyzing the data to obtain a picture of the problem being studied and a quantitative method. So it can be concluded that in the t test (partially) via SPSS (statistical product and service solution) version 20. It can be seen that the sig. For the work discipline variable on employee performance, it shows  $t = 1.872$  and  $t_{table} = 1.99$ ,  $t \text{ count} = 1.872 \geq 1.99$  with a significance value of  $0.065 \leq 0.05$ , so  $H_0$  is rejected and  $H_a$  is accepted, which means that partially there is an influence between work discipline (X1) on employee performance (Y).

**Findings:** The results of testing work motivation on employee performance show  $t \text{ count} = 6,261$  and  $t_{table} = 1,99$   $t \text{ count} 6,261 \geq 1,99$  with a significant value of  $0,00 \leq 0,05$ , so  $H_0$  is rejected and  $H_a$  is accepted, which means that there is a partial influence on work motivation. (X2) on employee performance (Y). Based on the overall results of data processing via SPSS (Statistical Product and Service Solution) version 20. It can be concluded that the low work discipline and work motivation of PT. Falcon Berkat Indonesia employees. So that the quality of the work produced has decreased.

**Paper type:** Research Paper

**Keyword:** *Work Discipline, Work Motivation and Quality of the Work*

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## I. INTRODUCTION

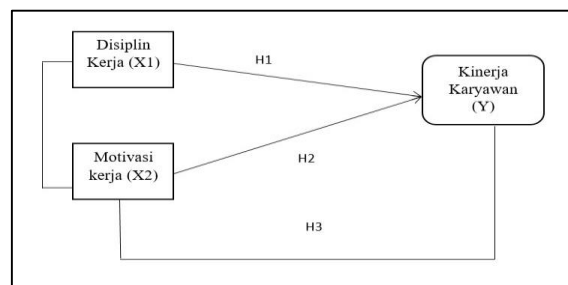
Within the scope of an organization or company, Human Resources (HR) is an integral part and system of the organization, Human Resource Management holds. Role important deep a government organization, industry, education, and so on. If human resources in the organization or company are managed properly, the organization runs optimally. Human resource management plays a role in increasing the effectiveness and efficiency of an organization in achieving its goals (Sivanissa & Azizah, 2022). The success of a company is greatly influenced by the individual performance of its employees. Every company will always try to get the best performance from its employees, with the hope that what is the company's goal will be achieved. The results of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Employee performance is influenced by several factors both related to the workforce itself and those related to the company or organizational environment (Sucahyowati & Hendrawan, 2020). Factors that affect performance include motivation and work discipline (Shofiana et al., 2023). Enforcing discipline is important for the company, because discipline contains rules that must be obeyed by employees. With discipline, it is expected to make work as efficient as possible. Work discipline can be seen as something that has great benefits, both for the benefit of the organization and for employees. For organizations, the existence of work discipline will ensure the



maintenance of order and smooth implementation of tasks, so that optimal results are obtained. The work discipline factor is a major attitude that must be carried out by members / employees in the company to get maximum performance results, internal problems in fact employees of PT. Falcon Berkat Indonesia often cannot be sure that it will finish working hours, because indeed at the beginning of the company there is no provision if employees are not in accordance with working hours there will be consequences. According Rikarling et al. (2021) in addition, the factor that affects employee performance is work motivation that teaches how to encourage the morale of subordinates so that they want to work harder and work hard by using all the abilities and skills they have to be able to advance and achieve company goals. Motivation is a driving tool that causes a member of the organization to be willing and willing to take time to carry out various activities to become his responsibility and fulfill his obligations in achieving goals and various organizational goals that have been determined (Soetanto, 2012). In recent years employees of PT. Falcon Berkat Indonesia experienced a decrease in motivation in doing work in accordance with the results and specified working time, because from the company's management there are no provisions that can encourage employee morale in the form of compensation or consequences if it is not in accordance with company management regulations. In 2022-2023 the company PT. Falcon Berkat Indonesia is able to compete with other companies in the same field so that the company experiences an increase in turnover that should be employees in the administrative office department certainly experience additional jobs that must be completed in the right time and in accordance with their target goals, while in this company there is a lack of discipline and motivation for employees to complete their job desk in accordance with the target that should be due to the absence of Regulations that tighten the employee working time system, therefore what happened this year employees experienced overtime work which requires employees to be more disciplined and motivated to work in accordance with the time and conditions determined by the company. Based on the description above, the researcher is interested in conducting research with the title "Analysis of The Effect of Work Discipline and Work Motivation on Employee Performance at PT. Falcon Berkat Indonesia".

### **A. Theoretical Framework of Thought**

From the description of these thoughts can be clarified through the aribel the influence of motivation and work discipline on employee performance, systematically depicted as in the picture.



The picture above illustrates how the frame of mind of the relationship between the variables to be studied where X1 (Work discipline), X2 (Work motivation) to Y (Employee Performance), if done well to consumers then consumers will feel satisfied. Based on the description of the framework and the results of empirical studies above, the researcher proposed several hypotheses in this study as follows:

H1 : Work discipline has a positive effect on employee performance

H2 : Work motivation has a positive effect on employee performance

H3 : Work discipline and work motivation have a positive influence on the performance of PT. Falcon Berkat Indonesia.

## **II. METHODS**

### **A. Research Variables and Operational Definitions**

#### **1. Research Variables**

Research variables are a trait or value of people, objects or activities that belong to certain variations that have been determined by researchers to be studied and then draw conclusions.

The variables used in this study are independent variables and dependent variables:

- a. Independent variables are variables that influence, which cause the emergence or change of the dependent variable. The independent variables used in this study are locus of control and personality, which in this study consists of work discipline (X1) and work motivation (X2).

- b. **Dependent Variable** A dependent variable is a variable that is affected due to the presence of an independent variable. The dependent variable used in this study is performance, which in this study consists of employee performance (Y).

The operational definition of research variables is an explanation of each variable used in research on the indicators that make it up. The operational definition of this research can be seen in the following table:

**2. Operational Definition**

The operational definition of variables is the definition of variables (expressed in the definition of concepts) that, operationally, in practice, are real within the scope of the object of research / object under study.

*Table 1. Operational Definition*

<i>Variable</i>	<i>Operational Definition</i>	<i>Indicator</i>	<i>Measurement</i>
<i>Research</i>			
<i>Discipline Employee (X1)</i>	<i>Work discipline is an attitude of employee willingness to understand and obey all forms of regulations determined by the company, and are ready to accept the type of sanctions if they violate these rules</i>	<i>Punctuality comes to work.</i> <i>Punctuality comes the clock back home</i> <i>Compliance with applicable regulations.</i>	<i>Scale Likert</i>
<i>Work Motivation (X2)</i>	<i>Work motivation can be concluded that motivation is a process by which to encourage and raise employee morale which has a very positive impact on employees in an organization or work environment.</i>	<i>Driving force</i> <i>Desire</i> <i>Kerelaan</i> <i>Shaping expertise</i> <i>Shaping skills</i>	<i>Scale Likert</i>
<i>Karyawan's Performance (Y)</i>	<i>It can be concluded that performance is a real contribution made by employees according to their duties and responsibilities through management processes with standards determined by the company.</i>	<i>Provision of deliverables</i> <i>Thoroughness of work</i> <i>The resulting work</i> <i>Presence</i> <i>Company regulation</i>	<i>Scale Likert</i>

**3. Research Instruments**

The research instrument aims to measure the variables to be studied where the measurement of research variables is carried out through questionnaire questions with reference to the Likert scale. Likert scales are used to measure the attitudes, opinions, and perceptions of a person or group of people about social phenomena. The score given to each respondent's answer can be seen in table 2.

*Table 2. Respondents' answers and the weight of the questionnaire results*

<i>Respondents' Answers</i>	<i>Value Weighting</i>
<i>Strongly Agree (SS)</i>	<i>5</i>
<i>Agree (S)</i>	<i>4</i>
<i>Raagu-Raagu (R)</i>	<i>3</i>
<i>Disagree (TS)</i>	<i>2</i>
<i>Strongly Disagree (STS)</i>	<i>1</i>

**B. Time and Place of Research**

**1. Research Time**

The research time in collecting the data needed until the preparation of this thesis is April 2023 – June 2023.

**2. Research Sites**

The place of research was conducted at PT. Falcon Berkat Indonesia is located in sweet warehousing, 3M multi warehouse kadu warehousing area, curug Tangerang Banten regency.

**C. Population and Sample**

**1. Population**

Population is a generalized area consisting of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2017: 297). The population in this study was 100 employees from PT. Falcon Berkat Indonesia.

**2. Sample**

The sample is part of the number and characteristics possessed by that population. If the population is large and it is not possible for the researcher to study everything in the population, for example due to motivation, experience, and time limitations, then the researcher can use a sample taken from that population. What is learned from that sample, the conclusions will be applicable to the population. For this reason, samples taken from the population must be truly reflective / representative (Sugiyono, 2017: 297). From the total population (N) there is a number of research samples (n) that must be taken based on the slovin formula with a confidence level of 85% (a = 0.05) are as follows:

$$n = \frac{N}{1 + Ne^2}$$

$$N = \frac{100}{100(0,05)^{2+1}} = 80 \text{ Responden}$$

Data of the administration department at PT. Falcon Berkat Indonesia:

Female Employees : 40 people

Male Employees : 40 persons

**D. Data Source Type**

a. Data Primer

Data obtained from informant sources, namely individuals or individuals such as the results of interviews conducted by researchers. And in this study primary data was obtained from the object of research by providing questionnaires given to employees.

b. Data Seconds

Secondary data is data obtained from records, books and in the form of company publication reports. Secondary data in this study are company profiles and company production data

## **E. Data Collection Methods**

In this writing, the author uses the data collection method as Next:

### **1. Literature Research**

In this method, researchers study literature studies to collect information relevant to the topic or problem that is the object of research. Such information can be obtained from books, scientific papers, theses, dissertations, encyclopedias, the internet, and other sources. By conducting a literature study, researchers can utilize all information and thoughts relevant to their research.

### **2. Field Research**

Field Research is research conducted by collecting data and information obtained directly from respondents. The collection of data and information is carried out in the following ways:

#### **1. Observation**

Research methods for measuring individual actions and processes in an observed event, and observation are accurate methods of collecting data.

#### **2. Interview**

A method of obtaining information for research purposes by means of questions and answers while meeting face to face between questioners or respondents using a tool called an interview guide

#### **3. Questionnaire**

Information gathering techniques that allow analysts to study the attitudes, beliefs, attitudes, and characteristics of some of the key people in the organization who could be affected by the proposed system or by the existing system.

F.

## **Data Analysis Methods**

Quantitative analysis is a method that emphasizes the measurement aspect, where each variable is determined by number symbols, and mathematical calculation techniques. The statistical approach between variables that affect leadership style and work discipline influenced by member performance is calculated by the following equation

### **1. Quantitative Analysis**

Quantitative analysis is a method for testing certain theories by examining relationships between variables. The author uses several theories of statistical approaches, among others.

#### **a. Validity Test**

The validity test is used to measure the validity or validity of a questionnaire. If the correlation between the score of each question item and the total score has a significance level of 0.05 then the question item is said to be valid, and vice versa.

#### **b. Reliability Test**

Reliability tests are used to determine the extent to which questionnaire measurement results remain consistent, if two or more measurements are made of symptoms with the same symptoms using a same measuring instrument. Reliability is measured by the Cronbach alpha statistical test ( $\alpha$ ) of each instrument in a variable. An instrument is said to be reliable if it has a cronbach alpha more than 0.70.

### **2. Classical Assumption Test**

The classical assumption test is used to test a model that includes whether or not the regression analysis model used in research is feasible. The terms of the classical assumption are as follows

#### **a. Multicollinearity Test**

The purpose of the multicollinearity assumption test is to test whether in the regression model there is a correlation between the independent variables. A regression model is said to be free of multicollinearity problems if the correlation between independent variables is close to 0.5. In addition, it can be known through the magnitude of VIF and Tolerance, where if the value of VIF and Tolerance  $< 10$ , then the regression model is free of multicollinearity.

#### **b. Normality Test**

To test whether in regression models, confounding or residual variables have a normal distribution, because as it is known that the t-test and F test assume that the residual value follows the normal distribution, if this assumption is violated it will result in the statistical test being invalid.

#### **c. Heterokedasticity Test**

The purpose of the heteroscedasticity assumption test is to test whether the residual error of a regression model does not have constant variance from one observation to another. If the variance from the residual of one observation to another is different, it is called heteroscedasticity. A good regression model is that heteroscedasticity does not occur. The basis for decision making of a regression model is said not to occur heteroscedasticity is that if there is no clear pattern, and the points spread above and below the number 0 (zero) on the Y axis, then heteroscedasticity does not occur.

d. Uji Autokorelasi

The autocorrelation test aims to test whether in the linear regression model there is a correlation between confounding errors in period t with confounding errors in periods t-1 (previous periods). To determine the presence or absence of autocorrelation in regression is done using the Durbin-Watson test, which is done by directly comparing the value of DW (d calculated) with d table. Autocorrelation tests were carried out with the help of SPSS (Ghozali, 2016: 107).

e. Multiple Linear Regression Analysis

Regression analysis is basically the study of the dependence of the dependent variable (bound) with one or more independent variables (explanatory / independent variables), with the aim of estimating and / or predicting the population mean or the values of the dependent variable based on the value of the independent variable known. The mathematical equation of multiple regression used in this study is:

$$Y = a + b_1X_1 + b_2X_2$$

Information:

Y = Purchase Decision

A = constant value

b1 = Variable Coefficient X1

b2 = Variable coefficient x2

X1 = Promotion Strategy

X2 = Product Quality

f. Coefficient of Determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) essentially measures how far the model is able to explain the variation of the dependent variable. The value of the coefficient of determination is between zero and one. A small  $R^2$  value means that the ability of independent variables to explain dependent variable variation is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable.

Coefficient of determination ( $R^2$ ) analysis is needed to determine how much purchase decisions are caused by promotional strategies and product quality.

Formula:

$$KD = r^2 \times 100\%$$

Information:

KD = Coefficient of determination

$R^2$  = Correlation coefficient between x and y

g. Test t

Used to find out whether the independent variable used has a partial effect on the dependent variable or not.

The steps that need to be done in the t test are:

1. Determining Tcalculate
2. Determining the table that can be seen in the statistical table at a signification of  $0.05 : 2 = 0.025$  (2-sided test) with a degree df of  $n-k-1$ .
3. Test criteria
  - 1) The independent variable (X) has no partial effect on the variable (Y) if  $Tcount < Ttable$
  - 2) The independent variable (X) partially affects the variable (Y) if  $Tcount > Ttable$
4. Compare Tcalculate with Ttabel
5. Making conclusions

So if the variable error rate of a variable is more than 5% or 0.05%, it means that the variable is not significant.

h. Test F

Testing the effect of independent variables together (simultaneously) on changes in the value of independent variables, carried out through testing the magnitude of changes in the value of the dependent variable obtained, explained by changes in the values of all independent variables for which it is necessary to do an f test. The f or ANOVA test is performed by comparing the level of significance established for the study. The steps that need to be done in the f test are:

1. Create a  $F_{calculate}$
2. Determine  $F_{table}$  which can be seen in the statistical table at a significance of 0.05 with degree of freedom of  $n-k$
3. Test criteria
  - 1) The independent variable (X) has no partial effect on the dependent variable (Y) if  $F_{calculate} < F_{table}$
  - 2) The independent variable (X) partially affects the dependent variable (Y) if  $F_{calculate} > F_{table}$
4. Compare  $F_{calculate}$  with  $F_{table}$
5. Making conclusions
 

So if the error rate of a variable is more than 5% or 0.05, it means that the variable is not significant.

### III. RESULTS AND DISCUSSION

#### A. Test Data Analysis and Discussion

##### 1. Validity Test

The validity test is used to measure the validity or validity of a questionnaire. The results of the study are considered valid if there are similarities between the data collected and the data that actually occurs in the object studied. The correlation test used in this study was the Pearson correlation with the SPSS program. Refers to the formula  $df = n-2$  with a significant of 5%. Provided that the final result is:

If  $r_{counts} > r_{table}$  and a positive value is valid

If  $r_{counts} < r_{table}$  and a negative value means that it is invalid

The results of the promotion strategy validity test can be seen in table 3.

*Table 3. Work Discipline Validity Test Results (X1)*

<i>Items</i>	<i>Calculate</i>	<i>r<sub>table</sub> 5% (30)</i>	<i>Information</i>
<i>X1.1</i>	<i>0,606</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.2</i>	<i>0,711</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.3</i>	<i>0,488</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.4</i>	<i>0,550</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.5</i>	<i>0,624</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.6</i>	<i>0,515</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.7</i>	<i>0,522</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.8</i>	<i>0,642</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.9</i>	<i>0,700</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.10</i>	<i>0,524</i>	<i>0,2199</i>	<i>Valid</i>

Source : Data processed 2023

Based on the table shows that  $r_{count} > r_{table}$ , it can be concluded that all work discipline variable questionnaires (X1) are declared valid. On the other hand, the results of the work motivation validity test can be seen in table 4.

*Table 4. Work Motivation Validity Test Results (X1)*

<i>Item</i>	<i>Calculate</i>	<i>rtable 5% (30)</i>	<i>Information</i>
<i>X1.1</i>	<i>0,433</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.2</i>	<i>0,652</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.3</i>	<i>0,541</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.4</i>	<i>0,477</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.5</i>	<i>0,555</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.6</i>	<i>0,501</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.7</i>	<i>0,662</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.8</i>	<i>0,692</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.9</i>	<i>0,579</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.10</i>	<i>0,529</i>	<i>0,2199</i>	<i>Valid</i>

Source : Data processed 2023

Based on table 4 shows that  $r \text{ count} > r \text{ table}$ , it can be concluded that all work motivation variable questionnaires (X2) are declared valid. The results of the Employee Performance validity test (Y) can be seen in table 5.

*Table 5. Employee Performance Validity Test Results (Y)*

<i>Item</i>	<i>Calculate</i>	<i>rtable 5% (30)</i>	<i>Information</i>
<i>X1.1</i>	<i>0,567</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.2</i>	<i>0,574</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.3</i>	<i>0,464</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.4</i>	<i>0,592</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.5</i>	<i>0,623</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.6</i>	<i>0,552</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.7</i>	<i>0,670</i>	<i>0,2199</i>	<i>Valid</i>
<i>X1.8</i>	<i>0,498</i>	<i>0,2199</i>	<i>Valid</i>

X1.9      0,543      0,2199      Valid

X1.10      0,567      0,2199      Valid

Source : Data processed 2023

Based on table 5 shows that  $r \text{ count} > r \text{ table}$ , it can be concluded that all employee performance variable questionnaires (Y) are declared valid.

**2. Reliability Test**

To calculate the reliability of questionnaire items in this study using alpha cronbach calculations with the SPSS program. With decision making criteria, namely:

If the  $\alpha > 0.60$  then the instrument is reliable

If the  $\alpha < 0.60$  then the instrument is not reliable

The reliability test results can be seen in table 3.

*Table 6. Reliability Test Results X1,X2, and Y*

<i>Variable</i>	<i>Calculate</i>	<i>Tables (30)</i>	<i>Information</i>
<i>Work Discipline (X1)</i>	<i>0,786</i>	<i>0,60</i>	<i>Reliable</i>
<i>Work Motivation (X2)</i>	<i>0,760</i>	<i>0,60</i>	<i>Reliable</i>
<i>Employee Performance (Y)</i>	<i>0,746</i>	<i>0,60</i>	<i>Reliable</i>

Source : Data processed 2023

The results of the reality test using the SPSS program on all variables such as those contained in all variables as contained in the table above show that the value of Cronbach's alpha for each variable, namely work discipline (X1), work motivation (X2), and employee performance (Y) is  $r \text{ calculate} > r \text{ table}$  or above 0.60 so it can be concluded that the statement is declared reliable.

**3. Classical Assumption Test**

1. Normality Test

The purpose of normality is to test whether in a regression model, variables are bound and free or both have normal distributions or not. Normal detection is done by looking at the normal probability plot graph. To find out whether the data in this study is normal or not, researchers used the Kolmogorov smirnov statistical test (K-S), with the following criteria:

a. If the significant value or probability  $< 0.05$  then the data is abnormally distributed.

b. If the significant value or probability  $> 0.05$  then the data is normally distributed.

The results of the test using the Kolmogorov-Smirnov statistical test (K-S) are as follows:

*Table 7. Normality Test Results using SPSS*

*One-Sample Kolmogorov-Smirnov Test*

		<i>Unstandardized Residual</i>
<i>N</i>		<i>80</i>
<i>Normal Parameters,a,b</i>	<i>Mean</i>	<i>.0000000</i>
	<i>Std. Deviation</i>	<i>2.47583367</i>



<i>Most Extreme Differences</i>	<i>Absolute</i>	<i>.080</i>
	<i>Positive</i>	<i>.080</i>
	<i>Negative</i>	<i>-.073</i>
<i>Test Statistic</i>		<i>.080</i>
<i>Asymp. Sig. (2-tailed)</i>		<i>.200c,d</i>

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Based on the results of the normity test results of Kolmogorof Swimov show a significant value of 0.200 which means it is above 0.05, it can be concluded that the variability has been distributed normally. The results of the chart analysis normality test can be seen in figure 1.

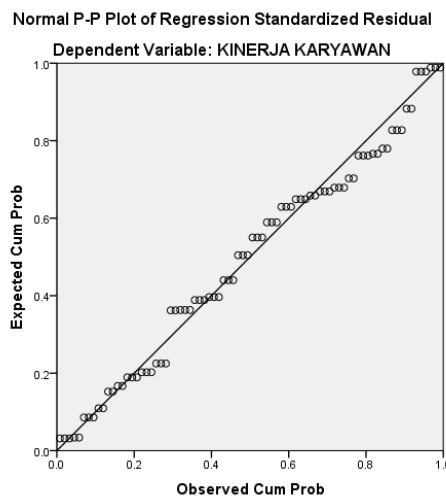


Figure 1. Chart analysis Normality Test Results

Based on figure 1 above, it can be seen that the points are close to the diagonal image. If the residual data distribution is the norm, then the line describing the actual data will follow its diagonal line. Thus, based on the figure above, it can be seen that the data is distributed normally.

2. Multicollinearity Test

The multicollinearity test is carried out to test whether the regression model finds a correlation between independent variables. This testing needs to be done because the number of independent variables in the study is more than one. Testing for the presence or absence of symptoms of multicollinearity is carried out by:

Pay attention to the value of the correlation matrix. Decision making in this test is taken based on two ways, namely:

- a. Based on the tolerance value using the spss program, with the following criteria: if the tolerance value >0.10 means there is no multiconnectivity and if the tolerance value <0.10 means multiconearity.
- b. Based on the value of variance infloatin factor (VIF), with the following criteria: if VIF <10.0 means there is no multicollinearity and if VIF > 10.0 means multicollinearity.

The results of muccolnearity testing using spss can be seen in view 8.

*Table 8. Multicollinearity Test Results with SPSS Program*

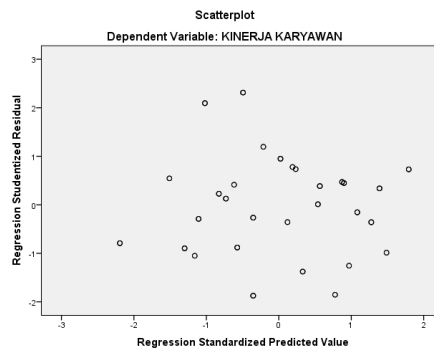
		<i>Coefficients<sup>a</sup></i>				<i>Collinearity Statistics</i>		
		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>				
<i>Model</i>		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>Bright</i>
1	<i>(Constant)</i>	8.701	3.953		2.201	.031		
	<i>Work Discipline</i>	.181	.097	.180	1.872	.065	.668	1.497
	<i>Work Motivation</i>	.613	.098	.603	6.261	.000	.668	1.497

a. Dependent Variable: EMPLOYEE PERFORMANCE

Based on table 8, the results of the multicollinearity test show that work discipline and work motivation do not occur multicollinearity. Table 7 shows that the value of work discipline tolerance is  $0.668 > 0.10$  and the value of VIF (Variance Inflation Factor) is  $1.497 > 10$  and the value of work motivation is  $0.668 > 0.10$  and the value of VIF (Variance Inflation Factor) is  $1.497 < 10$ , which means that multicollinearity does not occur.

3. Heteroscedasticity Test

The way used to determine the presence or absence of heteroscedasticity in a multiple linear regression model is to look at the scatterplot graph or the predicted value of the bound variable, namely SRESID with residual errors, namely ZPRED. If there is no particular pattern and spreads above and below zero on the y-axis, heteroscedasticity does not occur. The results of the heteroscedasticity test with the SPSS program can be seen in figure 2.



*Figure 2. Heteroscedasticity Test*

Based on figure 2 of the scatterplot test results with SPSS, it can be seen that the points spread randomly, either at the top of the number 0 or below the number 0 of the vertical axis or horizontal axis. Thus, it can be concluded that heteroschedaticity does not occur in this regression model.

4. Uji Autokorelasi

This test aims to determine whether or not there is a relationship or correlation between the fault of the confounding in period t with the fault of the confounding in period t-1 (previous). If there is a correlation, it indicates an autocorrelation problem. The autocorrelation test most often used by researchers is the durbin waston test.

In this study to test autocorrelation researchers using durbin-watson as a benchmark are:

1. D-W number below -2 then there is a positive autocorrelation
2. Numbers D-W to +2 cannot be autocorrelated
3. D-W number above +2 then there is autocorrelation

The results of the autocorrelation test can be seen in table 9.

Table 9. Autocorrelation test results with SPSS program

*Model Summary<sup>b</sup>*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.723a	.522	.510	2.508	1.639

a. Predictors: (Constant), WORK MOTIVATION, WORK DISCIPLINE

b. Dependent Variable: EMPLOYEE PERFORMANCE

Test results through SPSS stated that no auto correlation occurred because:

Table 10. Result Value d

D	of	of the	4 - dI	4-Of
1.639	1,5859	1,6882	2,4141	2.338

Source : Data Processed 2023

Based on the data in table 10 that can be concluded as follows:

of > d < 4-Of Sunday 1.6882 > 1.639 < 2.338.

The Du value is greater than the d value and the d value is smaller than 4-dU, which means that a correlation occurs.

### 5. Multiple Liner Regression Analysis

The results of multiple linear regression calculations are used to predict the magnitude of the relationship between the dependent variable, namely employee performance, and the independent variable, namely employee performance and employee motivation.

The results of multiple linear regression tests can be seen in table 11.

Table 11. Multiple Linear Regression Test Results with SPSS

Model	Unstandardized Coefficients		Standardized Coefficients	T	Say.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	Bright
(Constant)	8.701	3.953		2.201	.031		
Work Discipline	.181	.097	.180	1.872	.065	.668	1.497
Work Motivation	.613	.098	.603	6.261	.000	.668	1.497

a. Dependent Variable: EMPLOYEE PERFORMANCE

Based on table 11 data analysis using SPSS, regression results are obtained based on the following formula:

$$Y = a + b_1X_1 + b_2X_2$$

$$Y = 8,701 + 0,181 X_1 + 0,613 X_2$$

The above equation can be explained as follows:

- a. a = 8.701 means that if work discipline and work motivation are not improved (X1 and X2 = 0) then the employee performance level is 8.701.

- b.  $b_1 = 0.181$  means that if motivation is increased by 1 unit ( $X_1 = 1$ ) and sales promotion is not increased ( $X_2 = 0$ ) then employee performance increases by 0.181.
- c.  $b_2 = 0.613$  means that if work discipline is 1 unit ( $X_2 = 1$ ) and work motivation cannot be increased ( $X_1 = 0$ ) then employee performance will increase by 0.613.
- d. Uji Goodness of Fit

6. Coefficient of Determination ( $R^2$ )

The coefficient of determination ( $R^2$ ) is carried out to see whether there is a perfect relationship or not, which is indicated on whether the independent variable (Purchase Decision) is in the same proportion. The value used in this study is the adjusted  $R^2$  value using the spss program. The results of the coefficient of determination test with SPSS can be seen in table 4.12

*Table 12. Regression test results (coefficient of determination)*

<i>Model Summary<sup>b</sup></i>					
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
<i>1</i>	<i>.723a</i>	<i>.522</i>	<i>.510</i>	<i>2.508</i>	<i>1.639</i>

a. Predictors: (Constant), WORK MOTIVATION, WORK DISCIPLINE

b. Dependent Variable: EMPLOYEE PERFORMANCE

Based on the spss summary output above, it is known that the value of the coefficient of determination or adjusted R is 0.522. This can be interpreted that the amount of contribution of independent variables, namely work discipline ( $X_1$ ) and motivation ( $X_2$ ) to performance ( $Y$ ) is 52.2% and the remaining 47.8% is explained by other factors outside the model that were not studied.

7. Test t

The t test is used to ensure that each variable, namely promotion strategy and product quality, affects purchasing decisions and will be tested partially using SPSS. The results of t-test data processing using spss can be seen in table 13.

*Table 13. Test result t (parunlucky)*

<i>Model</i>	<i>Unstandardized Coefficient</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig</i>
	<i>B</i>	<i>Std. Error</i>			
				<i>Beta</i>	
<i>Work Discipline</i>	<i>.181</i>	<i>.097</i>	<i>.180</i>	<i>1.872</i>	<i>.065</i>
<i>Work Motivation</i>	<i>.613</i>	<i>.098</i>	<i>.603</i>	<i>6.261</i>	<i>.000</i>

a. Dependent Variable: EMPLOYEE PERFORMANCE

Based on table 4.15 it can be known the calculated t value of each variable, namely:

Define t table:

T table =  $t(a/2 ; n - k - 1)$   
 =  $t(0.025 ; 80-2-1)$   
 =  $t(0,025 ; 77)$   
 = 1.99

- a. Work discipline variable ( $X_1$ )

Based on the table above, the work discipline variable is known to calculate the value of  $t < t$  table ( $1.872 < 1.99$ ) and the significant value of  $0.065 > 0.05$ . Then  $H_0$  is accepted,  $H_A$  is rejected. So it can be interpreted that work discipline does not have a positive but significant effect on employee performance.

b. Work Motivation Variable (X2)

Based on the table above, the work motivation variable is known to be calculated  $t$ -value  $> t$  table ( $6.261 > 1.99$ ) and significant value  $0.000 < 0.05$   $H_0$  rejected  $H_A$  accepted. So that it can be interpreted that work motivation has a positive and significant effect on employee performance.

8. F Test

This test was carried out to determine the hypothesis proposed, namely that allegedly work discipline and work motivation simultaneously affect employee performance proven true or not using the F test test.

Table 14. Test Results F Work Discipline (X1) and Work Motivation (X2) on Employee Performance (Y)

ANOVA

Coefficients<sup>a</sup>

		Unstandardized Coefficients		Standardized Coefficients		
	Model	B	Std. Error	Beta	t	Sig.
1	(Constant)	8.701	3.953		2.201	.031
	Work Discipline	.181	.097	.180	1.872	.065
	Work Motivation	.613	.098	.603	6.261	.000

a. Dependent Variable: EMPLOYEE PERFORMANCE

b. Predictors: (Constant), WORK MOTIVATION, WORK DISCIPLINE

Determine F table :  $df_1 : k-1 = 3-1 = 2$ ,  $df_2 : n-k = 80-3 = 77$  (n is the number of respondents and k is the number of variables) the results obtained f table is 2.72 Based on the table above, obtained a calculated F value of ( $42.082 > F$  table 2.72) and a significant value of  $0.000 < 0.005$  then  $H_0$  rejected  $H_A$  is accepted, which means that the work discipline variable (x1) and work motivation variable (X2) together have a positive and significant effect on the performance of PT employees. Falcon Berkat Indonesia.

**B. Discussion of Research Results**

In this study, all respondents as many as 80 people who are employees of PT. Falcon Berkat Indonesia. This shows that the answer to each respondent's statement can be accounted for. The progress of the company can be seen from work discipline, work motivation and performance of an employee.

Based on the results of a comprehensive test (F test) through SPSS (statistical Product and Service Solution) version 20, it appears that the sig is  $0.00 \leq 0.05$  or  $42.082 \geq 2.72$  thus  $H_0$  is rejected and  $H_A$  is accepted which means that there is an influence of work discipline and work motivation on employee performance where the independent variable has a significant effect on related variables.

Based on the R2 coefficient of determination test, it can be known through SPSS (statistical Product and Service Solution) version 20. That the value of R2 (R Square) variable work discipline work motivation is 52.2% and the rest is employee performance 47.8%. This shows the large role of work discipline and work motivation together can affect employee performance.

In t testing (parcially) through SPSS (statistical Product and Service Solution) version 20. It can be seen that the results of sig. For the variable of work discipline on employee performance shows  $t$  count = 1.872 and  $t$  table = 1.99,  $t$  count  $1.872 \geq 1.99$  with a significance value of  $0.065 \leq 0.05$  then  $H_0$  is rejected and  $H_A$  is accepted which means that there is a partial influence between work discipline (X1) on employee performance (Y).

The results of testing work motivation on employee performance show  $t$  count = 6.261 and  $t$  table = 1.99  $t$  count  $6.261 \geq 1.99$  with a significant value of  $0.00 \leq 0.05$ , then  $H_0$  is rejected and  $H_A$  is accepted, which means that there is a partial effect of work motivation (X2) on employee performance (Y).

Based on the overall results of data processing through SPSS (statistical Product and Service Solution) version 20. It can be concluded that work discipline and work motivation have a positive and significant effect on the performance of PT. Falcon Berkat Indonesia.

#### IV. CONCLUSION

In this section, the author will convey to the conclusions of results research that has been carried out and is expected to be useful for PT. Falcon Berkat Indonesia. In this thesis, the author examines the influence of work discipline and work motivation on PT. Falcon Berkat Indonesia. Based on the descriptions and explanations that have been stated in the previous chapters, it can be drawn to the following conclusions:

1. Based on the results of comprehensive testing (F test) through SPSS (statistical Product and Service Solution) version 20, Visible sig. Sis  $0.000 \leq 0.05$  or  $42.082 \geq 2.72$  thus  $H_0$  is rejected and  $H_a$  is accepted which means there is an influence of work discipline and work motivation on employee performance.
2. Based on the test of the coefficient of determination  $R^2$  can be known through SPSS (statistical Product and Service Solution) version 20. That the value of  $R^2$  (R Square) variable work discipline work motivation is 52.2%. This shows the role of work discipline and work motivation together to affect employee performance.
3. In t testing (partially) through SPSS (statistical Product and Service Solution) version 20. It can be seen that the results of sig. For the variable of work discipline on employee performance shows t count = 1.872 and t table = 1.99, t count  $1.872 \geq 1.99$  with a significance value of  $0.065 \leq 0.05$  then  $H_0$  is rejected and  $H_a$  is accepted which means that there is a partial influence between work discipline ( $X_1$ ) on employee performance ( $Y$ ).
4. The results of testing work motivation on employee performance showed t count = 6.261 and t table = 1.99 t count  $6.261 \geq 1.99$  with a significant value of  $0.00 \leq 0.05$ , then  $H_0$  was rejected and  $H_a$  was accepted, which means that there is a partial effect of work motivation ( $X_2$ ) on employee performance ( $Y$ ).
5. Based on the Linear Regression Test through SPSS  $a = 8.701$  means that if work discipline and work motivation are not improved ( $X_1$  and  $X_2 = 0$ ), employee performance levels are 8.701 and  $b_1 = 0.181$  means that if motivation is increased by 1 unit ( $X_1 = 1$ ) and sales promotion is not increased ( $X_2 = 0$ ), then employee performance increases by 0.181,  $b_2 = 0.613$ , meaning that if work discipline is 1 unit ( $X_2 = 1$ ) and work motivation cannot be increased ( $X_1 = 0$ ) then employee performance will increase by 0.613 can be concluded  $X_2$  is the most influential.

#### A. Suggestion

Research is expected to provide input and advice for human resources so that: Based on the results of the research and conclusions above, the author suggests several suggestions that can be used for management in determining company policies in the future, namely as follows:

1. The lowest indicators in all statements of work discipline are
2. Come to the office on time. Therefore, it must be considered because it has an impact on the goods or products produced such as:
  - a. Not on target production
  - b. The presence of defective goods / reject
  - c. And it takes the participation of all employees in order to create good results.
  - d. satisfying and better. Companies must also pay more attention to the accuracy of employees when entering working hours. Such as: Periodically the company monitors attendance so that employees who have exceeded the company's rules will immediately call and sanction according to company rules (provide letters of reprimand and others).
3. The lowest indicator on the work motivation variable is that my opinion of myself drops when I do a bad job. Therefore, we must reward / reward so that employees will perform well.
4. The lowest indicator on the employee performance variable is about the quality of work, therefore the company must choose and sort from recruitment to employee placement.
5. In order to improve compliance with applicable rules within the company owned by employees.
6. In order to increase cohesiveness among employees so that employees can work together in overcoming problems that arise in the company.

#### REFERENCES

Rikarling, A., Sarwoko, E., & Sedayastuti, K. (2021). Pengaruh Disiplin Kerja Dan Motivasi Terhadap Kinerja

- Pegawai Pada Kantor Pertanahan Kota Malang. *Jurnal Riset Mahasiswa ...*, 1–7.
- Shofiana, V. N. D., Souisa, J., & Oktavianto, A. D. (2023). Faktor-faktor yang Mempengaruhi Kinerja Karyawan di PT. Ebako Nusantara. *Solusi*, 21(4), 839. <https://doi.org/10.26623/slsi.v21i4.7846>
- Sivanissa, N., & Azizah, H. (2022). Pengaruh kompetensi SDM terhadap kinerja karyawan pada PT Sherish Cipta Interindo. *Nautical : Jurnal Ilmiah Multidisiplin*, 1(3), 114–120.
- Soetanto, E. (2012). Pengaruh Kemampuan Dan Motivasi Kerja Terhadap Kinerja Karyawan (Studi Pada Karyawan Pts. X Malang). *Industri Inovatif: Jurnal Teknik Industri*, 2(1), 44–51. <https://ejournal.itn.ac.id/index.php/industri/article/view/1460%0Ahttps://ejournal.itn.ac.id/index.php/industri/article/download/1460/1310>
- Sucahyowati, H., & Hendrawan, A. (2020). Pengaruh Employee Engagement Terhadap Kinerja Karyawan pada PT MK Semarang. *Jurnal Sains Teknologi Transportasi Maritim*, 2(2), 9–15. <https://doi.org/10.51578/j.sitektransmar.v2i2.21>
- Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. CV Alfabeta.

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# Production System Development, Aviary and Sliding Turning Product Innovation at Cv. Mitra Jaya Company Malang to Increase Sales

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## ABSTRACT

**Purpose:** This research was carried out using an R & D (Research and Development) approach or development research that produces a product. By using the ADDIE method (analysis, design, development, implementation and evaluation). This research aims to develop a production system and product innovation. The resulting development products are in the form of development models, 1) Standard Operating Procedures, and 2) Product Innovation.

**Design/methodology/approach:** The model was developed with performance and needs analysis. In the initial development process, researchers consulted and validated with economic experts and IT experts to obtain input and suggestions about the model being developed and to determine the feasibility of the product development model. By using a questionnaire as a research instrument.

**Findings:** The research results obtained from the expert validation test results show that the model score obtained from the economic expert validation test results is (89.28), while the IT expert validation test (85) is in the very good category and does not need revision. In product trials carried out on 15 production employees at CV. Mitra Jaya Company has results with the highest score of 88.25, meanwhile, product innovation was tested on 4 consumers and obtained results with the highest score of 100. Thus, the Standard Operational Procedure development model can be used as a guideline in the production process, while product innovation can be applied to improve old products and new products to increase sales.

**Paper type:** Research Paper

**Keyword:** Production System, Product Innovation, Sales

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## I. INTRODUCTION

Free trade causes increased competition, making consumers more selective in choosing products. So every company must understand and always understand what is happening in the market and what the market wants. In order to be able to compete with competitors, companies need to make changes related to the way they develop products and innovate, as well as improve production systems in order to get higher quality output to respond to increasingly dynamic, complex and uncertain market changes. This is done so that the company is able to compete with competitors that continue to emerge.

One of the efforts that companies must make to win market competition is by always developing and innovating their products. According to Victor (2018) Product Innovation is something that can be seen as a product's functional progress that can take the product one step further compared to its competitors' products. This is because innovation is useful for adding more value to a company's products, such as improving design, color and function. So, with innovation, it is hoped that it can increase consumers' desire to buy.

In consuming a product, consumers not only look at the value or function of the product offered, but also pay attention to whether the product chosen has added value or superiority compared to other similar products. This is a consideration that companies need to pay attention to as a basis for carrying out the innovation process.



Because innovation is the right strategy to maintain a product's position in the market. Where most of the competitors' products appear static from year to year. (Setiawan: 2012). The stages of innovation can be carried out when the market begins to become saturated with the products offered, competitors appear, or there is demand from the market itself.

On the other hand, product innovation is very dependent on controlling the production system. According to Ginting (2013), the production system is a collection of sub-systems that interact with each other with the aim of transforming production input into production output, so strict supervision of the production process is needed to produce quality products.

Meanwhile, CV. Mitra Jaya Company still does not have guidelines governing the control of the current production system. During the establishment of CV. Mitra Jaya Company, the production system implemented in the company uses a piecework method, where workers tend to work on the production flow in their own way, which is not sequential, the most important thing is that it is completed quickly. So it often happens that the finished product does not comply with the expected product standards, starting from the size of the box between workers and other workers is always different, the finishing of the egg incubator is still not neat, and there is a lack of quality control. And this resulted in production targets not being achieved.

*Table 1. CV Production Data. Mitra Jaya Company in 2018-2020*

<i>Year</i>	<i>Production Targets</i>	<i>Production Amount</i>	<i>Number of Damaged Products</i>	<i>Percentage</i>	<i>Information</i>
2018	6.000	5.592	279	5%	<i>Not achieved</i>
2019	6.000	5.755	402	7%	<i>Not achieved</i>
2020	6.000	5.893	593	10%	<i>Not achieved</i>

Source : nurbaiti 2022

Based on the background of the problems contained in CV. Mitra Jaya Company Malang, the researcher is interested in conducting research with the title "PRODUCTION SYSTEM DEVELOPMENT, AVIARY AND SLIDING TURNING PRODUCT INNOVATION AT CV. MITRA JAYA COMPANY MALANG TO INCREASE SALES". The research method uses sources from previous research conducted by Tegeh and I Made Kirna (2013) and research by Fauziah (2016) where the research is based on research and development using the ADDIE method focusing on the development of the world of education. So researchers are interested in adopting and conducting research and development-based research by adopting the ADDIE method in CV manufacturing companies. Mitra Jaya Company Malang. In this case, the expected output is to design standard operational procedures which aim to be implemented as guidelines for the production process.

## II. METHODS

The research method used by researchers is an effective development model that requires compatibility between the approach used and the product to be produced. The development model that will be planned follows the flow of ADDIE. (Sugiyono, 2016:38). ADDIE is an abbreviation for analysis, design, development, implementation and evaluation. At the analysis stage, it is related to the activity of analyzing the situation and environment so as to design a product according to what is needed. The design stage is an activity to design the product according to what is needed. The development stage is the activity of making and testing the resulting product. The Implementation Stage is an activity using products that have been tested. And evaluation is an activity of assessing the steps and products that have been made.

The target of this research is the Production Division as those who know about the production system currently implemented, totaling 15 people. Meanwhile, for product innovation, the research subjects came from 4 consumers. Product validation in this research was carried out by experts, namely economics experts for production systems, while product innovation was validated by IT (Information Technology) experts.

The instrument used in this research was a questionnaire. The questionnaire in this research was used to measure the validity and feasibility of product innovation and standard operational procedures prepared by researchers using a formula.

*Table 2 Answer Options for Validation Sheet*

<i>No.</i>	<i>Answer</i>	<i>Score</i>
<i>1</i>	<i>Not enough</i>	<i>1</i>
<i>2</i>	<i>Enough</i>	<i>2</i>
<i>3</i>	<i>Good</i>	<i>3</i>
<i>4</i>	<i>Verry good</i>	<i>4</i>

$$\text{Mark} = \frac{\text{acquisition score}}{\text{maximum score}} \times 100$$

*Table 3 Validity Criteria*

<i>No.</i>	<i>Score</i>	<i>classification</i>
<i>1</i>	<i>76-100</i>	<i>Verry good</i>
<i>2</i>	<i>51-75</i>	<i>Good</i>
<i>3</i>	<i>26-50</i>	<i>Enough</i>
<i>4</i>	<i>0-25</i>	<i>Not Enough</i>

- e. "Very Good" category (can be used without revision), total score 76% - 100%. Predicate A.
- f. "Good" category (can be used with minor revisions), total score 51% - 75%. Predicate B
- g. "Fair" category (can be used with major revisions), total score 26% - 50%. Predicate C.
- h. "Poor" category (not suitable for use), total score 0%-25%. Predicate D.

This research uses qualitative descriptive. Qualitative descriptive analysis to process data in the form of employee responses (responses) to product innovation and standard operational procedures prepared by researchers. From the results of the qualitative descriptive data, three types of data will be obtained, namely validity, effectiveness and feasibility of product innovation and standard operational procedures prepared by researchers.

### III. RESULTS AND DISCUSSION

#### A. Results

Performance analysis was carried out to determine the problems faced by the production system implemented by CV. Mitra Jaya Company Malang uses a piecework method, where workers tend to work on the production flow in their own way, which is not sequential, the most important thing is that it is completed quickly. As a result, many finished products do not meet the expected product standards, as well as a lack of quality control needed to ensure that the product produced is in accordance with the expected product. Another problem found was that the previous egg incubator product had a deficiency in that it still used a manual drive.

Needs analysis, namely determining Standard Operational Procedures as guidelines for the production system required by CV. Mitra Jaya Company Malang to achieve production targets. Analysis of other needs required by CV. Mitra Jaya Company is concerned with egg incubator product innovation, namely by perfecting the egg incubator machine from manual to a fully automatic system.

The design stage is the activity of preparing a design draft for Standard Operating Procedures (SOP) according to needs selected from the results of performance analysis and needs analysis.

2. Draft Standard Operating Procedures (SOP)
  - a. Study the company's business processes
  - b. Collect other information related to main duties, authority and responsibilities.
  - c. Create a draft Standard Operating Procedure (SOP)
3. Product Innovation Design
  - a. Identification of problems
  - b. Identify market needs
  - c. Preparation of Innovation Plans
  - d. Control and Improvement

In developing or making soup, it consists of several items, as follows; (1) Standard Operational Procedure Cover; (2) Table of Contents; (3) Company Profile; (4) Organizational Structure; (5) Job Description; and (6) Production Procedure Standard Operational Flow Diagram.

In carrying out product innovation, several stages are carried out, including; (1) Refining the semi-automatic egg incubator machine variant to use a digital thermostat type MJST220, making it easier for consumers to regulate the temperature; (2) Adding an automatic drive mode to make it easier for consumers to hatch eggs; (3) Adding thermohygro to make it easier for consumers to know the humidity level in the egg incubator; (4) Change the rotating shelf feature to a sliding shelf, because based on observations the success rate of sliding shelves is greater than rotating shelves. Because the shelf moves, the eggs rotate so there is movement in the eggs; (5) Innovating by perfecting small capacity machines with digital thermostat type XH-W3001, automatic drive type MJST220 and dynamo drive type TYD49-D4 SYNCHRONOUS MOTOR; and (6) Providing additional equipment such as egg binoculars for free.

The validation stage aims to obtain input from validators, namely IT experts and economic experts, then the input will be used as evaluation material. The results of the expert validation test are described as follows:

- 3) Cahya Riam Krisna, SE

*Table 4 Economic Experts' Assessment of Standard Operating Procedures*

No.	Description	Evaluation	Information	Score
1	<i>Appearance</i>			
	<i>The size of the letters used is appropriate and easy to read</i>	<i>Good</i>	<i>The font size is appropriate so it is easy to read</i>	<i>3</i>
	<i>Illustrations in the form of proportional images</i>	<i>Good</i>	<i>The picture illustrations are very helpful and appropriate</i>	<i>3</i>
2	<i>Contents</i>			
	<i>The contents and objectives of each Job Description and SOP are in accordance with the topic</i>	<i>Verry Good</i>	<i>The material in the Job Description and SOP is appropriate to the topic</i>	<i>4</i>
	<i>The material presented is coherent and clear</i>	<i>Verry Good</i>		<i>4</i>
	<i>The images displayed contain a clear message</i>	<i>Verry Good</i>	<i>The explanation in the picture is clear</i>	<i>4</i>
3	<i>Language</i>			
	<i>The sentences used are clear and easy to understand</i>	<i>Sangat Baik</i>	<i>Already using standard language</i>	<i>4</i>

<i>The spelling used is in accordance with EYD</i>	<i>Baik</i>	3
<i>Total</i>		25

Mark =  $\frac{\text{acquisition score}}{\text{maximum score}} \times 100$   
 =  $\frac{25}{28} \times 100$   
 = 89,28 (Verry Good) Can be used without revision.

4) Muhammad Subhan, ST

*Table 5 IT Experts' Assessment of Product Innovation*

No.	Description	Evaluation	Information	Score
1	<i>The MJST220 type digital thermostat is easy to regulate the temperature</i>	<i>Good</i>	<i>It is easier for consumers to regulate the temperature</i>	3
2	<i>Auto drive mode</i>	<i>Good</i>	<i>Efficient and makes it easier to hatch eggs</i>	3
3	<i>Use of Thermohygro</i>	<i>Good</i>	<i>Makes it easier to know the humidity level</i>	3
4	<i>Changing the rotating shelf feature to a sliding shelf</i>	<i>Verry Good</i>	<i>Can increase the success rate of egg hatching</i>	4
5	<i>Innovation and improvement of small capacity hatching machines</i>	<i>Verry Good</i>		4
<i>Total</i>				17

Mark =  $\frac{\text{acquisition score}}{\text{maximum score}} \times 100$   
 =  $\frac{17}{20} \times 100$   
 = 85 (Verry Good) Can be used without revision.

This Standard Operational Procedure is implemented in activities that take place within the company from factory opening to factory closing time at CV. Mitra Jaya Company after obtaining approval from the validator and supervisor.

The final stage of developing the production system and product innovation is evaluating the implementation of Standard Operating Procedures and Product Innovations that have been produced.

**B. Discussions**

The results of this research development are Standard Operational Procedures and Products for Full Automatic Egg Incubator Machines Type ST (Sledding Turning) and Aviary.

*Table 6 CV Sales Data. Mitra Jaya Company in 2019-2022*

<i>Year</i>	<i>Production Targets</i>	<i>Sale</i>	<i>Information</i>
<i>2019</i>	<i>6.000</i>	<i>3.702</i>	<i>Not Achieved</i>
<i>2020</i>	<i>6.000</i>	<i>5.904</i>	<i>Not Achieved</i>
<i>2021</i>	<i>6.000</i>	<i>6.850</i>	<i>Achieved</i>
<i>Jan-Juni 2022</i>	<i>3.000</i>	<i>3.351</i>	<i>Achieved</i>

Source : sale of CV. Mitra Jaya Company

Based on the table above, it can be seen that before the Product Innovation was carried out in 2019 and 2020, the sales data for Egg Incubator Machines had still not reached the production target. Meanwhile, after carrying out Product Innovation from 2021 to June 2022, based on the sales data table, it can be seen that sales exceed the production target, so it can be concluded that when sales increase above the production target, the production target has automatically been achieved.

#### IV. CONCLUSION

This research is generally to find out whether production system development and product innovation can influence sales at CV. Mitra Jaya Company Malang. So the conclusions obtained from the research results are as follows: (1) The results of this research are in the form of a development model for Standard Operational Procedures and Products for Full Automatic Egg Incubator Machines Type ST (Sledding Turning) and Aviary which have passed expert validation tests and product trials; (2) The final form of the Standard Operational Procedure consists of (a) Flow Diagram; (b) Job Description; (c) Standard Operating Procedures; (d) Product Standards; and (e) Quality Control; (3) Meanwhile, the final form of product innovation is in the form of improvements to the ST Type (Sledding Turning) Full Automatic Egg Incubator Machine and the Aviary Type Egg Incubator Machine; and (4) Development of a soup-based production system and product innovation is able to increase sales after being implemented from January 2021 to June 2022 based on sales data.

A limitation in this research is that the references used in this research are mostly taken from educational science. So the resulting SOP suggestions for companies can be used as guidelines in the production process activities carried out by CV companies. Mitra Jaya Company Malang because the Standard Operational Procedure proposed by researchers can increase company sales. Meanwhile, for future researchers: (1) The resulting development model can be used as a reference for further research, especially those that will develop production systems; (2) Enriching references originating from the business world; and (3) Designing Standard Operational Procedures regarding raw materials.

Production system development is not only through implementing SOPs but can be further developed by updating production equipment and machines to become automatic and product innovation can be carried out consistently in the future following developments in information technology.

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## REFERENCES

- Basu Swasta dan Hani Handoko (2015). *Manajemen Pemasaran: Analisa dan. Perilaku Konsumen*. BPFE. Yogyakarta.
- Fauziah, I. Z. (2016). Pengembangan E-Modul Berbasis Adobe Flash CS6 pada Mata Pelajaran Penataan Barang Dagang. *JPBM (Jurnal Pendidikan Bisnis dan Manajemen)*, 2(2), 154-159.
- Ginting, Rosnani (2013). *Sistem Produksi*, Graha Ilmu, Yogyakarta.
- Hartono, Hendry, dkk. (2012). Pengaruh Strategi Pemasaran Terhadap Peningkatan Penjualan Pada Perusahaan” Dengan Menetapkan Alumni dan Mahasiswa Universitas Bina Nusantara Sebagai Objek Penelitian. Jurusan Manajemen. Universitas Bina Nusantara. Jakarta Barat. *Jurnal (Online)*
- Hubeis, Musa. (2012). *Manajemen Kreativitas dan Inovasi dalam Bisnis*. Penerbit PT. Hecca Mitra Utama. Jakarta.
- Kotler, P., & Armstrong, G. (2016). *Principle of Marketing (16th ed)*. North Carolina: Pearson Education Limited.
- Nafarin, M. (2015). *Penganggaran Perusahaan*. Edisi tiga. Jakarta: Salemba Empat
- Nasution, M.Nur. 2015. *Manajemen Mutu Terpadu (Total Quality Management)*. Jakarta: Ghalia Indonesia.
- Setiawan, Arief. 2012. *Jurnal Pengaruh Harga dan Lokasi Terhadap Keputusan Pembelian Ramayana*. Vol 14 No.2
- Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- Sumarni, Murti; Suprihanto, John. 2014. *Pengantar Bisnis*. Liberty: Yogyakarta.
- Tegeh, I. M., & Kirna, I. M. (2013). Pengembangan Bahan ajar metode penelitian Pendidikan dengan addie model. *Jurnal Ika*, 11(1).
- Victor & Rapper. (2018). *Cerebrovascular Disease 6th edition*. New York: MC Graw-Hill Book

# The Impact of Compensation Upon Employee Performance with Job Satisfaction as An Intervening Variable at the Dental Health Centre Jakarta Group

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## ABSTRACT

**Purpose:** The objective of this research is to assess the impact of compensation upon employee impactiveness, while taking into account job contentment as an intervening factor, within the Dental Health Centre Group located in Jakarta.

**Design/methodology/approach:** This research employs a quantitative methodology and utilizes primary data obtained from a purposively sampled group of 113 employees from the Dental Health Centre Group in Jakarta. The data analysis techniques involve validity testing, reliability testing, classical assumption testing, hypothesis testing utilizing t-tests and F-tests, as well as path analysis testing. Statistical Product and Service Solution (SPSS) Version 22 is utilized for the analysis.

**Findings:** The outcomes suggest that compensation has an impact upon job contentment, albeit without any impact upon employee productivity. Nonetheless, job satisfaction has a significant bearing upon employee performance. It is noteworthy that the connection among compensation and employee performance is not entirely designed by job satisfaction.

**Practical implications:** According to the research outcomes regarding the three variables, it is apparent that compensation has a significant impact upon job contentment, which in turn affects employee productivity. Consequently, it is suggested that organizations offer fair compensation to cultivate worker satisfaction, ultimately amplifying their performance.

**Originality/value:** The researcher asserts that this research represents his original work and is the first of its kind utilized at the Dental Health Centre Group in Jakarta, bearing the title of the research under examination, with the exception of citations from select summaries included as references.

**Paper type:** Research paper

**Keywords:** *Compensation, Employee Performance, Job Satisfaction*

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## I. INTRODUCTION

In the contemporary global landscape, enterprises and institutions face multifarious predicaments that span from minuscule to immense. In light of escalating competition, it is imperative for individuals to cogitate strategically, creatively, innovatively, and proactively that's why operate efficiently and sustain elevated stages of motivation while contending with the present epoch of globalization (Pudjiarti et al., 2023). The human capital embedded within organizations is a pivotal element in realizing goals and optimizing financial gains (Afrizal et al., 2022). In every enterprise, the most crucial element is its workforce, given that individuals are responsible for executing all operations within an organization (Annisa Miftahul Maghfiroh et al., 2023). As the primary impetus behind an establishment, human resources hold a crucial position in deciding the triumph of a corporation. As a

outcome, corporations must proficiently administer and optimize the capabilities and accomplishments of their human resources (Makarim & Suratman, 2024).

In the current era of global competition, it is imperative for organizations and companies to prioritize the augmentation of employee performance. This will facilitate progress for the enterprise and empower it to flourish in an environment that is both competitive and volatile (Amin et al., 2023). Adequate employee performance has the potential to significantly augment the progression and endurance of any institution or enterprise (Akib et al., 2022). It is incumbent upon companies to consistently enhance the proficiency of their workforce that's why foster growth and development. The individual performance of every employee serves as a catalyst for optimizing their skillset, thereby facilitating successful execution of job responsibilities (Indripriarko & Aima, 2022). Corporate performance is a yardstick utilized by enterprises to ascertain optimal tactics for competing against other firms (Nur Muthia Naseh et al., 2023).

One of the most influential variables that can enhance employee productivity is job contentment (Irma Kue et al., 2023). Job satisfaction can indicate employees' favorable dispositions towards their present occupation (Eka Mayastika Sinaga et al., 2023). Every leader desires optimal work outcomes from their employees, which necessitates the presence of highly efficient and productive workers (Indrawanto, 2021). Bestowing accolades can impactively heighten employee contentment and ultimately enhance their performance. Nevertheless, incentives are a variant of external motivation and can also directly impact employee productivity (Ariani, 2023).

Similarly, remunerating staff members will outcome in a mutually beneficial relationship where employee productivity and impactiveness bolster the long-term viability of the organization or corporation (Pranata et al., 2023). One essential aspect of employee feedback is the provision of appropriate compensation, which serves as a driving force for optimal performance and overall improvement among employees (Wandi et al., 2022). Proficient employees will be rewarded with improved compensation (Nalim et al., 2020). According to Ingsih et al. (2022) stated that Compensation concerns to the compensation, which may take the form of monetary payment or valuable assets, that is provided to an individual who has made a significant contribution to the organization. The compensation framework within an organisation ought to be intricately connected with the goals and strategies of said organisation. Nevertheless, it is equally imperative to strike a balance among employer expenses and benefits whilst simultaneously meeting employee expectations (Gea & Haryetti, 2014). Workers rely on compensation to sustain stability in their livelihoods, whereas employers hinge on the proficiency and productivity of their employees to uphold competitiveness (Pratomo, 2022). compensation holds considerable significance for the enterprise as it is a reflection of the organization's endeavors to retain its human capital, thereby fostering an environment that imbues employees with both zeal and proficiency to perform optimally in service of the corporation (Setiawan et al., 2018).

According to on previous research utilized by Pudjiarti et al. (2023) obtained the outcomes that compensation exerts an impact on the performance of employees, while it also engenders a constructive and noteworthy impact on their job contentment. Furthermore, job satisfaction bears upon employee performance. Research utilized by Indripriarko & Aima (2022) also obtained the same outcomes, namely compensation exerts a substantial impact upon employee contentment, while said compensation also significantly impacts employee performance. Moreover, job satisfaction bears an impact on the overall success of employees in their duties.

This research explores the correlation among compensation and employee performance, where job satisfaction acts as an intervening variable at the Dental Health Centre Group Jakarta. Researchers utilize observed several occurrences in the operations of employees at this center, including suboptimal employee performance. This issue arises due to a high workload that is not matched with appropriate rewards for employees' needs. Consequently, job satisfaction plays a significant role in determining both quality and quantity of work delivered by staff members at the Dental Health Centre Group Jakarta.

## **A. Literature Review**

### **1. Compensation**

compensation pertains to the entirety of an employee's earnings and benefits in exchange for their labor (Sutrisno, 2019). According to Muhammad Gandung (2020) Compensation encompasses all compensation, be it in the form of monetary or material benefits, that employees receive either directly or indirectly for their services rendered to the enterprise. Meanwhile, according to Sulaeman et al. (2021) Compensation concerns to various forms of financial compensation, as well as services and benefits that employees receive in the context of their employment.

### **2. Employee Performance**

Performance is the willingness of a individual or group of people to carry out or perfect an activity in accordance with their responsibilities to obtain the expected outcomes (Afandi, 2020). According to Agus Triansyah et al. (2023) employee performance is a measure of how impactively an employee can carry out his duties and responsibilities. Meanwhile, according to Ratnasari et al. (2023) employee performance affects their



contribution to the organisation, including production quantity, production quality, production time, attendance at work, and cooperative attitude.

### 3. Job Satisfaction

Job satisfaction concerns to the stage of positivity an employee holds towards their work and the acenterprising situations (Sinambela, 2020). According to Sumarjo (2022) Job satisfaction concerns to an individual's emotional state and appraisal of their employment, particularly in relation to the working environment, the extent to which their job fulfills individualal expectations, as well as needs and desires. Meanwhile, according to Usman et al. (2019) The degree of contentment experienced by an individual in response to the multifaceted work environment of their employing organization is commonly referred to as job satisfaction.

## II. METHODS

The research was executed employing quantitative methodologies, with the primary tool being original data gathered through the distribution of questionnaires to respondents (Astarina et al., 2022). The research population consisted of 157 permanent employees, with a sample size of 113 individuals determined through random sampling techniques and the Slovin formula. The data analysis methods utilized in this research encompassed validity testing, reliability testing, classical assumption testing, hypothesis testing via t-tests and F-tests, as well as path analysis examination. Analysis was builded utilizing Statistical Product and Service Solution (SPSS) version 22.

## III. RESULTS AND DISCUSSION

### A. Results

#### 1. Validity Test

*Table 1 Validity Test outcome*

<i>No.</i>	<i>Variables</i>	<i>R Count</i>	<i>R Table</i>	<i>Information</i>
<i>1</i>	<i>Compensation (X)</i>			
	<i>1</i>	<i>0,476</i>	<i>0,1541</i>	<i>VALID</i>
	<i>2</i>	<i>0,221</i>	<i>0,1541</i>	<i>VALID</i>
	<i>3</i>	<i>0,199</i>	<i>0,1541</i>	<i>VALID</i>
	<i>4</i>	<i>0,434</i>	<i>0,1541</i>	<i>VALID</i>
	<i>5</i>	<i>0,351</i>	<i>0,1541</i>	<i>VALID</i>
	<i>6</i>	<i>0,459</i>	<i>0,1541</i>	<i>VALID</i>
<i>2</i>	<i>Employee Performance (Y)</i>			
	<i>1</i>	<i>0,268</i>	<i>0,1541</i>	<i>VALID</i>
	<i>2</i>	<i>0,568</i>	<i>0,1541</i>	<i>VALID</i>
	<i>3</i>	<i>0,248</i>	<i>0,1541</i>	<i>VALID</i>
	<i>4</i>	<i>0,327</i>	<i>0,1541</i>	<i>VALID</i>

	5	0,266	0,1541	VALID
	6	0,381	0,1541	VALID
	7	0,561	0,1541	VALID
	8	0,547	0,1541	VALID
	9	0,442	0,1541	VALID
<b>3</b>	<i>Job Satisfaction (Z)</i>			
	1	0,296	0,1541	VALID
	2	0,264	0,1541	VALID
	3	0,232	0,1541	VALID
	4	0,303	0,1541	VALID
	5	0,540	0,1541	VALID
	6	0,207	0,1541	VALID
	7	0,239	0,1541	VALID
	8	0,201	0,1541	VALID

According to Table 1, all statement items exhibit a correlation coefficient value (r count) exceeding r table, thereby affirming the validity of the data obtained and its suitability as a research tool.

## 2. Reliability test

*Table 2 Reability Test outcome*

<i>Variables</i>	<i>Cronbach Alpha</i>	<i>Information</i>
<i>Compensation (X)</i>	0,768	<i>Reliable</i>
<i>Employee Performance (Y)</i>	0,771	<i>Reliable</i>
<i>Job Satisfaction (Z)</i>	0,762	<i>Reliable</i>

According to Table 2, this research employs three variables - compensation, employee performance, and job satisfaction. Notably, all of these constructs exhibit a Cronbach's alpha coefficient exceeding 0.6, attesting to their high stage of reliability.

## 3. Classical Assumption Test

### a. Normality Test

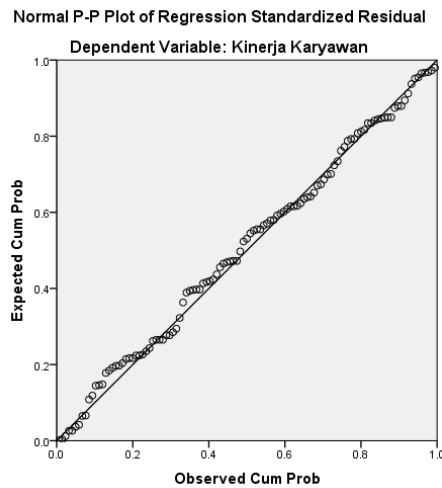


Figure 1 Normality Test outcome

The plot depicted in Figure 1 exhibits a dispersion of points that align with and follow the diagonal trendline, indicating that the utilized regression model adheres to the normality assumption.

**b. Multicollinearity Test**

Table 3 Multicollinearity Test outcome

Model	Collinearity Statistics		Description
	Tolerance	VIF	
Compensation	0,862	1,160	No multicollinearity
Job Satisfaction	0,862	1,160	No multicollinearity

According to Table 3, the independent variables pertaining to compensation and job satisfaction exhibit a Tolerance value of  $\geq 0.10$  and a VIP value of  $\leq 10$ , thereby indicating an absence of multicollinearity.

**c. Heteroscedasticity Test**

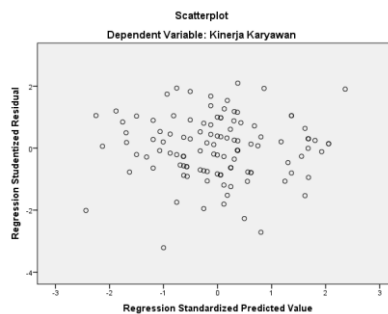


Figure 2 Heteroscedasticity Test outcome

Displayed in Figure 2 above is the Scatterplot graph of the heteroscedasticity test, portraying points randomly dispersed without any apparent pattern and distributed evenly both above and below the zero mark on the Y-axis. This observation signifies a lack of heteroscedasticity within this research, thereby validating the soundness of this regression model.

**d. Hypothesis Test**

**1). Test t (partial)**

*Table 4 Hypothesis Testing outcomes 1*

<i>Variables</i>	<i>Coefficient <math>\beta</math></i>	<i>t Count</i>	<i>t Sig</i>
<i>Constant</i>	<i>19,003</i>	<i>8,076</i>	<i>0,000</i>
<i>Compensation</i>	<i>0,464</i>	<i>4,211</i>	<i>0,000</i>

According to the outcomes from testing hypothesis 1, it was determined that compensation had a significant impact upon job satisfaction as evidenced by a t count of 4.211 and sig value of 0.000. Since the sig value is less than 0.05, Ho is refused, further confirming the significance of compensation in relation to job satisfaction.

*Table 5 Hypothesis Testing outcomes 2*

<i>Variables</i>	<i>Coefficient <math>\beta</math></i>	<i>t Count</i>	<i>t Sig</i>
<i>Constant</i>	<i>16,416</i>	<i>4,688</i>	<i>0,000</i>
<i>Compensation</i>	<i>0,255</i>	<i>1,819</i>	<i>0,072</i>
<i>Job Satisfaction</i>	<i>0,343</i>	<i>3,061</i>	<i>0,003</i>

According to the outcomes from hypothesis 2 testing, the direct compensation yielded a t-score of 1.819 with a significance stage of 0.072. As this t-value is greater than 0.05, we accept Ho, indicating that employee performance is not significantly impacted by compensation.

The variable of job satisfaction yielded a direct correlation with a t-value of 3.061 and significance stage of 0.003. As the significance stage of the t-value is less than 0.05, Ho is refused, indicating that job satisfaction significantly impacts employee performance.

**2) F Test (Simultaneous)**

*Table 6 F Test outcome (simultaneous)*

<i>Model</i>	<i>F Count</i>	<i>F Sig</i>
<i>Regression</i>	<i>9,746</i>	<i>0,000</i>

According to Table 7, the F statistic is 9.746 and has a corresponding significance value of 0.000. This indicates that the F Significance stage of 0.000 is less than the established threshold of 0.05, thereby leading to rejection of Ho hypothesis, which in turn implies that both compensation and job satisfaction variables exert a significant impact upon employee performance concurrently.

**3) Coefficient of Determination (R)<sup>2</sup>**

*Table 7 Coefficient of determination of model 1*

<i>Model</i>	<i>R Square</i>
<i>1</i>	<i>0,138</i>

The coefficient of determination in table 1, represented by the R-squared value, stands at 0.138. This indicates that compensation's impact upon job satisfaction accounts for merely 13.8%, while the remaining 86.2% is ascribed to unexplored variables in this research. that's why ascertain e1's worth, it will be computed utilizing the following formula:

$$\begin{aligned}
 e1 &= \sqrt{1 - R \text{ Square}} \\
 &= \sqrt{1 - 0,138} \\
 &= \sqrt{0,862} \\
 &= 0,928
 \end{aligned}$$

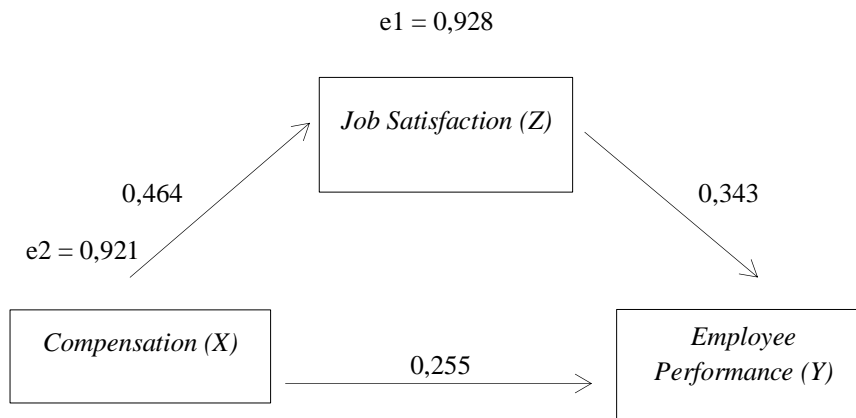
*Table 8 Coefficient of determination of model 2*

<i>Model</i>	<i>R Square</i>
<i>1</i>	<i>0,151</i>

The coefficient of determination table reveals an R-squared value of 0.151, implying that the collective impact of compensation upon both job satisfaction and performance is equivalent to 15.1%, while the remaining 84.9% pertains to other unexamined variables. The e<sup>2</sup> value is computed utilizing the following formula:

$$\begin{aligned}
 e1 &= \sqrt{1 - R \text{ Square}} \\
 &= \sqrt{1 - 0,151} \\
 &= \sqrt{0,849} \\
 &= 0,921
 \end{aligned}$$

**e. Path Analysis**



*Figure 3 Path Analysis*

Upon analysis of the given data, it is evident that compensation has a direct impact upon employee performance with a beta value of 0.255. Additionally, when taking into account job satisfaction as an intervening variable, the indirect impact of compensation upon performance can be calculated to be 0.11832 (by multiplying 0.464 and 0.255). It should be noted that since the value of direct impact (0.255) exceeds that of the indirect impact (0.11832), it is summarized that job satisfaction does not serve as an intervening variable among compensation and employee performance, thus accepting the null hypothesis (Ho).

**B. Discussion****1. The impact of compensation upon job satisfaction**

According to the aforementioned analysis, compensation exerts a noteworthy impact upon job contentment. This indicates that as employees receive greater compensation, their stage of job satisfaction correspondingly increases.

**2. The impact of compensation upon employee performance**

According to the preceding analysis, compensation does not utilize an impact upon employee performance. This suggests that the quantum of compensation accepted has no bearing upon one's performance.

**3. The impact of job satisfaction upon employee performance**

According to the analysis mentioned earlier, it is apparent that job satisfaction has a substantial impact upon employee performance. It can be inferred that as employees experience heightened stages of job satisfaction, their performance tends to improve correspondingly.

**4. The impact of compensation upon employee performance designed by job satisfaction**

According to the aforementioned analysis, it can be summarized that job satisfaction does not serve as a mediator among compensation and employee performance. This suggests that the magnitude of compensation offered is capable of generating its own sense of contentment among employees, thereby facilitating optimal stages of productivity. (Nyoman Santi Ardani et al., 2023).

**IV. CONCLUSION**

The researchers' analysis has led them to conclude that there exists a notable correlation among compensation and job satisfaction, as well as among job satisfaction and employee performance. Yet, it is apparent that compensation alone does not utilize a direct impact upon employee performance. Instead, the combined variables of compensation and job satisfaction significantly impact an employee's performance. Furthermore, their outcomes suggest that job satisfaction only partially mediates the impact of compensation upon employee performance within the Dental Health Centre Group located in Jakarta.

Researchers advise companies that compensation has a significant impact upon job satisfaction, which in turn significantly affects employee performance. Therefore, it is imperative for companies to offer fair and competitive compensation to their staff that's why improve their overall productivity.

**REFERENCES**

- Afandi, P (2020). *Manajemen Sumber Daya Manusia*. Zanafa Publishing.
- Afrizal, A., Muhammad, M., Wibisono, C., Indrayani, I., & Qarny, A. A (2022). Mediating Role of Job Satisfaction in Relationship of Compensation, Motivation and Organizational Commitment on Employee Performance in Batam Island, Indonesia. *International Journal of Advances in Social Sciences and Humanities*, 1(3), 131–137. <https://doi.org/10.56225/ijassh.v1i3.50>
- Agus Triansyah, F., Hejin, W., & Stefania, S (2023). Factors Affecting Employee Performance: A Systematic Review. *Journal Markcount Finance*, 1(2), 118–127. <https://doi.org/10.55849/jmf.v1i2.102>
- Akib, A., Mansyur, M., Kurdin, K., & Demina, D (2022). The Effect of Compensation and Work Discipline on Employee Performance in State Islamic Religious Higher Education. *AL-TANZIM: Jurnal Manajemen Pendidikan Islam*, 6(1), 586–602. <https://doi.org/10.33650/al-tanzim.v6i2.3480>
- Amin, M., Wicaksana, H., & Suhardi, S (2023). The Effect Of Transformational Leadership And Competence On Performance Through Compensation As An Intervening Variable. *International Journal of Science, Technology & Management*, 4(2), 350–357. <https://doi.org/10.46729/ijstm.v4i2.775>
- Annisa Miftahul Maghfiroh, Frendika, R., & Roosallyn, A (2023). Pengaruh Beban Kerja dan Kecerdasan Emosional terhadap Kinerja Karyawan PT KAI (Persero) Daop II Bandung. *Bandung Conference Series: Business and Management*, 3(1), 226–233. <https://doi.org/10.29313/bcsbm.v3i1.6450>
- Ariani, D. W (2023). Relationship Model of Compensation, Motivation, Job Satisfaction and Employee Performance. *International Review of Management and Marketing*, 13(4), 9–13. <https://doi.org/10.32479/irmm.14464>
- Astarina, I., Fitrijo, T., Hapsila, A., Supriyadi, A., & Cahyono, D (2022). The Role Of Training In Mediating The Effect Of Competence, Compensation On Employee Performance. *Jurnal Economia*, 18(1), 132–147.

- <https://doi.org/10.21831/economia.v18i1.42881>
- Eka Mayastika Sinaga, Christin Natalia Sianipar, & Ranti Dwi Putri Saragih (2023). The Effect Of Compensation On Job Satisfaction With Work Motivation As An Intervening Variable (Case Study at PT. Tiga Mutiara Nusantara Molding Section in Dolok Merawan District). *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration (IJEBAS)*, 3(4), 1197–1210. <https://doi.org/10.54443/ijebas.v3i4.1008>
- Gea, Y., & Haryetti (2014). *Effect of Corporate Social Responsibility (CSR) and Compensation For Performance Management Manufacturing Companies Listed in Indonesia Stock Exchange Effect of Corporate Social Responsibility (CSR) and Compensation For Performance Management Manufacturing*. 115–125.
- Indrawanto, S (2021). Pengaruh Fungsi Kepemimpinan Kompensasi dan Kepuasan Kerja Terhadap Kinerja Pegawai Dinas Lingkungan Hidup Kota Cimahi. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 4(3), 246. <https://doi.org/10.32493/jjsdm.v4i3.10453>
- Indripriarko, G., & Aima, M. H (2022). Effect of Work Environment and Compensation on Employee Performance with Job Satisfaction as a Mediation Variable. *Journal Research of Social Science, Economics, and Management*, 2(02), 134–148. <https://doi.org/10.59141/jrssem.v2i02.249>
- Ingsih, K., Budiantoro, R. A., Hasanatina, F. H., & Ali, S (2022). Work-life Balance and Compensation on Performance with Job Satisfaction as an Intervening Variable for Millennial Generation Banking Employees. *Jurnal Manajemen Bisnis*, 13(2), 255–276. <https://doi.org/10.18196/mb.v13i2.13947>
- Irma Kue, M. A., Nuryakin, N., & Suwanti, A (2023). The Effect of Reward, Career Development and Task-Oriented Leadership Style on Employee Performance with Job Satisfaction as Intervening Variables. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 8(2), 1–8. <https://doi.org/10.30604/jjka.v8i2.1796>
- Makarim, M. H. A., & Suratman, A (2024). How far religiosity , compensation, and organizational commitment impact toward employee performance at Waroeng Steak and Shake, special region of Yogyakarta. *Asian Journal of Management Entrepreneurship and Social Science*, 04(01), 375–396.
- Muhammad Gundung (2020). 4861-10343-1-Sm (2). *Jenius*, 3(3), 236–245.
- Nalim, N., Haryono, S., & Muchran, M (2020). The Effect of Leadership Style and Compensation on the Work Performance of Merangin District Office Employees, Jambi: The Role of Work Motivation. *Journal of Governance and Public Policy*, 7(2), 78–87. <https://doi.org/10.18196/jgpp.72124>
- Nur Muthia Naseh, S., Frendika, R., & Roosallyn Assyofa, A (2023). Pengaruh Knowledge Sharing dan Kompetensi terhadap Kinerja Karyawan pada PT. Eleska Iatki Kota Bandung. *Bandung Conference Series: Business and Management*, 3(1), 115–124. <https://doi.org/10.29313/bcsbm.v3i1.5873>
- Nyoman Santi Ardani, P., Ayu Putu Widani Sugianingrat, I., & Ayu Putri Trarintya, M (2023). The Effect of Compensation and Motivation on Employee Performance Through the Mediation of Job Satisfaction (Case Study on Savings and Loan Cooperatives in Karangasem Regency). *International Journal of Social Science, Education, Communication and Economics (SINOMICS JOURNAL)*, 2(2), 385–396. <https://doi.org/10.54443/sj.v2i2.144>
- Pranata, R., Iska, S., & Mastanora, R (2023). Effect of Compensation on Employee Job Satisfaction at PT. Indohealth Pekanbaru. *El -Hekam*, 8(1), 1. <https://doi.org/10.31958/jeh.v8i1.8600>
- Pratomo, A (2022). Pengaruh Employee Compensation Pada Employee Performance Di Hospitality Industry. *Jurnal IPTA*, 10(1), 154. <https://doi.org/10.24843/ipta.2022.v10.i01.p17>
- Pudjiarti, E. S., Herman, M., & Mahesa, D (2023). The Effect of Compensation on Employee Performance is mediated by Job Satisfaction. *IQTISHODUNA: Jurnal Ekonomi Islam*, 12(1), 209–222. <https://doi.org/10.54471/iqtishoduna.v12i1.2180>
- Ratnasari, D., Utami, H. N., & Prasetya, A (2023). The Impacts of Perceived Organizational Support and Work Environment on Employee Performance: The Mediating Effects of Job Satisfaction. *Jurnal Administrasi Bisnis* |, 17(2), 267–281.
- Setiawan, S., Sutarlan, S., & Sumarno, N (2018). International Review of Management and Marketing The Role of Work Motivation as Effect Intervening Variable of Intrinsic Reward, Supervision of Work and Satisfaction of Compensation on Employee Performance (A Sudy at Cooperatives in the City of Pekalongan. *International Review of Management and Marketing*, 8(4), 65–70.
- Sinambela, L. P (2020). *Manajemen Sumber Daya Manusia*. Prenadamedia Group.
- Sulaeman, A., Suryani, N. L., Sularmi, L., & Guruh, M (2021). Pengaruh Kompensasi Terhadap Kinerja Karyawan Pada PT. Primacipta Graha Sentosa Di Jakarta. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 4(2), 137. <https://doi.org/10.32493/jjsdm.v4i2.9082>
- Sumarjo, W (2022). Pengaruh Pengembangan Karir dan Penempatan Terhadap Kepuasan Kerja yang Berdampak pada Kinerja Karyawan pada PT Sanco Perdika Pratama di Jakarta. *JENIUS (Jurnal Ilmiah Manajemen Sumber Daya Manusia)*, 5(2), 485. <https://doi.org/10.32493/jjsdm.v5i2.16524>
- Sutrisno, E (2019). *Manajemen Sumber Daya Manusia*. PT Bumi Aksara.

- Usman, J., Sukmayuda, D. N., & Kurniawati, S (2019). International Review of Management and Marketing Job Satisfaction and Employee Performance Shoes Industry in Tangerang Regency Banten Province. *International Review of Management and Marketing*, 9(1), 98–103.
- Wandi, D., Kahpi, H. S., Fidziah, F., & Abidin, Z (2022). Pengaruh Kompensasi terhadap Kinerja Karyawan di Perusahaan Jasa Pengiriman di Kota Serang Indonesia. *Journal of Management and Business Review*, 19(1), 80–91. <https://doi.org/10.34149/jmbr.v19i1.235>



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# Entrepreneurial Intentions of Students Using the Shapero Entrepreneurial Event Model

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## ABSTRACT

**Purpose:** This research aims to examine the influence of entrepreneurship education, self-efficacy, and perceived desire on entrepreneurial intentions using the Shapero Entrepreneurial Event Model theoretical approach.

**Design/methodology/approach:** The population in this study was 280 Tarakan City students. The data used in this case. This research is primary data sourced from questionnaires. This research uses a quantitative approach with survey methods. Variable measurement uses a Likert scale and the sampling technique used is non-probability sampling with a purposive sampling method. The analysis technique used is SEM (Structural Equation Modeling) with SPSS and LISREL 8.80 software tools.

**Findings:** The findings show that entrepreneurship education has a positive and significant effect on self-efficacy, self-efficacy has a positive and significant effect on entrepreneurial intentions, and perceived desire has a positive and significant effect on entrepreneurial intentions.

**Paper type:** Research paper

**Keywords:** *Entrepreneurship Education, Self-efficacy, Perceived Desire, Entrepreneurial Intention*

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## I. INTRODUCTION

Indonesia is a country that has abundant natural resources. Apart from that, Indonesia also has quite a lot of human resources. If large human resources are not balanced with quality human resources, this will cause problems. The government realizes that the business world is the backbone of the country's economy and therefore must continue to be improved. The number of entrepreneurs in Indonesia is still relatively low compared to other countries such as Malaysia with entrepreneurship reaching 4.74 percent, Thailand reaching 4.26 percent, and Singapore 8.76 percent, while Indonesia has 3.74 entrepreneurship. percent (Prayoga, 2021) This is a challenge for the productive age in Indonesia to catch up with entrepreneurship in Indonesia. To become a developed country, the entrepreneurial indicator is at least 2% of the population (Andika & Madjid, 2012).

Catching up with ASEAN countries It is necessary to instill an entrepreneurial spirit in students to increase the number of jobs and reduce unemployment. An entrepreneurial spirit needs to be developed to overcome the unemployment problem. With the existence of an entrepreneurial spirit, it is hoped that the attitude and desire to be independent will grow to get a better life without having to depend on other people, as stated (Alma, 2013), the more developed the country, the more people are educated and the more unemployment there is.

The more graduates there are, the greater the level of public awareness of the importance of education, but this is less balanced by changes in people's culture who are unwilling to become entrepreneurs, increasing the number of unemployed graduates. The high number of unemployed may occur due to the increase in the workforce which is not accompanied by an increase in new businesses in industry or other businesses. This is one of the factors that most college graduates tend to choose to become job seekers rather than create jobs (Job Creator). (Dikti, 2012).

Entrepreneurship is the most important thing to develop. Finally, many people try to work by creating their own business which is usually called entrepreneurship. Entrepreneurship is an independent business whose resources and activities are carried out by business actors, starting from determining how to make goods, setting

up a business, selling products, and managing the business. Without realizing it, the role of entrepreneurship influences the level of the Indonesian economy, so awareness is needed to increase interest in entrepreneurship. Entrepreneurship is a supporter of determining whether or not the country's economy is progressing because the entrepreneurial sector has the freedom to work and be independent. Apart from that, entrepreneurship can also create jobs and absorb labor (Debiyani & Syahran, 2020).

Making college graduates into entrepreneurs is not easy to realize. Several universities in Tarakan City, such as the University of Borneo Tarakan, STIMIK PPKIA Tarakanita Rahmawati, STIE Bulungan Tarakan, North Kalimantan Business Polytechnic, and North Kalimantan Polytechnic are expected to produce students and educated graduates as reliable and superior entrepreneurs. But the intention to become an entrepreneur must start from the intention that exists within you. Students as an educated component of society are expected to be able to open up employment opportunities by developing the intention to become entrepreneurs so that they can simultaneously answer existing problems.

### **A. Literature review**

Entrepreneurship is an innovative and creative process that has the potential to add value to products, create jobs, increase productivity, revive and segment markets, improve social welfare, and more broadly improve the country's economy (Guerrero et al., 2008). Hisrich (2001) suggests that entrepreneurship is defined as a dynamic process in which additional wealth is created by individuals who take significant capital, time, and career risks or provide value for some products and services. Drucker and Zimmerer in Kasmir (2011) entrepreneurship are the ability to create a business, which requires creativity and innovation to find something different. Suryana (2008) states that entrepreneurship is a creative and innovative ability to create new things that are used as a basis, business skills or to improve life.

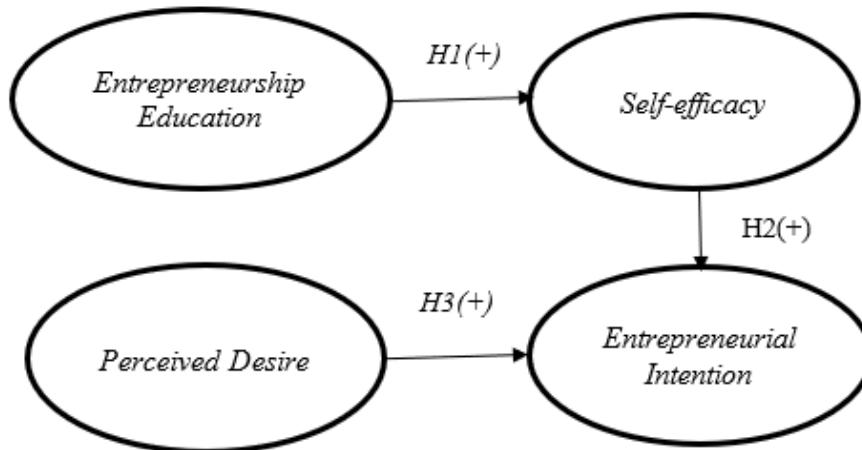
The entrepreneurial intention model was first developed by Shapero and Sokol in 1982 with the Entrepreneurial Event Theory. The Entrepreneurial Event Model theory put forward by (Shapero & Sokol, 1982) adapts the Reasoned Action theory (Fishbein & Ajzen, 1975) and applies it specifically to the world of entrepreneurship so that it underlies the Entrepreneurial Event Theory which influences entrepreneurial intentions with three dimensions, namely perceived desirability, perceived feasibility and the tendency to act (propensity to act). Shapero Entrepreneurial Event Model using two main variables, between others are perceived desires and also perceived feasibility. Segal et al., (2005) conceptualize perceived desire as an individual's interest in starting a new business and perceived feasibility as a perceptual measurement of a person's abilities related to the new business being created. These two variables are related to the drive for entrepreneurship. Shapero & Sokol (1993) and Krueger (1993) in (Segel et al., 2005) argue that perceived desirability, perceived feasibility, and propensity to act are related to entrepreneurial motivation which is carried out using push motivation theory and full theory to test factors. -factors that motivate someone to start a new business. Gilad and Levine (1986) were the first figures to study entrepreneurial motivation from the push theory and pull theory.

Shapero and Sokol (1982) stated that perceived desirability is a personal attraction to starting a new business. The perception of desire leads to the entrepreneurial behavior of a person who wants a business or a person's level of evaluating the beneficial and detrimental results of the results of entrepreneurial activities so that the greater the desire and feasibility of a person's intentions in carrying out entrepreneurial activities can increase (Hisrich, 2017). Krueger et al., (2000) Determining perceived desires is a person's personal bias that views the creation of a new business as something interesting and desirable. Perceived desire involves a person's view or perception of whether or not it is important to build a business (Giagtzi, 2013).

Linan (2018) said that perceived desire leads to the extent to which a person feels attracted to certain behavior, in this case namely becoming an entrepreneur and the activities involved in it. Felt desires include a person's assessment of everything related to entrepreneurial activities and becoming an entrepreneur (Liñán et al., 2011). Hisrich et al., (2012) explain that perceived desire is the extent to which a person can assess something related to the profits obtained in entrepreneurship. (Alfonso & Cuevas, 2012) said that the desire felt is the level of someone's attraction to starting a new business. Meanwhile, according to the TPB, subjective attitudes and norms are assessed as perceived desirability.

Fishbein & Ajzen (2011) expressed his opinion that intention is referred to as intention, namely the component that exists within a person which refers to the desire to carry out certain behavior. Entrepreneurial intention is the process of gathering information to be able to start a new business (Katz, 1998). Entrepreneurial intention is the state of mind of a person who wants to create a new business and drive new value in an existing organization, this is the generating force of entrepreneurial activity (Wu, 2008). Entrepreneurial intentions include attitudes toward the pursuit of entrepreneurship as a career choice and the desire to act (Krueger et al., 2000). Krueger (1993) states that entrepreneurial intention is a form of a person's commitment to starting a new business and is very important for understanding the process of establishing a business. In general, intention can be interpreted as a relatively persistent tendency in a person to feel interested in a particular field and feel happy to join in various activities related to that field.

**B. Framework Conceptual**



**II. METHODS**

This study uses a quantitative approach. The quantitative method used in this research is the survey method, The objects in this research were students in Tarakan City, the research location was carried out in the Tarakan City area and the time of the research was carried out in November 2023. In this research the population used were students at the University of Borneo Tarakan, STIMIK PPKIA Tarakanita Rahmawati, STIE Bulungan Tarakan, Polytechnic North Kalimantan Business and North Kalimantan Polytechnic who have taken entrepreneurship courses. The sampling used was a non-probability sampling technique, namely the purposive sampling method. According to (Irianto, 2019) non-probability sampling is a sampling technique that does not give all elements or members of the population the same opportunity to be selected as samples. According to (Marlinda, 20 21) the number of samples as respondents must be adjusted to the number of indicator statements or questions used in the questionnaire or questionnaire with the assumption that the number of indicators is multiplied by 5-10. So the sample size determined is u sample size = Number of indicators x 10, sample size = 28 x 10, so sample size = 280.

**III. RESULTS AND DISCUSSION**

*Table 1 Validity Test of Entrepreneurship Education*

<i>Variable</i>	<i>Indicator</i>	<i>Rotated Component Matrix</i>	<i>Information</i>
<i>Entrepreneurship Education</i>	<i>PK1</i>	<i>0.679</i>	<i>Valid</i>
	<i>PK2</i>	<i>0.739</i>	
	<i>PK3</i>	<i>0.560</i>	
	<i>PK4</i>	<i>0.741</i>	
	<i>PK5</i>	<i>0.784</i>	

PK6 0.729

PK7 0.668

Source: Researcher data, 2024

*Table 2 Validity Tests of Self-Efficacy*

<i>Variable</i>	<i>Indicator</i>	<i>Rotated Components Matrix</i>	<i>Information</i>
<i>Self-Efficacy</i>	<i>ED1</i>	0.693	<i>Valid</i>
	<i>ED2</i>	0.753	
	<i>ED3</i>	0.720	
	<i>ED4</i>	0.718	
	<i>ED5</i>	0.652	
	<i>ED6</i>	0.698	
	<i>ED7</i>	0.541	

Source: Researcher data, 2024

*Table 3 Tests of the Validity of Felt Desire*

<i>Variable</i>	<i>Indicator</i>	<i>Rotated Component Matrix</i>	<i>Information</i>
<i>Felt Desire</i>	<i>KD1</i>	0.689	<i>Valid</i>
	<i>KD2</i>	0.706	
	<i>KD3</i>	0.694	
	<i>KD4</i>	0.711	
	<i>KD5</i>	0.698	
	<i>KD6</i>	0.280	
	<i>KD7</i>	0.528	

Source: Researcher data, 2024

*Table 4 Validity Tests of Entrepreneurial Intentions*

<i>Variable</i>	<i>Indicator</i>	<i>Rotated Component Matrix</i>	<i>Information</i>
<i>Entrepreneurial Intentions</i>	<i>NB1</i>	<i>0.568</i>	
	<i>NB2</i>	<i>0.633</i>	
	<i>NB3</i>	<i>0.727</i>	
	<i>NB4</i>	<i>0.742</i>	<i>Valid</i>
	<i>NB5</i>	<i>0.687</i>	
	<i>NB6</i>	<i>0.748</i>	
	<i>NB7</i>	<i>0.728</i>	

Source: Researcher data,2024

*Table 5 Reliability Test Results*

<i>Variable</i>	<i>Cronbach's Alpha If Item Deleted</i>	<i>Cronbach's Alpha</i>	<i>Information</i>
<i>Entrepreneurship Education</i>			
<i>PK1</i>	<i>0.826</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK2</i>	<i>0.823</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK3</i>	<i>0.814</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK4</i>	<i>0.807</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK5</i>	<i>0.807</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK6</i>	<i>0.815</i>	<i>0.7</i>	<i>Reliable</i>
<i>PK7</i>	<i>0.817</i>	<i>0.7</i>	<i>Reliable</i>
<i>Self-Efficacy</i>			
<i>ED1</i>	<i>0.882</i>	<i>0.7</i>	<i>Reliable</i>
<i>ED2</i>	<i>0.867</i>	<i>0.7</i>	<i>Reliable</i>
<i>ED3</i>	<i>0.862</i>	<i>0.7</i>	<i>Reliable</i>

<i>Variable</i>	<i>Cronbach's Alpha If Item Deleted</i>	<i>Cronbach's Alpha</i>	<i>Information</i>
<i>ED4</i>	<i>0.868</i>	<i>0.7</i>	<i>Reliable</i>
<i>ED5</i>	<i>0.866</i>	<i>0.7</i>	<i>Reliable</i>
<i>ED6</i>	<i>0.865</i>	<i>0.7</i>	<i>Reliable</i>
<i>ED7</i>	<i>0.876</i>	<i>0.7</i>	<i>Reliable</i>
<i>Felt Desire</i>			
<i>KD1</i>	<i>0.825</i>	<i>0.7</i>	<i>Reliable</i>
<i>KD2</i>	<i>0.824</i>	<i>0.7</i>	<i>Reliable</i>
<i>KD3</i>	<i>0.821</i>	<i>0.7</i>	<i>Reliable</i>
<i>KD4</i>	<i>0.846</i>	<i>0.7</i>	<i>Reliable</i>
<i>KD5</i>	<i>0.824</i>	<i>0.7</i>	<i>Reliable</i>
<i>KD7</i>	<i>0.837</i>	<i>0.7</i>	<i>Reliable</i>
<i>Entrepreneurial Intentions</i>			
<i>NB1</i>	<i>0.903</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB2</i>	<i>0.899</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB3</i>	<i>0.900</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB4</i>	<i>0.890</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB5</i>	<i>0.904</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB6</i>	<i>0.895</i>	<i>0.7</i>	<i>Reliable</i>
<i>NB7</i>	<i>0.893</i>	<i>0.7</i>	<i>Reliable</i>

Source: Researcher data, 2024

Table 6 Normality Test Results

Skewness			Kurtosis			Skewness dan Kurtosis	
Value	Z-Score	P-Value	Value	Z-Score	P-Value	Chi-Square	P-Value
133.443	24.946	0.000	956.441	17.498	0.000	928.460	0.000

Source: Researcher data, 2024

Based on the results of the normality test in table 6, it show that the p-value of skewness and kurtosis is  $0.00 < 0.05$ , so it can be concluded that the data is not normally distributed. Abnormal data can be ignored, this is because the answers from respondents are varied. This research is supported by previous researchers, namely (Rina Lestari, 2022) and (Meliana, 2023) where the results of the normality test were not normal due to the varied responses from respondents.

After carrying out Confirmatory Factor Analysis /CFA for each latent variable, a full structural model estimation was carried out. This is because the full structural model estimation analysis can describe the relationship between latent variables. The results of the full structural model estimation using latent variables are shown in the following figure:

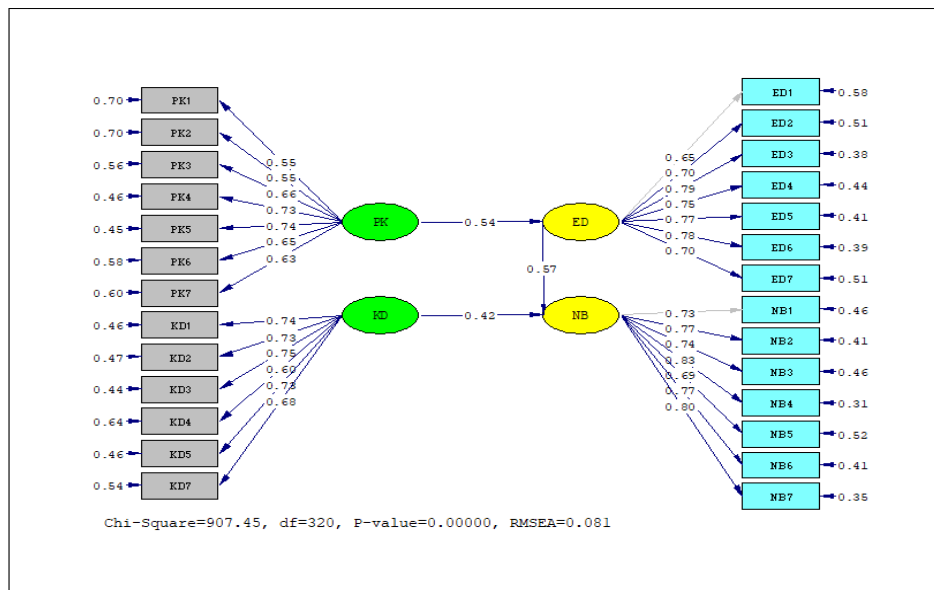


Figure 2. Full Structural Model Test Results (Standardized)

Before testing the structural model, the level of fit is first tested using the Goodness of Fit index approach. This was done to find out whether the model built was compatible with the empirical data obtained through the distributed questionnaire instrument. The test results are shown in the following table:

Table 7 Goodness of Fit Results

Goodness of Fit	Cut of Value	Research result	Information
Chi-Square	850.50	907.45	Marginal Fit
$X^2/df$	$> 5$	320	Fit

NCP	501.29 - 681.24	587.45	Fit
RMSEA	≤ 0,08	0,081	Marginal Fit
NFI	≥ 0,9	0,94	Fit
CFI	0,90-1	0,96	Fit
IFI	0,90	0,96	Fit

Sumber: Data peneliti

Based on the test results in table 4.7, it show that some parameters have met the expected requirements, but there are two parameters, namely Chi-square and RMSEA, which are at *marginal fit criteria* (not good). However, according to Ghazali (2005), this is not a problem because other fit models can be found. Therefore, researchers can see *from* the values of:

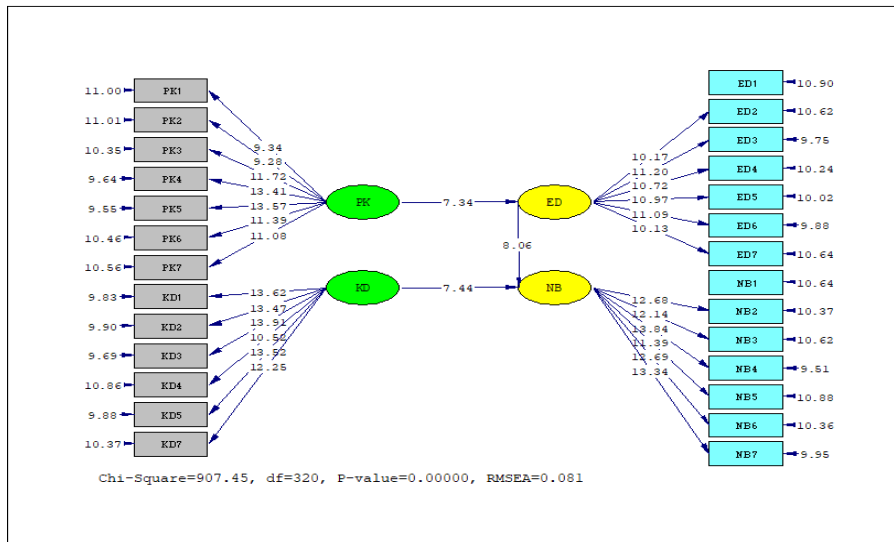


Figure 3 Full Structural Model Test Results (T-Value)

Based on Figure 2 and Figure 3, the results of hypothesis testing and the magnitude of the relationship values between research variables can be seen as shown in table 8 as follows:

Table 8 Hypothesis Test Results

Alternative Hypothesis	Variable Relationships	$\beta$	$Q$	$T$ Table Value	Information
H1	PK→ED	0.54	7.34		Supported
H2	ED→NB	0.57	8.06	1.96	Supported
H3	KD→NB	0.42	7.44		Supported

Source: Researcher data, 2024

The results of hypothesis testing for each variable can be explained based on the analysis of table 4.8 as follows:

H1: The Effect of Entrepreneurship Education on Self-Efficacy



The influence of entrepreneurship education on self-efficacy has a  $\beta$  value of 0.54 with a t value of 7.34 and a t table of 1.96. So the t value > t table value, so it can be interpreted that entrepreneurship education has a positive and significant effect on self-efficacy. Thus it can be concluded that Hypothesis 1 is supported.

#### H2: The Influence of Self-Efficacy on Entrepreneurial Intentions

The influence of self-efficacy on entrepreneurial intentions has a  $\beta$  value of 0.57 with a t value of 8.06 and a t table value of 1.96. So the t value > t table value, so it can be interpreted that self-efficacy has a positive and significant effect on entrepreneurial intentions. Thus it can be concluded that Hypothesis 2 is supported.

#### H3: The Influence of Perceived Desire on Entrepreneurial Intentions

The influence of perceived desire on entrepreneurial intentions has a  $\beta$  value of 0.42 with a t value of 7.44 and a t table value of 1.96. So the t value > t table value, so it can be interpreted that the perceived desire has a positive and significant effect on entrepreneurial intentions. Thus it can be concluded that Hypothesis 3 is supported.

### 1. Entrepreneurship Education on Self-Efficacy

Based on the research results, it shows that entrepreneurship education has a positive and significant effect on student self-efficacy in Tarakan City. Entrepreneurship education is a process of instilling an entrepreneurial spirit in someone so that they can live independently, creatively, and innovatively by increasing their knowledge. With entrepreneurship education, students will increase their knowledge of real entrepreneurial experience so that it will make them more trained which will give rise to the confidence to start a business.

Entrepreneurship education that involves entrepreneurial practices can help students gain experience and increase self-efficacy with encouragement and positive feedback given by lecturers to students during the learning process regarding students' abilities in entrepreneurship. Entrepreneurship can change the mindset of students who were previously unsure to become confident in their abilities. By the opinion of Lubem & Sarah (2018) entrepreneurship education has a role in the development of self-efficacy, which can influence a person's attitude towards entrepreneurship, thereby creating motivation and desire to become an entrepreneur.

The results of this research are in line with research conducted by Anggreini and Nurcaya (2016) that entrepreneurship education has a positive and significant effect on self-efficacy. This research is also supported by Solomon et al., (2008) who say that entrepreneurship education has a positive impact on an individual's perception of their ability to start a new business. Furthermore, Puni et al., (2018) also said that entrepreneurship education has a significant positive effect on self-efficacy.

### 2. Self-Efficacy on Entrepreneurial Intentions

The results of hypothesis testing carried out in this research state that self-efficacy has a positive and significant effect on students' entrepreneurial intentions in Tarakan City. Self-efficacy is a person's belief in their ability to manage and lead a business, as well as the belief that through continuing this business they will achieve entrepreneurial success (Anggreini, 2016). A person's self-confidence can influence the activities that will be carried out and a person's thoughts. By having good self-efficacy, a person's confidence in acting will be higher. These results are consistent with the results of research conducted by Vindi (2021) which also found that self-efficacy has a positive and significant effect on entrepreneurial intentions.

Self-efficacy influences the actions a person will choose. One of the actions a person chooses is to want to become an entrepreneur. This shows that self-efficacy plays a very big role in students. This is in line with research conducted by Hapsah and Savira in Evaliana (2015) which states that with great self-efficacy, a person will have more confidence in their abilities to complete various tasks so that a person has a high interest in entrepreneurship. So it can be said that the higher a person's self-efficacy towards entrepreneurial interest, the stronger the person's intention or intention to become an entrepreneur. Therefore, high self-efficacy is believed to influence entrepreneurial intentions among students in Tarakan City.

### 3. Perceived Desirability of Entrepreneurial Intentions

The results of hypothesis testing carried out in this research state that perceived desirability or perceived desire has a positive and significant effect on students' entrepreneurial intentions in Tarakan City, which means that the higher a person's perceived desire, the higher their entrepreneurial intentions will be. This is in line with research conducted by Mukharomah (2017) which states that perceived desires have a positive and significant influence on entrepreneurial intentions.

When someone perceives entrepreneurship as something desirable, then someone tends to have a stronger intention to engage in entrepreneurial activities (Krueger et al., 2000). In other words, students who have high entrepreneurial interest or desire will be encouraged to start and run a business compared to students who have low perceived desirability.

The results of this research are also supported by previous research conducted by Wibisono (2011) on students at the Faculty of Economics, Sebelas Maret University, which showed positive results, namely that the

perceived desire variable can increase entrepreneurial intentions, where the more students apply their perceived desire for entrepreneurship, the more it will increase. a person's intention to become an entrepreneur. Apart from that, Krueger (2000) also suggests a positive relationship between perceived desire and intention to start a business, this is due to the existence of factors to meet family needs.

#### IV. CONCLUSION

Based on research conducted by researchers entitled The Influence of Entrepreneurship Education, Self-Efficacy and Perceived Desire Regarding Entrepreneurial Intentions, the following conclusions are drawn:

1. Entrepreneurship education has a positive and significant effect on student self-efficacy in Tarakan City. Entrepreneurship education has a role in the development of self-efficacy, where self-efficacy can influence a person's attitude toward entrepreneurship.
2. Self-efficacy has a positive and significant effect on students' entrepreneurial intentions in Tarakan City. The higher a person's confidence, the higher their entrepreneurial intentions.
3. Perceived desire has a positive and significant effect on students' entrepreneurial intentions in Tarakan City. The higher the desire a person feels, the higher the entrepreneurial intention he or she will have.

Based on the research results, discussion, and conclusions above, the suggestions that researchers can convey are as follows:

1. Students should not only think about looking for work but also try to continue to develop their creativity so that they can create jobs through entrepreneurship.
2. It is hoped that future researchers will be able to develop this research, such as adding variables or indicators as well as research models using different and better test equipment so that the results obtained are more accurate and more valid so that they can be implemented in the formation of students' youth to create young entrepreneurs.
3. The role of universities is to improve entrepreneurship education and motivate students to develop entrepreneurial intentions.

#### REFERENCES

- Bandura. (1997). Self-efficacy is the exercise of control. New York: wh free and company.
- Bandura, A. ( 1986 ). The Social Foundations of Thought and Action. Englewood Cliffs, NJ: Pre n tice- Hall. 1986.
- Baporikar, & Neeta. (2016). . Entrepreneurship in the Contemporary Knowledge-Based Global Economy. Hershey PA, USA : Business Science Reference ( an imprint of IGI Global).
- Chimucheka, T. (2013). The Impact of Entrepreneurship Education on the Establishment and Survival of Small, Micro and Medium Enterprises (SMMEs). *Journal of Economics*, 4(2)
- Dawson, C., & Henley, A. (2012). "Push" versus "Pull" Entrepreneurship: An Ambiguous Distinction? *International Journal of Entrepreneurial Behavior & Research*, 18(6), 697-719.
- Dissanayake, D. (2014). The Impact of Perceived Desirability and Perceived Feasibility on Entrepreneurial Intention among Undergraduate Students In Sri Lanka: An Extended Model. *Kelaniya Journal of Management*, 2(1), 39–57
- Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, 94, 172-182
- Fishbein, M., & Ajzen, I. (1975). Belief, Attitude, and Behaviour: An Introduction to Theory and Research. *Belief, Attitude, and Behaviour: An Introduction to Theory and Research*, 10(2).
- Fishbein, M., & Ajzen, I. (2011). Predicting and changing behavior: The reasoned action approach. In *Predicting and Changing Behavior: The Reasoned Action Approach*.
- Giagtzi, Z. (2013). How perceived feasibility and desirability of entrepreneurship influence entrepreneurial intentions: A comparison between southern and northern European countries. In *Masters Thesis*.
- Guerrero, M., Rialp, J., & Urbano, D. (2008). The impact of desirability and feasibility on entrepreneurial intentions: A structural equation model. *International Entrepreneurship and Management Journal*, 4(1).
- Guzmán-Alfonso, C., & Guzmán-Cuevas, J. (2012). Entrepreneurial intention models as applied to Latin America. *Journal of Organizational Change Management*, 25(5).

- Hair, J., Anderson, R., Tatham, R., & Black, W. (2006). "Multivariate data analysis". Upper Saddle River, NJ: Prentice Hall
- Hisrich, R. D., Peters, P. M., & Shepard, D. A. (2012). *Entrepreneurship*. McGraw Hill International Edition.
- Isaga, N., Masurel, E., & Van Montfort, K. (2015). Owner-Manager Motives and the Growth Of Smes In Developing Countries: Evidence From the Furniture Industry In Tanzania. *Journal of Entrepreneurship in Emerging Economies*, 7(3), 190-211.
- Fatoki, O. (2014). The entrepreneurial intention of undergraduate students in South Africa: The influences of entrepreneurship education and previous work experience. *Mediterranean Journal of Social Sciences*, 5(7), 294–299.
- Fayolle, A., & Gailly, B. (2008). From craft to science: Teaching models and learning processes in entrepreneurship education. *Journal of European Industrial Training*, 32(7).
- Katz, J. D. (1998). Properties of emerging organizations. *Academy of Management Review*, 13(3), 429–441
- Kennedy, J., Drennan, J., Renfrow, P., & Watson, B. (2003). *Situational Factors And Entrepreneurial Intentions. A Paper for the Small Enterprise Association of Australia and New Zealand.*
- Kristen Zulkosky. (2009). *Self-Efficacy: A Concept Analysis*. Journal Compilation: Wiley Periodicals, Inc
- Krueger, N. (1993). The Impact of Prior Entrepreneurial Exposure on Perceptions of New Venture Feasibility and Desirability. *Entrepreneurship Theory and Practice*, 18(1).
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15(5).
- Lee, S. H., & Wong, P. K. (2004). An exploratory study of technopreneurial intentions: A career anchor perspective. *Journal of Business Venturing*, 19(1).
- Linan, F. (2018). *Intention-Based Models of Entrepreneurship Education*. Piccola Impresa. Small Business, Iss. 3, 11-35.
- Liñán, F., Rodríguez-Cohard, J. C., & Rueda-Cantuche, J. M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2).
- Mcgee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship: Theory and Practice*, 33(4).
- Moi, T., Adeline, Y. L., & Dyana, M. L. (2011). Young adult responses to entrepreneurial intent. *Journal of Arts, Science & Commerce*, 2(3).
- Mozahem, N. A., & Adlouni, R. O. (2021). Using Entrepreneurial Self-Efficacy as an Indirect Measure of Entrepreneurial Education. *International Journal of Management Education*, 19(1)
- Pretheeba, P. (2014). J Predicting Entrepreneurial Intention among Business and Engineering Students in Sri Lanka. *Ruhuna Journal of Management and Finance*, 1(1).
- Prodan, I., & Drnovsek, M. (2010). Conceptualizing academic-entrepreneurial intentions: An empirical test. *Technovation*, 30(5–6).
- Segal, G., Borgia, D., & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour and Research*, 11(1).
- Setiawan, J. L. (2014). Examining Entrepreneurial Self-efficacy among Students. *Procedia - Social and Behavioral Sciences*, 115.
- Shapiro, A., & Sokol, L. (1982). The Social Dimensions of Entrepreneurship, in the *Encyclopaedia of Entrepreneurship*. In *Encyclopedia of Entrepreneurship*.
- Solomon, G., Dickson, P. H., Solomon, G. T., & Weaver, K. M. (2008). Entrepreneurial selection and success: Does education matter? In *Journal of Small Business and Enterprise Development* (Vol. 15, Issue 2).
- Tessema Gerba, D. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, 3(2).
- Thurik, R., Verheul, I., Hessels, J., & Van Der Zwan, P. (2010). Factors Influencing the Entrepreneurial Engagement of Opportunity and Necessity Entrepreneurs (No. H201011). *EIM Business and Policy Research*.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387–406.
- Yar, D. H., Wennberg, W., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, 15(2).
- Zhao, H., Hills, G. E., & Seibert, S. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6).
- Zimmerer, W. T. (1996). *Entrepreneurship and The New Ventur Formation*. New Jersey: Prentice Hall Inc

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# The Effect of Transformational Leadership, School Culture, and Work Motivation on the Performance of State High School Teachers in Cirebon City

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## ABSTRACT

**Purpose:** The objective of this research is to examine how the performance of high school teachers in Cirebon City is affected by school culture, work motivation, and transformational leadership.

**Design/Methodology/Approach:** A quantitative approach was used in this research. 535 teachers in state high schools in Cirebon City comprised the population of this study. Simple random sampling was the sampling method used, where 84.25 or 84 respondents were obtained, and data collection samples were collected using a questionnaire, with the sample size determined using the Slovin formula. Findings: The findings indicate the relationship between work motivation, school culture, and transformational leadership with teacher performance.

**Limitations/Research Implications:** The effect of work motivation, school culture, and transformational leadership on teacher performance is the main focus of this research.

**Practical Implications:** Based on the study results, it is evident that teacher performance is simultaneously affected by all three variables - transformational leadership, school culture, and work motivation - both directly and indirectly. The performance of high school teachers in Cirebon City is collectively affected (simultaneously) by school culture, work motivation, and transformational leadership, in accordance with the study's findings on these factors.

**Originality/Value:** This paper is original

**Paper Type:** Research Paper

**Keyword:** Transformational Leadership, School Culture, Work Motivation, Teachers Performance

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## I. INTRODUCTION

Since every individual undergoes an educational process, education is a component of life that cannot be separated from other aspects, both in macro and micro contexts. This indicates that education is essential for producing quality human resources and can even determine whether development will succeed or fail. Therefore, educators and other education professionals must carry out their duties responsibly, but they must also enhance educational standards and personnel quality.

Improving educational standards cannot be separated from the authority of the school principal as decision-makers and policymakers who can foster a positive work environment. More precisely, to create a conducive, enjoyable, and productive work atmosphere, the school principal must be able to mobilize teachers effectively, foster positive relationships among school members, and plan, implement, and adapt to any changes or policies implemented to produce quality graduates.

Several factors are considered to affect how well teachers perform, and transformational leadership is one of them. Transformational leadership and their high expectations of teachers help them develop skills and enable them to efficiently and effectively complete assigned tasks and achieve higher performance (Vitria, 2021).

An important aspect in affecting how well employees perform is leadership. Similarly, leaders also affect how well teachers perform. In schools, the school principal is the leader of teachers. As a leader, the school principal must adapt to changing circumstances and address new challenges (Barnawi & M, 2014).

Organizational culture can also affect teacher performance, as stated by Robbins as cited in (Wardani, 2016) in fact, a study on organizational culture shows that followers in organizations with a strong culture are more committed to their organization compared to followers in organizations with a weak culture, and there is increasing evidence that strong culture is associated with high organizational performance.

Teacher motivation is another element that affects how well teachers perform. Workplace variables, talent, and motivation all affect individual performance. Individual performance is directly affected by motivational variables. Performance is also indirectly affected by the workplace and individual ability characteristics. Both of these elements will affect an individual's motivation to work. Workplace motivation directly affects teacher performance if relevant to the topic (Ahmadiansyah, 2016). The leadership of the school principal is not the only aspect that determines the effectiveness of education; teachers also play a crucial role. Therefore, the school principal must continually strive to enhance teacher work motivation for professionalism by developing educational personnel; the key is to support teacher work motivation at both professional and personal levels.

Teachers need to work in a supportive school environment to have high work motivation. Every member of the school community practices behaviors, customs, habits, daily life, and symbols based on a set of ideals known as school culture. Komarudin Hidayat asserts that character education for students will be difficult to implement in schools with poor culture. Almost every new student will likely adhere to existing customs if the institution has a strong sense of its own culture.

The key components of education and determining factors of high-quality education are teacher performance. Educators fulfill their responsibilities as educators by carrying out their roles as teachers. Since teachers are the individuals, most directly involved with students during teaching and learning activities, their performance impacts the quality of educational outcomes.

According to Jasmani and Mustofa (2013), a teacher's performance in a madrasah or other educational institution is described as the outcome obtained by students from their lessons when the instructor fulfills their responsibility as an educator. Many factors can affect how effective a teacher or student is. Work motivation, job satisfaction, job design, dedication, leadership, engagement, management, career guidance, competence, organizational culture, and incentive structures are some of these elements (Sudarmanto, 2009).

Based on the description above, the researcher chose the title "The Effect of Transformational Leadership on Teacher Work Motivation in State High Schools (SMAN) in Cirebon City" because they want to further understand the phenomenon occurring in the field. This research aims to determine how the performance of state high school teachers in Cirebon City is affected by school culture, work motivation, and transformational leadership. By gaining a comprehensive understanding of these elements, it is hoped to have a positive effect on the quality of schools and create an ideal learning environment for students. We can create plans and regulations that encourage long-term expansion and improvement in the field of education by understanding the relationship between organizational culture, transformational leadership, and teacher performance.

## **A. Theoretical Review**

### **1. Transformational Leadership**

Individual consideration, intellectual stimulation, and idealized effect are factors that will cause workers to strive harder for greater organizational effectiveness. According to Stephen P. Robbins (2017), transformational leaders can motivate their followers to prioritize organizational needs over their own needs.

Inspiring subordinates to do more than expected and nurturing feelings of pride, loyalty, self-confidence, and respect for the leader are characteristic features of transformational leadership, according to Suwatno (2019).

According to Bass & Avolio as cited in Surucu, Maslakci & Esen (2021) transformational leadership is defined as a group process, attributes, personality, art of promoting satisfaction, the exercise of effect, specific actions or behaviors, from persuasion, relational violence, instruments to achieve goals, interaction outcomes, different roles or the initiation of a structure. Dimensions of transformational leadership: 1. Idealized effect with indicators of Acting as a role model & emphasizing beliefs and values. 2. Inspirational Motivation with indicators of providing a clear vision of the future & self-confidence. 3. Intellectual Stimulation with indicators of careful problem-solving & Stimulating followers to be more creative and innovative. 4. Individualized Consideration with indicators of treating subordinates individually & developing followers' capacities.

### **2. School Culture**

Culture can be described as a way of thinking based on the existence and unity of groups of society interacting and distinguishing one group from another. Organizations, especially schools, are artifacts of the cultural paradigm of society. Furthermore, each school develops a culture that distinguishes it from other schools based on individual environments, various inputs, and procedures.

School culture impacts school and work life and is considered one of the important psychosocial factors for the success of school development and the progress of its members. Elements of school culture (attitudes, beliefs, cultural norms, relationships, rituals, and ceremonies, leadership, cooperation with parents and the local community, curriculum, organizational conditions, and positive or negative school design) can stimulate or disrupt the achievement of goals and the impact of interpersonal relationships in school (Druzinec, 2019).

Furthermore, educational institutions are seen as dynamic social systems consisting of individuals (including students, teaching staff, and administration) who act according to their own desires, values, and goals, and have similar characteristics or behaviors to each other (K & G, 2014). Deal dan Peterson as cited in Supardi (2015) states that school culture is a set of norms that regulate actions, habits, practices, and symbols followed by everyone involved - from administrators, teachers, and students to members of the community. The nature, character, and way the community views the institution are part of the school culture.

According to (Hoy & Miskel, 2013) the dimensions of school culture are:

Academic Culture Dimension, with the following indicators:

1. Clear Vision & Mission
2. Focus on Achievement
3. Availability of Resources
4. Teacher Professional Development

Meanwhile, according to (Schein, 2010) the dimensions of school culture are with the following indicators:

1. Orderliness & Discipline
2. Collaboration & Cooperation
3. Mutual Respect

### **3. Work Motivation**

Work motivation is the ability originating from internal and external sources to drive someone towards predetermined goals (Uno, 2014). Work motivation is essentially the capacity to cultivate a work ethic, which becomes the willingness to achieve and persevere in the face of difficulties (H et al., 2020). Work motivation: "A person's needs move gradually, if lower needs are met, they desire higher needs," according to Abraham Maslow's theory as stated in Maslow (2021).

There are 2 (two) dimensions of Work Motivation, namely (Uno, 2014):

1. Internal Motivation
2. External Motivation

There are several indicators of work motivation, namely (Uno, 2014) :

1. Accountability to complete tasks
2. Completing activities with clear goals
3. Setting definite and challenging goals
4. Accepting feedback on their work results.
5. Feeling happy at work
6. Continuously striving to meet living needs.
7. Satisfied with receiving praise for their work results.
8. Working hard in hopes of receiving significant rewards
9. Working hard in hopes of attracting the attention of managers

### **4. Teacher Performance**

Whitmore (as cited in Hamzah dan Nina, 2012) defines performance as the execution of individual responsibilities. Performance can be defined as an action, achievement, or demonstration of innate talent.

Teacher performance refers to the competencies demonstrated by an educator while working in the classroom. Good and satisfactory performance is defined as achieving goals that align with established criteria. Therefore, educators should perform in a manner that meets the needs and objectives of all stakeholders, especially the general public, who have trust in the school and instructors to support children (Northouse, 2013).

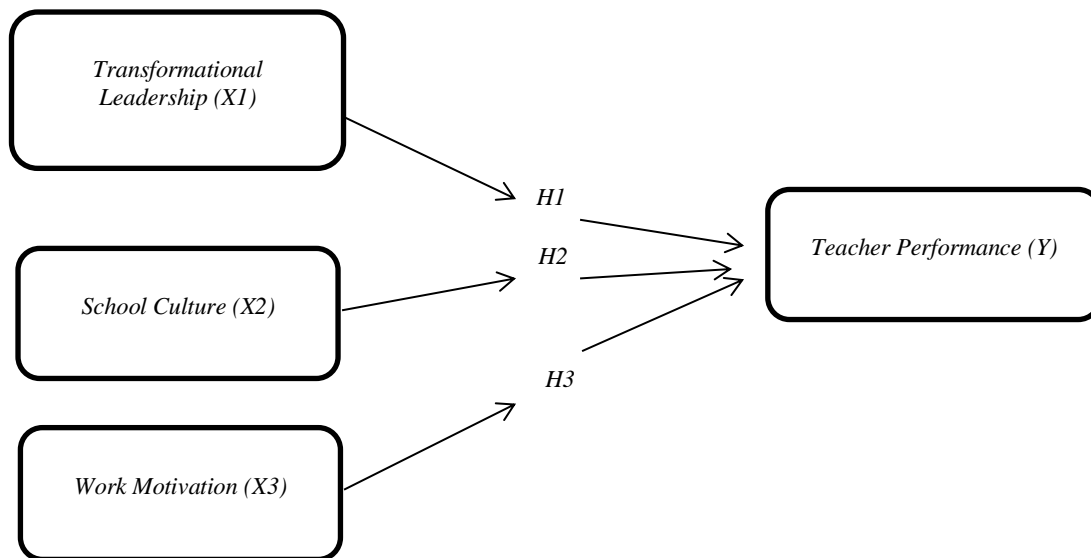
According to Edison (2021), performance is the result of work and behavior demonstrated in performing tasks and duties assigned within a specified period. Meanwhile, teacher performance, according to Abbas (2017) is essentially more related to how a teacher behaves in the workplace and how effectively education accomplishes tasks that can affect students to achieve established goals.

If all the established requirements have been met, then a teacher has succeeded. If those requirements are fulfilled, then the individual's work is considered high quality. The concept of performance explains that teacher performance is the result of their efforts, manifested in various skills. "In accordance with the Republic of Indonesia Law Number 14 of 2005 concerning Teachers and Lecturers, Chapter IV, Article 10 paragraph (1),

"Teacher competencies as referred to in Article 8 include pedagogical competence, personality competence, social competence, and professional competence obtained through professional education."

## II. METHODS

This research method was "quantitative in nature as it establishes relationships between variables with a focus on their numerical values. Quantitative research method is a research method based on positivism and used to study specific populations or samples (Sugiyono, 2017)." In this approach, researchers collected data using research instruments and then analyzed it using quantitative or statistical methods to see if their hypotheses were correct.



### A. Population and Sample

Characteristics possessed by the population are not limited to the sample. The population of this study consisted of 535 teachers working at State High Schools (SMAN) in Cirebon City. Simple random sampling, or proportional random sampling, was the sampling strategy used in this research. In this case, 84.25 or 84 respondents were the sample size collected using the Slovin formula.

### A. Data Collection Instruments

The research instrument was a questionnaire specifically designed to measure each variable. This questionnaire consisted of items related to each variable, designed based on the conceptual framework developed from related literature.

### C. Data Analysis

The appropriate statistical method, such as multiple linear regression, was applied to the collected data analysis. Understanding the relationship between transformational leadership, school culture, and teacher work motivation with the dependent variable, teacher performance, was the main driver of this research. Understanding the direct and indirect interactions between variables was another goal of path analysis.

## III. RESULTS AND DISCUSSION

### 1. Validity Test

When a measurement tool is considered valid, it can provide accurate data for the variables under study.

1. A statement is invalid if calculated correlation coefficient ( $r$ -calculated) < critical correlation coefficient ( $r$ -table);
2. conversely, the statement is valid if  $r$  calculated >  $r$  table.

"Where for  $df = n - 2 = 84 - 2 = 82$ , so the degree of freedom ( $df$ ) = 84 and alpha 0.05. Based on the correlation coefficient  $r$  table, the obtained  $r$  table = 0.2146."

*Table 1 Validity Test of Leadership (X1)*

<i>Item No.</i>	<i>r-calculated</i>	<i>r-table</i>	<i>Description</i>
1	.672	0.2146	Valid
2	.775	0.2146	Valid
3	.750	0.2146	Valid
4	.784	0.2146	Valid
5	.676	0.2146	Valid
6	.685	0.2146	Valid
7	.624	0.2146	Valid
8	.691	0.2146	Valid
9	.533	0.2146	Valid
10	.672	0.2146	Valid
11	.549	0.2146	Valid
12	.734	0.2146	Valid
13	.700	0.2146	Valid
14	.810	0.2146	Valid
15	.501	0.2146	Valid
16	.627	0.2146	Valid
17	.719	0.2146	Valid
18	.695	0.2146	Valid
19	.603	0.2146	Valid

The statements of the Leadership variable (X1) are considered valid based on the table above, the calculated results for each condition, and the value of r calculated > r table. Therefore, it is concluded that all statements of the leadership instrument are valid or suitable for use in the data analysis process.



*Table 2 Validity Test of School Culture (X2)*

<i>Item No.</i>	<i>r-calculated</i>	<i>r-table</i>	<i>Description</i>
1	.406	0.2146	Valid
2	.458	0.2146	Valid
3	.571	0.2146	Valid
4	.421	0.2146	Valid
5	.513	0.2146	Valid
6	.559	0.2146	Valid
7	.613	0.2146	Valid
8	.501	0.2146	Valid

Based on the previous table, which shows the computational results for each condition, the statement of the School Culture variable (X2) is considered valid if the calculated r-value > the tabulated r-value, so that the statement can be fully utilized for further testing.

*Table 3 Validity Test of Motivation (X3)*

<i>Item No.</i>	<i>r-calculated</i>	<i>r-table</i>	<i>Description</i>
1	.719	0.2146	Valid
2	.678	0.2146	Valid
3	.658	0.2146	Valid
4	.475	0.2146	Valid
5	.637	0.2146	Valid
6	.685	0.2146	Valid
7	.640	0.2146	Valid
8	.640	0.2146	Valid
9	.608	0.2146	Valid
10	.718	0.2146	Valid

11 .528 0.2146 Valid

The statement of Motivation variable (X3) is considered valid based on the table above, the computational results achieved for each condition, and the calculated r-value > the tabulated r-value, so that the statement can be fully utilized for further testing.

*Table 4 Validity Test of Teacher Performance (Y)*

<i>Item No.</i>	<i>r-calculated</i>	<i>r-table</i>	<i>Description</i>
1	.640	0.2146	Valid
2	.713	0.2146	Valid
3	.735	0.2146	Valid
4	.611	0.2146	Valid
5	.719	0.2146	Valid
6	.807	0.2146	Valid
7	.558	0.2146	Valid
8	.587	0.2146	Valid
9	.719	0.2146	Valid
10	.665	0.2146	Valid
11	.613	0.2146	Valid
12	.668	0.2146	Valid

Based on the data in the table, the calculation results for each condition, and the calculated r-value > the tabulated r-value, the statement of Teacher Performance variable (Y) is valid. Additional testing can fully utilize these statements.

**2. Reliability Test**

According to reliability, repeated measurements on the same object using the same instrument will yield the same results. The reliability test utilizes Cronbach's Alpha. Instruments with Cronbach's alpha values above 0.70 are considered reliable.

*Table 5 Reliability Test of Leadership (X1)*

<i>Reliability Statistics</i>	
<i>Cronbach's Alpha</i>	<i>N of Items</i>

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0.933                      19

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From the previous table, it is evident that the Leadership variable (X1) is reliable because the calculation results yield a Cronbach's Alpha value  $> 0.70$ , specifically  $0.933 > 0.70$ .

*Table 6 Reliability Test of School Culture (X2)*

<i>Reliability Statistics</i>	
<i>Cronbach's Alpha</i>	<i>N of Items</i>
.706	9

The School Culture variable (X2) is reliable, as indicated in the table above because Cronbach's Alpha value is greater than 0.70, specifically 0.706.

*Table 7 Reliability Test of Motivation (X3)*

<i>Reliability Statistics</i>	
<i>Cronbach's Alpha</i>	<i>N of Items</i>
.848	11

The table above indicates that the Cronbach's Alpha value for the Motivation variable (X3) is greater than 0.70, specifically  $0.848 > 0.70$ , indicating that the variable is reliable.

*Table 8 Reliability Test of Teacher Performance (Y)*

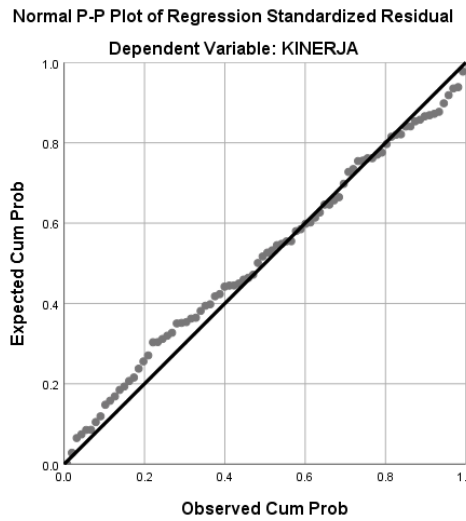
<i>Reliability Statistics</i>	
<i>Cronbach's Alpha</i>	<i>N of Items</i>
.885	12

The table above indicates that the Teacher Performance variable (Y) is reliable with a Cronbach's Alpha value  $> 0.70$ , specifically  $0.885 > 0.70$ .

### **3. Classical Assumptions Test**

#### **a. Normality Test**

The normality test determines whether research data follows a normal distribution. This study's data is normal or close to normal. The results of the normality analysis of the data using the Normal P-P plot:



It is clear from the dispersion of points around the diagonal line that the regression model is normal, as shown in the image above.

*Table 9 Kolmogorov-Smirnov Normality Test Results*

<i>Tests of Normality</i>						
	<i>Kolmogorov-Smirnov<sup>a</sup></i>			<i>Shapiro-Wilk</i>		
	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>	<i>Statistic</i>	<i>df</i>	<i>Sig.</i>
<i>Standardized Residual</i>	.086	84	.188	.900	84	.000

a. Lilliefors Significance Correction

As indicated in the table, the Kolmogorov-Smirnov test yielded a significance value of 0.188 (>0.05). Each variable has a normal distribution.

*Table 10 Multicollinearity Test*

<i>Coefficients<sup>a</sup></i>							
<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>t</i>	<i>Sig.</i>	<i>Collinearity Statistics</i>	
		<i>B</i>	<i>Std. Error</i>			<i>Beta</i>	<i>Tolerance</i>
1	<i>(Constant)</i>	10.960	6.619	1.656	.102		
	<i>Leadership</i>	.131	.056	2.361	.021	.823	1.215
	<i>School Culture</i>	.245	.201	1.219	.226	.713	1.403
	<i>Motivation</i>	.449	.123	3.638	.000	.709	1.410

a. Dependent Variable: Performance

The VIF values for the three variables - motivation, school culture, and leadership - are each below 10: 1.410 < 10, 1.403 < 10, and 1.215 < 10, as indicated in the Coefficients table. The collinearity statistics table for the Leadership variable shows that the Tolerance value is 0.823 > 0.10. Both the school culture and motivation variables also have values greater than 0.10. The calculated regression model does not exhibit multicollinearity based on these two metrics (VIF and Tolerance).

**4. Multiple Linear Regression Analysis**

This research employs multiple linear regression analysis to understand the interaction between independent and dependent variables. Y represents teacher performance, X represents motivation, X2 represents school culture, and X1 represents transformational leadership.

*Table 11 Multiple Linear Regression Analysis*

<i>Descriptive Statistics</i>			
	<i>Mean</i>	<i>Std. Deviation</i>	<i>N</i>
<i>Performance</i>	51.82	4.810	84
<i>Leadership</i>	84.61	8.533	84
<i>School Culture</i>	35.13	2.540	84
<i>Motivation</i>	47.07	4.141	84

*Table 12*

*Correlations*

		<i>Kinerja</i>	<i>Kepemimpinan</i>	<i>Budaya Sekolah</i>	<i>Motivasi</i>
<i>Pearson Correlation</i>	<i>Performance</i>	1.000	.422	.407	.537
	<i>Leadership</i>	.422	1.000	.361	.367
	<i>School Culture</i>	.407	.361	1.000	.501
	<i>Motivation</i>	.537	.367	.501	1.000
<i>Sig. (t-tailed)</i>	<i>Performance</i>	.	.000	.000	.000
	<i>Leadership</i>	.000	.	.000	.000
	<i>School Culture</i>	.000	.000	.	.000
	<i>Motivation</i>	.000	.000	.000	.
<i>N</i>	<i>Performance</i>	84	84	84	84

<i>Leadership</i>	84	84	84	84
<i>School Culture</i>	84	84	84	84
<i>Motivation</i>	84	84	84	84

*Table 13 Output Tabel Model Summary*

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.599 <sup>a</sup>	.359	.335	3.923

a. Predictors: (Constant), Motivation, Leadership, School Culture

b. Dependent Variable: Performance

1. The correlation (R) indicates the level of relationship between independent and dependent variables. Leadership, school culture, and motivation have a correlation of 0.599 with performance.
2. R square = 0,359
3. The coefficient of determination of 0.359 indicates that motivation, leadership, and school culture explain 35.9% of the variance in performance. Other variables not included in the model explain 64.1%.

*Table 14 Anova Output Table*

<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	<i>Regression</i>	688.828	3	229.609	14.916	.000 <sup>b</sup>
	<i>Residual</i>	1231.494	80	15.394		
	<i>Total</i>	1920.321	83			

a. Dependent Variable: Performance

b. Predictors: (Constant), Motivation, Leadership, School Culture

Sig = 0,000

Since the Sig value of 0.000 < 0.05, H1 is rejected (accept H2), meaning that the obtained equation model fits well. This equation model can be used to predict the Teacher Performance variable.

*Table 15 Coefficient Output Table*

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
1	<i>(Constant)</i>	10.960	6.619		1.656	.102
	<i>Leadership</i>	.131	.056	.233	2.361	.021
	<i>School Culture</i>	.245	.201	.129	1.219	.226

<i>Motivation</i>	.449	.123	.387	3.638	.000
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a. Dependent Variable: Performance

The regression equation obtained based on the Coefficients Table:

$$Y = 10.960 + 0.131 X1 + 0.245 X2 + 0.449 X3$$

**5. Coefficient of Determination**

The table above indicates that motivation, school culture, and leadership have an effect of 33.5% on teacher performance, with an Adjusted R Square value of 0.335.

*Table 16 Coefficient of Determination*

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
<i>1</i>	.599 <sup>a</sup>	.359	.335	3.923

a. Predictors: (Constant), Motivation, Leadership, School Culture

The table above indicates that motivation, school culture, and leadership have an effect of 33.5% on teacher performance, with an Adjusted R Square value of 0.335.

**6. Hypothesis Test**

**a. t-Test**

The t-test determines whether each independent variable significantly affects the dependent variable. Whether the calculated t-value is greater than the tabulated t-value or less than the tabulated t-value partially accepts or rejects the research hypothesis. Calculate the partial t-test using this comparison.

“From the calculation, with  $\alpha = 0.05$  and degrees of freedom (df) = n-2 or 84 - 2 = 82, the tabulated t-value is obtained as 1.663.”

The criteria for hypothesis testing are:

1. “If the calculated t-value > the tabulated t-value (df = n-2), then Ho is rejected and Ha is accepted.”
2. “If the calculated t-value < the tabulated t-value (df = n-2), then Ho is accepted and Ha is rejected.”

*Table 17. t-Test Results*

*Coefficients<sup>a</sup>*

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1</i>	<i>(Constant)</i>	11.162	6.696		1.667	.099
	<i>Leadership</i>	.132	.056	.235	2.354	.021
	<i>School Culture</i>	.277	.201	.146	1.376	.173
	<i>Motivation</i>	.420	.124	.361	3.389	.001

a. Dependent Variable: Performance

- a. The table above is based on the fact that the calculated t-value is greater than the critical t-value, specifically  $2.354 > 1.663$ , with a significance value of  $0.021 < 0.05$ . Thus,  $H_0$  is rejected and  $H_a$  is accepted, indicating that partially, the leadership variable has a positive and significant effect on teacher performance.
- b. Determined by the fact that the calculated t-value is less than the critical t-value, specifically  $1.376 < 1.663$ , with a significance value of  $0.173 > 0.05$ . Therefore,  $H_0$  is accepted, and  $H_a$  is rejected, indicating that the school culture variable has a negative effect on teacher performance, albeit not significant.
- c. This discrepancy is caused by the fact that the calculated t-value is greater than the critical t-value, specifically  $3.389 > 1.663$ , with a significance value of  $0.001 < 0.05$ . Thus,  $H_0$  is rejected, and  $H_a$  is accepted, indicating a positive and significant partial effect of the motivation variable on teacher performance.

**b. f-Test**

The research hypothesis is to investigate the potential impact of motivation, school culture, and leadership stimuli on teacher performance.

From the calculation, the "F-table value with a significance level of 0.05 and degrees of freedom, where  $df_1$  is (number of variables - 1) or  $4 - 1 = 3$ . Then the degrees of freedom  $df_2 = (n - k)$  or  $84 - 2 = 82$ . Therefore, the obtained F-table value is 2.72."

*Table 18 F-Test Results*

*Anova<sup>a</sup>*

	<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>1</i>	<i>Regression</i>	<i>655.219</i>	<i>3</i>	<i>221.740</i>	<i>14.134</i>	<i>.000<sup>b</sup></i>
	<i>Residual</i>	<i>1255.102</i>	<i>80</i>	<i>15.689</i>		
	<i>Total</i>	<i>1920.321</i>	<i>83</i>			

a. Dependent Variable: Performance

b. Predictors: (Constant), Motivation, Leadership, School Culture

Leadership, school culture, and teacher motivation affect academic performance. This is evidenced by comparing the calculated F-value with the critical F-value ( $14.134 > 2.72$ ) and the significance value ( $sig < 0.05$  or  $0.000 < 0.05$ ). Thus,  $H_0$  is rejected and  $H_a$  is accepted. Therefore, leadership, school culture, and motivation enhance teacher performance.

**IV. CONCLUSION**

The results of this study support the theory that transformational leadership has a significant and beneficial effect on the success of educators. The exemplar provided by transformational leaders has the potential to motivate educators to enhance their performance and achieve more. Teacher performance greatly benefits from school culture. Teacher motivation and performance are driven by work motivation and an optimistic and supportive school environment. Motivated teachers will strive harder and deliver better results.

At State High Schools in Cirebon City, transformational leadership, school culture, and work motivation are significant determinants of teacher effectiveness. These three elements are interconnected and mutually supportive. Therefore, to enhance teacher performance and teaching standards in State High Schools in Cirebon City, efforts need to be made to improve these three factors: enhancing school principals' training in transformational leadership, nurturing a friendly and supportive school climate, and boosting teacher work motivation through various initiatives and regulations.

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## REFERENCES

- Abbas, E. (2017). *Magnet Kepemimpinan Kepala Madrasah Terhadap Kinerja Guru*. Gramedia.
- Astuty, W., Zaini, H., Muhammad Faxis, Erlinda, R., & Demina. (2023). Pengaruh Gaya Kepemimpinan Transformasional Kepala Sekolah dan Self Monitoring Guru Terhadap Kinerja Guru Pada SMANegeri di Kabupaten Tanah Datar. *Jurnal Bahana Manajemen Pendidikan*, 12(1), 130–147.
- Barnawi, & M, A. (2014). *Instrumen Pembinaan, Peningkatan, dan Penilaian Kinerja Guru Profesional*. Ar-Ruzz Media.
- Druzinec, V. (2019). *Tinjauan Penelitian Empiris Budaya Sekolah. Makalah Rasprave I lanci*.
- E. Edison. (2021). *Manajemen Sumber Daya Manusia (Strategi dan Perubahan)*. Alfabeta.
- Engel. (2019). Pengaruh Kinerja. *Paper Knowledge. Toward a Media History of Documents*, 11–30.
- H, H., E, S., & Wahyudi. (2020). *Kajian Manajemen Sumber Daya Manusia Untuk Manusia*. Umpam Press.
- Iii, B. A. B. (2023). *Metodologi Penelitian*.
- Iii, B. A. B., Sekolah, T., Atas, M., Cimahi, K., Sekolah, T., Atas, M., & Cimahi, K. (2017). *METODOLOGI A . Lokasi Penelitian Penelitian ini dilaksanakan di Kota Cimahi , salah satu kota strategis di Jawa Barat yang membuat kecerdasan ekologis penting dimiliki masyarakatnya . Kota yang peraih adipura enam kali dengan lima diantaranya diraih bertu. 214, 54–99*.
- K, H. W., & G, M. C. (2014). *Educational Administration Theory Research and Practice* (Ninth). Mc Graw-Hill.
- Kurniawan, A. (2017). Pengaruh Kepemimpinan Kepala Sekolah Terhadap Kinerja Guru Di Sekolah Menengah Atas Negeri 6 Kota Cirebon. *JIEM (Journal of Islamic Education Manajemen)*, 3(1), 32.
- Republik Indonesia, P. (2005). *UU 14-2005 Guru dan Dosen.pdf* (p. 17).
- Stephen P. Robbins. (2017). *Prinsip-prinsip Perilaku Organisasi* (5th ed.). Erlangga.
- Sugiyono. (2017). *Metode penelitian bisnis: pendekatan kuantitatif, kualitatif, kombinasi, dan R&D*. CV. Alfabeta.
- Suhada, M. M. (2021). Pengaruh Kepemimpinan Transformasional Kepala Sekolah, Budaya Sekolah, Dan Lingkungan Sekolah Terhadap Kinerja Guru Di Mi Islamiyah Wareng, Butuh, Purworejo, Jawa Tengah. *IBTIDA- Jurnal Kajian Pendidikan Dasar*, 1(1), 67–89. <https://doi.org/10.33507/ibtida.v1i1.194>
- Supardi. (2015). *Sekolah Efektif: Konsep Dasar dan Praktiknya*. Grafinda Persada.
- ULFA, F., RONY, Z. T., & SUROSO, S. (2022). The Influence of Teaching Experience, School Culture and Motivation on Teacher Performance. *International Journal of Environmental, Sustainability, and Social Science*, 3(2), 359–367. <https://doi.org/10.38142/ijesss.v3i2.222>
- Uno, H. B. (2014). *Teori Motivasi dan Pengukurannya*. Bumi Aksara.
- Wexley, Kenneth, N., Yukl, & A. Gary. (2005). *Perilaku Organisasi dan Psikologi Personal*. Rineka Cipta.

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# Analysis of Arabica Coffee Characteristics and Drying Method on Arabica Coffee Flavor Using Analysis of Variance

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## ABSTRACT

**Purpose:** This study investigated the effect of the coffee drying process using a coffee drying house on the moisture content, acidity, caffeine value, and flavor of arabica coffee.

**Design/methodology/approach:** An experimental method with a two-factor analysis of variance was used to evaluate significant differences between three different drying processes: Before Drying Process, Sun Drying Process, and Drying Process with Coffee Drying House

**Findings:** The results showed that sun-drying coffee with a coffee drying house produced coffee with lower moisture content, acidity, and caffeine value compared to the other drying processes

**Research limitations/implications:** The research location was Karot Village, Langke Rembong Subdistrict, Manggarai Regency. The object of research was the drying process of arabica coffee beans and the measurement of moisture content, acidity content and caffeine content of arabica coffee. The method used was analysis of variance with a fixed model (one-way anava design, block subsampling anava and two-factor anava). The data obtained were the acidity value, caffeine value, moisture content and coffee flavour.

**Practical implications:** The results of the research were successful and improved the quality of coffee exports in Karot Village, Langke Rembong District, Manggarai Regency.

**Originality/value:** The research carried out by the researcher states that this research is the result of his work and is the first time at Karot Village, Langke Rembong District, Manggarai Regency with the title of the research being researched, except for quotations from several summaries, all of which the researcher has explained the source.

**Paper type:** Research Paper

**Keyword:** Anova Block Subsampling, Anova 1 Factor Fixed Model, Anova 2 Factor Factorial Design, Arabica Coffee Characteristics, Drying Process, Arabica Coffee Flavors

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## I. INTRODUCTION

Coffee is one of the most popular beverages around the world today. Moisture content, acidity value and caffeine value are obtained from coffee (Hendrasto F, 2017). Young adults in their productive years are the main consumers of coffee. The acidity value and caffeine value as well as the moisture content in coffee can be used to assess the quality of a cup of coffee (Pradipta & Fibrianto, 2017). The three elements that affect coffee quality are acidity, caffeine and moisture content. The sour taste of coffee is caused by acidity, in addition to caffeine and moisture content is one of the ingredients that give coffee a bitter taste (Blumberg et al., 2010). Consuming coffee can relieve sleepiness and fatigue. On the other hand, excessive caffeine intake can also have a negative impact on health, for example affecting behavior and cardiovascular problems and calcium absorption (Pradipta & Fibrianto, 2017). Coffee contains acids, both volatile and non-volatile, which contribute to its acidity in addition to caffeine. These acids help give coffee its flavor (Sunarharum et al., 2014). The caffeine content, acidity value

and moisture content in good coffee should not be too high or low. Consumption of coffee with high caffeine, acidity and low water content can cause digestive problems, especially the release of stomach acid (Pradipta & Fibrianto., 2017). Consuming caffeine has two negative effects. Caffeine has adverse effects on the nervous system, circulatory system, and can be addictive (Wikoff et al., 2017). However, coffee also has the advantage of supporting metabolism, being a source of antioxidants, and having other effects (Pradipta & Fibrianto, 2017). There is approximately 102-200 mg of caffeine in a cup of brewed coffee ( $\pm$  250 ml) with a standard percentage of 1-3% (CSPI, 2023). Coffee has a pH between 4 - 6%, therefore if it is too acidic, it can cause damage to the coffee. In addition, the moisture content of coffee that is suitable for coffee quality ranges from 10-12.5%. If the moisture content of coffee is above 12.5%, it can cause the coffee flavor to become bland and the resulting coffee beans to be damaged because they have been contaminated by bacteria (CSPI, 2023).

One of the things that must be considered in order to produce quality coffee with a sweet coffee flavor is the drying process of coffee beans. Drying of coffee beans has the main purpose as a process to remove the water content in the coffee beans and can increase the acidity degree value and reduce the caffeine value so that the coffee beans will avoid the potential for quality deterioration in the final processing process, namely storage in the warehouse. The deterioration or damage (deterioration) in question is initiated by the presence of high water in the beans, for example causing mold or triggering the presence of warehouse pests. Some fungal species can also produce certain chemical compounds that are toxic to humans, such as the ochratoxin compound caused by *Aspergillus ochraceus*. In addition to causing toxicity in coffee, fungal attack can also reduce the potential for flavor to be produced, so aspects of drying techniques are important to consider (CSPI, 2023).

The people of Indonesia, especially in Karot Village, Langke Rembong Sub-district, Manggarai Regency, still dry coffee traditionally or directly under the sun with a tarpaulin in front of the house. This method is quite effective in accelerating the drying process of coffee beans, but when the weather is rainy, the coffee beans that are temporarily dried will be lifted and stored inside the house. In addition, because they are dried outside in the open air, the coffee beans will be exposed to dust and bacteria. And also, every 2-3 hours the coffee beans that are temporarily dried must be checked periodically by flipping the coffee beans so that the drying process of the coffee beans can be evenly distributed. That is what can cause the high water content, acidity and caffeine levels in the coffee beans. In addition to the traditional drying process directly under the sun, the process before drying is also important. This process is done in order to know the initial process of the condition of the coffee beans when they have just been picked from the tree. In addition, when the coffee cherries are still wet and the ones that have been picked will be sorted to separate the ripe and immature coffee cherries. Ripe coffee fruit is full red in color, while immature coffee fruit is pale whitish and slightly wrinkled. The ripe coffee fruit will be washed with clean water to remove dirt and fruit residue. After washing, the coffee fruit will be put into sacks to store the coffee fruit. After being stored for a long time, the coffee fruit will be washed again to remove any remaining dirt. The clean coffee fruit will be peeled off the skin using a huller machine to produce arabica coffee beans. Arabica coffee beans will then be dried in the sun until the moisture content reaches 10-12%.

Apart from using sun drying, coffee drying can also be done using the coffee drying house drying method. The drying method with a coffee drying house can dry coffee evenly and in a shorter time. In addition, the drying process with a coffee drying house can be done indoors, so that the coffee beans are better protected from contamination. The drying house method is carried out by drying coffee beans without horn skins that are still wet and the thickness of the beans is low so that the heat transfer rate is obtained in the process of drying the beans more evenly and evaporating water directly from the beans so that saturation does not occur which causes the beans to require higher heat (excess) to evaporate water. Sufficient and not excessive heat energy during drying will maintain unnecessary evaporation of volatile aroma-forming compounds, so that the potential aroma of coffee will be better and have a stronger flavor potential (bold). In addition, it is also necessary to analyze the effect of moisture content, acidity value and caffeine value on the flavor of arabica coffee in the drying process to improve the quality of arabica coffee.

Therefore, this research will use the experimental method with analysis of variance using Anova Block Subsampling, Anova 1 Factor Fixed Model and Anova 2 Factor Factorial Design. An experimental method using two-factor analysis of variance is a statistical approach to analyze significant differences between two or more groups of data. In a research context, the rationale for using this method can be based on the need to understand the effect of multiple independent variables on a dependent variable. For example, a study on the effect of moisture content, acidity, and caffeine content on coffee flavor uses one-factor ANOVA and subsampling block ANOVA to determine whether variations in these three variables during the coffee drying process have a significant effect on coffee flavor.

**II. METHODS**

The research was conducted in Karot Village, Langke Rembong Sub-district, Manggarai Regency. The research conducted was quantitative research. The methods used by researchers are the fixed model variance analysis method, subsampling block variance analysis and factorial design variance analysis.

In the context of this research, it involves coffee farmers in Karot village and the type of coffee studied is arabica coffee. Arabica coffee flavor served as the sole dependent variable in this quasi-experimental study, while moisture content and drying process served as the two independent variables. The researcher applied three different drying processes, namely:

1. Pre-Drying Process
2. Sun-drying Process
3. Drying process with a coffee drying house.

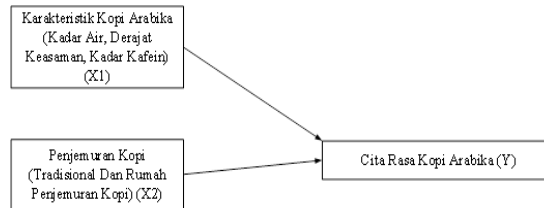


Figure 1. Framework Of Thought

The research hypotheses in this study are:

- H01: There is no effect of arabica coffee characteristics on the taste of arabica coffee
- H11: There is an influence of arabica coffee characteristics on the taste of arabica coffee
- H02: There is no effect of arabica coffee characteristics on the drying process
- H12: There is an effect of arabica coffee characteristics on the drying process
- H03: There is no effect of arabica coffee characteristics and arabica coffee drying process on the taste of arabica coffee.
- H13: There is an effect of Arabica coffee characteristics and the drying process of Arabica coffee on the taste of Arabica coffee.

**III. RESULTS AND DISCUSSION**

**1. Fixed Model Analysis of Variance Before Drying**

Table 1 Fixed Model Analysis of Variance With One Way Annova Before Drying

	Characteristics of Arabica Coffee			Total
	Moisture Content (%)	Acidity (PH)	Caffeine Levels (%)	
Taste (1,2,3)	33.5	12.17	11.15	
	30	13.25	12.85	
	27.4	12.6	12.01	
	21	14	11.21	
	26.7	13.05	12.93	
	22.9	12.22	12.07	

	34.8	13.4	11.27	
	23.4	13.8	12.99	
	25	12.71	12.13	
	32.2	12.5	11.33	
	34.5	13.64	13.05	
	27.1	14	12.19	
	30.3	12.9	11.39	
	40.2	12.4	13.11	
	24.8	13.25	12.25	
	23.7	13.74	11.45	
	41.4	12.02	13.17	
	33.7	12.19	12.31	
	44.4	12.17	11.51	
	30.6	13.25	13.23	
	33.5	12.6	12.37	
	30	14	11.57	
	27.4	13.05	13.29	
	21	12.22	12.43	
<i>Total</i>	719.5	311.13	293.26	1323.89
<i>Many Observations</i>	24	24	24	72
<i>Average</i>	29.97916667	12.96375	12.21916667	18.38736111

For the research hypothesis:

H0 : There is no effect of arabica coffee characteristics on the taste of arabica coffee

H1 : There is an influence of arabica coffee characteristics on the taste of arabica coffee

$$R_y = \frac{(1323.89)^2}{72} = 24342.84$$

$$W_y = P_y = \frac{719.5^2}{24} + \frac{311.13^2}{24} + \frac{293.26^2}{24} - 24342.84 = 4843.971$$

$$\sum Y^2 = 30117.87$$

$$E_y = 30117.87 - 4843.971 - 24342.84 = 931.0545$$

Table 2 Anova For Data Before Drying

Source Of Variation	dk	JK	RJK	ERJK	F <sub>Count</sub>	F <sub>Table</sub>
Average	1	24342,84	24342,84	-		
Characteristics of Arabica Coffee	2	4,843,971	2,421,986	$\sigma_e^2 + \phi(M)^2$	5,462,806	3,47
Fallacy	21	9,310,545	4,433,593	$\sigma_e^2$		
Total	24	30117,87	-	-	-	

The conclusion is F<sub>Count</sub> > F<sub>Table</sub>, which means that there is a very significant effect of arabica coffee characteristics on the taste of arabica coffee.

Mean Test After Anava with Newman-Keuls Test

Mean : 29,97916667; 12,96375; 12,21916667  
 Treatment : 1 2 3  
 RJK (Fallacy) : 3,47  
 dk : 21  
 dk=21 dan  $\alpha$  =0.05  
 P = 2 3  
 Range = 3.00 3.65  
 P = 2 3  
 RST =4.08 4.964  
 2 opponent 3 -> 0.745 < 4.964  
 1 opponent 3 -> 17.76 > 4.964  
 2 opponent 1 -> -17.02 < 4.08

Conclusion:

- 1) F<sub>Count</sub> < F<sub>Table</sub>, so there is no difference between treatments 2 and 3 (acidity and caffeine content) on the taste of arabica coffee.
- 2) F<sub>Count</sub> > F<sub>Table</sub> then there is a difference between treatments 1 and 3 (moisture content and caffeine content) on the taste of arabica coffee.
- 3) F<sub>Count</sub> < F<sub>Table</sub> then there is no difference between treatments 2 and 1 (acidity and moisture content) on the taste of arabica coffee.

**2. Fixed Model Analysis of Variance for Sun Drying**

*Table 3 Fixed Model Analysis of Variance With One Way Annova Sun Drying*

<i>Characteristics of Arabica Coffee</i>			<i>Total</i>
<i>Moisture Content (%)</i>	<i>Acidity Level (PH)</i>	<i>Caffeine Content (%)</i>	
13.2	8.17	4.56	
14.1	8.46	3.65	
12.8	7.6	4.75	
15.3	7.87	4.7	
13.7	8.05	4.63	
12.9	8.32	4.37	
14.8	8.38	4.24	
13.4	8.66	4.05	
15	8.83	3.9	
<i>Taste (1,2,3)</i>	12.6	8.5	3.35
	14.5	8.78	3.95
	13.1	8.95	3.75
	15.2	8.62	4.13
	12.7	8.89	3.8
	14.6	9.06	3.55
	13	8.74	4.01
	15.1	9.02	3.6
	13.5	9.19	3.45
	14.4	8.86	3.85

	13.3	9.14	3.5	
	14.9	9.31	3.3	
	13.5	8.98	3.7	
	15.4	9.26	3.4	
	12.6	9.43	3.25	
<i>Total</i>	333.6	209.07	93.44	636.11
<i>Many Observations</i>	24	24	24	72
<i>Average</i>	13.9	8.71125	3.893333333	8.834861111

For the research hypothesis:

H0: There is no effect of arabica coffee characteristics on the taste of arabica coffee

H1: There is an influence of arabica coffee characteristics on the taste of arabica coffee

$$R_y = \frac{636.11^2}{72} = 5619.94$$

$$W_y = P_y = \frac{333.6^2}{24} + \frac{209.07^2}{24} + \frac{93.44^2}{24} - 5619.94 = 1202.151$$

$$\sum Y^2 = 6853.402$$

$$E_y = 6853.402 - 1202.151 - 5619.94 = 31.307$$

Table 4 Anova For Sun Drying Data

Source Of Variation	Dk	JK	RJK	ERJK	FCount	FTable
<i>Average</i>	1	5619,94	5619,94	-		
<i>Characteristics of Arabica Coffee</i>	2	1,202,151	601,075	$\sigma_{\epsilon}^2 + \phi(M)^2$	403,406	3,47
<i>Fallacy</i>	21	31,307	1,49	$\sigma_{\epsilon}^2$		
<i>Total</i>	24	6,853,402	-	-	-	

The conclusion is FCount > FTable, which means that there is a very significant effect of arabica coffee characteristics on the taste of arabica coffee.



Mean Test After Anava with Newman-Keuls Test

Means : 13,9; 8,71; 3,89  
 Treatment : 1 2 3  
 RJK (Fallacy) : 3,47  
 dk : 21  
 dk=21 dan  $\alpha$  =0.05  
 P = 2 3  
 Range =3.00 3.65  
 P = 2 3  
 RST =0.75 0.91  
 2 opponent 3 -> 4.82 > 0.91  
 1 opponent 3 -> 10.01 > 0.91  
 1 opponent 2 -> 5.19 > 0.75

Conclusion:

- 1)  $F_{Count} > F_{Table}$  then there is a difference between treatments 2 and 3 (acidity and caffeine content) on the taste of arabica coffee.
- 2)  $F_{Count} > F_{Table}$ , there is a difference between treatments 1 and 3 (moisture content and caffeine content) on the taste of Arabica coffee.
- 3)  $F_{Count} > F_{Table}$ , there is a difference between treatments 1 and 2 (moisture content and acidity) on the taste of arabica coffee.

**3. Fixed Model Analysis of Variance with Coffee Drying House**

*Table 5 Fixed Model Analysis Of Variance With One Way Anova With Coffee Drying House*

	<i>Characteristics of Arabica Coffee</i>			<i>Total</i>
	<i>Moisture Content (%)</i>	<i>Acidity Level (PH)</i>	<i>Caffeine Content (%)</i>	
	9.66	3.46	1.71	
	9.14	3.09	1.65	
	9.2	3.15	1.6	
	10.23	4.9	1.55	
	9.32	3.27	1.86	
	8.79	2.65	2.25	
<i>Taste (1,2,3)</i>	9.85	3.67	1.95	
	10.15	4.82	1.35	
	9.7	3.5	1.79	
	9.28	3.2	1.63	
	8.39	2.42	2.53	
	10.68	5.25	1.15	

	12.29	6.45	1.1	
	12.26	6.4	1.05	
	12.29	6.45	1	
	9.72	3.55	1.84	
	9.22	3.17	1.65	
	8.56	2.56	2.4	
	11.22	5.7	0.8	
	10.15	4.82	0.75	
	9.7	3.5	1.79	
	9.28	3.2	1.63	
	8.39	2.42	2.53	
	10.68	5.25	1.15	
<i>Total</i>	238.15	96.85	38.71	373.71
<i>Many Observation</i>	24	24	24	72
<i>Average</i>	9.922916667	4.035416667	1.612916667	5.190416667

For the research hypothesis:

H0: There is no effect of arabica coffee characteristics on the taste of arabica coffee

H1: There is an influence of arabica coffee characteristics on the taste of arabica coffee

$$R_y = \frac{373.71^2}{72} = 1939.71$$

$$W_y = P_y = \frac{238.15^2}{24} + \frac{96.85^2}{24} + \frac{38.71^2}{24} - 1939.71 = 876.698$$

$$\sum Y^2 = 2892.8$$

$$E_y = 2892.8 - 876.698 - 1939.71 = 76.39$$

*Table 6 Anova For Coffee Drying House Data*

<i>Source Of Variations</i>	<i>dk</i>	<i>JK</i>	<i>RJK</i>	<i>ERJK</i>	<i>F<sub>Count</sub></i>	<i>F<sub>Table</sub></i>
<i>Average</i>	1	1939,71	1939,71	-	11,48	3,47

<i>Characteristics of Arabica Coffee</i>	2	876,698	438,349	$\sigma_{\epsilon}^2 + \phi(M)$
<i>Fallacy</i>	21	76,39	3,64	$\sigma_{\epsilon}^2$
<i>Total</i>	24	2892,8	-	-

The conclusion is  $F_{Count} > F_{Table}$ , which means that there is a significant effect of arabica coffee characteristics on the taste of arabica coffee.

**Mean Test After Anava with Newman-Keuls Test**

Mean	: 9,92; 4,04; 1,61
Treatment	: 1                      2                      3
RJK (Fallacy)	: 3,47
dk	: 21
dk=21 dan $\alpha$	=0.05
P	= 2                      3
Range	=3.00 3.65
P	= 2                      3
RST	=1.26                      1.53
2 opponent 3	-> 2.43 > 1.53
1 opponent 3	-> 8.31 > 1.53
1 opponent 2	-> 5.88 > 1.26

**Conclusion:**

- 1)  $F_{Count} > F_{Table}$  then there is a difference between treatments 2 and 3 (acidity and caffeine content) on the taste of arabica coffee.
- 2)  $F_{Count} > F_{Table}$ , there is a difference between treatments 1 and 3 (moisture content and caffeine content) on the taste of Arabica coffee.
- 3)  $F_{Count} > F_{Table}$ , there is a difference between treatments 1 and 2 (moisture content and acidity) on the taste of arabica coffee.

**4. Anova with Block Design Subsampling of Moisture Content with Drying**

*Table 7 Anova With Block Subsampling Design (Moisture Content And Drying Process)*

<i>Block</i>	<i>Treatment</i>			<i>Total</i>	<i>Average</i>
	<i>Before Drying</i>	<i>Sun Drying</i>	<i>Coffee Drying House</i>		
<i>1</i>	33.5	13.2	9.66		
<i>Moisture Content (%)</i>					
<i>2</i>	30	14.1	9.14		
<i>3</i>	27.4	12.8	9.2		

4	21	15.3	10.23		
5	26.7	13.7	9.32		
6	22.9	12.9	8.79		
J1j	161.5	82	56.34	299.84	16.65778
1	34.8	14.8	9.85		
2	23.4	13.4	10.15		
3	25	15	9.7		
4	32.2	12.6	9.28		
5	34.5	14.5	8.39		
6	27.1	13.1	10.68		
J2j	177	83.4	58.05	318.45	17.69167
1	30.3	15.2	12.29		
2	40.2	12.7	12.26		
3	24.8	14.6	12.29		
4	23.7	13	9.72		
5	41.4	15.1	9.22		
6	33.7	13.5	8.56		
J3j	194.1	84.1	64.34	342.54	19.03
1	44.4	14.4	11.22		
2	30.6	13.3	10.15		
3	33.5	14.9	9.7		
4	30	13.5	9.28		
5	27.4	15.4	8.39		

6	21	12.6	10.68		
J4j	186.9	84.1	59.42	330.42	18.35667
Big Quantity	719.5	333.6	238.15	1291.25	
Average	9.993055556	4.633333333	3.307638889		0.249084

Research Hypothesis:

H0= No Effect of Arabica Coffee Moisture Content on the Drying Process

H1= There is an Effect of Arabica Coffee Moisture Content on the Drying Process

$$\sum Y^2 = 29530.84$$

$$R_y = \frac{(1291.25)^2}{(3)(6)(4)} = 23157.31$$

$$S_b = \frac{(161.5)^2 + (82)^2 + (56.34)^2 + \dots + (186.9)^2 + (84.1)^2 + (59.42)^2}{3 \times 6} - 23157.31 = 19857$$

$$S_y = 29530.84 - 23157.31 - 19857 = -13483.5$$

$$B_y = \frac{(299.84)^2 + (318.45)^2 + (342.54)^2 + (330.42)^2}{3 \times 6} = 23212.53$$

$$P_y = \frac{(719.5)^2 + (333.6)^2 + (238.15)^2}{4 \times 6} - 23157.31 = 5412.883$$

$$E_y = 19857 - 23212.53 - 5412.883 = -8768.41$$

Table 8 Anova Block Design Of Moisture Content And Drying Process

Source Of Variations	Dk	JK	RJK	F <sub>Count</sub>	F <sub>Table</sub>
Average	1	23157.31	23157.31		
Block	3	23212.53	7737.51		
Drying	2	5412.883	2706.442	-1.85	3.15
Experiment Error	6	-8768.41	-1461.4		
Sampling Error	60	-13483.5	-224.725		
Total	72	29530.84			

F<sub>Count</sub> < F<sub>Table</sub> then H0 accepted H1 rejected. There is no significant effect of arabica coffee moisture content on the drying process.

**5. Anova with Block Design Subsampling of Acidity Level with Drying**

*Table 9 Anova With Block Subsampling Design (Acidity Level And Drying Process)*

Block	Treatment			Total	Average
	Before Drying	Sun Drying	Coffee Drying House		
1	12.17	8.17	3.46		
2	13.25	8.46	3.09		
3	12.6	7.6	3.15		
4	14	7.87	4.9		
5	13.05	8.05	3.27		
6	12.22	8.32	2.65		
J1j	77.29	48.47	20.52	146.28	8.126667
Acidity Content (PH)	1	13.4	8.38	3.67	
	2	13.8	8.66	4.82	
	3	12.71	8.83	3.5	
	4	12.5	8.5	3.2	
	5	13.64	8.78	2.42	
	6	14	8.95	5.25	
J2j	80.05	52.1	22.86	155.01	8.611667
	1	12.9	8.62	6.45	
	2	12.4	8.89	6.4	
	3	13.25	9.06	6.45	
	4	13.74	8.74	3.55	
	5	12.02	9.02	3.17	
	6	12.19	9.19	2.56	

<i>J3j</i>	76.5	53.52	28.58	158.6	8.811111
<i>1</i>	12.17	8.86	5.7		
<i>2</i>	13.25	9.14	4.82		
<i>3</i>	12.6	9.31	3.5		
<i>4</i>	14	8.98	3.2		
<i>5</i>	13.05	9.26	2.42		
<i>6</i>	12.22	9.43	5.25		
<i>J4j</i>	77.29	54.98	24.89	157.16	8.731111
<i>Big Quantity</i>	311.13	209.07	96.85	617.05	
<i>Average</i>	4.32125	2.90375	1.345138889		0.11903

Research Hypothesis:

H0 = No Effect of Arabica Coffee Acidity Level on the Drying Process

H1 = There is an Effect of Arabica Coffee Acidity Level on the Drying Process

$$\sum Y^2 = 6300.669$$

$$R_y = \frac{(617.05)^2}{(3)(6)(4)} = 5288.204$$

$$S_b = \frac{(77.29)^2 + (48.47)^2 + (20.52)^2 + \dots + (77.29)^2 + (54.98)^2 + (24.89)^2}{3 \times 6} - 5288.204$$

$$= 37538.66$$

$$S_y = 6300.669 - 5288.204 - 37538.66 = -36256.2$$

$$B_y = \frac{(146.28)^2 + (155.01)^2 + (158.6)^2 + (157.16)^2}{3 \times 6} - 5288.204 = 5.08$$

$$P_y = \frac{(311.13)^2 + (209.07)^2 + (96.85)^2}{4 \times 6} - 5288.204 = 957.30$$

$$E_y = 37538.66 - 5.08 - 957.30 = 36576.2809$$

Table 10 Anova Block Design Of Acidity Level And Drying Process

Source Of Variations	<i>Dk</i>	<i>JK</i>	<i>RJK</i>	<i>F<sub>Count</sub></i>	<i>F<sub>Table</sub></i>
<i>Average</i>	1	5288.204	5288.204		
<i>Block</i>	3	5.08	1.69	-10.09	3.15
<i>Drying</i>	2	957.3	478.65		
<i>Experiment Error</i>	6	36576.2809	6096.05		

*Sampling Error*                      60                      -36256.2                      -604.27

*Total*                                      72                                      6300.669

$F_{Count} < F_{table}$  then  $H_0$  accepted  $H_1$  rejected. There is no significant effect of arabica coffee acidity on the drying process.

**6. Anova with Block Design Subsampling of Caffeine Content with Drying**

*Tabel 11 Anova With Block Subsampling Design (Caffeine Content And Drying Process)*

<i>Block</i>	<i>Treatment</i>			<i>Total</i>	<i>Average</i>
	<i>Before Drying</i>	<i>Sun Drying</i>	<i>Coffee Drying House</i>		
<i>1</i>	<i>11.15</i>	<i>4.56</i>	<i>1.71</i>		
<i>2</i>	<i>12.85</i>	<i>3.65</i>	<i>1.65</i>		
<i>3</i>	<i>12.01</i>	<i>4.75</i>	<i>1.6</i>		
<i>4</i>	<i>11.21</i>	<i>4.7</i>	<i>1.55</i>		
<i>5</i>	<i>12.93</i>	<i>4.63</i>	<i>1.86</i>		
<i>6</i>	<i>12.07</i>	<i>4.37</i>	<i>2.25</i>		
<i>J1j</i>	<i>72.22</i>	<i>26.66</i>	<i>10.62</i>	<i>109.5</i>	<i>6.083333</i>
<i>Caffeine Content (%)</i>	<i>1</i>	<i>11.27</i>	<i>4.24</i>	<i>1.95</i>	
	<i>2</i>	<i>12.99</i>	<i>4.05</i>	<i>1.35</i>	
	<i>3</i>	<i>12.13</i>	<i>3.9</i>	<i>1.79</i>	
	<i>4</i>	<i>11.33</i>	<i>3.35</i>	<i>1.63</i>	
	<i>5</i>	<i>13.05</i>	<i>3.95</i>	<i>2.53</i>	
	<i>6</i>	<i>12.19</i>	<i>3.75</i>	<i>1.15</i>	
<i>J2j</i>	<i>72.96</i>	<i>23.24</i>	<i>10.4</i>	<i>106.6</i>	<i>5.922222</i>
	<i>1</i>	<i>11.39</i>	<i>4.13</i>	<i>1.1</i>	
	<i>2</i>	<i>13.11</i>	<i>3.8</i>	<i>1.05</i>	
	<i>3</i>	<i>12.25</i>	<i>3.55</i>	<i>1</i>	



4	11.45	4.01	1.84		
5	13.17	3.6	1.65		
6	12.31	3.45	2.4		
J3j	73.68	22.54	9.04	105.26	5.847778
1	11.51	3.85	0.8		
2	13.23	3.5	0.75		
3	12.37	3.3	1.79		
4	11.57	3.7	1.63		
5	13.29	3.4	2.53		
6	12.43	3.25	1.15		
J4j	74.4	21	8.65	104.05	5.780556
Big Quantity	293.26	93.44	38.71	425.41	
Average	4.073055556	1.297777778	0.537638889		0.082062

Research Hypothesis:

H0 = No Effect of Arabica Coffee Caffeine Content on the Drying Process

H1 = There is an effect of caffeine content of Arabica coffee on the drying process

$$\sum Y^2 = 6300.669$$

$$R_y = \frac{(617.05)^2}{(3)(6)(4)} = 5288.204$$

$$S_b = \frac{(72.22)^2 + (26.66)^2 + (10.62)^2 + \dots + (74.4)^2 + (21)^2 + (8.65)^2}{3 \times 6} - 5288.204 = 3506.573$$

$$S_y = 6300.669 - 5288.204 - 37538.66 = -36256.2$$

$$B_y = \frac{(146.28)^2 + (155.01)^2 + (158.6)^2 + (157.16)^2}{3 \times 6} - 5288.204 = 5.08$$

$$P_y = \frac{(311.13)^2 + (209.07)^2 + (96.85)^2}{4 \times 6} - 5288.204 = 957.30$$

$$E_y = 37538.66 - 5.08 - 957.30 = 36576.2809$$

Table 12 Anova Block Design Of Caffeine Content And Drying Process

Source Of Variations	Dk	JK	RJK	F <sub>Count</sub>	F <sub>Table</sub>
Average	1	5288.204	5288.204	-10.09	3.15
Block	3	5.08	1.69		

<i>Drying</i>	2	957.3	478.65
<i>Experiment Error</i>	6	36576.2809	6096.05
<i>Sampling Error</i>	60	-36256.2	-604.27
<i>Total</i>	72	6300.669	

$F_{Count} < F_{table}$  then  $H_0$  accepted  $H_1$  rejected. There is no significant effect of arabica coffee caffeine content on the drying process.

**7. Anova with Block Subsampling Design (Arabica Coffee Characteristics and Drying Process)**

*Table 13 Anova With Block Subsampling Design (Arabica Coffee Characteristics And Drying Process)*

<i>Block</i>	<i>Treatment</i>			<i>Total</i>	<i>Average</i>
	<i>Before Drying</i>	<i>Sun Drying</i>	<i>Coffee Drying House</i>		
<i>1</i>	33.5	13.2	9.66		
<i>2</i>	30	14.1	9.14		
<i>3</i>	27.4	12.8	9.2		
<i>4</i>	21	15.3	10.23		
<i>5</i>	26.7	13.7	9.32		
<i>6</i>	22.9	12.9	8.79		
<i>J1j</i>	161.5	82	56.34	299.84	16.65778
<i>Moisture Content (%)</i>					
<i>1</i>	34.8	14.8	9.85		
<i>2</i>	23.4	13.4	10.15		
<i>3</i>	25	15	9.7		
<i>4</i>	32.2	12.6	9.28		
<i>5</i>	34.5	14.5	8.39		
<i>6</i>	27.1	13.1	10.68		
<i>J2j</i>	177	83.4	58.05	318.45	17.69167
<i>1</i>	30.3	15.2	12.29		

	2	40.2	12.7	12.26		
	3	24.8	14.6	12.29		
	4	23.7	13	9.72		
	5	41.4	15.1	9.22		
	6	33.7	13.5	8.56		
	<i>J3j</i>	<i>194.1</i>	<i>84.1</i>	<i>64.34</i>	<i>342.54</i>	<i>19.03</i>
	1	44.4	14.4	11.22		
	2	30.6	13.3	10.15		
	3	33.5	14.9	9.7		
	4	30	13.5	9.28		
	5	27.4	15.4	8.39		
	6	21	12.6	10.68		
	<i>J4j</i>	<i>186.9</i>	<i>84.1</i>	<i>59.42</i>	<i>330.42</i>	<i>18.35667</i>
	1	12.17	8.17	3.46		
	2	13.25	8.46	3.09		
	3	12.6	7.6	3.15		
	4	14	7.87	4.9		
Acidity Content (PH)	5	13.05	8.05	3.27		
	6	12.22	8.32	2.65		
	<i>J1j</i>	<i>77.29</i>	<i>48.47</i>	<i>20.52</i>	<i>146.28</i>	<i>8.126667</i>
	1	13.4	8.38	3.67		
	2	13.8	8.66	4.82		
	3	12.71	8.83	3.5		

	4	12.5	8.5	3.2		
	5	13.64	8.78	2.42		
	6	14	8.95	5.25		
	J2j	80.05	52.1	22.86	155.01	8.611667
	1	12.9	8.62	6.45		
	2	12.4	8.89	6.4		
	3	13.25	9.06	6.45		
	4	13.74	8.74	3.55		
	5	12.02	9.02	3.17		
	6	12.19	9.19	2.56		
	J3j	76.5	53.52	28.58	158.6	8.811111
	1	12.17	8.86	5.7		
	2	13.25	9.14	4.82		
	3	12.6	9.31	3.5		
	4	14	8.98	3.2		
	5	13.05	9.26	2.42		
	6	12.22	9.43	5.25		
	J4j	77.29	54.98	24.89	157.16	8.731111
	1	11.15	4.56	1.71		
	2	12.85	3.65	1.65		
<i>Caffeine Content (%)</i>	3	12.01	4.75	1.6		
	4	11.21	4.7	1.55		
	5	12.93	4.63	1.86		

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6	12.07	4.37	2.25		
J1j	72.22	26.66	10.62	109.5	6.083333333
1	11.27	4.24	1.95		
2	12.99	4.05	1.35		
3	12.13	3.9	1.79		
4	11.33	3.35	1.63		
5	13.05	3.95	2.53		
6	12.19	3.75	1.15		
J2j	72.96	23.24	10.4	106.6	5.922222222
1	11.39	4.13	1.1		
2	13.11	3.8	1.05		
3	12.25	3.55	1		
4	11.45	4.01	1.84		
5	13.17	3.6	1.65		
6	12.31	3.45	2.4		
J3j	73.68	22.54	9.04	105.26	5.847777778
1	11.51	3.85	0.8		
2	13.23	3.5	0.75		
3	12.37	3.3	1.79		
4	11.57	3.7	1.63		
5	13.29	3.4	2.53		
6	12.43	3.25	1.15		
J4j	74.4	21	8.65	104.05	5.780555556

<i>Big Quantity</i>	1323.89	636.11	373.71	2333.71
<i>Average</i>	24.51648148	11.77981481	6.920555556	14.40561728

Research Hypothesis:

H0 = No Effect of Arabica Coffee Characteristics on the Drying Process

H1 = There is an Effect of Arabica Coffee Characteristics on the Drying Process

$$\sum Y^2 = 39864.07$$

$$R_y = \frac{(233.71)^2}{12 \times 6 \times 3} = 252.87$$

$$S_b = \frac{(161.5)^2 + (82)^2 + (56.34)^2 + \dots + (74.4)^2 + (21)^2 + (8.65)^2}{12 * 6} - 252.87 = 2992.63$$

$$S_y = 39864.07 + 252.87 + 2992.63 = 43109.57$$

$$B_y = \frac{(299.84)^2 + (318.45)^2 + \dots + (105.26)^2 + (104.05)^2}{12 * 6} - 252.87 = 7502.19$$

$$P_y = \frac{(1323.89)^2 + (636.11)^2 + (373.71)^2}{3 \times 6} - 252.87 = 127357.12$$

$$E_y = 2992.63 - 7502.19 - 127357.12 = -131867$$

Table 14 Anova With Block Subsampling Design (Arabica Coffee Characteristics And Drying Process)

Source Of Variations	Dk	JK	RJK	F <sub>Count</sub>	F <sub>Table</sub>
<i>Average</i>	1	252.87	252.87		
<i>Block</i>	2	7503.19	3751.6		
<i>Drying</i>	2	127357.12	63678.56	-2.9	3.15
<i>Experiment Error</i>	6	-131867	-21977.8		
<i>Sampling Error</i>	204	43109.57	211.32		
<i>Total</i>	216	39864.07			

The conclusion is that  $F_{Count} < F_{Table}$ , which means that there is no significant effect of arabica coffee characteristics on the drying process.

### 8. Factorial Design of Arabica Coffee Characteristics and Drying Process

Table 15 Factorial Design Of Arabica Coffee Characteristics And Drying Process

A\B	Treatment			Total	Average
	Before Drying	Sun Drying	Coffee Drying House		
<i>Moisture Content(%)</i>	26.92	13.67	9.39		
	29.5	13.9	9.68		

	32.35	14.02	10.72	
	31.15	14.02	9.9	
<i>Total</i>	119.92	55.61	39.69	215.22
<i>Average</i>	29.98	13.9025	9.9225	17.935
	12.88	8.08	3.42	
<i>Acidity Content (PH)</i>	13.34	8.68	3.81	
	12.75	8.92	4.76	
	12.88	9.16	4.15	
<i>Total</i>	51.85	34.84	16.14	102.83
<i>Average</i>	17.28333333	11.61333333	5.38	11.43
	12.04	4.44	1.77	
	12.16	3.87	1.73	
<i>Caffeine Content(%)</i>	12.28	3.76	1.51	
	12.4	3.5	1.44	
<i>Total</i>	48.88	15.57	6.45	70.9
<i>Average</i>	16.29333333	5.19	2.15	7.88
<i>Big Quantity</i>	220.65	106.02	62.28	388.95
<i>Average</i>	18.3875	8.835	5.19	10.8

**Research Hypothesis:**

H0 = No Effect of Arabica Coffee Characteristics and Drying Process on Arabica Coffee Flavors

H1 = There is an Effect of Arabica Coffee Characteristics and Drying Process on Arabica Coffee Flavor

$$\sum Y^2 = 6491.228$$

$$R_y = \frac{(388.95)^2}{4 \times 3 \times 3} = 4202.28$$

$$A_y = \frac{(215.22)^2 + (102.83)^2 + (70.9)^2}{3 \times 3} - 4202.28 = 2677.772$$

$$B_y = \frac{(220.65)^2 + (106.02)^2 + (62.28)^2}{3 \times 3} - 4202.28 = 2887.216$$

$$J_{ab} = 1/3\{(119.92)^2 + (55.61)^2 + (39.69)^2 + (51.85)^2 + (34.84)^2 + (16.14)^2 + (48.88)^2 + (15.57)^2 + (6.45)^2\} / 3 - 4202.28 = 1475.307$$

$$AB_y = 1475.307 - 2677.772 - 2887.216 = -4089.68$$

$$E_y = 6491.228 - 4202.28 - 2677.772 - 2887.216 + 4089.68 = 813.64$$

*Table 16 Factorial design of Arabica coffee characteristics and drying process on the flavor of Arabica coffee*

<i>Source Of Variations</i>	<i>Dk</i>	<i>JK</i>	<i>RJK</i>	<i>F<sub>Count</sub></i>	<i>F<sub>table</sub></i>
<i>Average</i>	<i>1</i>	<i>4202.28</i>	<i>4202.28</i>	<i>54.3</i>	<i>3.28</i>
<i>Treatment : Drying Process</i>	<i>2</i>	<i>2677.772</i>	<i>1338.886</i>		
<i>Error</i>	<i>33</i>	<i>813.64</i>	<i>24.66</i>		

$F_{Count} > F_{table}$  then  $H_0$  is rejected  $H_1$  is accepted. There is a significant effect of arabica coffee characteristics and drying process on arabica coffee flavor.

#### IV. CONCLUSION

The following are the results of data processing with a fixed model analysis of variance with one way annova, analysis of variance with a subsampling block design and by using a two way annova factorial design analysis of variance so that it can be concluded, using the drying method with a coffee drying house can produce coffee with lower moisture content, acidity, and caffeine value, as well as a sweeter taste and also the quality of coffee produced is in accordance with coffee export standards. In addition, based on the results of the research hypothesis that has been carried out, the value of the  $F_{hitung} > F_{tabel}$  test is  $545.377 > 9.55$  and for the significance value is  $0.000 < 0.005$ , which means that  $H_0$  is rejected  $H_1$  is accepted, which means that the moisture content, acidity value, caffeine value and coffee drying process using a coffee drying house affect the taste of arabica coffee.

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#### REFERENCES

- Agustina, R., Nurba, D., Antono, W., & Septiana, R. (2019). Pengaruh suhu dan lama penyangraian terhadap sifat fisik-kimia kopi arabika dan kopi robusta. In *Prosiding Seminar Nasional Inovasi Teknologi Untuk Masyarakat* (Vol. 53, No. 9, pp. 285-299).
- Budiharti, Nelly., & Wardana, ING. (2018). Analisa Variansi Jenis Bibit Kedelai Indonesia Dan Lokasi Tanam Terhadap Hasil Produksi Untuk Memenuhi Permintaan. *Conference On Innovation and Application of Science and Technology (CIASTECH 2018)* universitas Widyagama Malang, 12 September 2018, ISSN Cetak: 2622-1276 ISSN Online: 2622-1284
- Dhamayanthie, I. (2022). Analisis Metode Pengurangan Kadar Air pada Biji Kopi. *Jurnal Pendidikan Tambusai*, 6(2), 12056-12065.
- Heckman, J. J., & Urzua, S. (2010). Comparing IV with structural models: What simple IV can and cannot identify. *Journal of Econometrics*, 156(1), 27-37.
- Hendrasto, F. (2017). Peran Identifikasi Merek dan Citra Merek dalam Mempengaruhi Cinta kepada Merek. *Jurnal Ekonomi Modernisasi*, 13(2), 94-104.
- Hutahaean, H. A., Hamzah, F. H., & Harun, N. (2021). Sifat Fisikokimia Biji Kopi Robusta Solok Radjo dengan Lama Penyangraian Berbeda. *Jurnal Online Mahasiswa (JOM) Bidang Pertanian*, 8, 1-11.
- Ilham, R. A., Hamzah, F. H., & Raswen, R. (2021). Lama Penyangraian Terhadap Sifat Fisiko-Kimia Biji Kopi Arabika Nagari Lasi Kecamatan Canduang Kabupaten Agam Provinsi Sumatera Barat. *Jurnal Online Mahasiswa (JOM) Bidang Pertanian*, 8, 1-9.
- Mardjan, S. S., Purwanto, E. H., & Pratama, G. Y. (2022). Pengaruh Suhu Awal Dan Derajat Penyangraian Terhadap Sifat Fisikokimia Dan Citarasa Kopi Arabika Solok. *Jurnal Keteknik Pertanian*, 10(2), 108-122.



- McKay, D. L., Chen, C. O., Saltzman, E., & Blumberg, J. B. (2010). Hibiscus sabdariffa L. tea (tisane) lowers blood pressure in prehypertensive and mildly hypertensive adults. *The Journal of nutrition*, 140(2), 298-303.
- Montgomery, D.C., Peck, E.A., and Vining, G.G. (2021). *Introduction to Linear Regression Analysis*. 8th ed. New York: John Wiley & Sons.
- Nicolet, Y., Rubach, J. K., Posewitz, M. C., Amara, P., Mathevon, C., Atta, M., ... & Fontecilla-Camps, J. C. (2008). X-ray structure of the [FeFe]-hydrogenase maturase HydE from *Thermotoga maritima*. *Journal of Biological Chemistry*, 283(27), 18861-18872.
- Pradipta, K., & Fibrianto, K. (2017). Perbedaan Air Seduh Terhadap Persepsi Multisensoris Kopi: Review Jurnal. *Jurnal Pangan dan Agroindustri*, 5(1).
- Pullman, M., & Wikoff, R. (2017). Institutional sustainable purchasing priorities: Stakeholder perceptions vs environmental reality. *International Journal of Operations & Production Management*, 37(2), 162-181.
- Rosdianto, H. (2017). Pengaruh model generative learning terhadap hasil belajar ranah kognitif siswa pada materi hukum Newton. *Jurnal Pendidikan Fisika dan Keilmuan (JPFK)*, 3(2), 66-69.
- Sunarharum, W. B., Williams, D. J., & Smyth, H. E. (2014). Complexity of coffee flavor: A compositional and sensory perspective. *Food research international*, 62, 315-325.

# Optimization of Local Original Revenue (PAD) through Regional Tax Revenue of North Kalimantan Province

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## ABSTRACT

**Purpose:** to analyze the effect of local tax revenue targets, regional tax intensification and intensification costs and management of regional tax receivables on the optimization of regional revenues of the North Kalimantan Provincial Government

**Design/methodology/approach:** quantitative research by taking the object of research at the Regional Revenue Agency of North Kalimantan Province in Tanjung Selor City. The analysis techniques used use multiple linear regression analysis, t-test and determination coefficient analysis

**Findings:** the variable target of regional tax revenue has a positive and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. The variable costs of intensification and extensification do not have a significant influence on the optimization of local native income of North Kalimantan Province in 2015-2022. The variable of regional tax receivables management has a negative and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022.

**Practical implications:** Intensifying local tax revenue targets, local tax intensification and intensification costs and managing regional tax receivables towards optimizing local revenues of the North Kalimantan Provincial Government.

**Originality/value:** This paper is original

**Paper type:** research paper

**Keyword:** Local Tax Revenue, Intensification, Electrification, Management

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## I. INTRODUCTION

The North Kalimantan Provincial Government is a division of East Kalimantan Province, which was formed based on Law Number 20 of 2012. As a relatively new Autonomous Region, the North Kalimantan Provincial Government with all existing limitations, both in terms of facilities, infrastructure, and human resources, has made maximum efforts to organize government as carried out by local governments in general. This can be seen through the North Kalimantan Provincial Independence Ratio which shows that the comparison between Regional Original Income (PAD) to total regional income has an increasing trend from year to year. In fiscal year 2014 the Independence Ratio of North Kalimantan Province was 0.91%, then increased in fiscal year 2015 to 36.90%. In fiscal year 2016 the Independence Ratio of North Kalimantan Province decreased to 32.06%, in fiscal year 2017 decreased to 28.65%, and in fiscal year 2018 increased to 31.45%, and finally in fiscal year 2019 experienced a very significant increase to 41.39%. This increase cannot be separated from local taxes which are one of the contributors to the PAD of North Kalimantan Province. Based on Law Number 23 of 2014 in Article 285 paragraph (1), there are four types of local original revenue, which include regional taxes, regional levies, the results of segregated regional wealth management, and other legitimate local original revenues.

The increase in local tax revenue during 2015 to 2022 indicates that the collection of these regional taxes has been effectively implemented by the North Kalimantan Provincial Government starting from fiscal year 2015. This is because the handover/transfer of personnel and documents from the East Kalimantan Provincial Government (as the parent province) to the North Kalimantan Provincial Government was only carried out in 2015. Further governing provisions on Regional Tax are regulated in Regional Regulation Number 4 of 2016 which has been in force in North Kalimantan Province since 2016.

The increase in regional tax revenue is inseparable from policies related to regional tax revenue, intensification and classification costs as well as the management of regional tax receivables carried out by North Kalimantan Province. Local original revenue is more influenced by government policy factors related to the implementation of tax intensification and extensification carried out by each region. In general, this policy is quite effective in increasing local original income, but according to research by Nara et al., (2021), the intensification and extensification strategy has not been optimal in supporting the increase in original income, for example related to entertainment tax regulations and tariff determination which are considered less supportive in the implementation of intensification and extensification. Horota's research, (2017) the results showed that the influence between local tax contributions and regional levies with PAD. Research by Afifah et al., (2020), the results of this study provide information that policies related to intensification and extensification can support an increase in regional tax revenue. Pattilouw, (2018) the results of this study provide information that one of the policies in optimizing PAD is to optimize local taxes. Nurhayati, (2015), the results of this study show that there is a significant influence between tax intensification, tax extensification and regional retribution on the implementation of good governance and PAD. Adziem et al., (2018), the results of this study show that there is an influence between tax revenue and the effectiveness of local taxes. Nursafitra et al., (2019), intensification measurement through 3 aspects, namely institutional aspects, administrative aspects and personnel aspects and extensification efforts through the creation of sources of regional taxes and levies and policies in the investment sector. Meanwhile, this study emphasizes more on the costs used in implementing intensification & extensification policies. The results of this study recommend the implementation of intensification & extensification in improving PAD.

Research conducted by Purwanto et al., (2016) the results of this study show that there is a significant influence between tax intensification, tax extensification, regional taxes and levy taxes on PAD. Sulila, (2022), the results of this study show that there is a significant influence between tax intensification and tax extensification on local tax revenues and levies. Hala, (2004) the results of this study show that there is a significant influence between tax intensification and tax extensification on local original income. Amalu et al., (2020), the results of this study show that there is a significant influence between product tax and income and economic growth in the regions

Based on the results of studies in previous studies, there are differences in the results of this study, showing that research related to tax intensification and extensification of PAD still has gaps that must be carried out further research, considering that policies related to tax intensification and extensification from each region also vary in application and control. In addition, to develop this research activity, the author also added new variables in this study, namely related to tax determination rates and debt management owned by the city/regency or provincial government. On the other hand, the existence of PAD problems in North Kalimantan Province is interesting to study, considering that North Kalimantan Province always makes a higher budget compared to the budget absorption used.

### **A. Research Concept Framework**

The establishment of the North Kalimantan Provincial Government in accordance with Law Number 20 of 2012 requires the Governor of East Kalimantan together with the Acting Governor of North Kalimantan to organize and carry out the transfer of personnel, transfer of assets, and documents to the North Kalimantan Provincial Government in accordance with the approval of the Regional People's Representative Council of East Kalimantan Province and the Governor of East Kalimantan. The management of assets in the form of tax receivables submitted and recorded in the financial statements of the North Kalimantan Provincial Government can have a positive effect on optimizing local original revenues through increasing regional taxes or the transfer of these receivables is only an uncollectible burden for the North Kalimantan Provincial Government so that it requires proposing the elimination of receivables. The framework of thought in this study can be described as follows:

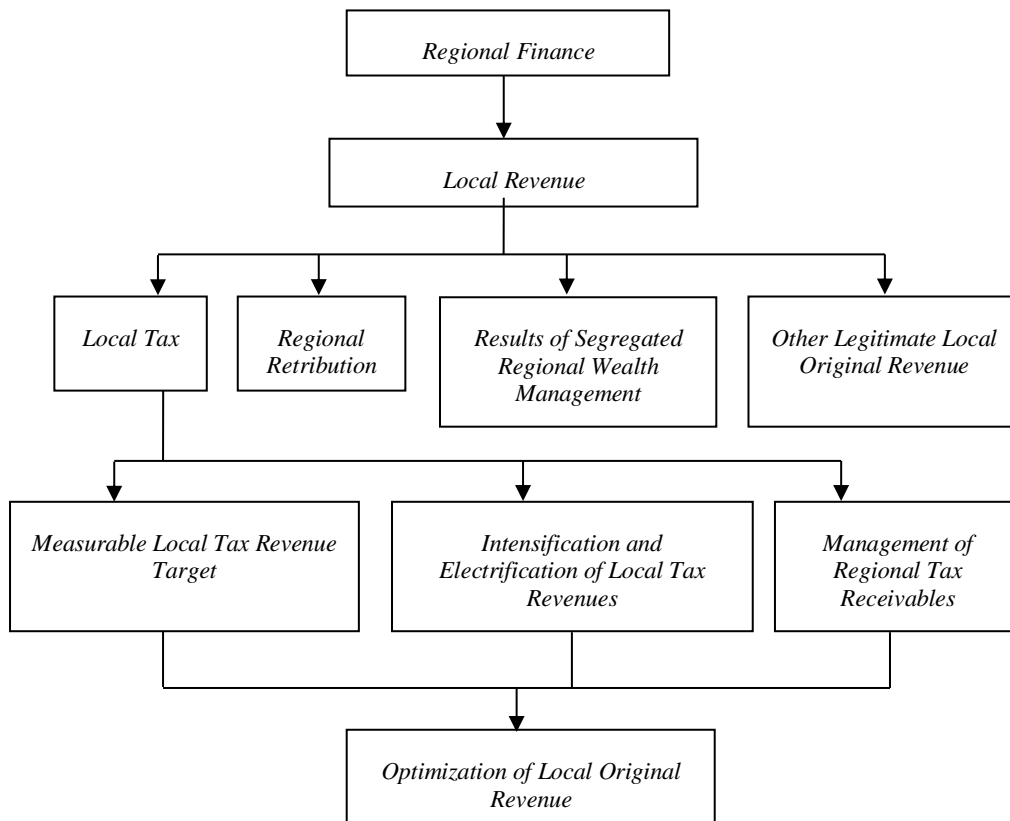


Figure 1. Frame of Mind

Based on the above framework, the following research framework can be made:

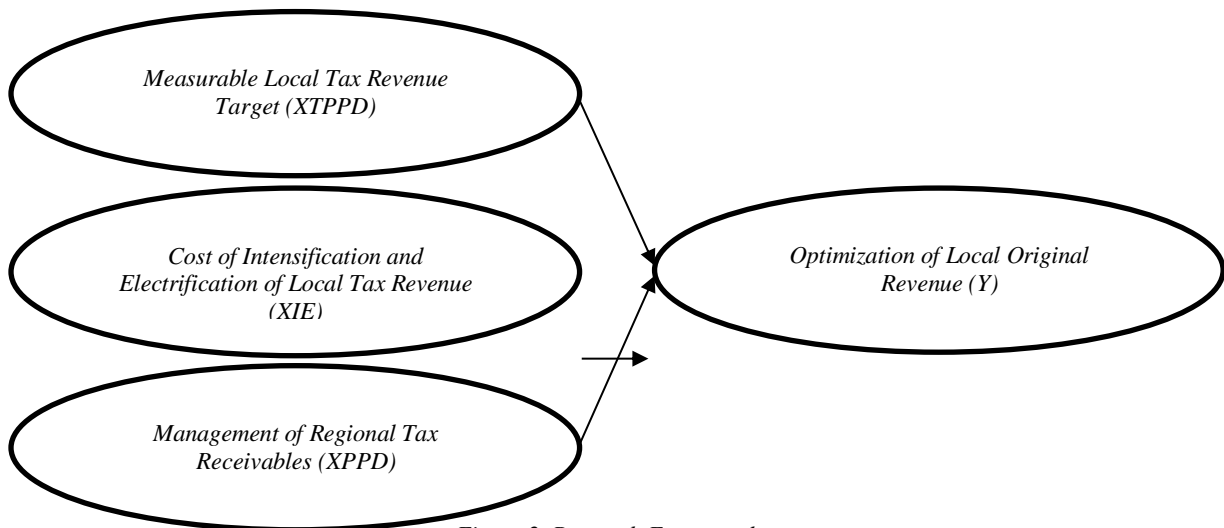


Figure 2. Research Framework

## II. METHODS

This study used a quantitative descriptive research approach. For data collection from each variable, the study was carried out by means of a time series with a data period between 2015-2022 (Riyanto & Hatmawan, 2020). The research was conducted at the regional apparatus organization (OPD), namely the Regional Revenue Agency of North Kalimantan Province in Tanjung Selor City. The research will be conducted in January - August 2023. During this period of time, research was carried out in the field, data processing, and preparation of research reports as a result of the research. To help accurate data, research instruments in the form of data collection tools

are needed. The data collected includes data related to the operationalization of the variables to be studied, the following data and measurement indicators are conveyed:

*Table 1 Operational Research Variables*

No.	Variabel	Indicator
1.	<i>Regional Tax Revenue Target of North Kalimantan Province</i>	<i>Local Tax Target exceeds Budget by 100%</i>
2.	<i>Intensification and Extensification of Regional Tax Revenue of North Kalimantan Province</i>	<i>Cost intensification and electrification are implemented effectively and efficiently;</i>
3.	<i>Management of Regional Tax Receivables from East Kalimantan Province</i>	<i>The remaining amount of tax receivables transfer is reduced by 50%</i>
4.	<i>Optimization of Local Original Revenue</i>	<i>Realization of Local Original Revenue (PAD) of the North Kalimantan Provincial Government</i>

The data analysis technique used in this study used multiple linear regression analysis, t test and coefficient of determination. The author uses SPSS software to assist in processing research data.

Companies that have competence in the fields of marketing, manufacturing and innovation can make its a souch to achieve competitive advantage (Daengs GS, et al. 2020:1419).

The research design is a plan to determine the resources and data that will be used to be processed in order to answer the research question. (Asep Iwa Soemantri, 2020:5).

Standard of the company demands regarding the results or output produced are intended to develop the company. (Istanti, Enny, 2021:560).

Time management skills can facilitate the implementation of the work and plans outlined. (Rina Dewi, et al. 2020:14).

### III. RESULTS AND DISCUSSION

#### A. Results

##### 1. Multiple Linear Regression Analysis

From the research data that has been tabulated and analyzed using multiple linear regression with the help of the SPSS program which is formulated as follows.

$$Y = \alpha + \beta_1 X_{TPPD} + \beta_2 X_{IE} + \beta_3 X_{PPD} + e$$

Information:

Y = Optimization of Local Original Revenue

XTPPD = Local Tax Revenue Target

XIE = Intensification and Extensification of Local Tax Revenues

XPPD = Management of Regional Tax Receivables

a = Konstanta

$\beta_{1,2,3}$  = Regression coefficient

e = Disruptor (*standard error*)

The effect of regional tax revenue target variables (XTPPD), intensification and extensification costs (XIE) and management of regional tax receivables (XPPD) on regional original revenue optimization variables (Y) through multiple linear regression testing, is explained in table 2.

*Table 2. Results of Regression Analysis and t-Test*

<i>Variabel</i>	<i>Koefisien Regresi</i>	<i>t<sub>hitung</sub></i>	<i>Sig</i>
<i>(Constant)</i>	272132434902,743	0,686	0,530
<i>Target Pendapatan Pajak Daerah</i>	13,866	4,686	0,009
<i>Intensification and Extensification</i>	24,191	0,088	0,934
<i>Management of Regional Tax Receivables</i>	-34,069	-3,377	0,028
<i>R Square</i>	0,919		
<i>Adjusted R Square</i>	0,859		
<i>t<sub>tabel</sub></i>	3,182		

From table 3 the following equation is obtained.

$$Y = 272132434902,743 + 13,866X_{TPPD} + 24,191X_{IE} - 34,069X_{PPD}$$

The constant of 272,132,434,902,743 states that if the variables of regional tax revenue target (X<sub>TPPD</sub>), intensification and extensification costs (X<sub>IE</sub>) and management of regional tax receivables (X<sub>PPD</sub>) are considered constant, then the average amount of optimization of local original revenue (Y) of the local government of North Kalimantan Province is IDR 272,132,434,902,743.

The regression coefficient (β<sub>1</sub>) of 13.866 states that every increase in the regional tax revenue target variable (X<sub>TPPD</sub>) of one rupiah will have an impact on the increase in the optimization of local original revenue (Y) of the local government of North Kalimantan Province by 13,866 one rupiah assuming other variables remain.

The regression coefficient (β<sub>2</sub>) of 24.191 states that every increase in the variable cost of intensification and extensification (X<sub>IE</sub>) of one rupiah will have an impact on the optimization of local original income (Y) of the local government of North Kalimantan Province by 24,191 one rupiah assuming other variables remain.

The regression coefficient (β<sub>3</sub>) of 34.069 states that every decrease in the variable of regional tax receivables management (X<sub>PPD</sub>) of one rupiah will have an impact on decreasing the optimization of local original revenue (Y) of the local government of North Kalimantan Province by 34,069 one rupiah assuming other variables remain

## 2. Test t

Based on the hypothesis test with the t test in table 3 that for the effect of the regional tax revenue target (X<sub>TPPD</sub>) on the optimization of regional original revenue (Y), North Kalimantan Province in 2015-2022 has a calculated value of 4.686 and a ttable of 3.182 (t<sub>calculate</sub> > t<sub>table</sub>) with a significant level of 0.009 (0.009 < 0.05). This means that the variable target of regional tax revenue has a positive and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. The t test for the effect of intensification and extensification costs (X<sub>IE</sub>) on the optimization of local original income (Y) of North Kalimantan Province in 2015-2022 has a calculated value of 0.088 and a ttable of 3.182 (t<sub>count</sub> < t<sub>table</sub>) with a significant level of 0.934 (0.934 > 0.05). This means that the variable costs of intensification and extensification do not have a significant influence on the optimization of local native income of North Kalimantan Province in 2015-2022. The t-test for the effect of regional tax receivables management (X<sub>PPD</sub>) on the optimization of local original revenue (Y) of North Kalimantan Province in 2015-2022 has a calculated value of -3.377 and a ttable of -3.182 (-t<sub>calculate</sub> < -t<sub>table</sub>) with a significant level of 0.028 (0.028 < 0.05). This means that the variable management of regional tax receivables has a negative and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022.

## 3. Coefficient of Determination Analysis (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) test is used to determine how far the model is able to explain the variation of the dependent variable, along with the results of the coefficient of determination test. Based on Table 3, it is known that the results of the coefficient of determination analysis (*adjusted* R<sup>2</sup>) are 0.859, meaning that

changes in the optimization of local original income of North Kalimantan Province in 2015-2022 can be explained by changes in regional tax revenue target variables, intensification and extensification costs and management of regional tax receivables together by 85.9%. While the remaining 14.1% was influenced by other variables outside the variables studied.

## **B. Discussion**

### **1. The Effect of Regional Tax Revenue Target on the Optimization of Local Original Revenue of North Kalimantan Province**

Based on the results of this study, it proves that the regional tax revenue target has a positive and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. The results of this study support the theory put forward by Siahaan, (2013) local taxes are levies from the community by local governments based on laws that can be imposed and owed by taxpayers paying them by not getting re-achievement (counter-achievement/remuneration) directly, the results of which are used to finance government expenditures in development. While regional retribution is a mandatory payment from residents to the government because of certain services provided by the government for its residents individually. The results of this study also support the results of the research conducted (Adziem et al., 2018; Amalu et al., 2020; Horota, 2017), proves that tax determination in terms of the type of local tax has a significant influence on tax revenue with the effectiveness of local taxes. The tax target set by the local government must be based on data and reality from the previous year. The tax target is also based on the existing sources of tax revenue within an area, so there is a potential difference in revenue from tax revenue sources. There are differences in revenue from tax revenue sources from various regions that have an impact on the amount of Regional Original Revenue (PAD), so it is necessary to have a management system of authority in increasing PAD. PAD which is revenue obtained by regions from sources within their own territory collected based on law, which shows in Law Number 1 of 2022, Regional Original Revenue (PAD) is regional revenue obtained from Regional Taxes, Regional Levies, the results of segregated Regional Wealth Management and other legitimate Regional Original Revenue in accordance with laws and regulations.

### **2. The Effect of Regional Tax Intensification and Intensification Costs on Local Original Revenue of North Kalimantan Province**

The results of this study show that the cost of intensification and extensification does not have a significant influence on the optimization of local native income of North Kalimantan Province in 2015-2022. The results of this study are different from Halim's opinion, (2008), where the increase in PAD can be done through increasing tax revenues and regional levies by intensifying and extensifying collection. Further explained by Halim, (2008) "intensification of regional taxes and levies is defined as an effort made by the city/regency government to increase regional taxes and levies, therefore with the increase in taxes and levies, there is an increase in PAD. The results of this study support research from Nara et al., (2021), proving different results from previous studies, where there is an insignificant influence between tax intensification and tax extensification on PAD. In addition, the results of this study are contrary to research conducted by (Afifah et al., 2020; Hala, 2004; Nurhayati, 2015; Nursafitra et al., 2019; Purwanto et al., 2016; Sulila, 2022), proves that there is a significant influence between tax intensification and tax extensification on local tax revenues and levies. Tax extensification activities aim to increase the number of taxpayers, while tax intensification has a tax revenue target through taxpayer data that has been registered with the Director General of Taxes. These two activities are expected to contribute to the increase in PAD, where the more the number of taxpayers in the region, the potential to increase the number of PAD in the area.

### **3. The Effect of Regional Tax Receivables on North Kalimantan Local Original Revenue**

The results of this study show that the management of regional tax receivables has a negative and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. In financial management in local government, regional receivables will be known. The definition of regional receivables itself can be found in terms of various laws and regulations. In this sense, what is meant by regional receivables is the amount of money that must be paid to the Regional Government and / or the rights of the Regional Government which can be assessed with money as a result of agreements or other consequences based on applicable laws and regulations or other legal consequences. The results of this study also support the research of Nursafitra et al., (2019), which explains that the management of Regional Tax Receivables contains guidelines and procedures for handling regional tax receivables. This manual is also a reference to Regional Governments in managing local tax receivables by: 1. Provide an adequate picture of the position of local tax receivables derived from taxpayer arrears. 2. Develop a strategy for handling local tax receivables by classifying receivables based on data analysis from the Taxpayer database. 3. Carry out collection of local tax receivables for categories of receivables that can still be collected in accordance with statutory provisions. 4. Eliminate local tax receivables for expired and non-

collectible receivables categories in accordance with statutory provisions. In this study, it is known that regional receivables have a negative influence on optimizing regional revenues in North Kalimantan Province, this is because local governments have difficulty in collecting their receivables. Legally, it is known that if the local government experiences problems with collection of receivables, then the settlement can refer to Law No. 1 of 2004. In the Law, it is stated that the Head of the Regional Financial Management Work Unit as the General Regional Government Treasurer can collect regional receivables.

When collecting data sources, researchers collect data sources in the form of raw data. The survey method is a method of collecting primary data using written questions (Kumala Dewi, Indri et al, 2022: 29). This research will be conducted in three phases: measurement model (external model), structural model (internal model), and hypothesis testing. (Pramono Budi, et al., 2023; 970) Through this process, employees are given training and development that is relevant to their job performance, so they are expected to carry out their job responsibilities as well as possible. (Abdul Aziz Sholeh et.al. 2024 :82) Good working conditions are when humans can carry out work optimally healthy, safe and comfortable (Pandu Widodo, Hesti et al 2024:73).

#### IV. CONCLUSION

The conclusion of the results of this study can be explained that the variable target of regional tax revenue has a positive and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. The variable costs of intensification and extensification do not have a significant influence on the optimization of local native income of North Kalimantan Province in 2015-2022. The variable of regional tax receivables management has a negative and significant influence on the optimization of local original revenue of North Kalimantan Province in 2015-2022. This negative impact can be caused by the potential for unpaid receivables or bad debts from regional receivables sources. For further research, it can identify sources of receivables that have the potential to default and the need for a policy from North Kalimantan Province against unpaid receivables.

#### REFERENCES

- Adziem, F., Jamaluddin, J., & Marnianti, M. (2018). Analisis Optimalisasi Penerimaan Pajak Daerah Pada Kantor Badan Pendapatan Daerah Kabupaten Sinjai. *Amnesty: Jurnal Riset Perpajakan*, 1(2), 40–60. <https://doi.org/10.26618/jrp.v1i2.2913>
- Afifah, N., Paramita, M. H., & K, N. (2020). Tinjauan Pelaksanaan Ekstensifikasi Dan Intensifikasi Pajak Sebagai Upaya Peningkatan Penerimaan Pajak. *Jurnal Analisa Akuntansi Dan Perpajakan*, 3(2). <https://doi.org/10.25139/jaap.v3i2.2192>
- Amalu, H. I., Ukwueze, T. N., Olife, L. U., & Irokwe, F. F. (2020). Product Tax Revenue and Economic Growth in Nigeria: An Engle-Granger Approach, Evidence From 1981 - 2019. *Journal of Advanced Research in Economics and Administrative Sciences*, 1(2), 66–76. <https://doi.org/10.47631/jareas.v1i2.111>
- Hala, Y. (2004). The Effectiveness of the Intensification and Extensification Strategy to Increase The Revenue of Makassar City. *International Conference Adri-5*, 32, 376–383.
- Halim, A. (2008). *Auditing (dasar-dasar Audit Laporan Keuangan)*. Yogyakarta: Unit Penerbit dan percetakan STIM YKPN.
- Horota, P. (2017). Dalam Rangka Peningkatan Pendapatan Asli Daerah ( PAD ). *Jurnal Keuda*, 2(1), 1–10.
- Nara, N., Nurdin, W. N., & Nur. A. Hamka. (2021). Intensification and Extensification of Entertainment Taxes to Increase Own-Source Revenue (PAD) in Makassar City. *Turkish Journal of Computer and Mathematics Education*, 12(11), 303–312.
- Nurhayati, N. (2015). Pengaruh Intensifikasi Dan Ekstensifikasi Pajak Dan Retribusi Daerah Terhadap Peningkatan Pendapatan Asli Daerah Dengan Dimoderasi Pelaksanaan Good Governance Pada Kabupaten / Kota Di Wilayah Iii Cirebon. *Jurnal Riset Keuangan Dan Akuntansi*, 1(01), 49–61. <https://doi.org/10.25134/jrka.v1i01.1423>
- Nursafitra, Nursadik, M., & Yunus, M. (2019). Strategi Peningkatan Pendapatan Asli Daerah (Pad) Melalui Intensifikasi Dan Ekstensifikasi Penerimaan Pajak Dan Retribusi Daerah Di Kabupaten Enrekang. *JAKPP (Jurnal Analisis Kebijakan & Pelayanan Publik)*, 5(1), 37–48. <https://doi.org/10.31947/jakpp.v1i1.6500>
- Purwanto, Indrawan, R., & Safira, H. (2016). Do Extensification And Intensification On Regional Tax And Regional Retributions Have Impact On Own-Source Revenue? ( A Case Study In Regional Revenue Management Board In Cimahi Financial Year 2012-2016 ). *Icbae*, 33, 138–143.



- Riyanto, S., & Hatmawan, A. . (2020). *Metode Riset Penelitian Kuantitatif: Penelitian di Bidang Manajemen, Teknik, Pendidikan dan Eksperimen*. Deepublish.
- Siahaan, M. (2013). *Pajak Daerah dan Retribusi Daerah Edisi*. Jakarta: PT. Raja Grafindo.
- Sulila, I. (2022). The Effect of Intensification and Extensification of Tax and Retribution on Local Own-Source Revenue. *Central Asia and the Caucasus*, 23(1), 605–613.
- Aziz Sholeh, Abdul et. Al. 2024. Kompensasi Terhadap Motivasi Kerja Karyawan pada PT. Insolent Raya di Surabaya, *Journal Of Management and Creative Business* Vol. 2 No. 1 Januari 2024, Halaman : 82 - 96
- Daengs, G. S. A., Istanti, E., Negoro, R. M. B. K., & Sanusi, R. (2020). The Aftermath of Management Action on Competitive Advantage Through Process Attributes at Food and Beverage Industries Export Import in Perak Harbor of Surabaya. *International Journal Of Criminology and Sociologi*, 9, 1418–1425
- Enny Istanti1), Bramastyo Kusumo2), I. N. (2020). IMPLEMENTASI HARGA, KUALITAS PELAYANAN DAN PEMBELIAN BERULANG PADA PENJUALAN PRODUK GAMIS AFIFATHIN. *Ekonomika* 45, 8(1), 1–10
- Iwa Soemantri, Asep et al. 2020. Entrepreneurship Orientation Strategy, Market Orientation And Its Effect On Business Performance In MSMEs. *Jurnal EKSPEKTRA Unitomo* Vol. IV No. 1, Hal. 1-10.
- Kumala Dewi, Indri et al, 2022 Peningkatan Kinerja UMKM Melalui pengelolaan Keuangan, *Jurnal Ekonomi Akuntansi* , UNTAG Surabaya, Hal ; 23- 36
- Pandu Widodo, Hesti et. al. 2024. Dampak Pelatihan, Motivasi dan Lingkungan Kerja pada Kinerja Karyawan PT. KAI (Persero) di Stasiun Surabaya Pasar Turi, *Journal Of Management and Creative Business* 2 (1) , 66 - 81
- Pramono Budi, Istanti Enny, Daengs GS, Achmad, Syafi'i, Bramastyo KN, RM ,2023, Impact of Social Media Marketing and Brand Awareness on Purchase Intention in coffe shop culinary in Surabaya, *International Journal of Entrepreneurship and Business Decelopment*, Volume. 5 Number 6 November 2022, Page. 968 - 977
- Rina Dewi, et al. 2020. Internal Factor Effects In Forming The Success Of Small Businesses. *Jurnal SINERGI UNITOMO*, Vol. 10 No. 1, Hal. 13-21

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# The Impact of Work Engagement on Workforce Agility with Psychological Empowerment as A Moderator: A Study on State Civil Servant in Organization X

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## ABSTRACT

**Purpose:** The objective of this study is to investigate the impact of work engagement and psychological empowerment as moderator variables on workforce agility in the State Civil Apparatus of organisation X.

**Design/methodology/approach:** This study is quantitative and uses the Moderation Regression Analysis (MRA) technique with the SPSS 23 application. The measuring instruments used are the Workforce Agility Scale (Sherehiy, 2008) to measure workforce agility, the Psychological Empowerment Scale (Spreitzer, 1995) to measure psychological empowerment, and the UWES-17 (Schaufeli & Bakker, 2004) to measure work engagement.

**Findings:** The findings of the study reveal a significant positive relationship between work engagement and workforce agility. Psychological empowerment can have a positive effect on the regression value as a moderator.

**Research limitations/implications:** To enhance and optimize research results, additional methods are required to obtain in-depth information. Future research should conduct interviews with relevant parties to ensure and strengthen the phenomenon under study.

**Paper type:** Research paper

**Keyword:** *Digital Transformation, Workforce Agility, Psychological Empowerment, Work Engagement, ASN*

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## I. INTRODUCTION

The Indonesian government, through the Ministry of Communication and Information, is making efforts to accelerate digital transformation in response to its acceleration. One of these efforts is the preparation of the Digital Indonesia 2024 Roadmap (KOMINFO, 2021). According to the technocratic draft of the National Medium-Term Development Plan (RPJMN), the digital economy's contribution was assumed to be 3.17% in 2020 and is expected to increase to 4.66% in 2024. The predicted GDP growth for information and telecommunications in 2020 is between 7.12% and 7.54%. The target for GDP growth in 2024 is between 7.54% and 8.78%. The targeted value of e-commerce transactions in 2020 is Rp260 trillion, which is expected to increase to Rp600 trillion in 2024. The targeted value of e-commerce transactions in 2020 is Rp260 trillion, which is expected to increase to Rp600 trillion in 2024. The plan aims to improve Indonesia's Ease of Doing Business (EoDB) ranking to 40 in 2020. The Ministry of Communication and Information has tasked Organization X with formulating and implementing policies for managing informatics applications. The Ministry is responsible for implementing policies to ensure the successful realization of the digital transformation roadmap.

Organization X is facilitating digital transformation in Indonesia through four priority programs: internet infrastructure, technology development policies, development of digital talent, and acceleration of primary legislation and international relations. The language used is clear, objective, and value-neutral, with a formal register and precise word choice. The text adheres to conventional structure and formatting features, including consistent citation and footnote style. The sentences and paragraphs create a logical flow of information with causal connections between statements. The text is free from grammatical errors, spelling mistakes, and

punctuation errors. No changes in content have been made. Organization X implements policies related to the four pillars of the digital literacy program: digital skills, digital safety, digital culture, and digital ethics. These policies aim to develop digital talent. According to the Head of the Personnel and Organization Bureau at the Secretariat General of the Ministry of Communication and Information, the four pillars of digital literacy are currently encouraging ASNs to adopt a more open-minded and open-hearted approach, enabling them to become problem solvers within their work units. This shift in mindset aims to transform the current work culture from reactive to proactive, promoting agility over sluggishness (KOMINFO, 2022). Therefore, for ASN to be effective in organization X, it is important to be adaptable to environmental changes and the current digital acceleration.

Agility is a concept that occurs at various levels in organizations. It is categorized into organizational agility, team agility, and individual agility, all of which contribute to keeping pace with dynamic environments (Pulakos et al., 2019). The emphasis on employee and individual agility has become an attribute of sustainable and competitive organizations simultaneously (Munteanu et al., 2020). Individual agility, also known as workforce agility, is a management strategy that enables companies to respond quickly and effectively to emerging threats and opportunities in a competitive and volatile business environment (Tessarini & Saltorato, 2021). Workforce agility is a multidimensional approach that belongs to the domain of organizational and manufacturing agility. Workforce agility is a complex topic studied mainly in the field of operations management, with a focus on the plant level (Qin & Nembhard, 2015). It refers to the combination of talents, abilities, skills, and knowledge that enable companies to proactively, responsively, and resiliently perform the tasks required to achieve organizational success while adapting to various environmental changes (Ganemi & Chalabi, 2021). Sya & Mangundjaya (2020) state that agile employees are trained to be flexible and adapt quickly.

Tien, Hsu, and Hsing's (2020) research suggests that improving workforce agility can motivate employees to expand their knowledge and skills beyond their current expertise, facilitating collaboration and encouraging innovative thinking. Franco and Landini (2022) found that firms with higher labor agility are more likely to innovate due to the effective exchange of information and experience between employees. Although employees are recognized as an important source of competitiveness and a key driver of agility and change (Holbeche, 2018; Munteanu et al., 2020), workforce agility is still one of the least studied aspects to date (Harsch & Festing, 2020; Muduli & Pandya, 2018; Storme et al., 2020). The absence of systematic reviews on labor agility is a clear indication of the lack of research in this area.

Work engagement is crucial for organizations as it affects various aspects of work performance and culture. Engaged employees tend to have better working relationships and provide better service to customers. Research has also shown a significant positive correlation between work engagement and workforce agility. When employees are highly engaged, they tend to be more motivated, resulting in increased workforce agility (Natapoera & Mangundjaya, 2020; Fitradilla, 2022). Additionally, a study has shown that work engagement mediates the relationship between workforce agility and adaptive performance (Saptarini & Mustika, 2023). Therefore, work engagement is crucial in influencing workforce agility and overall organizational performance. Improving employee work engagement can contribute to enhancing workforce agility in organizations.

To maintain agility in Organization X, a psychological program should be planned for employees to feel empowered by the organization. Psychological empowerment aims to enable employees to feel empowered and capable of completing their work effectively, allowing them to better respond to customer needs and adapt to today's complex and changing environment (Nadhira & Mangundjaya, 2020). The psychological empowerment variable is crucial in promoting workforce agility (Muduli, 2016). Muduli and Pandya (2018) stated that workforce agility is influenced by the dimension of psychological empowerment known as self-determination. This dimension suggests that individuals who feel empowered by the organization are more motivated to exhibit proactive, adaptive, and resilient behavior. Psychological empowerment can influence employees in their decision-making and problem-solving, providing insight and new knowledge in the workplace (Maan et al., 2020). Empowered employees can easily exchange ideas and express their opinions (Newman et al., 2017).

Organisation X is a public service bureaucratic organization under the Ministry of Communication and Information Technology. According to Farel (1966), bureaucracy is a hierarchical structure that involves differentiation and competence. The hierarchy refers to the positions within the organization that result in differences in duties and authority between members. The differentiation being discussed is the variance in duties and authority among members of a bureaucratic organization in achieving goals. If the bureaucratic structure is not conducive to existing policies, it can render resources ineffective and hinder organizational agility. This study aimed to determine whether enhancing psychological empowerment and work engagement can impact workforce agility in Organization X.

## II. METHODS

This study employed a non-experimental quantitative methodology. The Workforce Agility Scale (Sherehiy, 2008), comprising 39 questions, was used to measure workforce agility. Psychological empowerment was measured using the Psychological Empowerment Scale (Spreitzer, 1995), which consists of 12 questions. The study measured work engagement variables using the UWES-17 (Schaufeli & Bakker, 2004), which comprised 17 questions. A pilot test of the measuring instrument was conducted before data collection. Four invalid items were identified on the Workforce Agility Scale measuring instrument during analysis. Consequently, the research questionnaire comprised 64 questions. The Moderation Regression Analysis (MRA) technique was used with SPSS version 23 software to test the research model. The purpose of this analysis was to determine whether the psychological empowerment variable, as a moderator, could increase or decrease the influence of work engagement on workforce agility.

Data collection took place between July 3, 2022, and July 20, 2022, through an online questionnaire distributed via WhatsApp broadcast messages. The study population consisted of 447 employees of ASN in organization X. Sample size calculation was performed using the Slovin technique, as described by Sugiyono (2011). Using this formula, the sample of respondents in this study was adjusted to 211 people from all the total ASN employees in organization X. However, after data collection was carried out, only 122 respondents were obtained, which did not meet Slovin's calculations. Therefore, other calculations were used to determine whether the sample data obtained could represent the population or not. The researchers employed McClave's formula for standard deviation (standard error).

*Table 1. Demographic Data*

<i>Demographic Data</i>		<i>Frequency</i>	<i>Percentage (%)</i>
<i>Gender</i>	<i>Men</i>	76	62.3
	<i>Women</i>	46	37.7
<i>Year Of Birth</i>	<i>Gen X</i>	59	48.4
	<i>Gen Y</i>	48	39.3
	<i>Gen Z</i>	15	12.3
<i>Last Education</i>	<i>High School</i>	2	1.6
	<i>Diploma III</i>	8	6.6
	<i>Bachelor</i>	77	63.1
	<i>Magister</i>	34	27.9
	<i>Doctoral</i>	1	0.8
<i>Employment Status</i>	<i>PNS</i>	90	73.8
	<i>PPPK</i>	32	26.2
<i>Length of Service</i>	<i>&lt;5 year</i>	30	24.6

Table 1 presents the demographic information of respondents from organization X. The study participants are State Civil Apparatus (ASN) who work in organization X. ASN is divided into two categories: PNS and PK. PNS are Indonesian citizens who meet specific requirements and are appointed as permanent ASN employees by civil service officials to occupy government positions. Meanwhile, Government Employees with Work Agreements (PPPK) are Indonesian citizens who meet certain requirements and are appointed based on a work agreement for a certain period to carry out government duties. Table 1 shows that out of 122 respondents, 90 were civil servants and 32 were PPPK employees.

### III. RESULTS AND DISCUSSION

Before conducting the MRA analysis, a regression test was performed on work engagement and workforce agility. Table 2 shows that the coefficient of determination (R<sup>2</sup>) is 0.357, indicating that 35.7% of work engagement variables affect workforce agility.

*Table 2. Test Results: Coefficient of Determination of Work Engagement on Workforce Agility*

<i>R</i>	<i>R<sup>2</sup></i>	<i>Sig.</i>
0,597	0,357	0,000

Based on Table 3, the MRA analysis test was conducted by adding the psychological empowerment variable as a moderating variable. The result of the R<sup>2</sup> coefficient is 0.592 or 59.2%, indicating an increase in the value of influence after adding the psychological empowerment variable as a moderating variable.

*Table 3. Test Results: Coefficient of Determination of Work Engagement and Psychological Empowerment as Moderating Variables on Workforce Agility*

<i>R</i>	<i>R<sup>2</sup></i>	<i>Sig.</i>
0,769	0,592	0,000

Organizations face numerous challenges in a highly dynamic and unpredictable environment. To remain competitive and drive employee performance, companies must demonstrate a significant level of agility. Agile employees are flexible and adaptable when faced with new activities or policies provided by the organization. Organizations that enhance workforce agility enable employees to modify their capacities and capabilities, thereby promoting innovation within the organization. Work engagement, which refers to positive and satisfying feelings related to work, plays a crucial role in strengthening employee agility within the organization. The study shows that work engagement has a 35.7% impact on workforce agility. Natapoera and Mangundjaya (2020) explain that work engagement has a positive influence on workforce agility. The MRA test showed a positive increase to 59.2%. According to Shah et al (2017), employees who experience positive psychological empowerment are better able to respond to customer needs and adapt to a complex and changing environment. Some studies suggest that psychological empowerment has a positive effect on work engagement. Meng & Sun (2019) found a positive relationship between psychological empowerment and work engagement, which in turn affects organizational performance.

Improving workforce agility is crucial for creating an agile organization. Organizations depend more on their employees' ability to create an agile organization than on technology. This is because employees with workforce

agility can help the organization achieve its goals through innovation and improved strategic capabilities. Employees who possess good workforce agility exhibit a positive attitude towards self-development and can readily adapt to changes within the organization, as well as new ideas and technologies. Additionally, they are capable of producing innovative solutions and are accountable for their work. These attributes can significantly enhance organizational performance, enabling the organization to remain competitive and thrive in unstable conditions.

#### IV. CONCLUSION

According to the study's findings, work engagement has a 35.7% influence on workforce agility. This influence increases by 59.2% when moderated by psychological empowerment. Work engagement refers to employees' positive feelings towards their work, which can enhance motivation. Psychological empowerment can moderate work engagement, which enables employees to innovate in their work.

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#### REFERENCES

- AL-Ganemi, S. S. W., & Chalab, I. D. (2021). *International Journal Of Transformations In Business Management*.
- Amaliah, R., Amin, A.M., Dipoadmodjo, T.S., Kurniawan, A.W., & Haeruddin, M.I. (2023). The Influence of Psychological Empowerment on Workforce Agility of Office Staff Housing Provision Study Province of West Sulawesi. *Economics and Business Journal (ECBIS)*.
- Fitradilla, L. (2022). *Pengaruh Work Engagement dan Self-Efficacy Terhadap Workforce Agility* (Doctoral dissertation, Universitas Gadjah Mada).
- Franco, C., & Landini, F. (2022). Organizational drivers of innovation: The role of workforce agility. *Research Policy*, 51(2), 104423.
- Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organizational agility – A qualitative exploration. *Human Resource Management*, 59(1), 43-61. <https://doi.org/10.1002/hrm.21972>
- Holbeche, L. S. (2018). Organisational effectiveness and agility. *Journal of Organizational Effectiveness: People and Performance*, 5(4), 302-313. <https://doi.org/10.1108/JOEPP-07-2018-0044>
- Maan, A. T., Abid, G., Butt, T. H., Ashfaq, F., & Ahmed, S. (2020). Perceived organizational support and job satisfaction: a moderated mediation model of proactive personality and psychological empowerment. *Future Business Journal*, 6(1), 1-12.
- Meng, Q., & Sun, F. (2019). The impact of psychological empowerment on work engagement among university faculty members in China. *Psychology research and behavior management*, 983-990.
- Muduli, A. (2016). Exploring the facilitators and mediators of workforce agility: an empirical study. *Management Research Review*, 39(12), 1567-1586. <https://doi.org/10.1108/mrr-10-2015-0236>
- Muduli, A., and Pandya, G. (2018). Psychological empowerment and workforce agility. *Psychol. Stud.* 63, 276–285. doi: 10.1007/s12646-018-0456-8
- Munteanu I, Newcomer K. Leading and learning through dynamic performance management in government. *Public Adm Rev.* 2020;80 (2):316–325. doi:10.1111/puar.13126
- Nadhira Putri, D., & Mangundjaya, W. (2020). Examining the effects of organizational learning on workforce agility through psychological empowerment. *Open Journal for Psychological Research*, 4(2).
- Natapoera, M., & Mangundjaya, W. (2020, August). The effect of employee involvement and work engagement on workforce agility. In *Proceedings of the 3rd International Conference on Administrative Science, Policy, and Governance Studies, ICAS-PGS 2019, October 30-31, Universitas Indonesia, Depok, Indonesia*.
- Newman, A., Donohue, R., Eva, N., 2017a. Psychological safety: a systematic review of the literature. *Hum. Resour. Manag. Rev.* 27 (3), 521e535.
- Pulakos, E. D., Kantrowitz, T., & Schneider, B. (2019). What leads to organizational agility: It's not what you think. *Consulting Psychology Journal: Practice and Research*, 71(4), 305.

- Qin, R., & Nembhard, D. A. (2015). Workforce agility in operations management. *Surveys in Operations Research and Management Science*, 20(2), 55-69. <https://doi.org/10.1016/j.sorms.2015.11.001>
- Saptarini, N. I., & Mustika, M. D. (2023). Workforce Agility And Adaptive Performance In Government Institution: The Mediating Role Of Work Engagement. *Jurnal Manajemen dan Kewirausahaan*, 25(1), 55-62.
- Sherehiy, B. (2008). Relationships between agility strategy, work organization, and workforce agility. University of Louisville.
- Sya, I. S., & Mangundjaya, W. (2020, August). The Moderating Effect of Perceived Organizational Support in Relationship between Affective Commitment and Workforce Agility in Workplace. In ICAS-PGS 2019: Proceedings of the 3rd International Conference on Administrative Science, Policy, and Governance Studies, ICAS-PGS 2019, October 30-31, Universitas Indonesia, Depok. Indonesia (p. 140). European Alliance for Innovation.
- Tessarini Junior, G., & Saltorato, P. (2021). Workforce agility: a systematic literature review and a research agenda proposal. *Innovar*, 31(81), 155-167.
- Tien, C. T., Hsu, K. C., & Hsing, Y. H. (2020). The Mediated Effect of Workforce Agility on the Relationship of IT Leveraging Competence and Entrepreneurship. In 2020 The 4th International Conference on E-Society, E-Education and E-Technology (pp. 110-113).

# Financial Distress Analysis to Predict the Bankruptcy Rate of State-Owned Banks Using the Altman Z-Score Method (Case Study on Commercial Banks of Persero Listed on the Indonesia Stock Exchange for the 2019 – 2021 Period)

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## ABSTRACT

**Purpose:** Bankruptcy is the inability of a company to continue its operations due to a decline in its financial condition and has liabilities or debts that are greater than the value of its assets. This study aims to predict the level of bankruptcy of state-owned banks using the Altman Z – Score method.

**Design/methodology/approach:** This study uses a quantitative research approach with the Z – Score method. The data used is secondary data in the form of state-owned commercial bank financial reports for the period 2019 – 2021 which are listed on the Indonesia Stock Exchange (IDX), taken from the official website at [www.idx.co.id](http://www.idx.co.id). The variables used consist of 4 independent variables and 1 dependent variable, namely Working Capital to Total Assets (X1), Retained Earnings to Total Assets (X2), Earnings Before Interest and Taxes to Total Assets (X3) and Book Value of Equity to Book Values of Debt (X4) and analysis index Z – Score (Z).

**Findings:** The results of the Z – Score calculation, the four banks in this study are in the Gray Area and Distress Area categories because working capital, retained earnings and operating profits are smaller than their total assets, and the amount of debt is greater than their total equity. The chance of bankruptcy will be even greater if the company's management does not immediately make improvements or evaluate the company's financial condition.

**Paper type:** Research paper

**Keyword:** Bankruptcy, Method – Z Score, Government Bank (BUMN)

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## I. INTRODUCTION

Banking plays an important role in people's lives. Banking activities are so influenced by customer trust or the wider community. Banks are considered the driving force of a country's economy. Four banks with government-owned status received the title of market leader from 118 banks in Indonesia, namely Bank BRI, Mandiri, BNI and BTN. Because of its position as a market leader with a large market share, the performance of state-owned banks greatly affects the performance of national banks. If the performance of state-owned banks is good, the overall banking industry performance will also be good (Emilia, 2018).

As an effort to anticipate bankruptcy, one of the tools used by companies to assess the company's condition is the financial statements produced every period. In order for the company to know more clearly the current condition of the company, the company can compare the current financial statements with the previous period's financial statements. One analysis method that has proven to provide many benefits is the Z-Score model. This model was developed by Edward I Altman, a financial economist. This model is a development of the statistical technique of multiple discriminants that combine the effects of several variables. Altman's model is a financial analysis model that has been widely used in the United States (Sarwani & Sunardi, 2019).

Based on the phenomenon in the background above, problems can be formulated, namely: Can the Altman Z – Score method be used to assess the bankruptcy rate of commercial banks for the 2019-2021 period.



Based on the background above, the title of this study is "Financial Distress Analysis to Predict the Bankruptcy Rate of State-Owned Banks Using the Altman Z – Score Method (Case Study of a Company Commercial Bank Listed on the IDX for the 2019 – 2021 Period).

### **A. Problem Statement**

Based on the background of the above problems, the problems that will be discussed and sought answers in this study are: "How is the potential for bankruptcy in Government Banks (SOEs) listed on the Indonesia Stock Exchange from 2019-2021 based on the Z – Score analysis method?".

### **B. Literature Review**

#### **1. Bankruptcy**

Bankruptcy according to Supriadi (2020:232) is the inability of a company to continue its operations because its financial condition has decreased and has liabilities or debts that are greater than the value of its assets. Bankruptcy is usually interpreted in layman terms as the company's failure to carry out the company's operations to generate profits. Bankruptcy analysis is very important to be analyzed early to obtain early signs of bankruptcy so that in this case it can minimize the risk of bankruptcy.

According to Altman (2019), bankruptcy is a failure that occurs in a company. Some of the reasons companies can fail include:

- a. Poor operating performance and high levels of leverage
- b. Lack of technological innovation
- c. High rate of new business formation
- d. Major industrial deregulation
- e. Unexpected liabilities

#### **2. Altman-Score Ratios**

The ratios in the Altman Z – Score method each describe their own company. The Altman Z-Score model is a multivariable equation analysis method used to predict the bankruptcy rate of a company. The financial variables used in the analysis of the Altman model are as follows:

1.  $X_1$  = Net Working Capital to Total Assets  
This ratio shows the company's ability to generate net working capital from all its total assets.
2.  $X_2$  = Retained Earnings to Total Assets  
This ratio shows the company's ability to generate retained earnings from its total assets. Retained earnings usually occur because shareholders allow the company to make further investments in profits that are not distributed as dividends, as reserve capital / business development or to pay company debts.
3.  $X_3$  = Earnings Before Interest and Taxes to Total Asset)  
This ratio shows the company's ability to generate profits from company assets before tax or interest.
4.  $X_4$  = Book Value of Equity to Book Value of Debt)  
This ratio shows the company's ability to measure the company's ability to manage all of the company's capital against its debts.
5.  $Z = Z - \text{Score}$

From the financial statement data then analyzed using financial ratios that have been substituted into the modified Z - Score formula with the following formula:

$$Z = 6.56 X_1 + 3.26 X_2 + 6.72 X_3 + 1.05 X_4$$

Provided:

A  $Z < 1.1$  indicates the company is in a state of bankruptcy

$1.1 < Z < 2.6$  indicates the company is within the Grey Area

$Z > 2.6$  indicates the company is in a Save zone condition

#### **3. Financial Distress**

Financial distress can mean everything from liquidation difficulties which are the mildest financial difficulties, all the way to bankruptcy declarations, which are the most severe financial difficulties.

According to Simanjuntak et al. (2017), financial ratios simultaneously have a significant effect on financial distress. In this case, financial distress can be measured using financial ratios. Financial distress can be caused by several factors such as:

- a. Revenues that have decreased significantly.
- b. Decrease in net income and cash flow from operations.
- c. The stock market price declined significantly.
- d. Decrease in total assets.

- e. The possibility of failure in an industry with high risk.
- f. Young companies generally experience difficulties in the early years of operation, then if not supported by strong sources of capital will end in bankruptcy.
- g. Significant deductions in dividends

Platt & Platt (2002) deep Gobenvy (2013) Stating there are several ways to test that a company is experiencing financial distress, such as:

1. There is a termination of labor or non-payment of dividends.
2. Interest Coverage Ratio.
3. Smaller cash flow than current long-term debt.
4. Net operating income was negative.
5. There is a change in the price of equity.
6. The company ceased operations at the authority of the government and the company was required to carry out restructuring planning.
7. The company suffered a technical breach in debt and it is predicted that the company will go bankrupt in the coming period.
8. Have a negative Earning Per Share (EPS).

**C. Thinking Framework**

The conceptual framework of this research is as follows:

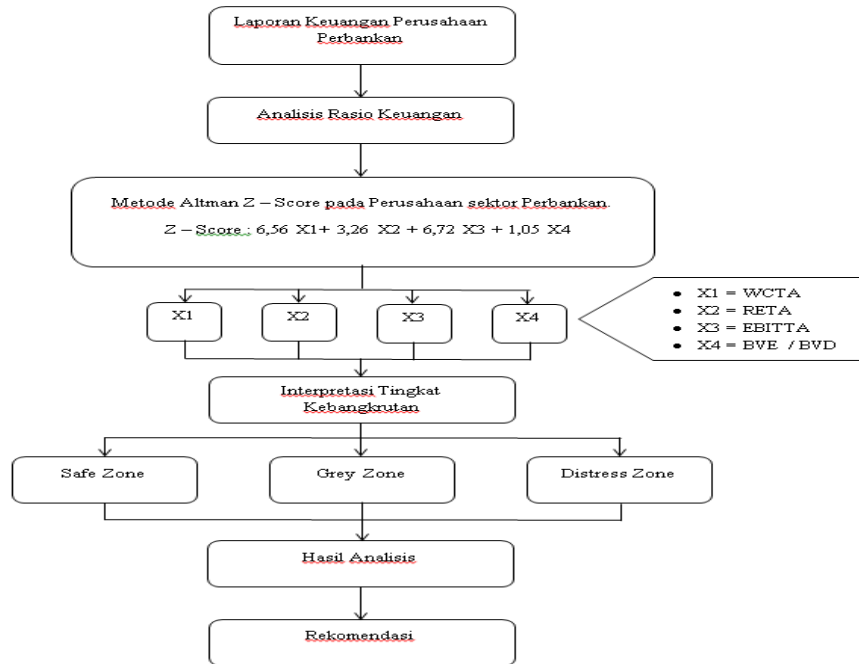


Figure 1 Thinking Framework Image

**II. METHODS**

**A. Research Approach**

This study aims to predict the bankruptcy rate of the persero bank using the Altman Z – Score method. This study used a quantitative research approach with the Z – Score method.

Quantitative research is the activity of collecting data, processing analysis, and presenting data based on the amount carried out objectively to solve a problem or test a hypothesis to develop general principles (Duli, 2019).

Quantitative methods can be interpreted as research methods based on the philosophy of positivism, used to examine certain populations or samples, data collection using research instruments, quantitative or statistical data analysis, with the aim of describing and testing hypotheses that have been established (Sugiyono, 2018:15).

So, the research conducted in this study uses quantitative methods because the data needed from the objects in this study are data expressed in the form of numbers, and are the results of calculations and measurements of the value of each variable.

## **B. Research Object**

The object of research is an attribute or trait or value of people, objects, organizations or activities that have certain variations determined by researchers to be studied and then drawn conclusions (Sugiyono, 2018:57).

The object of research in this study is a persero bank with a unit of analysis of financial ratios from the financial statements of related companies.

## **C. Population and Sample**

### **1. Population**

A population is a group of people (or institutions, events, or other subjects of study) that want to be described or that want to be generalized (Vogt & Johnson, 2015). While Population according to Sugiyono (2018:130) is a generalization area consisting of objects or subjects that have certain quantities and characteristics that are determined by researchers to be studied and then drawn conclusions.

Based on the population definition above, the population in this study is all 4 commercial banks consisting of Bank BRI, Bank BNI, Bank BTN and Bank Mandiri and have been registered on the IDX for the 2019-2021 period.

### **2. Sample**

The research sample is part of the number and characteristics possessed by that population. When a population is large, researchers may not take all of it for research, then researchers can use samples taken from that population. Thus, it can be concluded that the sample is part of the number and characteristics of the population studied (Sugiyono, 2018).

According to Sugiyono (2018) Sampling technique is a technique used in sampling. There are various sampling techniques used in determining research samples. The sampling technique used in this study is using the non-probability sampling method.

According to Sugiyono (2018), Non probability sampling is a sampling technique that does not provide equal opportunities for every element or member of the population to be selected as a sample. The non-probability sampling technique used in this study is using a saturated sampling technique, which is sampling if all members of the population are used as samples.

Based on the explanation above, the sample of this study will be 100% of the existing population, namely all commercial banks consisting of 4 banks, namely Bank BRI, Bank BNI, Bank BTN and Bank Mandiri within 3 years.

## **D. Types, Sources and Techniques of Data Collection**

### **1. Data Types and Sources**

Data plays an important role in research, especially quantitative research. Data is a collection of useful information obtained from the field or directly used for research materials (I Made, 2020).

The type and source of data used in this study is secondary data taken from the official website of the Indonesia Stock Exchange, namely in [www.idx.co.id](http://www.idx.co.id).

### **2. Data Collection Techniques**

Data collection technique is a process or procurement for research purposes where the data collected is to test hypotheses that have been formulated (Rukajat, 2018:6).

Data is obtained from literature studies and financial statements published and audited during the period 2019 – 2021 by related banking companies. The method used to get the desired data is to open the official website of the object under study so that it will get data and a general description of the company and the development of the company.

## **E. Data Analysis Techniques**

### **1. Analisis Altman Z – Score**

The data analysis technique in this study uses the Altman Z method – Score modification. Z – Score is one of the time-tested multivariate models. This model was developed by Edward I Altman (1968), a financial economist. Z-Score is a multivariable equation used by Altman to predict bankruptcy rates (Prihadi, 2019:468).

Altman found several adjustments of the Z-Score model to different types of companies so that this method could be applied to all companies. In the modified Z – Score model there are 4 variables, each of which represents

a financial ratio. These variables are combined to see the company's bankruptcy rate. Here is the formula used for Altman Z – Score modification:

$$Z = 6.56 X1 + 3.26 X2 + 6.72 X3 + 1.05 X4$$

The "cut off" values for this index are:

Z < 1.1 : Bangkrut

1.1 < Z < 2.6 : Grey Area

Z > 2.6 : Save Zone

Information:

X1 = Working Capital To Total Asset

X2 = Retained Earning To Total Asset

X3 = EBIT To Total Asset

X4 = Total Equity to Total Debt Ratio

Z = Overall Index

In the Altman Z – Score model, variable modification X5 is not used. Because, non-manufacturing companies generally offer services instead of selling goods. The value of X5 describes asset turnover whose philosophy is to understand how efficiently the asset is able to generate income. In service companies, fixed assets are usually not directly related to income.

### III. RESULTS AND DISCUSSION

#### A. Description of Research Results Data

In this study the data used consisted of 4 independent variables and 1 dependent variable, namely Working Capital to Total Asset (X1), Retained Earning to Total Asset (X2), Earning Before Interest And Taxes to Total Asset (X3) and Book Value of Equity to Book Values of Debt (X4) and Z – Score (Z) analysis index.

The data used in this study is secondary data in the form of financial statements of commercial banks starting from the period 2019 – 2021 taken from the official website of the Indonesia Stock Exchange (IDX) in [www.idx.co.id](http://www.idx.co.id).

#### 1. Altman Z Variable Calculation – Score

##### a. Working Capital to Total Asset (X1)

This ratio shows the company's ability to generate net working capital from all its total assets. The calculation of this ratio is by dividing the net working capital by the total assets or total assets owned by the company. Meanwhile, net working capital itself is calculated from the results of reducing current assets with current debt. If the net working capital is negative, the company will most likely face problems paying off its debt. Conversely, if net working capital is positive, the company rarely faces difficulties in paying off debt.

Table 1 Calculation of Net Working Capital for 2019 – 2021 (in millions of rupiah)

Bank Name	Year	Current Assets (Rp)	Current Debt (Rp)	Net Working Capital (Current Assets – Current Debt)(Rp)
BRI	2019	1.365.501.785	1.206.509.138	158.992.647
	2020	1.533.960.257	1.379.133.070	154.827.187
	2021	1.598.104.881	1.385.809.555	212.295.326
BNI	2019	805.407.068	660.280.743	145.126.325
	2020	844.604.295	731.265.926	113.338.369
	2021	910.357.028	787.136.412	123.220.616

<i>BTN</i>	2019	301.771.108	281.940.964	19.830.144
	2020	346.109.477	331.026.129	15.083.348
	2021	355.222.815	341.701.920	13.520.895
<i>Mandiri</i>	2019	1.245.828.742	1.191.727.756	54.100.986
	2020	1.457.965.035	1.336.613.933	121.351.102
	2021	1.637.152.320	1.502.862.703	134.289.617

Sumber : [www.idx.co.id](http://www.idx.co.id), diolah

*Table 2 Total Assets of Commercial Bank Persero (in millions of rupiah)*

<i>Bank Name</i>	<i>Year</i>	<i>Total Asset</i>
<i>BRI</i>	2019	1.416.758.840
	2020	1.610.065.344
	2021	1.678.097.734
<i>BNI</i>	2019	845.605.208
	2020	891.337.425
	2021	964.837.692
<i>BTN</i>	2019	311.776.828
	2020	361.208.406
	2021	371.868.311
<i>Mandiri</i>	2019	1.318.246.335
	2020	1.541.964.567
	2021	1.725.611.128

Sumber : [www.idx.co.id](http://www.idx.co.id)

Based on the table of working capital and total assets above, the variable value X1 (*Working Capital to Total Assets*) can be calculated which is presented in the following table:

Table 1 X Ratio Calculation<sub>1</sub> (Working Capital to Total Assets) Commercial Bank of the Company for the period 2019 – 2021. (in millions of rupiah)

Bank Name	Year	Net Working Capital(Rp)	Total Asset (Rp)	$XI = \frac{\text{Modal Kerja Bersih}}{\text{Total Asset}}$ (IDR)
BRI	2019	158.992.647	1.416.758.840	0,112
	2020	154.827.187	1.610.065.344	0,096
	2021	212.295.326	1.678.097.734	0,127
BNI	2019	145.126.325	845.605.208	0,172
	2020	113.338.369	891.337.425	0,127
	2021	123.220.616	964.837.692	0,128
BTN	2019	19.830.144	311.776.828	0,064
	2020	15.083.348	361.208.406	0,042
	2021	13.520.895	371.868.311	0,036
Mandiri	2019	54.100.986	1.318.246.335	0,041
	2020	121.351.102	1.541.964.567	0,079
	2021	134.289.617	1.725.611.128	0,078

From the calculation of table 4.11 ratio  $X_1$  (Working Capital to Total Assets) we can know the fluctuating value of *working capital to total assets* of commercial banks of the company each year:

- Bank BRI in 2019 – 2021 consecutively, namely 0.112; 0,096; 0,127.
- Bank BNI in 2019 – 2021 consecutively, namely 0.172; 0,127; 0,128.
- Bank BTN in 2019 – 2021 consecutively, namely 0.064; 0,042; 0,036.
- Bank Mandiri in 2019 – 2021 consecutively, namely 0.041; 0,079; 0,078

In addition, there was a decline in 2020 in working capital to total assets of the four banks. However, only BRI and BNI banks finally survived in 2021, while BTN and Mandiri banks had their working capital value declining.

From the calculation of *working capital to total assets*, it can be concluded that commercial banks (SOEs) are less relative to their total capitalization. This can be seen from the value of working capital to total assets of the four banks has not been able to generate working capital greater than Rp. 1.00 for every 1.00 assets or it can be said that every Rp. 1.00 total assets can only be guaranteed by net working capital equal to the value of each of these banks.

#### **b. Retained Earnings to Total Asset ( $X_2$ )**

This ratio is an indicator of cumulative profitability about the length of time an enterprise takes to build cumulative profit. In other words, the younger the company, the less time it has to build the company's profits and the more likely it is to experience business failure. If a company loses, then the total and value of retained earnings in the company will decrease. The following is a table of retained earnings owned by each commercial bank company.

This ratio is calculated by dividing retained earnings by total assets owned. The following is the value of *retained earnings* presented in table 4.12

Table 2 Retained Earnings in 2019 – 2021 (in millions of rupiah)

No	Bank Name	Year		
		2019	2020	2021
1	BRI	181.327.431	166.972.167	185.009.048
2	BNI	82.463.505	66.980.701	78.250.204
3	BTN	13.361.997	8.763.294	11.139.521
4	Mandiri	138.986.941	119.556.775	142.587.934

Sumber : [www.idx.co.id](http://www.idx.co.id)

Based on the table above, it can be calculated the variable value X2 (*Retained Earning to Total Assets*) which is presented in the following table:

Table 3 Calculation of the ratio X2 (retained earnings to total assets) of commercial banks for the period 2019 – 2021 (in millions of rupiah)

Bank Name	Year	Retained Earnings	Total Assets	$X2 = \frac{\text{Laba Ditahan}}{\text{Total Assets}}$
		(IDR)	(IDR)	(IDR)
BRI	2019	181.327.431	1.416.758.840	0,128
	2020	166.972.167	1.610.065.344	0,104
	2021	185.009.048	1.678.097.734	0,110
BNI	2019	82.463.505	845.605.208	0,098
	2020	66.980.701	891.337.425	0,075
	2021	78.250.204	964.837.692	0,081
BTN	2019	13.361.997	311.776.828	0,036
	2020	8.763.294	361.208.406	0,024
	2021	11.139.521	371.868.311	0,036
Mandiri	2019	138.986.941	1.318.246.335	0,105
	2020	119.556.775	1.541.964.567	0,078

2021 142.587.934 1.725.611.128 0,083

In table 4.13, we can find the calculation of the ratio  $X_2$  (*Retained Earning to Total Assets*). The value of *retained earnings to total assets* of the company's commercial banks in 2019 – 2021 is as follows:

1. Bank BRI in 2019 – 2021 consecutively, namely 0.128; 0,104; 0,110.
2. Bank BNI in 2019 – 2021 consecutively, namely 0.098; 0,075; 0,081.
3. Bank BTN in 2019 – 2021 consecutively, namely 0.036; 0,024; 0,036.
4. Bank Mandiri in 2019 – 2021 consecutively, namely 0.105; 0,078; 0,083.

Based on the graph of retained earnings to total assets owned by each bank, it can be seen that from 2019 to 2021 the value of *retained earnings to total assets* was dominated by BRI, then Mandiri, BNI and BTN.

In addition, there was a decrease in 2020 in retained earnings to total assets at each bank. However, the four banks were able to survive again in 2021.

From the calculation of retained earnings on the total assets owned by each bank, it can be seen that the four banks are not able to generate retained earnings as expected. It can be seen that for every Rp. 1.00 of assets, no one has been able to generate retained earnings greater than Rp. 1.00.

**c. Earnings Before Interest and Taxes to Total Asset ( $X_3$ )**

This ratio shows the company's ability to generate profits from company assets before interest and taxes. In other words, this ratio measures the productivity of the company in obtaining profit before tax or interest. The following is the EBIT table of each of the company's commercial banks.

This ratio is calculated by dividing earnings before interest and tax by the total assets owned. The following are the values of *earnings before interest and taxes* presented in table 6.

Table 4 Earning Before Interest And Taxes In 2019 – 2021 (In Million Rupiah)

No	Bank Name	Year		
		2019	2020	2021
1	BRI	43.364.053	27.612.364	38.591.374
2	BNI	19.369.106	5.112.153	12.550.987
3	BTN	411.062	2.270.857	2.993.320
4	Mandiri	36.441.440	24.392.405	38.358.421

Sumber : [www.idx.co.id](http://www.idx.co.id)

Based on the table above, it can be calculated the variable value  $X_3$  (Earning Before Interest And Taxes to Total Assets) which is presented in table 4.15 below:

Table 5 Calculation of  $X_3$  Ratio (Earning Before Interest And Taxes To Total Assets) of Commercial Banks of Persero for the period 2019 – 2021 (in millions of rupiah)

Bank Name	Year	EBIT	Total Assets	$X_3 = \frac{EBIT}{Total Assets}$
		(IDR)	(IDR)	(IDR)
BRI	2019	43.364.053	1.416.758.840	0,031
	2020	27.612.364	1.610.065.344	0,017



	2021	38.591.374	1.678.097.734	0,022
BNI	2019	19.369.106	845.605.208	0,023
	2020	5.112.153	891.337.425	0,006
	2021	12.550.987	964.837.692	0,013
BTN	2019	411.062	311.776.828	0,001
	2020	2.270.857	361.208.406	0,006
	2021	2.993.320	371.868.311	0,008
Mandiri	2019	36.441.440	1.318.246.335	0,027
	2020	24.392.405	1.541.964.567	0,016
	2021	38.358.421	1.725.611.128	0,022

From the calculation of table 4.15, namely the ratio  $X_3$  (*Earnings Before Interest And Taxes to Total Assets*), it can be seen that the value of *earnings before interest and taxes to total assets* of commercial banks in 2019 – 2021 is as follows:

- Bank BRI in 2019 – 2021 consecutively, namely 0.031; 0,017; 0,022.
- Bank BNI in 2019 – 2021 consecutively, namely 0.023; 0,006; 0,013.
- Bank BTN in 2019 – 2021 consecutively, namely 0.001; 0,006; 0,008.
- Bank Mandiri in 2019 – 2021 consecutively, namely 0.027; 0,016; 0,022.

In addition, we can see that only BTN bank experienced an increase in profit before interest and tax on total assets owned. One of the reasons for the increase in profit is the housing sector mortgage which supports the fertile coffers of BTN's profit which moved positively amid the correction in economic growth due to the pandemic. This also increases the potential in the property sector of Bank BTN and will affect the increase in net profit ([www.btn.co.id](http://www.btn.co.id)).

From the calculation of earnings before interest and taxes on the total assets owned by each bank, we can see that the productive assets of banking companies have not been able to generate operating profits as expected. It can be seen that for every Rp. 1.00 asset, it has not been able to generate interest and taxes greater than Rp. 1.00.

#### **d. Book Value of Equity to Book Value of Debt ( $X_4$ )**

This ratio shows the company's ability to measure the company's ability to manage all of the company's capital against its debts.

This ratio is calculated by dividing the total yield of equity (capital) by the total liabilities (debt) owned. The following is the *book value of equity to book value of debt* (earnings before interest and taxes) presented in table 4.16.

*Table 6 Calculation of ratio  $X_4$  (Book Value of Equity to Book Value of Debt) (in millions of rupiah)*

Bank Name	Year	Total Equity	Total Liabilities	$X_4 = \frac{\text{Total Ekuitas}}{\text{Total Liabilitas}}$
		(IDR)	(IDR)	(IDR)
BRI	2019	208.784.336	1.207.974.504	0,173

	2020	229.466.882	1.380.598.462	0,176
	2021	291.786.804	1.386.310.930	0,210
BNI	2019	125.003.948	720.601.260	0,173
	2020	112.872.199	778.465.226	0,145
	2021	126.519.977	838.317.715	0,151
BTN	2019	23.836.195	287.940.633	0,083
	2020	19.987.845	341.220.561	0,069
	2021	21.406.647	350.461.664	0,061
Mandiri	2019	209.034.525	1.109.211.810	0,188
	2020	204.699.668	1.337.264.899	0,153
	2021	222.111.282	1.503.499.846	0,148

From the calculation of the ratio  $X_4$  (*Book Value of Equity to Book Value of Debt*), it can be known the *value of book value of equity to book value of debt* of commercial banks of the company for 2019 – 2021 as follows:

- a. Bank BRI in 2019 – 2021 consecutively, namely 0.173; 0,176; 0,210.
- b. Bank BNI in 2019 – 2021 consecutively, namely 0.173; 0,145; 0,151.
- c. Bank BTN in 2019 – 2021 consecutively, namely 0.083; 0,069; 0,061.
- d. Bank Mandiri in 2019 – 2021 consecutively, namely 0.188; 0,153; 0,148

Based on the total capital to total debt owned by each bank, it can be seen that in 2019 the *book value of equity to book value of debt* was dominated by Mandiri, then BRI, BNI and BTN. Then in 2020 the *book value of equity to book value of debt* was dominated by BRI, then Mandiri, BNI and BTN. And in 2021 the value of *total equity to total debt* is dominated by BRI, then BNI, Mandiri and BTN.

In addition, there was a decrease in total equity to total debt at BTN and Mandiri banks. BRI bank has increased every year. Meanwhile, BNI bank which has experienced fluctuating developments.

The decrease in total equity to total debt is marked by an increase in the amount of company debt and a decrease in the value of equity in the company.

From the calculation of total equity with total liabilities at each bank, it can be seen that every Rp. 1.00 total debt can be guaranteed by Rp. 1.00 total equity. In other words, each of these banks has not been able to guarantee its total debt to equity.

## 2. Z – Score Analysis

Based on the data and calculation results of the four variables above (Working Capital to Total Assets, Retained Earning to Total Assets, Earning Before Interest And Taxes to Total Assets and Book Value of Equity to Book Value of Debt), the next step is to substitute the calculation results of  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  into the Z – Score formula as follows:

$$Z = 6,56 X_1 + 3,26 X_2 + 6,72 X_3 + 1,05 X_4$$

The "cut off" values for this index are:

OUT < 1.1 : Bangkrut  
 1,1 < Z < 2,6 : Grey Area

Out of > 2.6 : Save Zone

Information:

X1 = Working Capital To Total Asset

X2 = Retained Earning To Total Asset

X3 = EBIT To Total Asset

X4 = Total Equity to Total Debt Ratio

Z = Overall Index

The results of the Z – Score analysis are classified based on the standard or cut off value of the Z – Score index where if the value of Z – Score < 1.1 then the company is included in the category of bankruptcy (distress zone). For a Z – Score between 1.1 and 2.6, the company is included in the gray area category. Meanwhile, if the Z – Score value > 2.6, then the company is included in the healthy category (save zone).

*Table 7 Results of Analysis with the Z - Score Method at Commercial Banks of the Company in 2019 – 2021 (in Millions of Rupiah)*

<i>Bank Name</i>	<i>Year</i>	<i>X1</i>	<i>X2</i>	<i>X3</i>	<i>X4</i>	<i>With</i>	<i>Analysis Results</i>
<i>BRI</i>	<i>2019</i>	<i>0,112</i>	<i>0,128</i>	<i>0,031</i>	<i>0,173</i>	<i>1,54</i>	<i>Grey Zone</i>
	<i>2020</i>	<i>0,096</i>	<i>0,104</i>	<i>0,017</i>	<i>0,166</i>	<i>1,27</i>	<i>Grey Zone</i>
	<i>2021</i>	<i>0,127</i>	<i>0,110</i>	<i>0,022</i>	<i>0,210</i>	<i>1,55</i>	<i>Grey Zone</i>
<i>BNI</i>	<i>2019</i>	<i>0,172</i>	<i>0,098</i>	<i>0,023</i>	<i>0,173</i>	<i>1,78</i>	<i>Grey Zone</i>
	<i>2020</i>	<i>0,127</i>	<i>0,075</i>	<i>0,006</i>	<i>0,145</i>	<i>1,27</i>	<i>Grey Zone</i>
	<i>2021</i>	<i>0,128</i>	<i>0,081</i>	<i>0,013</i>	<i>0,151</i>	<i>1,35</i>	<i>Grey Zone</i>
<i>BTN</i>	<i>2019</i>	<i>0,064</i>	<i>0,036</i>	<i>0,001</i>	<i>0,083</i>	<i>0,63</i>	<i>Distress Zone</i>
	<i>2020</i>	<i>0,042</i>	<i>0,024</i>	<i>0,006</i>	<i>0,069</i>	<i>0,47</i>	<i>Distress Zone</i>
	<i>2021</i>	<i>0,036</i>	<i>0,036</i>	<i>0,008</i>	<i>0,061</i>	<i>0,47</i>	<i>Distress Zone</i>
<i>Mandiri</i>	<i>2019</i>	<i>0,111</i>	<i>0,105</i>	<i>0,027</i>	<i>0,188</i>	<i>0,98</i>	<i>Distress Zone</i>
	<i>2020</i>	<i>0,079</i>	<i>0,078</i>	<i>0,016</i>	<i>0,153</i>	<i>1,03</i>	<i>Distress Zone</i>
	<i>2021</i>	<i>0,078</i>	<i>0,083</i>	<i>0,022</i>	<i>0,148</i>	<i>1,08</i>	<i>Distress Zone</i>

From the results of the calculation of the Z – Score value, it can be seen that the results of the Z – Score analysis of the company's commercial banks for 2019 – 2021 are as follows:

1. Bank BRI's Z – Score for 2019 – 2021 is 1.54; 1,27; 1.55. Bank BRI is included in the gray area category from 2019 – 2021 because it has a Z – Score between 1.1 to 2.6.
2. Bank BNI's Z – Score for 2019 – 2021 is 1.78; 1,27; 1.35. Bank BNI is included in the gray area category from 2019 – 2021 because it has a Z – Score value between 1.1 to 2.6.
3. Bank BTN's Z – Score for 2019 – 2021 is 0.63; 0,47; 0.47. Because Bank BTN's Z – Score value from 2019 – 2021 is below 1.1, Bank BTN is included in the distress zone category.

4. Bank Mandiri's Z – Score value for 2019 – 2021 is 0.98 consecutively; 1,03; 1.08. In this case, Bank Mandiri is included in the distress zone category because the Z – Score value is below 1.1.

In this case, the greater the Z – Score value indicates the better the company's health level and the better the company's performance.

Based on the results of the Z – Score analysis on the four banks, it can be seen that:

5. Bank BRI and Bank BNI are in the Grey Zone category from 2019 to 2021. This is because the Z – Score is between 1.1 to 2.6 ( $1.1 > Z > 2.6$ ).
6. Bank BTN and Mandiri experienced a prediction of bankruptcy for 3 consecutive years from 2019 to 2021 and are in the Distress Zone category because the Z – Score value is below the cut off value of 1.1 ( $Z < 1.1$ ).

## **B. Discussion of Analysis Results**

### **1. Working Capital to Total Asset (X1)**

The higher the value of *working capital to total assets*, indicating the better the performance of a company where existing working capital is able to generate income so that the more effective the use of available working capital in increasing company profitability.

Based on the calculation of *working capital to total assets*, the value of *working capital to total assets* can be known as follows:

- a. Bank BRI in 2019 – 2021 consecutively, namely 0.112; 0,096; 0,127.
- b. Bank BNI in 2019 – 2021 consecutively, namely 0.172; 0,127; 0,128.
- c. Bank BTN in 2019 – 2021 consecutively, namely 0.064; 0,042; 0,036.
- d. Bank Mandiri in 2019 – 2021 consecutively, namely 0.041; 0,079; 0,078

It can be seen that in 2019 the value of *working capital to total assets* was dominated by BNI, then BRI, BTN and Mandiri. Then in 2020 and 2021 the value of *working capital to total assets* was dominated by BNI, BRI, Mandiri and BTN.

### **2. Retained Earning to Total Asset (X2)**

Based on the calculation of *retained earnings to total assets*, the value of *retained earnings to total assets* can be known as follows:

- a. Bank BRI in 2019 – 2021 consecutively, namely 0.128; 0,104; 0,110.
- b. Bank BNI in 2019 – 2021 consecutively, namely 0.098; 0,075; 0,081.
- c. Bank BTN in 2019 – 2021 consecutively, namely 0.036; 0,024; 0,036.
- d. Bank Mandiri in 2019 – 2021 consecutively, namely 0.105; 0,078; 0,083

It can be seen that from 2019 to 2021 the value of *retained earnings to total assets* was dominated by BRI, then Mandiri, BNI and BTN.

As explained and discussed about retained earnings above, it can be concluded that retained earnings are part of the company's reserve fund which illustrates how the company has the readiness of funds for business development. Therefore, the greater the amount of retained earnings owned, the healthier the company will be in terms of its finances.

### **3. Earning Before Interest And Taxes to Total Asset (X3)**

Based on the calculation of earnings before interest and taxes to total assets, it can be known the value of the calculation of earnings before interest and taxes to total assets as follows:

- a. Bank BRI in 2019 – 2021 consecutively, namely 0.031; 0,017; 0,022.
- b. Bank BNI in 2019 – 2021 consecutively, namely 0.023; 0,006; 0,013.
- c. Bank BTN in 2019 – 2021 consecutively, namely 0.001; 0,006; 0,008.
- d. Bank Mandiri in 2019 – 2021 consecutively, namely 0.027; 0,016; 0,022.

It can be seen that from 2019 to 2021 *earning before interest and taxes to total assets* was dominated by BRI, then Mandiri, BNI and BTN.

Earnings before interest and taxes (EBIT) can be concluded as an indicator to calculate the revenue of a company. Therefore, if the EBIT value is higher, the better, because the EBITTA value obtained will be higher too. And if the EBITTA value is high, it can describe the company is able to generate profits from company assets before tax and interest.

### **4. Book Value of Equity to Book Value of Debt (X4)**

Based on the results of the book value of equity to book value of debt, the calculation value of book value of equity to book value of debt can be known as follows:

- a. Bank BRI in 2019 – 2021 consecutively, namely 0.173; 0,176; 0,210.
- b. Bank BNI in 2019 – 2021 consecutively, namely 0.173; 0,145; 0,151.
- c. Bank BTN in 2019 – 2021 consecutively, namely 0.083; 0,069; 0,061.

d. Bank Mandiri in 2019 – 2021 consecutively, namely 0.188; 0,153; 0,148

It can be seen that in 2019 the *book value of equity to book value of debt* was dominated by Mandiri, then BRI, BNI and BTN. Then in 2020 the *book value of equity to book value of debt* was dominated by BRI, then Mandiri, BNI and BTN. And in 2021 the value of *total equity to total debt* is dominated by BRI, then BNI, Mandiri and BTN.

The higher the *book value of equity to book value of debt*, the healthier a company is where the company is able to manage all of the company's capital against its debts.

### 5. Results of Altman Z – Score (Z) Analysis

Based on the calculation results of *the Altman Z – Score* analysis, the calculation results can be known as follows:

- Bank BRI's Z – Score for 2019 – 2021 is 1.54; 1,27; 1.55. Bank BRI is included in the gray area category from 2019 – 2021 because it has a Z – Score between 1.1 to 2.6.
- Bank BNI's Z – Score for 2019 – 2021 is 1.78; 1,27; 1.35. Bank BNI is included in the gray area category from 2019 – 2021 because it has a Z – Score value between 1.1 to 2.6.
- Bank BTN's Z – Score for 2019 – 2021 is 0.63; 0,47; 0,47. Because Bank BTN's Z – Score value from 2019 – 2021 is below 1.1, Bank BTN is included in the distress zone category.
- Bank Mandiri's Z – Score value for 2019 – 2021 is 0.98 consecutively; 1,03; 1.08. In this case, Bank Mandiri is included in the distress zone category because the Z – Score value is below 1.1.

In this case, the greater the Z – Score value indicates the better the company's health level and the better the company's performance so that it can avoid indications of bankruptcy.

## IV. CONCLUSION

- The Altman Z – Score variable can be used in assessing and predicting the bankruptcy rate of commercial banks of the Company.
- Overall, the Altman Z – Score model can be used to assess and predict the bankruptcy rate of commercial banks for the period 2019 – 2021. From 2019 to 2021, Bank BRI and BNI are in the *Grey Zone* category because they show Z – Score results between 1.1 and 2.6 ( $1.1 < Z < 2.6$ ) while BTN and Mandiri banks are in the *Distress Zone* category because the Z – Score value is below 1.1.

The results of the Z – Score calculation above, the four banks are in the *Grey Area* and *Distress Area* categories due to working capital, retained earnings and operating profits that are smaller than their total assets, as well as the amount of debt that is greater than their total equity. The chances of bankruptcy will certainly be greater if the company's management does not immediately make improvements or evaluate the company's financial condition. Improving company performance at each bank can help anticipate the possibility of bankruptcy. Therefore, each bank must continue to apply its prudent principles and continue to strive to improve company performance so that the potential for financial distress and company bankruptcy is also getting smaller.

### A. Sugestions

Based on the conclusions above, the company's management should be more careful in managing assets. Making too large an investment in receivables is also dangerous and can affect capital and cause the company's performance to be disrupted. By knowing the level of bankruptcy prediction of banking companies, especially commercial banks, it is expected to help companies to anticipate the risk of company bankruptcy and be able to make early improvement efforts.

The results of the study can be used as a reference for further research on financial distress analysis to predict the bankruptcy rate of commercial bank companies. In addition, it is expected that future research can use other bankruptcy prediction models so that they can be used as a comparison in predicting the company's bankruptcy rate and with a longer period or period of time.

## REFERENCES

- Altman, E. I., Hotchkiss, E., & Wang, W. (2019). *Corporate Financial Distress, Restructuring, and Bankruptcy: Analyze Leveraged Finance, Distressed Debt, and Bankruptcy*. Wiley.
- Duli, N. (2019). *Metodologi Penelitian Kuantitatif: Beberapa Konsep Dasar Untuk Penulisan Skripsi & Analisis Data Dengan SPSS*. Deepublish.

- Emilia, D. R. (2018). *Pengaruh Kinerja Keuangan Terhadap Profitabilitas Bank Umum Milik Negara (BUMN) Di Indonesia*. University of Muhammadiyah Malang.
- Gobenvy, O. (2013). *Pengaruh Profitabilitas, Likuiditas dan Leverage dalam memprediksi Financial Distress*. STIE Widyagama, Lumajang.
- Metode Penelitian Kuantitatif dan Kualit*. (n.d.).
- Platt, H. D., & Platt, M. B. (2002). Predicting corporate financial distress: Reflections on choice-based sample bias. *Journal of Economics and Finance*, 26(2), 184–199.
- Prihadi, T. (2019). *Analisis Laporan Keuangan*. Gramedia Pustaka Utama.
- Rukajat, A. (2018). *Pendekatan Penelitian Kuantitatif: Quantitative Research Approach*. Deepublish.
- Sarwani, S., & Sunardi, N. (2019). Analisis Penggunaan Altman Z-Score untuk Mengetahui Potensi Kebangkrutan Industri Konstruksi (BUMN) di Indonesia Tahun 2013-2017. *Proceedings Universitas Pamulang*, 1(1).
- Simanjuntak, C. E. B., Krist, F. T., & Aminah, W. (2017). Pengaruh Rasio Keuangan Terhadap Financial Distress. *EProceedings of Management*, 4(2).  
<https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/1411>
- Sugiyono. (2018). *Metode Penelitian Kuantitatif* (Setiyamawi (Ed.)). CV Alfabeta.
- Supriadi, I. (2020). *Metode Riset Akuntansi*. Deepublish.
- Vogt, W. P., & Johnson, R. B. (2015). *The SAGE dictionary of statistics & methodology: A nontechnical guide for the social sciences*. Sage publications.

# The Impact of Brand Equity and Promotion on Toyota Customer Loyalty at the "XYZ" Dealership in Surabaya City (Case Study)

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## ABSTRACT

**Purpose:** to find out how the influence of brand equity and promotion on Toyota consumer loyalty at the "XYZ" Surabaya dealership

**Design/methodology/approach:** The method of data processing and analysis is using quantitative analysis which includes the interpretation of data obtained in research and the results of data processing that has been carried out by providing information and explanations, as well as quantitative analysis which includes validity and reliability tests, multiple regression analysis, hypothesis tests through F test and T test and regression coefficient analysis (R<sup>2</sup>).

**Findings:** the influence of brand equity and promotion has a good influence on customer loyalty. Based on the results of the analysis, the indicators in this study are valid and the variables are reliable. The results of this study show that there is a simultaneous influence on brand equity and promotion variables on customer loyalty. The results of this study also show that brand equity and promotion variables have a significant partial effect on customer loyalty. In the determination test, there was an influence of 60.5% of the independent variables (brand equity and promotion) on the dependent variable (customer loyalty). Meanwhile, the remaining 39.5% were influenced by other variables and were not included in this study.

**Practical implications:** knowing the effect of brand equity and promotion on Toyota consumer loyalty at the "XYZ" Surabaya dealership

**Originality/value:** This paper is original

**Paper type:** research paper

**Keyword:** Brand Equity, Promotion, Customer Loyalty

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## I. INTRODUCTION

The progress of globalization followed by an increasing population growth rate makes the needs of each individual also need to be supported by adequate facilities and infrastructure. One of them is in terms of means of transportation. It is undeniable, in this economic era, transportation is really made a mandatory thing for every individual to have. Economic activities are also easier to reach and more efficient.

Living individuals need a job to meet the economy for their survival, whether it is traders, employees, businessmen, and state apparatus definitely need accommodation in the form of transportation that is used to reach one place to another and one time to another to be faster and more efficient.

According to Susanto and Wijanarko (2004: 127), in the face of fierce competition, a strong brand is a clear, valuable, and sustainable differentiator, spearheading the company's competitiveness and very helpful in marketing strategies. The brand can be used as a symbol of a product or service produced by a company. The

symbol also serves to distinguish it from products offered by other competing companies. Brands also bridge consumer or customer expectations when a company promises something to consumers or customers. Thus it can be known that there is an emotional bond created between consumers or customers with product producers through a brand.

Other competitors may also offer the same emotional promise. But with a brand equity in a product, it will certainly make it have its own identity that can be observed by consumers or customers. Kotler and Keller (2007: 334) define brand as added value given to products and services. This value can be reflected in the way consumers think, feel, and act on the brand, price, market share, and profitability that the company has. Brand equity itself is an important intangible asset, which has psychological and financial value for the company.

While Aaker in Kotler and Keller (2007: 339) views brand equity as one set of five categories of brand assets and liabilities related to brands that increase or decrease the value provided by a product or service to the company and / or customers. In addition to *brand equity* owned by a product or service brand, a company also needs to carry out product introduction actions to the general public. This action in economics is called promotion. According to Dharmmesta and Irawan (2001: 345-349), promotion is essentially a form of marketing communication that aims to drive demand, what is meant by marketing communication is a marketing activity that seeks to disseminate information, influence and remind the target market of the company and its products to be willing to accept, buy, and be loyal to the products or services offered by the company concerned.

The ultimate goal of promotion is to strengthen brand loyalty, because as consumers tend to buy a product based on offers on new products that are seeded. So giving attractive offers on a regular basis will make them relatively loyal to a promoted brand. According to Rangkuty (2002: 60), brand loyalty is a measure of consumer loyalty to a brand. This loyalty is then called customer loyalty.

Some experts define customer loyalty including: Oliver in Hurriyati (2005: 128) customer loyalty is the customer's commitment to make repeated purchases of selected products or services consistently in the future, even though the influence of the situation and marketing efforts have the potential to cause behavior change. Meanwhile, Griffin in Hurriyati (2005: 129) suggests that customer loyalty refers more to the form of behavior of decision-making units to repurchase goods or services of a selected company.

## **A. Literature Review**

### **1. Theoretical Foundation**

According to Umar (2003: 76), service marketing is marketing that is *intangible* and *immaterial* and is carried out when consumers deal with producers. Meanwhile, Lupiyoadi and Hamdani (2006: 5) define service marketing as any action offered by one party to another party that is intangible in principle and does not cause any transfer of ownership.

### **2. Consumer Behavior**

Consumers are individuals who use, use, and enjoy a product or service that is marketed. Being called a consumer certainly cannot be separated from behavior, which is then called consumer behavior. According to Schiffman and Kanuk (2008: 6) the study of consumer behavior is a study of how an individual makes decisions to allocate available resources (time, money, effort, and energy). While Ristiyanti (2004: 9), consumer behavior is a process passed by someone in finding, buying, using, evaluating, and acting after consumption of products, services and ideas that are expected to meet their needs.

Kotler and Keller (2008: 214) also define consumer behavior as the study of how individuals, groups and organizations select, buy, use and place goods, services, ideas or experiences to satisfy their wants and needs. Meanwhile, the definition of consumer behavior according to Schiffman and Kanuk (2008: 6) is to describe the way individuals make decisions to utilize their available resources (time, money, effort) to buy goods related to consumption.

### **3. Brand Equity**

Kotler and Keller (2009: 258) also define a brand as a name, term, mark, emblem, or design, or a combination of these things, which is intended to identify the goods or services of a person or company that are expected to provide identity and differentiation that distinguishes it from competing products. A strong brand has strong brand equity. Aaker in Kotler and Keller (2007: 339) views brand equity as one set of five categories of brand assets and liabilities related to brands that increase or decrease the value provided by a product or service to the company and / or customers.

### **4. Promotion**

Promotion is any type of marketing activity aimed at driving consumer demand for the products offered by manufacturers or sellers. Promotion is also part of the marketing effort and is known as an element of the marketing mix. According to Hurriyati (2010: 50) promotion is a form of marketing communication in marketing



activities that seek to disseminate information, influence / persuade, and remind the target market of the company and its products to be willing to accept, buy, and be loyal to the products offered by the company concerned.

### 5. Customer Loyalty

Meanwhile, Wan and Huang (2010) show that customer loyalty can be shown through attitudes and behaviors. Attitudes include the intention of repurchasing or buying other products from the company, the intention to recommend and immunity to competitors. These behaviors include repurchase behavior, purchasing other products from the company, and recommending to others.

### B. Framework of Thought

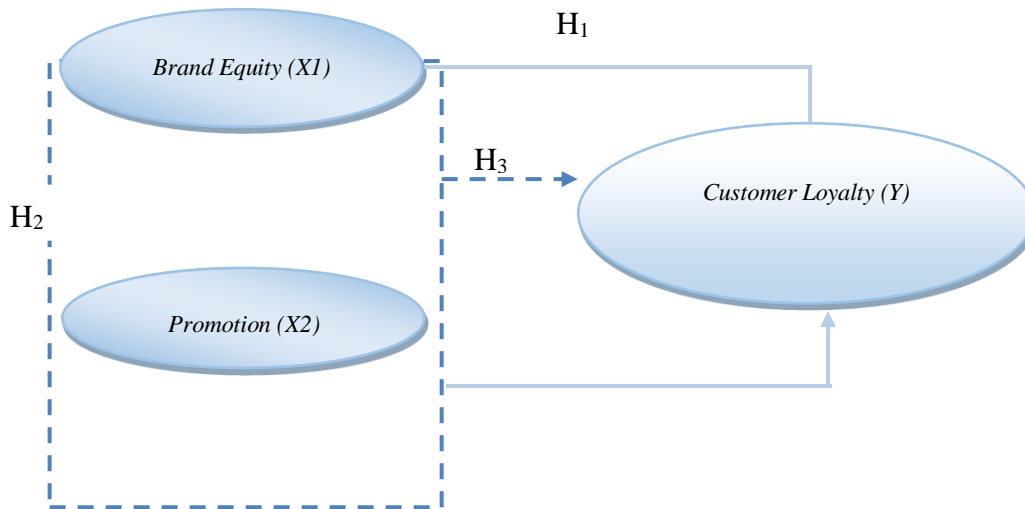


Figure 1 Framework of Thought

Source: Source developed for this study (2017)

### C. Hypothesis Submission

According to Arikunto (2009: 55) suggests that a hypothesis is an alternative to the alleged answers made by researchers to the problems proposed in their research. A hypothesis will be accepted if the data collected supports the statement. The formulation of the hypothesis in this study is:

H1: there is a significant influence of *brand equity* on loyalty Toyota customers at dealership "XYZ" Surabaya.

H2: there is a significant effect of promotion on customer loyalty Toyota at dealership "XYZ" Surabaya.

H3: there is a significant influence on the silicon between *brand equity* and promotion of Toyota customer loyalty at the dealership "XYZ" Surabaya.

Companies that have competence in the fields of marketing, manufacturing and innovation can make it's as a source to achieve competitive advantage (Daengs GS, et al. 2020:1419).

The research design is a plan to determine the resources and data that will be used to be processed in order to answer the research question. (Asep Iwa Soemantri, 2020:5).

Standard of the company demands regarding the results or output produced are intended to develop the company. (Istanti, Enny, 2021:560).

## II. METHODS

The research design used in this study, which is in accordance with the formulation of the problem and the research objectives to be achieved, this research is classified as *an Explanatory type of research*, or explanatory research which according to Singarimbun and Effendi (2006) is "Highlighting the relationship between research variables and testing hypotheses that have been formulated previously".

## A. Research Population

A population is a set of individuals who have common traits. Population is used to retrieve data that is then used by a researcher to solve problems. According to Sugiyono (2008: 80), population is a generalized area consisting of objects / subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions.

## B. Research Sample

The sample is a portion or representative of the population studied (Arikunto, 2010: 173). While Sugiyono (2010: 117) defines samples as part of the number and characteristics possessed by the population. Sampling in this study used *the purposive sampling* method, namely the selection of samples with certain considerations (Sugiyono, 2012: 124). The characteristics and conditions used in sampling with the *purposive sampling* method are as follows:

Toyota brand car customers in Surabaya. Has made a purchase transaction of Toyota brand cars at the dealer "XYZ" Surabaya. The way to obtain respondents is to provide questionnaires to consumers who have made Toyota brand car purchase transactions. The determination of the size of the research sample was determined using the Solvin formula (Umar: 2004) as follows:

$$n = \frac{N}{1 + N (\text{Moe})^2}$$

$n$  : Sample size

$N$  : Population size

Moe : The margin of error is the maximum error rate which is still tolerable at 5%.

## C. Quantitative Analysis

Quantitative analysis is an analysis that can be classified into categories in the form of numbers that can be calculated to produce a solid quantitative interpretation (Umar, 2004). The calculation results of the score or value are then in statistical analysis conducted with the help of the SPSS (*Statistical Package for Social Science*) program version 16 *for Windows*, to prove the relationship and influence between research variables. The purpose of this analysis is to test the correctness of the hypotheses that have been proposed in this study.

### 1. Multiple Linear Regression Analysis

Multiple linear regression analysis is used to determine the extent of the influence of the independent variable (X) on the dependent variable (Y). This method connects one *dependent* variable with many *independent variables*. In this study, the dependent variable is customer loyalty, while the independent variable is *brand equity* and promotion.

The model of the relationship between purchasing decisions and their independent variables is arranged in functions or equations as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + e$$

### 2. Hypothesis Testing

A hypothesis is an alternative to the alleged answers made by researchers to the problems posed in their research. The alleged answer is a temporary truth, which will be tested for correctness with data collected through research. With that position, hypotheses can turn into truth, but can also collapse as truth (Arikunto, 2009: 55).

A hypothesis will be accepted if the data collected supports the statement. The formulation of the hypothesis in this study is:

H1 : there is a significant influence of brand equity on Toyota customer loyalty at the "XYZ" Surabaya dealership.

H2 : there is a significant influence of promotion on customer loyalty at the "XYZ" Surabaya dealership.

H3 : there is a significant influence between brand equity and promotion on customer loyalty at "XYZ" Surabaya dealership.

The method of testing the proposed hypothesis is carried out by partial testing using t test and simultaneous testing using F test, as well as testing the Coefficient of determination (R<sup>2</sup>).

### 3. Individual Parameter Significance Test (Statistical Test t)

The t test basically shows how far the influence of one independent variable individually in explaining the variation of the dependent variable (Ghozali, 2005: 84). This test aims to examine the effect of independent variables (*Brand Equity* and Promotion) on the dependent variable (Customer Loyalty) separately or partially.

By comparing the value of t calculate it with t table:

1. If  $t_{table} > t_{count}$ , then  $H_0$  is accepted and  $H_1$  is rejected
2. If  $t_{table} < t_{count}$ , then  $H_0$  is rejected and  $H_1$  is accepted

With a significance level of 95% ( $\alpha = 5\%$ ), using the significance probability number.

1. If the probability number of significances  $> 0.5$  then  $H_0$  is accepted and  $H_1$  is rejected.
2. If the probability of significance  $< 0.5$  then  $H_0$  is rejected and  $H_1$  is accepted.

#### 4. Simultaneous Significance Test (F Test)

The F test basically shows whether all the independent variables included in the model have an influence together on the dependent variable (Ghozali, 2005: 84).

In this study, simultaneous hypothesis testing is intended to measure the magnitude of the influence of independent variables, namely the influence of *brand equity* and promotion on consumer loyalty as the dependent variable.

The basis for decision making (Ghozali, 2005: 84), namely by comparing the value of F count with F table:

1.  $F_{table} > F_{is}$  calculated, then  $H_0$  is accepted and  $H_1$  is rejected.
2.  $F_{table} < F_{is}$  are calculated, then  $H_0$  is rejected and  $H_1$  is accepted.

#### 5. Coefficient of Determination (R<sup>2</sup>)

The coefficient of determination (R<sup>2</sup>) essentially measures how far the model is able to explain the variation of the dependent variable. The value of the coefficient of determination is between zero and one. A small R<sup>2</sup> value means that the ability of independent variables to explain the variation of the dependent variable is very limited. A value close to one means that the independent variables provide almost all the information needed to predict the variation of the dependent variable (Ghozali, 2001: 83). Multicollinearity occurs when the R<sup>2</sup> value produced by an empirical regression model is very high, but individually many independent variables do not significantly affect the dependent variable (Ghozali, 2006).

### III. RESULTS AND DISCUSSION

#### A. Results

##### 1. Multiple Linear Regression Analysis

Statistical testing with multiple linear regression analysis tools is intended to determine the effect of *Brand Equity* (X<sub>1</sub>) and Promotion (X<sub>2</sub>) on Customer Loyalty (Y). An overview of *research outputs can be seen in Table 1 below.*

*Table 1 Multiple Linear Regression Output Overview*

Variabel	Unstandardized				Sign. T
	Coefficients		Beta	t-hitung	
	B	Error			
Independen					
(Constant)	1,073	3,492		0,307	0,759
Brand Equity (X <sub>1</sub> )	0,301	0,072	0,349	4,162	0,000
Promosi (X <sub>2</sub> )	0,652	0,108	0,504	6,009	0,000
R	= 0,778				
R Square (R <sup>2</sup> )	= 0,605				
Adjusted. R Square	= 0,597				

$$F\text{-hitung} = 74,391$$

$$\text{Sign-}F = 0,000$$

$$SE = 5.363$$

Variabel Dependen = Customer Loyalty  
Source: primary data processed

The multiple linear regression equation as in the *SPSS output* overview is:  
 $Y = 1.073 + 0.301X_1 + 0.652X_2 + 5.363$

## 2. Uji Hipotesis

### a. Individual Parameter Significance Test (Statistical Test t)

The t-test is used to test the correctness of the research hypothesis carried out with a significant t-test tester. This is intended to examine the significance of the influence of individual (partial) *Brand Loyalty* (X1) and Promotion (X2), on Customer Loyalty (Y). This test is carried out by comparing the calculated value with the Ttable value and also between the significance value (calculated probability) with *the Level of Significance* ( $\alpha$ ) of 5% (0.05). The calculated value of the results of data processing with the SPSS program can be seen in the table of multiple linear regression analysis test results in the *Coefficients table*.

Table 2 Multiple Linear Regression Test Results :Coefficients

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.073	3.492		.307	.759
Brand Equity	.301	.072	.349	4.162	.000
Promosi	.652	.108	.504	6.009	.000

a. Dependent Variable: Consumer Loyalty

Source: primary data processed

### b. The Effect of Brand Equity (X1) on Customer Loyalty (Y)

The results of the analysis obtained a calculated value of *Brand Equity* (X1) of 4,162 at a probability level of 0.000. Test criteria if Probability Calculate < *Level of Significance* ( $\alpha$ ) then Ho is rejected and Ha is accepted or there is a significant effect of *Brand Equity* (X1) on Customer Loyalty (Y). The test results show that  $0.000 < 0.05$  or the calculated probability < *the level of significance* ( $\alpha$ ) so that Ha is accepted. This means that there is a significant influence between *Brand Equity* (X1) and Customer Loyalty (Y).

### c. Effect of Promotion (X2) on Customer Loyalty (Y)

The results of the analysis obtained a Promotion calculation value (X2) of 6,009 at a probability level of 0.000. Test criteria if Probability Calculate < *Level of Significance* ( $\alpha$ ) then Ho is rejected and Ha is accepted or there is a significant effect of Promotion (X2) on Customer Loyalty (Y). The test results show that  $0.000 < 0.05$  or the calculated probability < *the level of significance* ( $\alpha$ ) so that Ha is accepted. This means that there is a significant influence between the Promotion (X2) and Customer Loyalty (Y).

### 3. Simultaneous Hypothesis Test (F-Test)

Simultaneous hypothesis tests are used to determine the effect of the Independent Variable as a whole on the Dependent Variable. This test is carried out by comparing the Fcalculate value with the Ftable value and also between the significance value (calculated probability) with the *Level of Significance* ( $\alpha$ ) of 5% (0.05)

### 4. Test Coefficient of Determination ( $R^2$ )

Based on the results of SPSS, the value of the coefficient of determination can be seen in the table below:

Table 3 Coefficient of Determination

Model Summary <sup>b</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.778a	.605	.597	5.363

Predictors: (Constant), Promosi, Brand Equity

Dependent Variable: Consumer Loyalty

Source: primary data processed

The calculation results using the SPSS program can be seen that the coefficient of determination ( $R^2$ ) obtained is 0.605. This means that 60.5% of Customer Loyalty can be explained by Brand Equity and Promotion variables while the remaining 39.5% of Customer Loyalty is influenced by other variables that were not examined in this study.

## B. Discussion

### 1. The Influence of *Brand Equity* on Toyota Customer Loyalty at "XYZ" Surabaya Dealership.

The first hypothesis (H1) which states that there is a significant influence between *Brand Equity* on Toyota Customer Loyalty at "XYZ" Surabaya Dealership, was successfully supported by data with a Probability Calculation < *Level of Significance* ( $\alpha$ ) of  $0.000 < 0.05$  then in other words the first hypothesis (H1) was accepted. From the results of the analysis, it can be seen that Brand Equity is very influential on Customer Loyalty because *the brand* (brand) is one of the important factors in marketing activities. Brands contribute to the company in order to influence consumers' decisions to buy or reject a good or service offered. To make a choice among a wide variety of brand alternatives, customers need information. And the brand will provide concise information about a product desired by customers.

*Brand Equity* benefits customers in providing value to customers by reinforcing: interpretation/information processing, confidence in purchases, and achievement of customer satisfaction. Meanwhile, for companies, brand equity is useful for strengthening: efficiency and effectiveness of marketing programs, brand loyalty, brand equity/profit, brand expansion, increased trade, and competitive advantage. This is in accordance with the statement of Kotler and Keller (2007: 334) defining brands as added value given to products and services. This value can be reflected in the way consumers think, feel, and act on the brand, price, market share, and profitability that the company has. Brand equity itself is an important intangible asset, which has psychological and financial value for the company.

### 2. The Effect of Promotion on Toyota Customer Loyalty at "XYZ" Surabaya Dealer

The first hypothesis (H1) which states that there is a significant influence between Promotion on Toyota Customer Loyalty at "XYZ" Surabaya Dealership, was successfully supported by data with a Probability Calculation < *Level of Significance* ( $\alpha$ ) of  $0.000 < 0.05$  then in other words the first hypothesis (H1) was accepted. Thus it can be concluded that promotions have a significant influence on customer loyalty of Toyota cars.

The results of this study support previous research conducted by Cakra Aditia Rakhmat (2011) entitled, "*The Effect of Sales Promotion on Customer Loyalty*". The conclusion of the results showed that there was a strong and positive relationship between sales promotion variables and Starbucks Coffee customer loyalty. In addition, sales promotions also have an influence on the formation of Starbucks customer loyalty. From the results of the study, it can be seen that the indicator with the highest mean is promotion 2 (3.95), which is the promotion period, this is because Starbucks conducts an offer program with a regular period of time. While the lowest indicator is

promotion 7 (3.58), which is related to sample distribution, this is because not all Starbucks branches provide the latest beverage or food samples because they consider the cost factor that will be incurred.

### **3. The Simultaneous Influence of *Brand Equity* and Promotion on Toyota Customer Loyalty at "XYZ" Surabaya Dealership**

The third hypothesis (H3) which states that there is a simultaneous influence between *Brand Equity* and Promotion on Toyota Customer Loyalty at "XYZ" Surabaya Dealership, was successfully supported by data with a Probability Calculation  $< Level\ of\ Significance\ (\alpha)$  of  $0.000 < 0.005$  than in other words the third hypothesis (H3) is accepted.

Therefore, to ensure consumer loyalty can be realized, one of the efforts of Toyota authorized dealers in Surabaya is to maintain product *brand equity* and increase promotions in order to realize a sense of customer loyalty to the product, because the contribution of *brand equity* and promotion to customer loyalty is quite large, namely 60.5% and the remaining 39.5% of customer loyalty is influenced by other factors that are not studied in this study. Time management skills can facilitate the implementation of the work and plans outlined.

(Rina Dewi, et al. 2020:14) When collecting data sources, researchers collect data sources in the form of raw data. The survey method is a method of collecting primary data using written questions (Kumala Dewi, Indri et al, 2022: 29). This research will be conducted in three phases: measurement model (external model), structural model (internal model), and hypothesis testing. (Pramono Budi, et al., 2023; 970) Through this process, employees are given training and development that is relevant to their job performance, so they are expected to carry out their job responsibilities as well as possible. (Abdul Aziz Sholeh et.al. 2024 :82) Good working conditions are when humans can carry out work optimally healthy, safe and comfortable (Pandu Widodo, Hesti et al 2024: 73).

## **IV. CONCLUSION**

1. First, based on the results of multiple linear regression tests, the calculated value for the *Brand Equity* variable (X1) is 4,162 at a probability level of 0.000. Test criteria if Probability Calculate  $< Level\ of\ Significance\ (\alpha)$  then Ho is rejected and Ha is accepted or there is a significant influence on the *Brand Equity* variable (X1) on the Customer Loyalty variable (Y). The test results show that  $0.000 < 0.05$  or the calculated probability  $< the\ level\ of\ significance\ (\alpha)$  so that Ha is accepted. This shows that there is a significant influence between *Brand Equity* (X1) and Customer Loyalty (Y).
2. Second, based on the results of multiple linear regression tests, the calculated value for the Promotion variable (X2) is 6,009 at a probability level of 0.000. Test criteria if Probability Calculate  $< Level\ of\ Significance\ (\alpha)$  then Ho is rejected and Ha is accepted or there is a significant influence on the Promotion variable (X2) on the Customer Loyalty variable (Y). The test results show that  $0.000 < 0.05$  or the calculated probability  $< the\ level\ of\ significance\ (\alpha)$  so that Ha is accepted. This shows that there is a significant influence between Promotion (X2) and Customer Loyalty (Y).
3. Third, based on the results of the analysis which states that there is an influence between *brand equity* and promotion on acceptable customer loyalty, where from the overall test results (test F) obtained a Fcalculate of 74,391 with a significant probability of 0.000. On the basis of this F-test analysis, the research hypothesis that reads there is a simultaneous significant influence of *Brand Equity* variables (X1) and Promotion variables (X2) on Customer Loyalty variables (Y), can be accepted or tested.

## **REFERENCES**

- Arikunto, Suharsimi. 2010. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Melton Utama.
- Aziz Sholeh, Abdul et. Al. 2024. Kompensasi Terhadap Motivasi Kerja Karyawan pada PT. Insolent Raya di Surabaya, *Journal of Management and Creative Business* Vol. 2 No. 1 Januari 2024, Halaman: 82 - 96
- Daengs, G. S. A., Istanti, E., Negoro, R. M. B. K., & Sanusi, R. (2020). The Aftermath of Management Action on Competitive Advantage Through Proccess Attributes at Food and Beverage Industries Export Import in Perak Harbor of Surabaya. *International Journal Of Criminology and Sociologi*, 9, 1418–1425
- Dharmmesta, Basu S. 2001. Loyalitas Pelanggan: Sebuah Kajian Konseptual sebagai Panduan Bagi Peneliti. *Jurnal Ekonomi dan Bisnis Indonesia*, Vol.14, No.3, hal.73-88.
- Dharmmesta, Basu S., dan Irawan. 2001. *Manajemen Pemasaran Modern*. Yogyakarta: Liberty.
- Enny Istanti1), Bramastyo Kusumo2), I. N. (2020). Implementasi Harga, Kualitas Pelayanan Dan Pembelian Berulang Pada Penjualan Produk Gamis Afifathin. *Ekonomika* 45, 8(1), 1–10

- Ghozali, Imam. 2001. *Aplikai Analisis Multivarite dengan SPSS*, cetakan keempat, Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, Imam. 2005. *Aplikai Analisis Multivarite dengan SPSS*, cetakan keempat, Semarang: Badan Penerbit Universitas Diponegoro.
- Ghozali, Imam. 2006. *Aplikai Analisis Multivarite dengan SPSS*, cetakan keempat, Semarang: Badan Penerbit Universitas Diponegoro.
- Griffin, Jill. 2003. *Customer Loyalty: Menumbuhkan dan Mempertahankan Kesetiaan Pelanggan*. Dialihbahasakan oleh Dwi Kartini Yahya. Jakarta: Erlangga.
- Hurriyati, Ratih. 2010. *Bauran Pemasaran dan Loyalitas Konsumen*. Bandung: CV. Alfabetha.
- Indriantoro, dan Supomo, 2002. *Metodologi Penelitian Bisnis untuk Akuntansi dan Manajemen*, Edisi Pertama. Yogyakarta:BPFE-Yogyakarta.
- Iwa Soemantri, Asep et al. 2020. Entrepreneurship Orientation Strategy, Market Orientation And Its Effect On Business Performance In MSMEs. *Jurnal EKSPEKTRA Unitomo* Vol. IV No. 1, Hal. 1-10.
- Kumala Dewi, Indri et al, 2022 Peningkatan Kinerja UMKM Melalui pengelolaan Keuangan, *Jurnal Ekonomi Akuntansi* , UNTAG Surabaya, Hal ; 23- 36
- Knapp, E. Duane. 2002. *The Brand Mindset*. Dialihbahasakan oleh Sisnuhadi. Yogyakarta: Andi.
- Kotler, Philip dan Keller, Kevin Lane, 2008. *Manajemen Pemasaran*, Jilid 1. Jakarta: Erlangga
- Kotler, Philip. 2004. *Manajemen Pemasaran: Analisis, Perencanaan, implementasi dan Kontrol*, Edisi Sebelas. Jakarta: Penerbit PT. Prenhallindo.
- Kotler, Philip. Keller, Kevin Lane. 2009. *Manajemen Pemasaran*. Edisi 13. Jilid 1 dan 2 Jakarta: Erlangga
- Lupiyoadi, Rambat dan A. Hamdani. 2006. *Manajemen Pemasaran Jasa, edisi 2*. Jakarta: Salemba Empat.
- Mustafa, Hasan. 2009. *Metodologi Penelitian*, cetakan kesepuluh. Jakarta: Bumi Aksara.
- Mowen, John, C dan Michael Minor. 2002. *Perilaku Konsumen*. Jilid Kedua.
- Pandu Widodo, Hesti et. al. 2024. Dampak Pelatihan, Motivasi dan Lingkungan Kerja pada Kinerja Karyawan PT. KAI (Persero) di Stasiun Surabaya Pasar Turi
- Pramono Budi,Istanti Enny, Daengs GS,Achmad, Syafi'i, Bramastyo KN,RM ,2023, Impact of Social Media Marketing and Brand Awareness on Purchase Intention in coffe shop culinary in Surabaya, Page. 968 - 977
- Rina Dewi, et al. 2020. Internal Factor Effects In Forming The Success Of Small Businesses. *Jurnal SINERGI UNITOMO*, Vol. 10 No. 1, Hal. 13-21
- Rangkuti, Freddy. 2004. *The Power of Brands: Teknik Mengelola Brand Equity dan Strategi Pengembangan Merek*. Jakarta: PT. Gramedia Pustaka Utama.
- Ristiyanti, Prasetijo. (2004). *Perilaku Konsumen*. Yogyakarta: Andi.
- Schiffman dan Kanuk. 2008. *Perilaku konsumen*. Edisi 7. Jakarta: Indeks
- Simamora, Henry. 2000. *Manajemen Pemasaran Internasional*. Cetakan Pertama. Jakarta: Salemba Empat.
- Singarimbun, Masri & Effendi, Sofian. 2006. *Metode Penelitian Survai*, Jakarta: Pustaka LP3ES Indonesia,
- Stanton, William J. 2009. *Prinsip Pemasaran*. Jilid I. Jakarta: Erlangga
- Susanto AB & Wijarnako H. 2004. *Power Branding, Membangun Merek Unggulan*, Jakarta: Quantum Bisnis & Manajemen.
- Tandjung, W. 2004. *Marketing Management Pendekatan pada Nilai-nilai Pelanggan*. Malang: Banyumedia.
- Tjiptono, Fandi. 2005. *Pemasaran Jasa*. Malang: Bayumedia Publishing.
- Tjiptono, Fandy dan Diana, Anastasia. 2000. *Prinsip & Dinamika Pemasaran*. Yogyakarta: J & J Learning.
- Umar, Husein. 2003. *Metodologi Penelitian: Aplikasi dalam Pemasaran*. Jakarta: Gramedia Pustaka Utama
- Umar, Husein. 2004. *Metode Penelitian Untuk Skripsi Dan Tesis Bisnis, Cetakan ke 6*. Jakarta: PT RajaGrafindo Persada.
- Wan, Pi and Huang, Hsieh-Hong, 2011. *Effects of Promotion on Relationship Quality and Customer Loyalty in the Airline Industry: The Relationship Marketing Approach*, *African Journal of Business Management*, Vol. 5 (4403-4414).
- Widaningsih, dan Rizal, Samsul. 2011. *Melakukan Pemasaran Barang dan Jasa*. Jakarta: Erlangga.

# Employee Job Security, Emotional Stability and Adaptability in Predicting Employee Retention among Gen Z Employees

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## ABSTRACT

**Purpose:** This study aims to discuss job security, emotional stability and adaptability in predicting employee retention of Gen Z employees in Indonesia.

**Design/methodology/approach:** This research uses a quantitative approach with primary data collection. The sample taken was 133 respondents. The data analysis technique used is multiple linear regression using SPSS.

**Findings:** This study found that job security, emotional stability and adaptability succeed to predict employee retention among Gen Z employees in the research context.

**Research limitations/implications:** This study only examines the effect of predictor variables on outcome variables in the context of a manufacturing company and involves only 133 respondents.

**Practical implications:** This finding informs managers that to increase the stay rate of Gen Z employees, their perceptions of job security, emotional stability, and adaptability are important to be maintained. Hence, management needs to pay attention and implement strategies that strengthen these factors to increase the employee retention of Gen Z employees.

**Originality/value:** This paper is an original paper because it has not been published anywhere.

**Paper type:** Research Paper

**Keyword:** Job Security, Emotional Stability, Adaptability, Employee Retention, Gen Z

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## I. INTRODUCTION

Generation Z (Gen Z), those born between 1995 and 2012 (Twenge, 2023) is a digitally connected generation and has different work preferences compared to previous generations (Berkup, 2014). Currently, Gen Z have relatively started to enter the work. Considering their relatively young age and the dynamics of their development, they have a lot of contact with the digital world, retention of Gen Z employees is a challenge. The importance of retention of Gen Z employees lies in the company's ability to understand and meet their needs and expectations (Lee, Lim, Seo & Kwak, 2022). As with employees in general, retaining Gen Z employees can help companies reduce training and recruitment costs (Ali, Lim & Qiu, 2024). The strategy for maintaining Gen Z is likely to be different from previous generations. Because Gen Z tend to value work-life balance, Gen Z employee retention strategies can be directed at clear career development, flexibility in the work environment and work-life balance (Lukić-Nikolić & Lazarević, 2022). Sure, by implementing the right Gen Z employee retention strategy by among others creating a flexible work environment, companies can attract and retain talented and productive Gen Z employees.

According to a report published by LinkedIn website, 72% of Gen Z always experience stress at work, and almost half of Gen Z feel exhausted due to the pressure of workload, salary, mental health which is the main reason they leave their jobs in the past two years. Research reveals that Gen Z is currently experiencing various



challenges in the workplace. Gen Z is generally worried because technological changes that continue to emerge have succeeded in replacing traditional jobs. In other words, their job security is disrupted by technological developments. However, the literature agrees that when employees feel there is security in their work, they tend to feel at home (Khalid & Sahibzada, 2023). Furthermore, job security is psychologically related to emotional stability (Qian, Yuan, Niv & Liu, 2019), while emotional stability and stress levels may influence employee retention (Shin & Shin, 2020). Therefore, organizations seem to need to have a special strategy to welcome the arrival of Gen Z workers in their organizations.

This research discusses the interaction between three important factors that influence the retention of Gen Z employees, namely job security, emotional stability, and adaptability. This research aims to see how Gen Z, who are more open to change and value work-life balance, respond to factors that are antecedents of their stay at the company. With a quantitative approach through data collection through questionnaires, this research has several contributions. First, this paper is relevant to the current issue, namely Gen Z, which is new workforces with unique characteristics, such as tending to use technology, being flexible and appreciating balance between work and personal life. Second, this study contributes to increasing new and more specific knowledge regarding the factors that influence employee retention in the modern era with the rapid development of information technology. These findings may provide new insights for companies in improving strategies to keep Gen Z employees in the company so that they can stay longer. Finally, this research is the basis for further research on other factors that influence employee retention, especially Gen Z employees.

## **A. Literature Review**

### **1. Job Security**

According to Filipe (2022), job security is an employee's subjective perception of job stability in an organization and is a predictor of employee attitude and behavior in the workplace. Workplace predictors as variables during the selection process are used to predict future employee performance (Sackett & Walmsley, 2014). Organizations can increase job security by implementing their fair policies and practices (Şenol, 2011). This perception of job security plays an important role in employee job happiness and has a strong relationship with intention to leave the company (Khawrin & Sahibzada, 2023). It is recognized that the job security perceived by employees is very dependent on the economic situation i.e on economic pressure on the organization (Lucky, Minai & Rahman, 2015). Job security also provides a sense of stability and calm which can motivate employees to work harder and improve their performance (Jung, Yoon & Hye, 2021).

### **2. Emotional Stability**

Emotional stability is the ability of individuals to perceive, understand, and communicate emotions with themselves and others which involves skills such as emotional awareness, emotional reasoning, emotional management, and emotional communication (Doğru, 2022). Good emotional management can also increase work motivation, thereby creating a high level of work engagement (Barreiro & Treglown, 2020). Therefore, the level of employee work engagement can be predicted through emotional stability (Schutte & Loi, 2014). Individuals with high emotional stability tend to handle stress better than those with low emotional stability (Moeller, Keyserlingk & Arum, 2022). Proper emotional management facilitates controlling feelings and emotions in dealing with individuals' own feelings and those of others while at the same time adapting to new conditions (Drigas & Papoutsis, 2018).

### **3. Adaptability**

Adaptability is an individual's capacity to effectively change their thoughts and actions based on new information and changing circumstances (Van Dam, 2013). Adaptability is an ongoing psychological process where individuals flexibly adjust their thoughts and behaviour to achieve meaningful goals in the ongoing context of their lives (Van Dam & Meulders, 2021). In an organizational context, adaptability is the ability of an individual or organization to adapt to change, the ability to adapt to change which is one of the keys to success in a world that continues to develop and shows flexibility in different situations (Schulze & Pinkow, 2020). The importance of adaptability is recognized in various fields such as business and organizational psychology, and adaptability is a core component needed by leaders and organizations to advance in an era of rapid change (Hamel, 2014). Hamel (2014) emphasizes that adaptive companies can innovate and transform by responding to market and technological changes. In psychology, adaptability is a strong predictor of individual mental resilience in dealing with stress and trauma (Bartone, Eid, Johsen, Laberg & Snook, 2009). Hence, it can be concluded that individuals with a high level of adaptability are better to adapt to difficult situations and bounce back from traumatic experiences because adaptability is a fundamental skill in dealing with problems in the workplace and the business world.

#### **4. Employee Retention**

Employee retention is the process of retaining employees to work with an organization for the long term (Xuecheng, Iqbal & Saina, 2022). The way an organization relates to its employees through attraction, recruitment, and motivation may create employees closer to or further away from the organization (Afsar, Masood & Umrani, 2019). Employee retention is responsible for the success and sustainability of an organization (Olckers & Du Plessis, 2012). Organizations are always looking for high-performing employees, and once they find those employees, they will work hard to retain those employees. (Darko, Akutey, Amoako and Affum, 2024) stated that employee retention is not easy to achieve because employee retention is a complex phenomenon that cannot be resolved with a single and simple solution but needs to be handled in various ways. Employee retention has been explored by many researchers in various ways and can be concluded that retention is a method of retaining talents in organizations (Sinha & Sinha, 2012).

### **B. Hypothesis Development**

#### **1. Job Security in Predicting Employee Retention**

Job security plays an important role in employee retention (Husain & Rehman, 2013). Job security is a contract that provides guarantees about the continuity of work, and the guarantee increases employee confidence and makes the stay longer (Anad, Dalmasso, Vessal, Parameswar, Rajasekar & Dhal, 2023) Organizations should include job security in their policies to support job stability and increase productivity (Lee, Jeong & Young, 2017). Organizations that provide a high level of job security will benefit from more committed employees (Ma, Shanshi, Donglai & Hongchun, 2016). When employees are assured of job security, they will work without fear and increase the overall productivity of the organization by using their intellectual skills. Hence, job security is one of the best and most significant strategies for creating loyalty among employees (Smith, 1999). Several studies (Panda & Sahoo, 2021) have found a significant positive relationship between job security and employee retention.

H1: Job Security is predicted to have a significant and positive relationship with employee retention.

#### **2. Emotional Stability in Predicting Employee Retention**

According to (Kinnary, Tanuwijaya, Pratama, Fatimah and Mirici, 2023), employees with high emotional stability are more satisfied and have a sense of belonging and may create employee retention. This is because employees with high emotional stability can better deal with stress and conflict in the workplace. The findings of this research are consistent with the results of previous research conducted by (Maldonado and Márquez, 2023) that employees with high emotional stability find it easy to adapt to new environments, remain calm in difficult situations, this brings to employees remain in the organization.

H2: Emotional Stability is predicted to have a significant and positive relationship with employee retention.

#### **3. Adaptability in Predicting Employee Retention on Employees Retention**

Adaptability plays an important role for individuals in organizational behavior, especially in today's rapidly changing work environment. This research supports several previous studies such as (Coetzee and Ellen, 2015) and (Firreira and Potgieter, 2018) that adaptability has a positive relationship with employee retention. In other words, employees with high adaptability to any change tend to remain in their jobs.

H3: Adaptability is predicted to have a significant and positive relationship with employee retention.

#### **4. Job Security, Emotional Stability, and Adaptability in Predicting Employee Retention**

Job security, emotional stability and adaptability are predicted to have a simultaneous influence on employee retention. The combination of three antecedents in explaining an outcome is consistent with various empirical studies in management studies (Andriyani, Siddiq, Hardjowikarto & Elyani, 2021; Ahmad, Siddiq, Suzana & Sofyan, 2023). From the aforementioned analysis, it can be underlined that when Gen Z employees feel safe in their work, are able to manage stress, and can adapt well to change, Gen Z employees are more likely to remain committed to the company. The role of job security, emotional stability, and adaptability simultaneously may create a perceived stable and supportive work environment, which is important for retaining employees in the long term.

H4: Job security, emotional stability, dan adaptability are simultaneously predicted to have a significant and positive relationship with employee retention.

**C. Conceptual Framework**

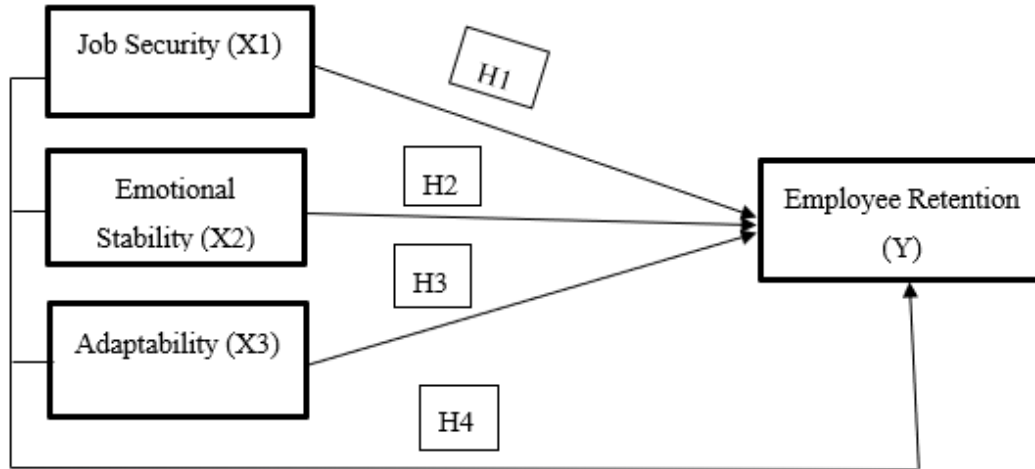


Figure 1. Conceptual Framework

**II. METHODS**

This research was conducted at a manufacturing company in Cirebon for 3 (three) months, starting from January to March 2024. This research focuses on Gen Z employees as research participants. The research strategy used is quantitative method with the type of associative data analysis. Associative data analysis is a data analysis formulation that focuses on the relationship between two or more variables (Sugiyono, 2015). Data processing in this study used SPSS version 25. There are three independent variables, namely job security (X1) measured by 7 questions, emotional stability (X2) measured by 10 questions and adaptability (X3) measured by 10 scales. The dependent variable is represented by employee retention (Y) which is measured by 9 scales. The measurement scale used in this study is a Likert scale. The Likert scale is designed to test how strongly research subjects agree or disagree with statements on a five-point scale (Sekaran & Bougie, 2016).

There were 133 Gen Z employee respondents involved in this research. Access to respondents was obtained through social networking with managers in companies where respondents work. The data collection technique was carried out through the distribution of paper-based questionnaire. Data analysis was conducted using several analyses consisting of validity test, reliability test, classical assumption test (multicollinearity test, heteroscedasticity test, normality test), t test, F test, and coefficient of determination test.

**III. RESULTS AND DISCUSSION**

**A. Results**

**1. Validity Test**

The validity test is measured using the Pearson Product Moment correlation formula in the SPSS application. (Kore, 2010) explains that the rule for making validity test decisions is that if the value of  $r_{count} > r_{table}$ , the instrument used can be considered valid. The Validity Test in Table 1 shows that all research variable instruments have a value of  $r_{count} > r_{table}$ . Hence all research instruments are valid.

Table 1. Testing of Validity

ItemNumber	r count Jobs Security	r count Emotional Stability	r count Adaptability	r calculate Employees Retention	r table
1.	0,877	0,855	0,448	0,243	0,170

2.	0,841	0,683	0,496	0,507	0,170
3.	0,913	0,837	0,228	0,509	0,170
4.	0,878	0,743	0,326	0,218	0,170
5.	0,811	0,761	0,472	0,521	0,170
6.	0,880	0,857	0,233	0,334	0,170
7.	0,917	0,715	0,244	0,304	0,170
8.		0,825	0,179	0,208	0,170
9.		0,842	0,171	0,277	0,170
10.		0,827	0,496		0,170

Source: Data Processing Results, 2024

**2. Reliability Test**

The purpose of the reliability test is to assess the extent of consistency of the data obtained measured using the Spearman-Brown formula. The decision rule in the reliability testing is that if the Cronbach's alpha value is greater than or equal to 0.06, the research instrument used is considered reliable (Anggraini, Aprianti, Setyawati & Hartono, 2022). From the results of the reliability test analysis, it can be concluded that all statement items have a Cronbach's alpha coefficient that exceeds 0.06. Therefore, all items are considered reliable and can be used to measure research variables.

*Table 2. Reliability Test Results*

<i>Variables</i>	<i>Cronbach's Alpha</i>	<i>N of item</i>
<i>Employees Retention</i>	<i>0,657</i>	<i>9</i>
<i>Job Security</i>	<i>0,964</i>	<i>7</i>
<i>Emotional Stability</i>	<i>0,951</i>	<i>10</i>
<i>Adaptability</i>	<i>0,665</i>	<i>10</i>

Source: Data Processing Results, 2024

**3. Multicollinearity Test**

Sugiyono (2017) explains that a good regression model does not have to be correlated with the independent variables. Multicollinearity occurs if the VIF value exceeds 10 and the tolerance value is less than 0.10. The results as described in Table 3 show that there is no independent variable that shows a tolerance value of less than 0.10 or a VIF value that exceeds 10. This indicates that there is no multicollinearity problem.

*Table 3 Multicollinearity Test Results*

No	Variables	Collinearity Statistics	
		Tolerance	VIF
1	Job Security	0,391	2,557
2	Emotional Stability	0,431	2,321
3	Adaptability	0,626	1,596

Source: Data Processing Results, 2024

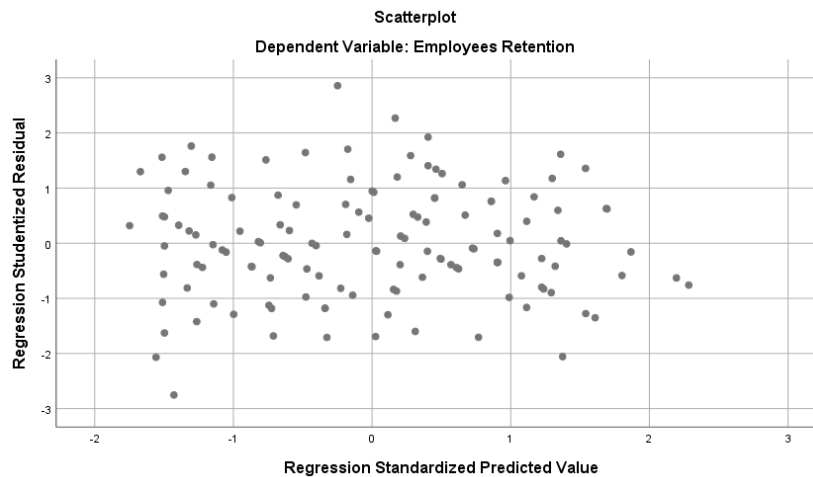
**4. Heteroskedasticity Test**

To detect heteroscedasticity, the Glesjer test can be used. If the probability of significance of each independent variable is greater than 0.05, it can be concluded that there is no heteroscedasticity in the regression model (Ridwan and Akdon, 2008). Table 4 and Figure 2 show that the significance value of each variable is greater than 0.05 and the points are evenly distributed. Thus, it can be concluded that there is no heteroscedasticity in the research data. This means that the data distribution is the same or homoscedastic.

*Table 4. Heteroscedasticity Test Results*

Variables	Glesjer Significant Test	Information
Job Security	0,239	Heteroscedasticity does not occur
Emotional Stability	0,684	Heteroscedasticity does not occur Heteroscedasticity does not occur
Adaptability	0,843	

Source: Data Processing Results, 2024



*Figure 2. Scatter Plot*

**5. Normality Test**

Sugianto (2012) states that a good regression model has a normal or close to normal data distribution. Decision making in the normality test uses the Kolmogorov-Smirnov test. From the results of the normality analysis, it was found that the Kolmogorov-Smirnov value was 0.200 with a significance of 0.200, which exceeded

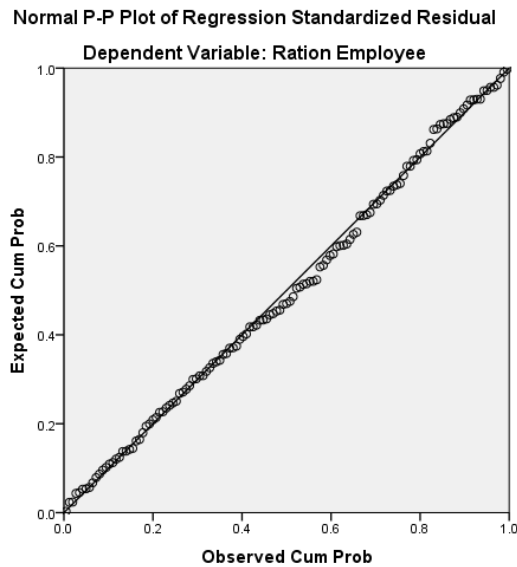
the value of 0.05. Thus, it can be concluded that the data has a normal distribution. Furthermore, as described in Figure 3, the points are evenly distributed along the diagonal axis.

*Table 5. Normality Test Results*

*One-Sample Kolmogorov-Smirnov Test*

		<i>Unstandardized Residual</i>
<i>N</i>		<i>133</i>
<i>Normal Parameters</i>	<i>Mean</i>	<i>.0000000</i>
	<i>Std. Deviation</i>	<i>1.91470888</i>
<i>Most Extreme Differences</i>	<i>Absolute</i>	<i>.047</i>
	<i>Positive</i>	<i>.047</i>
	<i>Negative</i>	<i>-.038</i>
<i>Test Statistic</i>		<i>.047</i>
<i>Asymp. Sig. (2-tailed)</i>		<i>.200<sup>c,d</sup></i>

Source: Data Processing Results, 2024



*Figure 3 Normality Test Plot Normal P-Plot*

**6. Multiple Linear Regression Analysis**

The results of multiple linear regression analysis carried out on the job security, emotional stability and adaptability variables are as shown in Table 6. The constant value of 10.964 explains that if the job security, emotional stability, and adaptability variables are equal to zero, the employee retention variable is worth 10.964. The regression coefficient value for the job security variable is 0.259. Having a positive sign means that if the job security variable increases by one unit, the employee’s retention variable will also increase by 0.259 units and

vice versa. The regression coefficient value for the emotional stability variable is 0.732. Having a positive sign means that if the emotional stability variable increases by one unit, the employee retention variable will also increase by 0.732 units and vice versa. The regression coefficient value for the adaptability variable is 0.254. Having a positive sign means that if the adaptability variable increases by one unit, the employee retention variable will also increase by 0.254 units and vice versa.

*Table 6. Multiple Linear Regression Results*

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
1 (Constant)	10.964	2.701		4.058	.000
Job security	.108	.034	.259	3.208	.002
Emotional Stability	.323	.034	.732	9.526	.000
Adaptability	.248	.062	.254	3.989	.000

Source: Data processing results, 2024

Based on the table above it can be formulated :

$$Y = \alpha + b_1X_1 + b_2X_2 + b_3X_3$$

$$Y = 10.964 + 0.108X_1 + 0.323X_2 + 0.248X_3$$

**7. Partial Hypothesis Test (T Test)**

The of the partial hypothesis test (t test) can be seen in Table 6 which shows the results of the partial hypothesis. The results of testing the first hypothesis show a calculated t value of 3.208, which exceeds the t table value of 1.960, or with a significance value of 0.002 which is smaller than 0.005. Therefore, it can be concluded that the job security variable has a positive and significant relationship with employee retention or the first hypothesis (H1) that job security has a positive and significant relationship with employee retention is accepted. For testing the second hypothesis, the calculated t value is 9.526, which also exceeds the t table value of 1.960, with a significance value of 0.000 which is smaller than 0.005. Therefore, it can be concluded that emotional stability has a positive and significant relationship with employee retention or the second hypothesis (H2) that emotional stability has a positive and significant relationship with employee retention is accepted. Testing the third hypothesis produced a calculated t value of 3.989, which exceeds the t table value of 1.960, with a significance value of 0.000 which is also smaller than 0.005. Therefore, it can be concluded that the adaptability variable has a positive and significant relationship on the employee retention, or the third hypothesis (H3) that adaptability has a positive and significant relationship with employee retention is accepted.

**8. Simultaneous Test Results (F Test)**

The results of simultaneous hypothesis analysis (F test) can be seen in Table 7. The significance value of 0.000 is smaller than the Alpha level used (5% or 0.05). Based on this simultaneous test, it shows that job security, emotional stability and adaptability simultaneously have a positive and significant relationship on employee retention. It means that employee retention values can be determined by three independent variables in this research. Thus, the third hypothesis (H4) proposed, namely that job security, emotional stability, and adaptability simultaneously have a positive and significant relationship on employee retention, is accepted and the null hypothesis (H0) is rejected.

*Tabel 7 Simultaneous Test Results (F Test)*

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	990.374	3	330.125	88.001	.000 <sup>b</sup>

<i>Residual</i>	483.927	129	3.751
<i>Total</i>	1474.301	132	

Source: Data processing results, 2024

**9. Coefficient of Determination (R<sub>2</sub>)**

From Table 8, the coefficient of determination (R<sup>2</sup>) reached 0.672. This indicates that the variability in increases and decreases in employee retention of 67.2% can be explained by the contribution of job security, emotional stability, and adaptability. Most of the variability (32.8%) is explained by other factors not included in this research model. The coefficient of determination of 67.2% shows that the influence of job security, emotional stability and adaptability is very significant on employee retention for Gen Z. According to Chin (1998) the R-Square value is classified as strong if it is more than 0.67, and weak if it is more than 0.19 but less than 0.33.

*Table 8. Coefficient of Determination (R<sub>2</sub>)*

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.820 <sup>a</sup>	.672	.664	1.937

Source: Data processing results, 2024

**B. Discussion**

This study explores the relationship between job security, emotional stability, adaptability, and retention of Gen Z employees in one manufacturing company in a city in Indonesia. Statistical analysis revealed a significant and positive relationship for each independent variable in predicting Gen Z employee retention.

**The Relationship of Job Security with Employee Retention**

This study found that job security has a positive and significant relationship with employee retention among Gen Z employees. This means that job security has a positive and significant impact on the stay of Gen Z employees in the company they work for. Thus, the first hypothesis 1 (H1) that job security is predicted to have a positive and significant association with employee retention of Gen Z employees is accepted. This finding is consistent with previous research (Samuel, 2009) that job security has a statistically significant impact on employee retention in both public and private sector organizations. The results of this study are also consistent with research conducted by Paranell and Crandall (2003) which found that job security positively and significantly affects employee retention.

**1. The Relationship of Emotional Stability with Employee Retention**

This study found that emotional stability has a positive and significant relationship with employee retention among Gen Z employees. This means that emotional stability has a positive and significant impact on Gen Z employee retention. Thus, the second Hypothesis (H2) that emotional stability is thought to have a positive and significant association with employee retention in Gen Z employees can be accepted. This finding is consistent with previous research (Naz, 2019) that found employees with high emotional stability tend to have higher levels of job satisfaction, which in turn increases employee retention in the organization. The finding of this study is also consistent with research conducted by Abebe and Singh (2023) which found that emotional stability has a significant impact on employee retention.

**2. The Relationship of Adaptability with Employees Retention**

Furthermore, this study shows that adaptability has a positive and significant relationship with Gen Z employees retention. This means that adaptability in a manufacturing company in Cirebon has a positive and significant impact on Gen Z employee retention. Thus, the third hypothesis (H3) that adaptability is thought to have a positive and significant association with employee retention among Gen Z employees in manufacturing companies can be accepted. This finding is consistent with previous research (Hammar, 2023). Hammar (2023) found that employees who are adaptive to a changing and dynamic work environment tend to stay at the organization because they can adjust to various situations and job demands that may change over time. High adaptability can help employees to remain relevant and effective in a rapidly changing work environment, which in turn can increase employee retention. The results of this study are also in line with research conducted by Yani



and Saputra (2023) which found that adaptability through the ability to adjust the work environment to the dynamics of the digital era is a significant factor in improving employee retention.

### **3. The Relationship of Job Security, Emotional Stability, and Adaptability on Employee Retention**

This study examines how job security, emotional stability, and adaptability simultaneously affect the employee retention among Gen Z employees in a manufacturing company. The results of statistical analysis show that the three variables together have a significant relationship with employee retention. The implication is that companies need to pay attention and implement strategies that strengthen these three variables to increase the retention of Gen Z employees.

From the above analysis, it can be underlined that job security emphasizes the employee perception on the security of their jobs, while emotional stability emphasizes stability of employee emotion or emotional intelligence as a factor affecting retention. In addition, adaptability highlights the importance of employees' ability to adapt to changes in the work environment. These findings provide important insights for company management in designing policies and programs to improve the retention of Gen Z employees by improving job security, emotional stability, and adaptability. It is expected that companies then can achieve higher retention rates and strengthen overall organizational performance.

## **IV. CONCLUSION**

The results of this study indicate that job security, emotional stability, and adaptability both individually and simultaneously have a positive and significant relationship with employee retention among Gen Z employees in a manufacturing company. Increasing retention in Gen Z employees requires great attention through among of them increasing job security, emotional stability, and adaptability. The higher job security, emotional stability and adaptability, the higher employee retention may be and the easier it will be for companies to achieve their goals. In addition, these three variables strongly explain all the information needed to increase Gen Z employee retention, considering that the coefficient of determination of the three variables is in the strong category.

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## **REFERENCES**

- Abebe, Dagim & Singh, Devinder. (2023). The Relationship between Emotional Intelligence, Job Satisfaction, and Job Performance: Empirical Evidence from Public Higher Education Institutions. *European Journal of Business and Management Research*. 8. 45-52. 10.24018/ejbmr.2023.8.3.1928
- Afsar, B., Masood, M., & Umrani, W. A. (2019). The role of job crafting and knowledge sharing on the effect of transformational leadership on innovative work behavior. *Personnel Review*, 48(5), 1186–1208. <https://doi.org/10.1108/PR-04-2018-0133>
- Ahmad, N., Siddiq, D. M., Suzana, A., & Sofyan, N. I. (2023). THE EFFECT OF WORKLOAD, WORK STRESS AND WORK FATIGUE ON EMPLOYEE PERFORMANCE ON PUSKESMAS IN MAJALENGKA REGENCY. *JRMSI - Jurnal Riset Manajemen Sains Indonesia*, 14(01), 48–56. <https://doi.org/10.21009/JRMSI.014.1.06>
- Ali, H., Li, M., & Qiu, X. (2024). Examination of HRM practices in relation to the retention of Chinese Gen Z employees. *Humanities and Social Sciences Communications*, 11(1), 24. <https://doi.org/10.1057/s41599-023-02472-6>
- Anand, A., Dalmaso, A., Vessal, S. R., Parameswar, N., Rajasekar, J., & Dhal, M. (2023). The effect of job security, insecurity, and burnout on employee organizational commitment. *Journal of Business Research*, 162, 113843. <https://doi.org/10.1016/j.jbusres.2023.113843>
- Andriyani, P., Siddiq, D. M., Hardjowikarto, D., & Elyani, N. D. (2022). Pengaruh kompetensi, motivasi kerja dan disiplin kerja terhadap kinerja karyawan. *Jurnal Inspirasi Bisnis Dan Manajemen*, 5(2), 189. <https://doi.org/10.33603/jibm.v5i2.5780>

- Anggraini, F. D. P., Aprianti, A., Setyawati, V. A. V., & Hartanto, A. A. (2022). Pembelajaran Statistika Menggunakan Software SPSS untuk Uji Validitas dan Reliabilitas. *Jurnal Basicedu*, 6(4), 6491–6504. <https://doi.org/10.31004/basicedu.v6i4.3206>
- Artz, B., & Kaya, I. (2014). The impact of job security on job satisfaction in economic contractions versus expansions. *Applied Economics*, 46(24), 2873–2890. <https://doi.org/10.1080/00036846.2014.914148>
- Barreiro, C. A., & Treglown, L. (2020). What makes an engaged employee? A facet-level approach to trait emotional intelligence as a predictor of employee engagement. *Personality and Individual Differences*, 159, 109892. <https://doi.org/10.1016/j.paid.2020.109892>
- Basyouni, S. S., & El Keshky, M. E. S. (2021). Job Insecurity, Work-Related Flow, and Financial Anxiety in the Midst of COVID-19 Pandemic and Economic Downturn. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.632265>
- Berkup, S. B. (2014). Working With Generations X And Y In Generation Z Period: Management Of Different Generations In Business Life. *Mediterranean Journal of Social Sciences*. <https://doi.org/10.5901/mjss.2014.v5n19p218>
- Brundin, E., Liu, F., & Cyron, T. (2022). Emotion in strategic management: A review and future research agenda. *Long Range Planning*, 55(4), 102144. <https://doi.org/10.1016/j.lrp.2021.102144>
- Coetzee, M., & Stoltz, E. (2015). Employees' satisfaction with retention factors: Exploring the role of career adaptability. *Journal of Vocational Behavior*, 89, 83–91. <https://doi.org/10.1016/j.jvb.2015.04.012>
- Coronado-Maldonado, I., & Benítez-Márquez, M.-D. (2023). Emotional intelligence, leadership, and work teams: A hybrid literature review. *Heliyon*, 9(10), e20356. <https://doi.org/10.1016/j.heliyon.2023.e20356>
- Doğru, Ç. (2022). A Meta-Analysis of the Relationships Between Emotional Intelligence and Employee Outcomes. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.611348>
- Doğru, Ç. (2022). A Meta-Analysis of the Relationships Between Emotional Intelligence and Employee Outcomes. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.611348>
- Drigas, A., & Papoutsi, C. (2018). A New Layered Model on Emotional Intelligence. *Behavioral Sciences*, 8(5), 45. <https://doi.org/10.3390/bs8050045>
- Ferreira, N., & Potgieter, I. L. (2018). Career-related dispositional factors in relation to retention within the retail sector: An exploratory study. *Journal of Psychology in Africa*, 28(5), 400–406. <https://doi.org/10.1080/14330237.2018.1527545>
- H. Ammar, Y. (2023). Analisis Pengaruh Beban Kerja dan Adaptabilitas Lingkungan Kerja Terhadap Kinerja Karyawan Melalui Kepuasan Kerja Pada Pabrik Kopi Senang Sorong. *Journal of Management*. 6. 42-55. ISSN : 2614-851X. <https://doi.org/10.3390/admsci10030037>
- Hussain, T., & Rehman, S. S. ur. (2013). Do Human Resource Management Practices Inspire Employees' Retention? *Research Journal of Applied Sciences, Engineering and Technology*, 6(19), 36253633. <https://doi.org/10.19026/rjaset.6.3569>
- Jung, H. S., Jung, Y. S., & Yoon, H. H. (2021). COVID-19: The effects of job insecurity on the job engagement and turnover intent of deluxe hotel employees and the moderating role of generational characteristics. *International Journal of Hospitality Management*, 92, 102703. <https://doi.org/10.1016/j.ijhm.2020.102703>
- Khawrin, M. K., & Sahibzada, A. (2023). The mediating role of job satisfaction at selected public universities in Afghanistan: the effect of job security on turnover intention. *Journal of Management and Business Education*, 6(3), 244–256. <https://doi.org/10.35564/jmbe.2023.0013>
- Kinnary, N. R., Tanuwijaya, J., Pratama S, K. I., Fatimah, T., & Mirici, I. H. (2023). The Influence of Emotional Intelligence on Employee Engagement and Job Satisfaction through Work-Life Balance. *INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND ANALYSIS*, 06(08). <https://doi.org/10.47191/ijmra/v6-i8-19>
- Lee, C. C., Lim, H. S., Seo, D. (Josh), & Kwak, D.-H. A. (2022). Examining employee retention and motivation: the moderating effect of employee generation. *Evidence-Based HRM: A Global Forum for Empirical Scholarship*, 10(4), 385–402. <https://doi.org/10.1108/EBHRM-05-2021-0101>
- Lee, S. H., & Jeong, D. Y. (2017). Job insecurity and turnover intention: Organizational commitment as mediator. *Social Behavior and Personality: An International Journal*, 45(4), 529–536. <https://doi.org/10.2224/sbp.5865>
- Lukić-Nikolić, J., & Lazarević, S. (2022). Employer branding and employee value proposition for Generation Z in digital economy. *Marketing*, 53(3), 203–214. <https://doi.org/10.5937/mkng2203203L>
- Ma, B., Liu, S., Liu, D., & Wang, H. (2016). Job security and work performance in Chinese employees: The mediating role of organizational identification. *International Journal of Psychology*, 51(2), 123–129. <https://doi.org/10.1002/ijop.12137>
- Moeller, J., von Keyserlingk, L., Spengler, M., Gaspard, H., Lee, H. R., Yamaguchi-Pedroza, K., Yu, R., Fischer, C., & Arum, R. (2022). Risk and Protective Factors of College Students' Psychological Well-Being During

- the COVID-19 Pandemic: Emotional Stability, Mental Health, and Household Resources. *AERA Open*, 8, 233285842110657. <https://doi.org/10.1177/23328584211065725>
- Muñoz Medina, F., López Bohle, S., Ugarte, S. M., Chambel, M. J., & Wall, E. (2022). Employees Perceptions of Job Insecurity and Performance: A Qualitative Approach. *International Journal of Environmental Research and Public Health*, 19(24), 16665. <https://doi.org/10.3390/ijerph192416665>
- Naz, Shumaila & Li, Cai & Khan, Hira & Rafiq, Muhammad. (2019). The impact of emotional intelligence on employee performance and employee engagement: mediating role of job satisfaction. *Middle East J. of Management*. 6. 574. 10.1504/MEJM.2019.101921.
- Olckers, C., & Du Plessis, Y. (2012). The role of psychological ownership in retaining talent: A systematic literature review. *SA Journal of Human Resource Management*, 13(1). <https://doi.org/10.4102/sajhrm.v10i2.415>
- Opore Darko, I. L., Bans-Akutey, A., Amoako, P., & Affum, L. K. (2024). Employee retention and organizational performance: Evidence from Ghana Police Service. *Annals of Management and Organization Research*, 5(3), 219–230. <https://doi.org/10.35912/amor.v5i3.1855>
- Panda, A., & Sahoo, C. K. (2021). Work–life balance, retention of professionals and psychological empowerment: an empirical validation. *European Journal of Management Studies*, 26(2/3), 103–123. <https://doi.org/10.1108/EJMS-12-2020-0003>
- Qian, S., Yuan, Q., Niu, W., & Liu, Z. (2022). Is job insecurity always bad? The moderating role of job embeddedness in the relationship between job insecurity and job performance. *Journal of Management & Organization*, 28(5), 956–972. <https://doi.org/10.1017/jmo.2018.77>
- Qin, C., Wu, K., Liu, X., Liu, S., & Lu, W. (2021). The Effect of job security on Deviant Behaviors in Diverse Employment Workplaces: From the Social Identity Perspective. *International Journal of Environmental Research and Public Health*, 18(14), 7374. <https://doi.org/10.3390/ijerph18147374>
- Ridwan, & Akdon. (2008). *Applications of statistics and research methods for administration & management*. Bandung: Dewa Ruchi
- Riwukore, JR (2010). The influence of transformational leadership, competency motivation and organizational commitment to work and employee performance at the Kupang city government secretariat, East Nusa Tenggara. Surabaya: Economics Study Program, Postgraduate University of 17 August 1945
- Sackett, P. R., & Walmsley, P. T. (2014). Which Personality Attributes Are Most Important in the Workplace? *Perspectives on Psychological Science*, 9(5), 538–551. <https://doi.org/10.1177/1745691614543972>
- Schulze, J. H., & Pinkow, F. (2020). Leadership for Organizational Adaptability: How Enabling Leaders Create Adaptive Space. *Administrative Sciences*, 10(3),37.
- Schutte, N. S., & Loi, N. M. (2014). Connections between emotional intelligence and workplace flourishing. *Personality and Individual Differences*, 66, 134–139. <https://doi.org/10.1016/j.paid.2014.03.031>
- ŞENOL, F. (2011). The Effect of Job Security on the Perception of External Motivational Tools: A Study in Hotel Businesses. *Journal of Economic and Social Studies*, 1(1), 33–67. <https://doi.org/10.14706/JECOSS11122>
- Shin, J., & Shin, H. (2020). Impact of Job Insecurity on Hotel Workers' Workaholism and Work–Family Conflict in Korea. *International Journal of Environmental Research and Public Health*, 17(21), 7783. <https://doi.org/10.3390/ijerph17217783>
- Sinha, C., & Sinha, R. (2012). Factors Affecting Employee Retention: A Comparative Analysis of two Organizations from Heavy Engineering Industry. In *European Journal of Business and Management* www.iiste.org ISSN (Vol. 4, Issue 3). Online. www.iiste.org
- Sugianto. (2012). *Applied quantitative research method: in education and psychology*. Jakarta: Kencana.
- Sugiyono.(2017). *Quantitative, qualitative and R&D methods*. Bandung. Alfabeta
- Twenge, J. M. (2023). Generations: The Real Differences between Gen Z, Millennials, Gen X, Boomers, and Silents—and What They Mean for America's Future. *Perspectives on Science and Christian Faith*, 75(3), 212–214. <https://doi.org/10.56315/PSCF12-23>
- Twenge, van Dam, K. (2013). Employee adaptability to change at work: a multidimensional, resource-based framework. In *The Psychology of Organizational Change* (pp. 123–142). Cambridge University Press. <https://doi.org/10.1017/CBO9781139096690.009>
- Twenge, van Dam, K., & Meulders, M. (2021). The Adaptability Scale. *European Journal of Psychological Assessment*, 37(2), 123–134. <https://doi.org/10.1027/1015-5759/a000591>
- Xuecheng, W., Iqbal, Q., & Saina, B. (2022). Factors Affecting Employee's Retention: Integration of Situational Leadership With Social Exchange Theory. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.872105>
- Yani, N. W. M. N., & Saputra, I. G. N. W. H. (2023). Retensi karyawan generasi Y dan Z: pentingnya manajemen talenta dan kepuasan kerja. *Jurnal Ilmu Manajemen*, 11(4), 807–820. <https://doi.org/10.26740/jim.v11n4.p807-820>

# Construction of the Performance Marketing Model of Superior Product in the One Village One Product (OVOP) Program (Studi of Sharia SMEs in Central Java)

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## ABSTRACT

**Purpose:** The decline in the number of MSME players and marketing performance is an indication of the effectiveness of the OVOP program towards the down streaming of marketing performance of SMEs in leading products assisted by Islamic banking in Central Java. These findings led this study to find empirically variables that could explain the problem of marketing performance by using a competitive advantage variable approach, business networking capabilities, HR competencies, financial factors, and operational factors.

**Design/methodology/approach:** The influence of marketing performance, competitive advantage, business networking capabilities, HR competencies, financial factors, and operational factors are visualized in the empirical model tested in this study using the Structural Equation Modeling (SEM) analysis technique approach.

**Findings:** The results of the tests conducted show that competitive advantage is built through the capabilities of business networks, HR competencies, financial factors and operational factors where financial factors are the main explanation. The test results also show that competitive advantage is proven to be a variable that can explain the occurrence of variations in marketing performance.

**Research limitations:** The predictors examined in this study are still limited to internal factors and do not involve other factors outside MSMEs.

**Practical implications:** Increasing business networking capabilities, HR competencies, financial factors and operational factors.

**Originality/value:** This research develops an empirical model to explain marketing performance in leading MSMEs

**Paper type:** Research paper

**Keyword:** Marketing Performance, MSMEs

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## I. INTRODUCTION

The development of SMEs in Indonesia has been carried out by the Office of the State Minister for Cooperatives and Small and Medium Enterprises (Ministry of State Affairs). In addition to the KUKM State Ministry, other agencies such as the Ministry of Industry and Trade, Ministry of Finance, and BI also carry out SME development functions in accordance with their respective authorities. Where the Ministry of Industry and Trade carried out the function of developing Small and Medium Industries (IKM) by drafting the 2002-2004 Small and Medium Industry Development Master Plan. Likewise, the Ministry of Finance through the Decree of the Minister of Finance (Minister of Finance) No. 316 / KMK.016 / 1994 requires SOEs to set aside 1-5% of company profits for fostering small businesses and cooperatives (PUKK). Bank Indonesia as the financial authority first issued regulations regarding bank loans for SMEs, although lately there has been no specific policy on banks

regarding credit to small businesses anymore. Likewise, many offices or agencies involved in SME "businesses" are also numerous.

In general, SMEs themselves face two main problems, namely financial problems and non-financial problems (management organizations). Problems that are included in financial problems include (Urata, 2000) (1) lack of conformity (occurrence of mismatch) between available funds that can be accessed by SMEs, (2) absence of a systematic approach in SME funding, (3) transaction costs high, which is caused by quite complex credit procedures that take up a lot of time while the amount of credit disbursed is small, (4) lack of access to formal funding sources, both due to the absence of remote banks and insufficient information available, (5) credit interest for investment and working capital is quite high, and (6) many SMEs are not yet bankable, both due to the absence of transparent financial management and lack of managerial and financial capabilities.

While included in the problem of management (non-financial) organizations include: (1) lack of knowledge of production technology and quality control caused by the lack of opportunities to keep up with technology and lack of education and training, (2) lack of marketing knowledge, due to the limited information that can be reached by SMEs regarding the market, other than because of the limited ability of SMEs to provide products / services that are in accordance with market desires, and (3) limited human resources (HR) in the lack of resources to develop HR and accounting.

In addition to these findings, the results of the preliminary survey found several other factual problems related to the capabilities of business networks, HR competencies, financial factors and operational factors. The existence of MSMEs is very much determined by its capability to build business networks to create superior marketing performance. The results of the mapping have found that the problems of the capability of business networks are related to the weakness of business networks and the limited ability of market penetration and market diversification (Winarni, 2006). SMEs that only rely on entrepreneurial spirit from their owners without being able to create creative marketing programs will find it difficult to develop because they only have a vision but are not accompanied by strategies that support it. Vice versa, the ability to create a creative marketing program will be difficult if it is not accompanied by the ability to see what challenges are actually being faced (Sawitri & Andarwati, 2014). Marketing difficulties and intense business competition (Hadiyati, 2012). Lack of access to product marketing (Fristian, 2014).

Business networking itself is a form of partnership between individuals, groups or organizations in achieving certain goals. Research conducted by Lukiasuti (2012) revealed that entrepreneurial business performance can be influenced by network capability factors in managing a business. A network, which is implied as an act of making contact with other people and organizations, can also be classified as human resources (Dollinger 1999) and networking is an alternative to using internal resources. Networking is a variable that is considered important for all types of companies, especially those relating to the fact that the economic environment is becoming increasingly competitive. Networking is becoming increasingly important because it makes it easier for companies to access information, resources, markets and technology (Gulati, Nohria, & Zaheer 2000). Even though in fact, the handicraft industry SMEs that are the object of this research still do not have a business network to market their products so far so far only rely on mediators that connect craftsmen with sales agents.

In general, empirical research related to finance and banking over the past three decades has concluded that small and medium enterprises (SMEs) always complain of the narrowness of the entrance (accessibility) seeking external funds, especially sources of funds from banks. The research was not only carried out in developing countries but also in developed countries (Sunarto, 2002). Constraints that often occur in funding sources are usually in the form of classic reasons such as lack of collateral, procedures, complicated, etc. On the other hand, lending to small businesses has the potential for failure to refund to banks or other financial institutions. This is because SMEs have informationally opaque characteristics (Berger and Udell 2000, in Sunarto, 2002). The issue of asymmetric information occurs between SMEs and creditors, where managers of SME owners know more and better about cash flow, creditability and business prospects than creditors. This condition makes the creditor have the perception that the business proposed for spending is at higher risk. In addition, in terms of administration and finance, SMEs rarely have consistent historical records (accounting, marketing and production) and are also not familiar with business plans, which further increases the likelihood of asymmetric information.

Research in Indonesia regarding financial problems often faced by MSMEs has been mapped. Access to small industries for low formal credit institutions (Tedjasuksmana, 2014). The classic problem faced by MSMEs is the lack of capital as a result of the low access of MSMEs to capital / financing sources, especially banks (Azazi et al., 2010). Most do not have financial reports and do not separate personal wealth from company assets (Winarni, 2006). The Winarni Study (2006) also found that the main source of business capital was personal capital and the low profit margins that MSME business activities could produce. Debt increases very sharply, debt increases unbalanced with increase in assets, net income decreases, sales decrease and gross profit, costs of selling general costs and administrative costs increase, bad debts increase, inventory turnover slows down, delays in obtaining a balance sheet regularly, bills that concentrated on certain parties (Adnan & Furywardhana, 2006). Lack of capital (Hadiyati, 2010; Fristian, 2014).

## II. METHODS

### A. Population and Samples

The population in this study was the management of MSMEs in the handicraft industry guided by Islamic banking in Central Java which amounted to 114. Determination of the number of samples for Structural Equation Modeling analysis using the formula (Ferdinand, 2015) number of indicators x 5 to 10. Because in this study there were 49 indicators, then the number of samples used is 245-490.

Furthermore, Hair et al. In Ferdinand (2015) found that the size of the sample suitable for SEM was between 100-200 samples. By referring to the opinion of Hair, the number of samples used in the study is the total population (census) which amounted to 114 respondents.

### B. Method of collecting data

Data collection research was conducted through structured interviews using a questionnaire. The type of questions in the questionnaire is closed questions. Scale data of respondents' answers to research questions using the Agree-Disagree Scale which produces very disagreeable answers - answers strongly agree in the range of 1 to 10 (Ferdinand, 2006).

### C. Analysis Method

To test the models and relationships developed in this study an analysis technique is needed. The analysis technique used in this study is Structural Equation Modeling (SEM) which is operated through AMOS programs.

## III. RESULTS AND DISCUSSION

### 1. Confirmatory Analysis

In confirmatory factor analysis techniques are carried out to confirm whether the observed indicators can reflect the factors analyzed. There is a basic test in confirmatory factor analysis, namely the test of the significance of the weight of the factor. Test the significance of the weighting factor to test whether an indicator can be used to confirm that the indicator can be together with other indicators to explain a latent variable. This test is done by analyzing the weight value of the factor and the value of standardized regression weight (Ferdinand, 2006).

Table 1 Regression Weight Value in Analysis of Confirmatory Factors in Research Variables

			Std Estimate	Estimate	S.E.	C.R.	P
X1	<---	Business networking capabilities	,885	1,000			
X2	<---	Business networking capabilities	,803	,992	,090	11,056	***
X3	<---	Business networking capabilities	,836	1,189	,099	12,002	***
X4	<---	Business networking capabilities	,776	,919	,088	10,458	***
X5	<---	Business networking capabilities	,803	,859	,078	11,057	***
X6	<---	Business networking capabilities	,788	,789	,074	10,646	***
X7	<---	Business networking capabilities	,841	,850	,069	12,335	***
X8	<---	Business networking capabilities	,354	,465	,122	3,812	***
X9	<---	HR competency	,761	1,000			

			<i>Std Estimate</i>	<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P</i>
X10	<---	<i>HR competency</i>	,044	,056	,127	,442	,659
X11	<---	<i>HR competency</i>	-,033	-,043	,130	-,329	,742
X12	<---	<i>HR competency</i>	,036	,049	,135	,364	,716
X13	<---	<i>HR competency</i>	,065	,085	,130	,655	,513
X14	<---	<i>HR competency</i>	,749	,829	,101	8,186	***
X15	<---	<i>HR competency</i>	,452	,451	,095	4,730	***
X16	<---	<i>HR competency</i>	,474	,510	,102	4,985	***
X17	<---	<i>HR competency</i>	,379	,433	,110	3,947	***
X18	<---	<i>HR competency</i>	,201	,320	,156	2,052	,040
X19	<---	<i>HR competency</i>	,460	,478	,099	4,821	***
X20	<---	<i>HR competency</i>	,780	,872	,102	8,547	***
X21	<---	<i>HR competency</i>	,693	,746	,099	7,497	***
X22	<---	<i>HR competency</i>	,677	,782	,108	7,253	***
X23	<---	<i>HR competency</i>	,764	,657	,079	8,329	***
X24	<---	<i>HR competency</i>	,740	,725	,091	7,962	***
X25	<---	<i>HR competency</i>	,782	,745	,088	8,429	***
X26	<---	<i>Financial factors</i>	,762	1,000			
X27	<---	<i>Financial factors</i>	,463	,703	,144	4,869	***
X28	<---	<i>Financial factors</i>	,439	,531	,115	4,603	***
X29	<---	<i>Financial factors</i>	,331	,349	,102	3,428	***
X30	<---	<i>Financial factors</i>	,422	,459	,104	4,409	***

			<i>Std Estimate</i>	<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P</i>
X31	<---	<i>Financial factors</i>	,770	1,088	,127	8,554	***
X32	<---	<i>Financial factors</i>	,868	1,021	,104	9,826	***
X33	<---	<i>Financial factors</i>	,882	,962	,096	10,045	***
X34	<---	<i>Financial factors</i>	,868	,952	,097	9,851	***
X39	<---	<i>Operational factors</i>	,821	17,459	20,023	,872	,383
X38	<---	<i>Operational factors</i>	,838	16,130	18,516	,871	,384
X37	<---	<i>Operational factors</i>	,827	15,372	17,649	,871	,384
X36	<---	<i>Operational factors</i>	,000	-,004	1,176	-,004	,997
X35	<---	<i>Operational factors</i>	,085	1,000			
X40	<---	<i>Operational factors</i>	,861	15,761	18,092	,871	,384
X41	<---	<i>Operational factors</i>	,841	16,876	19,348	,872	,383
X42	<---	<i>Competitive advantages</i>	,885	1,000			
X43	<---	<i>Competitive advantages</i>	,868	1,025	,085	12,042	***
X44	<---	<i>Competitive advantages</i>	,847	,945	,081	11,620	***
X45	<---	<i>Competitive advantages</i>	,755	,746	,076	9,796	***
X46	<---	<i>Marketing performance</i>	,765	1,000			
X47	<---	<i>Marketing performance</i>	,868	1,162	,120	9,658	***
X48	<---	<i>Marketing performance</i>	,848	1,175	,126	9,328	***
X49	<---	<i>Marketing performance</i>	,843	1,122	,122	9,188	***

Source: Processed primary data, 2022

From the results of confirmatory factor analysis on business networking capability variables it is known that indicative X8 about network capabilities with small companies / other MSMEs produces standardized estimates that do not meet the criteria so that the X8 indicator is issued as a measure of business network capabilities.



From the results of confirmatory factor analysis on HR competency variables it is known that indicators X10, X11, X12, X13, X15, X16, X17, X18, X19 produce standardized estimates that do not meet the criteria so that the indicators are issued as a measure of HR competency variables.

From the results of confirmatory factor analysis on financial factor variables, it is known that X27-X30 indicator produces a standardized estimate value that does not meet the criteria so that the indicators are issued as a measure of financial factor variables.

From the results of confirmatory factor analysis on operational factor variables it is known that X35 and X36 indicators produce standardized estimate values that do not meet the criteria so that the indicators are issued as a measure of operational factor variables.

From the results of the confirmatory factor revision analysis on the competitive advantage variable it is known that the X42-X45 indicator produces a standardized regression weight value as well as a probability value that meets the criteria so that it can be concluded that the X42-X45 indicator is an appropriate measure to measure the variable competitive advantage.

From the results of the confirmatory factor revision analysis on the marketing performance variable, it is known that X46-X49 indicator produces a standardized regression weight value and a probability value that meets the criteria so that it can be concluded that the X46-X49 indicator is the right measurement tool for measuring marketing performance variables.

**2. Reliability Evaluation and Variance Extract**

Reliability testing shows the extent to which a measuring instrument can provide results that are relatively the same if it is measured again on the same object. Minimum reliability values and dimensions / indicators forming latent variables that can be received are 0.70. While the Variance Extract measurement shows the amount of variance from the indicator extracted by the latent construct / variable developed. The value of Variance Extract that can be received is a minimum of 0.50. The results of the Reliability and Variance Extract calculations can be seen in Table 2.

*Table 2 Reliability dan Variance Extract*

<i>Variabel</i>		<i>Std.Load</i>	<i>Std.Load2</i>	<i>1-Std.Load2</i>	<i>Reliability</i>	<i>Variance</i>
<i>Business Network capability</i>	<i>X1</i>	<i>0,891</i>	<i>0,794</i>	<i>0,206</i>	<i>0,934</i>	<i>0,670</i>
	<i>X2</i>	<i>0,793</i>	<i>0,629</i>	<i>0,371</i>		
	<i>X3</i>	<i>0,834</i>	<i>0,696</i>	<i>0,304</i>		
	<i>X4</i>	<i>0,779</i>	<i>0,607</i>	<i>0,393</i>		
	<i>X5</i>	<i>0,797</i>	<i>0,635</i>	<i>0,365</i>		
	<i>X6</i>	<i>0,779</i>	<i>0,607</i>	<i>0,393</i>		
	<i>X7</i>	<i>0,850</i>	<i>0,723</i>	<i>0,278</i>		
		<i>5,723</i>	<i>4,690</i>	<i>2,310</i>		
<i>HR Competency</i>	<i>X9</i>	<i>0,730</i>	<i>0,533</i>	<i>0,467</i>	<i>0,910</i>	<i>0,558</i>
	<i>X14</i>	<i>0,751</i>	<i>0,564</i>	<i>0,436</i>		
	<i>X20</i>	<i>0,781</i>	<i>0,610</i>	<i>0,390</i>		

	X21	0,713	0,508	0,492		
	X22	0,706	0,498	0,502		
	X23	0,757	0,573	0,427		
	X24	0,737	0,543	0,457		
	X25	0,795	0,632	0,368		
		5,970	4,462	3,538		
<i>Financial Factors</i>	X26	0,767	0,588	0,412	0,919	0,696
	X31	0,767	0,588	0,412		
	X32	0,869	0,755	0,245		
	X33	0,877	0,769	0,231		
	X34	0,883	0,780	0,220		
		4,163	3,481	1,519		
<i>Operational Factors</i>	X37	0,830	0,689	0,311	0,922	0,702
	X38	0,844	0,712	0,288		
	X39	0,828	0,686	0,314		
	X40	0,857	0,734	0,266		
	X41	0,830	0,689	0,311		
		4,189	3,510	1,490		
<i>Competitive Advantages</i>	X42	0,866	0,750	0,250	0,906	0,706
	X43	0,865	0,748	0,252		
	X44	0,857	0,734	0,266		
	X45	0,769	0,591	0,409		
		3,357	2,824	1,176		

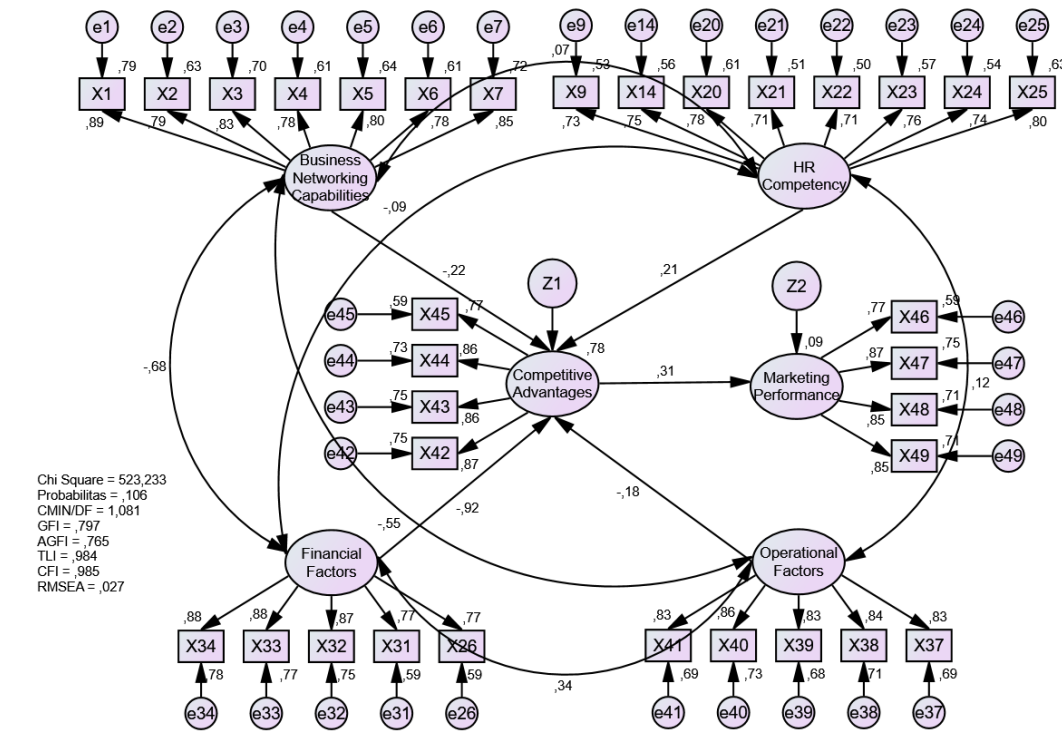
Marketing Performance	X46	0,769	0,591	0,409	0,900	0,692
	X47	0,865	0,748	0,252		
	X48	0,846	0,716	0,284		
	X49	0,845	0,714	0,286		
		3,325	2,769	1,231		

Source: Processed primary data, 2022

Based on the results of calculations shown in Table 2, it is known that all latent variables can meet the reliability criteria and Variance Extract. So that it can be concluded that the indicators observed can reflect the factors analyzed and together can reflect the existence of a unidimensionality.

**3. Full Model Analysis**

In testing the full model two stages of testing were carried out, namely the suitability of the model and the test of significance of causality through the regression coefficient test (Ferdinand, 2006). The results of the tests at both stages are described below.



Source: Processed primary data, 2022

Figure 1 Research Model Testing

The first stage of testing is intended to see the suitability of the model. The results of the suitability testing models developed in this study are presented in Table 5 below.

*Table 3 Feasibility Testing of Research Models*

<i>Goodness of Fit Indeks</i>	<i>Cut off Value</i>	<i>Hasil</i>	<i>Evaluasi Model</i>
<i>Chi-Square (df = 484)</i>	$\leq 536,287$	523,233	<i>Good</i>
<i>Probability</i>	$\geq 0,05$	0,106	<i>Good</i>
<i>CMIN/DF</i>	$\leq 2,00$	1,081	<i>Good</i>
<i>GFI</i>	$0,90 \leq GFI < 1,00$	0,797	<i>Marginal</i>
<i>AGFI</i>	$0,90 \leq AGFI < 1,00$	0,765	<i>Marginal</i>
<i>TLI</i>	$0,95 \leq TLI < 1,00$	0,984	<i>Good</i>
<i>CFI</i>	$0,95 \leq CFI < 1,00$	0,985	<i>Good</i>
<i>RMSEA</i>	$\leq 0,08$	0,027	<i>Good</i>

Source: Processed primary data, 2022

Based on the results presented in Table 3, it can be seen that the value of Chi Square = 523,233 with probability = 0.106 and index values including CMIN / DF, TLI, CFI, and RMSEA included in the good category while the GFI and AGFI indexes are included in the marginal category. it was concluded that there was no difference between the sample covariance matrix and the estimated population covariance matrix or in other words the model was fit.

**4. Causality Test**

After evaluating the assumptions that must be fulfilled in using analysis with SEM, then the hypothesis will be tested. Testing the four hypotheses put forward in this study was carried out by analyzing the value of Critical Ratio (CR).

*Tabel 4 Hypothesis Testing*

			<i>Std. Estimate</i>	<i>Estimate</i>	<i>S.E.</i>	<i>C.R.</i>	<i>P</i>
<i>Competitive Advantages</i>	←	<i>HR Competency</i>	0,211	,267	,085	3,122	,002
<i>Competitive Advantages</i>	←	<i>Business Networking Capabilities</i>	0,222	,206	,098	2,093	,036
<i>Competitive Advantages</i>	←	<i>Operational Factors</i>	0,176	,172	,078	2,211	,027
<i>Competitive Advantages</i>	←	<i>Financial Factors</i>	0,918	,928	,124	7,455	***
<i>Marketing Performance</i>	←	<i>Competitive Advantages</i>	0,306	,249	,084	2,951	,003

Source: Processed primary data, 2022

#### 1. Testing the Effect of Business Network Capability on Competitive Advantages

The estimation parameter for testing the effect of business networking capabilities on competitive advantage shows a CR value of 2.093 with a probability of 0.036. Because the value of CR (2,093) > 2,00 and the probability value (0,036) < 0,05, it can be concluded that the variable capability of business networking proved to have a significant positive effect on competitive advantage. This finding shows that if MSMEs have good business networking capabilities, this will increase the capability of the MSME's competitive advantage.

#### 2. Testing the Effect of HR Competence on Competitive Advantages

The estimation parameter for testing the influence of HR competencies on competitive advantage shows a CR value of 3.122 with a probability of 0.002. Because the value of CR (3.122) > 2.00 and the probability value (0.002) < 0.05, it can be concluded that the HR competency variable proved to have a significant positive effect on competitive advantage. This finding shows that if the HR competencies possessed by MSMEs are getting better, this will increase the capability of the MSME's competitive advantage.

#### 3. Testing the Effect of Financial Factors on Competitive Advantages

The estimation parameter for testing the influence of financial factors on competitive advantage shows a CR value of 7.455 with a probability of 0.000. Because the value of CR (7.455) > 2.00 and the probability value (0,000) < 0.05, it can be concluded that financial factor variables proved to have a significant positive effect on competitive advantage. This finding shows that if the financial factors owned by MSMEs are getting better, this will increase the capability of the MSME's competitive advantage.

#### 4. Testing the Effect of Operational Factors on Competitive Advantages

The estimation parameter for testing the influence of operational factors on competitive advantage shows a CR value of 2.211 with a probability of 0.027. Because the value of CR (2,211) > 2,00 and the probability value (0,027) < 0,05, it can be concluded that the operational factor variables proved to have a significant positive effect on competitive advantage. This finding shows that if the operational factors possessed by MSMEs are getting better, this will increase the capability of the MSME's competitive advantage.

#### 5. Testing the Effect of Competitive Advantages on Marketing Performance

The estimation parameter for testing the effect of competitive advantage on marketing performance shows a CR value of 2.951 with a probability of 0.003. Because the value of CR (2.951) > 2.00 and the probability value (0.003) < 0.05, it can be concluded that the variable competitive advantage proved to have a significant positive effect on marketing performance. This finding shows that if MSMEs have an increasingly competitive advantage, this will improve the marketing performance of these MSMEs.

### IV. CONCLUSION

Marketing performance ranging from turnover that is not growing, the number of customers is not growing, profits are not increasing and sales are still classic problems faced by MSMEs. This condition is caused by the limited competitive advantage capabilities possessed by MSMEs which are triggered by limited capabilities such as business networking capabilities, HR competency capabilities, financial factor capabilities and operational factors. In this study, the influence of these factors has been proven.

Therefore, the proposed managerial implications will focus on these four variables, namely:

#### 1. Managerial implications for business networking capabilities

Business networking capability is related to the ability of MSME managers to establish relationships or business relationships. To strengthen this network, MSME managers need to expand friendships, open all business possibilities, open opportunities for all suppliers, establish strong relationships with regulators, in this case the government and the private sector, open relationships with financial institutions and open and establish relationships with bigger companies.

#### 2. Managerial implications for HR competency

Low HR competency is often associated with MSME problems. To reduce problems related to MSME human resources, both managers and the government are actively seeking and providing knowledge about business management, strengthening knowledge about cooperation, decision making, leadership and knowledge about managing change.

#### 3. Managerial implications for financial factors

No less important is the financial factor. This financial factor is always a problem often faced by MSMEs. To overcome these financial problems, MSME managers need to equip themselves with knowledge about business financial management and risk management, while government and private institutions provide assistance in the form of soft loans, grants and providing knowledge, training and skills regarding business financial management.

#### 4. Managerial implications of operational factors

Operational factors are often associated with low technology utilization by MSMEs. This low utilization could be due to MSMEs' low access to high technology, both in terms of financial capability and technological mastery. This can be achieved by establishing relationships with educational institutions to produce appropriate technology for MSMEs that is environmentally friendly, skills friendly and of course also financially friendly.

## REFERENCES

- Adnan, Muhammad Akhyar dan Firdaus Furywardhana (2006), Evaluasi Non-Performing Loan (NPL) Pinjaman Qardhul Hasan (Studi Kasus di BNI Syariah Cabang Yogyakarta), *JAAI*, 10 (2).
- Ardiana, Brahmayanti & Subaedi (2010), Kompetensi SDM UKM dan Pengaruhnya Terhadap Kinerja UKM di Surabaya, *Jurnal Manajemen dan Kewirausahaan*, 12 (1).
- Brealey, Myers & Marcus (2007), *Dasar-Dasar Manajemen Keuangan Perusahaan*, Erlangga, Jakarta.
- Dendawijaya, Lukman (2003), *Manajemen Perbankan*, Ghalia Indonesia, Jakarta
- Dollinger, M. J. (1999). *Entrepreneurship: Strategies and resources*. Prentice Hall, ISBN 0137459939 (Upper Saddle River, NJ).
- Ediraras, Dharma T (2010), Akuntansi dan Kinerja UKM, *Jurnal Ekonomi Bisnis*, 2 (15).
- Ferdinand, Augusty (2000), *Structural Equation Modeling dalam Penelitian Manajemen*, BP Undip, Semarang.
- Ferdinand, Augusty (2005), *Structural Equation Modeling dalam Penelitian Manajemen*, BP Undip, Semarang.
- Ferdinand, Augusty (2006), *Metode Penelitian Manajemen*, BP Undip, Semarang.
- Fristian, S.C (2014), Analisis Karakteristik dan Identifikasi Kendala yang Dihadapi UMKM Di Kota Malang (Studi Kasus pada Sentra Industri Tempe Sanan), *Jurnal Ilmiah Jurusan Ilmu Ekonomi dan Bisnis Universitas Brawijaya*, Malang.
- Gulati, R., Nohria N., & Zaheer A., (2000), "Strategic networks", *Strategic Management Journal*", 21(3), 203-216.
- Hadiyati, Ernani (2010), Analisis Kualitas Pelayanan dan Pengaruhnya Terhadap Loyalitas Pelanggan (Studi Kasus pada PT. Pos Indonesia (Persero) Kantor Pos Lawang), *Jurnal Manajemen FE Universitas Jambi*, 81-90.
- Hadiyati, Ernani (2012), Analisis Kualitas Pelayanan dan Pengaruhnya Terhadap Loyalitas Pelanggan (Studi Kasus Pada Pt. Pos Indonesia (Persero) Kantor Pos Lawang), *Jurnal Manajemen Pemasaran Modern*, 2 (2).
- Handoyo, AG Sunarno (2015), Manajemen Sumber Daya Manusia Berbasis Talenta Memberikan Kontribusi terhadap Pengembangan Inovasi untuk Mencapai Kunggulan Kompetitif Menuju Kinerja Bisnis (Studi pada UMKM Industri Bordir Jawa Tengah), *Seminar Nasional Educational Wellbeing*, 68-89.
- Hartati, Sri (2013), Peranan Citra Merek Terhadap Keputusan Pembelin Produk Sophie Martin Pada Mahasiswa Perempuan Jurusan Administrasi Bisnis Politeknik Negeri Sriwijaya Palembang.
- Heizer, Jay dan Barry Render (2005), *Operation Management*, Prentice Hall, New Jersey.
- Kasmir (2010), *Analisis Laporan Keuangan*, PT Rajagrafindo Persada, Jakarta.
- Lamb, Charles W., Joseph F Hair dan Carl McDaniel (2001), *Pemasaran*, Salemba Empat, Jakarta.
- Mardiyanto (2002), *Intisari Manajemen Keuangan*, Grasindo, Jakarta.
- Porter, Michael E (1998), *Strategi Bersaing*, PT Gelora Aksara Pratama, Jakarta.
- Sawitri, Dyah., Andarwati, Sri Winaryati (2014), Strategi Kepala Sekolah dalam Peningkatan Profesionalisme Guru (Studi pada SMP Negeri 21 Kota Malang), *Jurnal Manajemen Bisnis Indonesia*, 1 (2).
- Smirnova, M.P Naude., S.C Henneberg, S. Mouzas, S.P Koutchtch (2011), The Impact of Market Orientation on The Development of Relational Capabilities and Performance Outcomes: The Case of Russian Industrial Firms, *Industrial Marketing Management*, 40 (1), 97-11
- Sullivan, Arthur and Steven M Sheffrin (2003), *Economics: Principles in Action*, Upper Saddle River, New Jersey, Pearson Prentice Hall.
- Sunarto (2002), *Pengantar Akuntansi*, BPFE UST, Yogyakarta.
- Sunyoto, Danang & Rini Raharti (2014), Kualitas Strategi Bersaing Guna Meningkatkan Kinerja Perusahaan pada UKM dan Koperasi Gerabah Kasongan Bantul, *Efektif Jurnal Bisnis dan Ekonomi*, 5 (2), 160-173.
- Tedjasuksmana, Budianto (2014), Potret UMKM Indonesia Menghadapi Masyarakat Ekonomi ASEAN 2015, *The 7th NCFB and Doctoral Colloquium 2014 Towards a New Indonesia Business Architecture*.
- Winarni, Endang Sri (2006), Strategi Pengembangan Usaha Kecil Melalui Peningkatan Aksesibilitas Kredit Perbankan, Infokop, 29 Tahun XXII.

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# Determinant Earning Management: Sales Growth, Tax Planning, Firm Size and Profitability

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## ABSTRACT

**Purpose:** This study tries to identify "the influence of sales growth, tax planning, firm size and profitability on earnings management (case study of consumer goods sector companies listed on IDX in 2017-2021)"

**Design/methodology/approach:** This analysis comprises all consumer products sector enterprises listed on the Indonesian Stock Exchange (BEI) between 2017 and 2021. Purposive sampling was utilized. This survey included 45 businesses for food and beverage companies listed on the Indonesia Stock Exchange from 2018 to 2021.

**Findings:** Earnings management is somewhat affected by the following elements, which are listed below: when it comes to earnings management, sales growth and profitability have a partial impact; nevertheless, tax planning and firm size do not have a partial impact on earnings management.

**Practical implications:** By concentrating on increasing sales and making strategic tax preparations, businesses can improve their ability to control their profits. Additionally, the size of the company and its profitability are important considerations when it comes to maximizing earnings management.

**Paper type:** Research paper

**Keyword:** Sales Growth, Tax Planning, Firm Size, Profitability and Earnings Management

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## I. INTRODUCTION

The earnings management is of the utmost importance for businesses that are aiming to sustain and improve their financial performance in markets that are extremely competitive. This is because the aforementioned markets are incredibly competitive. The potential to strengthen their earnings management systems is available to organizations that are experiencing considerable growth in their income. These organizations have the opportunity to capitalize on this growth. On the other side, careful tax planning can help reduce the amount of taxes that are owed and maximize the amount of net income that is earned. Generally speaking, larger companies are able to more readily execute more complex methods of earnings management since they have access to a greater number of resources and capabilities. Furthermore, increased profitability makes it possible to reinvest in the company, which not only encourages future expansion but also boosts operational efficiency. This is a win-win situation for everyone involved. In order for firms to accomplish optimal earnings management in this environment, they need to recognize the interplay between the following factors: the development of sales, the planning of taxes, the size of the organization, and profitability. The successful implementation of plans in these areas not only assures financial stability but also imposes a competitive edge, which helps businesses to adapt and prosper in the face of continuously shifting economic landscapes. This is because the competitive edge confers a competitive advantage.

It is possible to gain a thorough view of a company's financial state through the use of financial reports, which are also a great tool for supplying vital accounting information. They contribute to the process of making the appropriate decisions in order to enhance the existing performance and financial position of the organization. The economic position and the financial forecast of an organization are both significantly influenced by the

financial reports that are produced by the business. It is within the purview of the internal stakeholders to reveal information contained within the report (Widyasari, 2019). When it comes to financial reports, the income statement is an essential component since it gives shareholders and creditors information about the financial performance of a firm, particularly those that are primarily concerned with earnings. The obligation to provide users of financial reports with financial reports falls on the shoulders of the company's internal parties inside the organization. With the ability to deliver information to the market, effective financial reports present information that is true and pertinent, free of any distortion or embellishment, and they also have the ability to present information. Productivity is the primary financial statistic that is utilized in the evaluation of the performance of management. The return on investment that external stakeholders, such as investors and other parties, receive from their investments in the firm can be measured by the profit that the company generates. Earnings management methods are encouraged to be used by management as a result of the bias that is displayed by external parties in their focus on earnings information.

Earnings management is a strategy that managers employ in order to enhance the performance of the firm and its financial state, with the ultimate goal of increasing the satisfaction of shareholders. The management of a company has a significant impact on the trustworthiness of the financial reports that the company produces. In order to create the image of strong performance and successes, it is not commonplace for management to modify the figures in these reports. This is done even when the company is actually in a poor position. The quality of profits that will be displayed in the financial statements of the company will be affected by the utilization of earnings management strategies when they are implemented. Managers take deliberate actions to manage financial reporting and transaction processing in order to facilitate stakeholders' understanding of the company's economic performance and to influence employment contracts by focusing on the numerical data presented in accounting financial reports (Healy and Wahlen, in Widyasari, 2019). Earnings management is a term that refers to the actions that managers take in order to manage financial reporting and transaction processing.

The achievement of outstanding managerial performance in a company is the primary objective of stakeholders, which includes shareholders, governments, banks, and investors. A direct connection exists between the ability of each management in each department, including the finance department, to create the company's financial reports in a consistent manner throughout each reporting period and the evaluations that are made regarding the performance of each manager in each department. Using financial reports, businesses are able to effectively communicate the information they have regarding their performance, which in turn assists users in making the appropriate decisions regarding their finances (IAI, 2009). When it comes to the company's economic and financial success, the financial reports need to appropriately portray the situation.

On the other hand, while taking into account the current circumstances, users of financial reports frequently just concentrate on profit figures, without paying attention to the manner in which gains are obtained. Executives of corporations are offered incentives in this section to encourage them to participate in revenue management. The term "earnings management" refers to the deliberate intervention of management in the process of creating financial reports for external parties with the purpose of managing and controlling profits, with the intention of lowering, equalizing, or even raising them (Febriyanti, 2020). Managers are said to engage in earnings management by making specific evaluations in financial reporting and managing transactions in order to manipulate financial reports with the intention of misleading stakeholders about a company's economic success, as stated by (Destiana et al., 2020). The conflict of interest that exists between owners or shareholders (as proprietors) and managers (as agents) is the root cause of earnings management behavior.

According to Hanlon and Heitzman (2010), this conflict, which is also known as agency conflict, arises when both parties attempt to achieve the amount of financial success that corresponds to their goals. In the year 2004, PT Indofarma Tbk employed earnings management strategies in order to artificially enhance the company's profits by IDR 28.78 billion. As a consequence, the company's cost of goods sold that year was significantly higher than it should have been (Putra et al.,). An audit that was carried out by Bapepam (Capital Market Supervisory Agency) in 2007 indicated that PT Agis Tbk had not appropriately reported its profits during that year. Despite the fact that the total income that was reported was 800 billion IDR, it should have been 466.8 billion IDR. According to Putra et al.'s research from 2020, the purpose of this deceptive information is to generate a favorable view among external stakeholders that the financial reports of PT Agis Tbk are robust and healthy. The year 2001 marked the year that PT Kimia Farma Tbk made the discovery of inconsistencies in sales paperwork as well as irregularities in the evaluation of completed goods inventory. According to Putra et al.'s calculations from 2020, this variance led to an increase in net profit of IDR 32.7 billion.

According to the findings of Putra et al.'s 2020 study, PT Elnusa Tbk did not make use of its financial reserves amounting to 111 billion IDR in the year 2011. The false activities that are being taken provide the impression that the corporation is capable of generating pretty big profits, despite the fact that the company is actually in a precarious state. When it comes down to it, "earnings management" is nothing more than management's attempt to deceive investors and other interested parties into believing that the company's financial performance is better than it actually is. Earnings management is defined as a process in which managers make



strategic judgments about which accounting procedures would most effectively achieve their goals, such as raising profits or minimizing reported losses, according to Wardhana et al. (2022), which is cited in (Scott, William, 2009). Earnings management strategies can be affected by a variety of factors, such as the increase of revenue, the preparation of taxes, the size of the organization, and profitability. The term "sales growth" refers to the annual increase in merchandise sales. The practice of earnings management involves managers intentionally reporting profits that are lower than the real profits that the company has made. When there is a rise in a company's sales, lenders are more willing to make loans or extend credit to support the company. Businesses that experience a quick development in their customer base may have a sense of pressure to use earnings management methods in order to maintain or even enhance their present levels of sales and profitability. It is possible that earnings management is the answer for a firm that is experiencing difficulties in maintaining its profit and sales patterns, or if the company's sales are rising at a quick rate. According to the findings of (Destiana et al., 2020), the management of profitability is significantly impacted by the growth of overall sales. On the other hand, Nayiroh stated in 2013 in (Febriyanti, 2020) that earnings management is not affected by the growth of sales. As stated by Lubis and Suryani (2018), tax planning is an additional facet of tax administration that holds significant importance. With the use of legal tactics like tax preparation, we have a good possibility of successfully lowering the amount of income taxes that we are required to pay.

Tax planning is the process of managing tax liabilities in such a way that they do not exceed the financial commitments of the firm. This is in contrast to the practice of seeking to avoid paying taxes. When it comes to tax planning, having a solid understanding of the various significant tax rules and regulations is absolutely necessary in order to prevent tax evasion and other illegal behavior that violates the applicable tax regulations. the purpose of which is to ensure that the company will not face any further financial challenges in the future. It has been determined by Achyani and Lestari (2019) that tax planning, deferred tax assets, deferred tax expenses, and managerial ownership do not have any impact on earnings management. Although investors anticipate that tax preparation will result in a reduction in expenses and an increase in earnings, the preparation of taxes is not a top priority for the management of small businesses. According to the findings of this study, earnings management strategies are taken into consideration when free cash flow is considered. Despite this, management has the ability to decide whether or not to restrict earnings through free cash flow. One of the objectives of the management team is to generate a significant amount of free cash flow in order to highlight their great performance.

According to Achyani and Lestari (2019), managers have the ability to harness the power of free cash flow to their benefit. When dealing with revenue, the size of the company is an important consideration. People have the misconception that small organizations are more likely to implement earnings management tactics. For the purpose of attracting investors, small businesses frequently strive to maintain a high level of performance. When it comes to reporting their financial information, large corporations are more careful than small ones because of the heightened scrutiny from the public. In accordance with this concept, businesses of any size are free to engage in earnings management if they so want. It is possible for management to ruin the company's financial status in order to attract investors if they are just concerned with improving their personal profits. Specifically, Dewi and Rahmi (2022). When attempting to estimate the size of a corporation, the natural logarithm of its assets is a useful approximation. According to Dewi and Rahmi (2022), the reason for this is that total assets tend to be a more trustworthy and consistent measurement of the size of a corporation.

According to Jensen, MC, and Meckling (1976), when businesses have a lot of surplus capital on hand, they have a tendency to invest it in businesses that do not generate a lot of revenue. Taking a look at a company's profitability is one method that may be used to evaluate how successful it is. The profitability ratio of a firm is one method that may be utilized to evaluate the overall effectiveness of a business. This ratio is calculated by contrasting the revenue of the company with its sales and costs (Fahmi, 2011). Many individuals consider the profits of a corporation to be a measure of the success of the company. If all goes according to plan, the company will be able to generate a respectable profit. The income, on the other hand, will be on the lower end if something goes wrong. According to Baik (Luhglatno & Novius, 2019), the use of profit smoothing strategies is significantly impacted by the profitability of a corporation. Earnings management does not have any impact on profitability, as stated by the research conducted by Destaniana et al. in 2020. It is possible for management to be motivated to participate in earnings management by having profits increase. According to study (Fitriani, 2018), earnings management and return on assets (ROA) are two aspects that are closely related to one another. It has been found that growing sales has a large and favorable influence on earnings management, as stated by (Febriyanti, 2020). As a result, scholars are interested in investigating the elements that influence the management of earnings by companies.

## **A. Literature Review and Hypothesis Development**

### **1. Earnings management**

Earnings management refers to the deliberate actions taken by a manager to manage and control a company's financial statements in order to achieve the level of reported profits. Within the scope of this research, earnings

management assessment is carried out by examining discretionary accruals and using the modified Jones Model. As for research conducted by (Dewi & Rahmi, 2022) , the method used to calculate Total Accruals is as follows:

1. Determine Total Accruals (TAC) by subtracting net income for year t from total operating cash flow for year t.

$$TAC = Nit - CFOit$$

2. To calculate the regression coefficient, the second step is to estimate Total Accruals (TAC) using the Ordinary Least Squares (OLS) method. A formula can be written as follows:

$$TACit/Ait-1 = \beta_1(1/Ait-1) + \beta_2(\Delta Revt/Ait-1) + \beta_3(PPEt/Ait-1) + e$$

3. After obtaining the regression coefficient, the next step is to calculate non-discretionary accrual (NDA) using the formula as below:

$$NDAit = \beta_1(1/Ait-1) + \beta_2(\Delta Revt/Ait-1 - \Delta Rect/Ait-1) + \beta_3(PPEt/Ait-1)$$

4. To determine the level of earnings management, the final step is to calculate discretionary accruals, also known as DA.

$$DA_{it} = TAC_{it} / Ait - The NDA$$

## 2. Sales Growth (*Sales Growth*)

One definition of sales growth is the increase in the total amount of sales experienced by a company from one year to the next. There is a tendency for a company to be encouraged to increase its assets when it is in the process of experiencing a period of increased sales growth. By using the formula below (Destiana et al., 2020) , we can determine the level of sales increase:

$$sales\ growth = \frac{(sales\ t - sales\ t - 1)}{sales\ t - 1}$$

## 3. Tax Planning (*Tax Planning*)

One legitimate thing that taxpayers can do is carry out tax planning. The only way to save on taxes is to take advantage of things that are not regulated, so this part is fine. According to the TRR formula (Lubis & Suryani, 2018) , businesses that pay the most taxes are identified by looking at their tax retention rate:

$$TRR = \frac{Net\ Income}{earning\ before\ tax\ t}$$

## 4. Firm size

The size of a company can be defined as the sum of all its assets, which are measured in relation to the total value of all the products and services it produces. The following is the formula for business size according to (Dewi & Rahmi, 2022) :

$$Firm\ size = Log\ n\ (Total\ Assets)$$

## 5. Profitability (ROA)

This research measures profitability using Return on Assets Analysis (ROA), which is a metric that assesses a company's capacity to generate profits in the past. In Indonesian it is often called economic profitability. Calculation of Return on Assets (ROA) as stated by (Destiana et al., 2020) :

$$Return\ On\ Assets = Earning\ after\ tax / Total\ Asset \times 100\%$$

## 6. Hypothesis

Increasing sales from one year to the next is what is meant by the term "sales growth." In an effort to exert control over the outcomes, managers purposefully present earnings for the company that are lower than the actual profits realized. The increase of the company's sales will supply creditors with the information they need to determine whether or not it is appropriate to extend credit or lend money to the business. Earnings management is another strategy that may be appealing to businesses that are experiencing strong sales growth since it allows them to maintain increasing sales and retain increased profits. According to the findings of a study (Febriyanti, 2020), there is a considerable association between effective management of profits and increased sales. In accordance with the findings of (Destiana et al., 2020), which highlight the fact that an increase in sales has a significant and favorable impact on the management of profitability. Many times, companies that experience considerable gains in sales are able to manage their earnings. The ability of businesses to make profits is hindered when they are unable to maintain the patterns of their sales and profits. The first hypothesis is stated as follows, taking into consideration the description that came before it:

H1: It is suspected that there is an influence between sales growth related to earnings management.

The author of the book "Tax Planning" (Suandy, 2014) underlines that the first stage in tax management is the process of tax planning. During this stage, tax rules are gathered and analyzed in order to ascertain the most suitable method for reducing one's tax responsibility. It is the primary objective of tax planning to lessen the amount of tax obligations. According to the findings of Achyani and Susi's research, earnings management is not significantly affected by tax planning, deferred tax liabilities, deferred tax assets, or managerial ownership. Tax planning is a strategy that investors look to in order to reduce the expenses of small businesses and raise their earnings, despite the fact that management does not emphasize this objective. Additionally, the outcomes of the research indicate that earnings management strategies are impacted by free cash flow situations.

Since this is the case, management is in a position to effectively control earnings by making use of free cash flow. A high free cash flow is something that management looks for in order to demonstrate that the firm is performing well. In addition to that, managers have the ability to use free cash flow for their own personal interests (Achyani & Lestari, 2019). According to (Febriyanti, 2020), empirical research is utilized in the process of investigating the influence of earnings management in relation to tax preparation procedures. It has been demonstrated through empirical research that tax planning exerts a significant amount of influence on earnings management. According to the findings of this study, the equity view theory, which asserts that deferred taxes do not have an impact on value since cash flows cannot be forecast, is supported by the findings.

Taking everything into consideration, the results of this study indicate that tax planning has an effect on the amount of current accruals that are flexible. Taking into consideration the description that was presented earlier, the second hypothesis might be stated as follows:

H2: It is suspected that there is an influence between tax planning and earnings management.

A significant amount of importance is placed on the size of the organization when it comes to the management of a company's income. Most people are aware of the fact that small businesses are responsible for a greater number of earnings management activities than major corporations. For the purpose of attracting investors, small businesses frequently have to exert a great deal of effort in order to demonstrate that they are operating efficiently on a consistent basis. Due to the fact that they are subject to a greater level of public scrutiny, large corporations typically report their financial information with greater care than smaller companies. The authors of the study (Astuti et al., 2017) highlight the significance of the connection between earnings management and the sizes of businesses. Compared to smaller businesses, large corporations typically have less influence over the earnings they generate.

This is due, in part, to the fact that large firms have less of an incentive to produce inaccurate financial reports, and because external stakeholders and shareholders pay more attention to the matter. In their 2018 study, Lubis and Suryani made the observation that the size of a corporation increases its potential to control profitability. One of the primary motivating factors for large corporations to engage in earnings management is the imperative to fulfill the anticipations of their shareholders and prospective investors. It is generally accepted that small businesses engage in a greater amount of earnings management than large corporations do. This is mostly owing to the fact that small businesses have a greater tendency to continually display favorable corporate performance and that they are subject to greater public scrutiny. Taking into consideration the information presented above, the third hypothesis can be put up as follows:

H3: It is suspected that there is an influence between firm size regarding earnings management.

A company's profitability is a measurement of how well it is able to make profits for its shareholders. In accordance with the findings of Anam et al. (2023), profitability ratios are metrics that provide an examination of the overall efficiency of an organization by describing the degree to which a corporation is profitable in relation to its investments and sales. The performance of a company is frequently evaluated based on the amount of profit it generates. It is possible for individuals to believe that a company's revenue is high even if the company's performance is satisfactory, and vice versa. When it comes to revenue management, companies that have a low return on assets are more susceptible to damage. It is anticipated that fluctuations in reported earnings will result in a decrease in profitability, which is what motivates management to put earnings management techniques into action.

It is highly likely that a firm will be forced to enhance its earnings in order to deceive investors into believing that the company is in a healthy financial position if it reduces the changes in earnings. It has been demonstrated through research carried out by Luhgiatno and Novius (2019) and Fitriani (2018) that the level of profitability of a company has a significant impact on the income smoothing activities that it engages in. In light of the information presented above, the following is the fourth theory that has been proposed:

H4: It is suspected that there is an influence between profitability related to earnings management.

## II. METHODS

According to Sugiono (2019), the expressions "population" and "sample" relate to distinct categories within the realm of statistics. The research population consists of all consumer products businesses that were officially listed on the Indonesia Stock Exchange (BEI) during the years 2017 and 2021. There are 95 distinct companies that are a part of this organisation. The method that is utilized in sample operations is known as purposeful sampling. A total of forty-five different businesses were questioned for this investigation. The year 2023 (Anam et al.) The process of conducting a literature review, which includes searching for relevant books, journals, and websites within the subject matter, is one way of information collection. The foundation of this research is comprised of quantitative data, which is presented in the form of numerical statistics that describe the variables under investigation (Ghozali., 2018). The secondary data that was utilized in this investigation was obtained from the financial records of a publicly traded manufacturing business, which were available for download on the company's website. The data sources can be accessed by going to <http://www.idx.co.id/>. The approach of Multiple Linear Analysis was utilized in order to analyze the data from this investigation. Researchers utilized multiple regression analysis in order to ascertain the partial and cumulative influence that independent factors have on the variable that was being studied (the dependent variable).

## III. RESULTS AND DISCUSSION

### A. Results

#### 1. Descriptive Statistical Test

*Table 1 Descriptive Test*

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Means</i>	<i>Std. Deviation</i>
<i>Sales growth</i>	225	-1.00	1.92	,0578	,33062
<i>Tax planning</i>	225	-50.37	3.10	,5175	4.24509
<i>Firm size</i>	225	13.62	30.88	24.1029	5.34422
<i>Profitability</i>	225	-1.37	.89	,0755	,24259
<i>Earnings management</i>	225	-2.14	.10	-,0345	,22602
<i>Valid N (list)</i>	225				

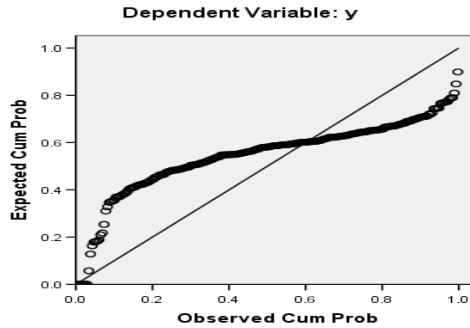
Source: SPSS Data Processing

Sales growth during the research period ranged from -1.00 to 1.92 with an average value of 0.0578 as seen in Table 4.1. By the way, the standard deviation is 0.33062. During the study, the tax plan value fluctuated between -50.37 and 3.10. A total of 24,102.29 is the average value of the tax plan. At the same time, 4.24509 is the standard deviation. During the study, firm size varied between 13.62 and 30.88 with an average of 24.1029. This data also has a standard deviation of 5.3442. During the research period, the ROA value varied between -1.37 to 0.89 with an average of 0.755. The value of 0.24259 is the standard deviation. The Earnings Management variable has an average value of -0.345 during the research period, with values ranging from -2.14 to 0.10. The standard deviation at the same time is 0.22602.

**2. Classic Assumption Test**

**a. Normality test**

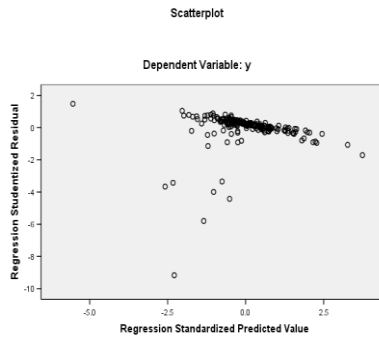
**Normal P-P Plot of Regression Standardized Residual**



*Figure 1 Normality Test Results*

SPSS data processing findings show that the PP Plot depicts a normal distribution pattern. More specifically, it can be seen that the points created are spread along the diagonal line in the image above.

**b. Heteroscedasticity Test**



*Figure 2 Heteroscedasticity Test Results*

We can conclude that the regression model does not show signs of heteroscedasticity because, as seen in the figure above, the residual plot is not symmetrical regarding zero or does not show a U-shaped or inverted U-shaped pattern.

**c. Autocorrelation Test**

*Table 2 Autocorrelation Test Results*

<i>Model</i>	<i>R</i>	<i>R square</i>	<i>Adjusted R Square</i>	<i>Std. Estimation Error</i>	<i>Durbin-Watson</i>
<i>1</i>	<i>.283(a)</i>	<i>,080</i>	<i>,063</i>	<i>,21874</i>	<i>1,838</i>

a Predictor: (Constant), x1, x3, x2, x4

b Dependent Variable: y

The du value in the dw table is determined by the number of independent variables, which is the same as the number of samples. In this section  $n = (nk)$ , where  $n = 225 - 4 = 221$ , and the resulting du value is 1.806.

Based on regression findings, the Durbin-Watson (DW) statistical value of 1.838 is in the range 1.806 to 2.164. Therefore, it can be concluded that the multiple linear regression model does not show signs of autocorrelation.

**d. Multicollinearity Test**

*Table 3 Multicollinearity Test Results*

<i>Model</i>		<i>Correlation</i>			<i>Collinearity Statistics</i>	
		<i>Zero sequence</i>	<i>Part</i>	<i>Partial</i>	<i>Tolerance</i>	<i>VIF</i>
<i>1</i>	<i>(Constant)</i>					
	<i>Sales growth</i>	<i>,205</i>	<i>,202</i>	<i>,198</i>	<i>,954</i>	<i>1,048</i>
	<i>Tax planning</i>	<i>-,024</i>	<i>-,116</i>	<i>-,112</i>	<i>,691</i>	<i>1,448</i>
	<i>Firm size</i>	<i>-,106</i>	<i>-,073</i>	<i>-,071</i>	<i>,814</i>	<i>1,228</i>
	<i>Profitability</i>	<i>,154</i>	<i>,139</i>	<i>,135</i>	<i>,586</i>	<i>1,705</i>

Dependent: Earnings management

Considering that the VIF of all independent variables including Sales Growth, Tax Planning, Firm size and Profitability has a value of less than 10, the regression model given in this research does not show signs of multicollinearity. This conclusion can be drawn from the table given previously.

**3. Multiple Linear Regression Test**

*Table 4 Multiple Linear Regression Test Results*

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficient</i>	<i>T test</i>	<i>Sign..</i>
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
<i>1</i>	<i>(Constant)</i>	<i>,028</i>	<i>,076</i>		<i>,373</i>	<i>,709</i>
	<i>Sales growth</i>	<i>,139</i>	<i>,045</i>	<i>,203</i>	<i>3,066</i>	<i>,002</i>
	<i>Tax planning</i>	<i>-,007</i>	<i>,004</i>	<i>-,134</i>	<i>-1,728</i>	<i>,085</i>
	<i>Firm size</i>	<i>-,003</i>	<i>,003</i>	<i>-,078</i>	<i>-1,090</i>	<i>,277</i>
	<i>Profitability</i>	<i>,164</i>	<i>,079</i>	<i>,176</i>	<i>2,083</i>	<i>,038</i>

Dependent: earnings management

Mathematically, the results of multiple linear regression analysis can be written as follows:

$$Y = 0,028 + 0,139X1 - 0,007 X2 - 0,003X3 + 0,164X4$$

The regression equation shows the following:

- a. Constant ( $\beta_0$  coefficient).

A constant value of 0.028 shows that when the variables Sales Growth, Tax Planning, Firm size and Profitability have a value of zero or have no independent influence regarding Earnings management , then the magnitude of Earnings management is 0.028.

b. Sales growth coefficient (X1).

The Sales Growth regression coefficient is 0.139. The positive regression coefficient shows that there is a one-way relationship between the Sales Growth and Earnings management factors. This section shows that there is a direct relationship between increased sales growth and the extent of implementation of Earnings management.

c. Tax Planning Coefficient (X2)

The Tax Planning regression coefficient value is -0.007. A negative regression coefficient shows that the Tax Planning and Earnings management variables are inversely correlated. This section shows that the amount of tax preparation is negatively correlated with the level of earnings management. Earnings management tends to decline as tax planning develops.

d. Firm size Coefficient (X3)

The regression coefficient of -0.003 shows that there is a negative relationship between firm size (X3) and earnings management. The existence of this inverse relationship shows that there is a negative relationship between firm size and Earnings management. Earnings Management suffers as the size of the company grows.

e. Profitability coefficient (X4)

Profitability and earnings management have a positive relationship, with a regression coefficient of 0.164. This positive correlation means that profitability and earnings management have a one-way relationship. Increasing profitability leads to improved earnings management.

#### **4. Hypothesis Test (t Test)**

The following is an explanation of the influence of each independent variable regarding the dependent variable based on the table above:

1. Earnings management is influenced by the sales growth variable. At a significance level of 0.05, the predicted t value of the Sales Growth variable is 3.066 greater than the critical t value of 1.652. Thus we can conclude that the Sales Growth variable has no influence regarding profitability management. This section describes how the company's earnings management plan will be implemented based on the size of sales growth. As a result, hypothesis 1, which states a partial relationship between earnings management and sales growth, can be accepted.
2. Factors related to tax planning may impact earnings management. The tax planning variable value of -1.728 is smaller than the critical t value of 1.652 and 0.085 above the significance level of 0.05. Therefore, it can be concluded that tax planning variables have a small influence on earnings management. This section proves that the importance of tax planning has little influence on the implementation of company earnings management. As a result, hypothesis 2 which states that there is a partial relationship between earnings management and tax planning is refuted.
3. Variations in firm size are one of the factors that influence earnings management practices. The firm size variable is not statistically significant at the 0.05 level because its value -1.090 is smaller than the critical t value of 1.652 or 0.277. Thus, it can be concluded that there is no clear relationship between business size and earnings management. This section shows that the implementation of company earnings management does not depend on firm size. According to Hypothesis 3, to a certain extent, firm size can influence the way earnings are handled. This section shows that there is no way to accept or reject the idea.
4. Earnings management practices are influenced by profitability variables. At a significance level of 5%, the estimated t value of the profitability variable is 2.083 which is greater than the critical t value of 1.652 or 0.038. However, it can be said that the profitability variable does not have much influence regarding earnings management. This section describes how the success of a business influences how earnings management is used. Thus, it can be concluded that hypothesis 4 which states that earnings management influences profitability to a certain extent is correct.

#### **B. Discussion**

Sales growth is one aspect that influences earnings management practices. The estimated t value for the Sales Growth variable is 3.066, exceeding the key t value of 1.673, or 0.002, which is less than the 0.05 threshold. Consequently, the Sales Growth variable appears to have little influence regarding earnings management. Projected revenue growth impacts how companies pay for operational and administrative costs. Managers are urged to change results to demonstrate to investors that the company is running effectively and is worth their investment. Therefore, managers are more likely to influence profitability. In an effort to achieve profitability, rapidly growing organizations tend to turn to earnings management, especially if they are having difficulty

maintaining sales and profit trends. According to (Febriyanti, 2020) , increasing sales has a positive influence regarding profit control. However , company earnings management and sales growth have a significant negative relationship, this part is in accordance with the results of research (Destiana et al., 2020) .

Earnings management is influenced by factors related to taxes. The tax planning variable has a value of - 1.728 which is smaller than the important t value of 1.673 and 0.085 above the significance level of 0.05. Therefore, flexible tax planning can be said to have no partial influence on income management. A study by (Rioni & Junawan, 2021) states that delayed tax costs are one part of tax planning that can be changed to make it more possible for earnings management to occur so that profits do not fall. The zero profit change point theory which states that tax planning can be used to predict income management is supported by these results. However, hypothesis analysis shows that tax planning is not a good way to find cases of earnings management in consumer goods companies traded on the Indonesia Stock Exchange from 2017 to 2021. The findings of this research are in line with research (Rioni & Junawan, 2021) . Based on the results of data studies, tax planning appears to be detrimental to earnings management in non-manufacturing companies traded on the IDX. The author says that the rejection of  $H_a$  in this research is related to differences in the way other research views non-manufacturing company earnings management.

Earnings management is influenced by firm size. The calculated t value of -1.090 for the firm size variable is below the critical t value of 1.673 or 0.277. This section means that the observation results do not have statistical significance at the 0.05 level. Thus, it can be concluded that the firm size variable has a small influence on earnings management. Research findings show that there is an inverse relationship between the extent of earnings management and the total assets of a company. Sales and the amount of cash a company spends have a very high correlation. This passage results in an increase in money circulation and greater market value. This situation will increase public awareness regarding companies, making it easier for companies to meet investment expectations more effectively, especially in large companies. It is important to note that much larger companies consider factors beyond the aggregate value of an organization's assets when determining the size of those assets. The way a business handles its revenue is not affected by its scale. This section shows that the size of a company does not always reduce the possibility of earnings management. This part is because large companies have a larger number of assets, thereby increasing the possibility of mismanagement of these assets. As a result, the likelihood of errors increases when stating the aggregate assets of an organization. This result is in accordance with the findings of (Astuti et al., 2017) who found that firm size did not have a significant impact on the way profits are controlled or managed in banking companies listed on the Indonesia Stock Exchange (BEI) between 2013 and 2015.

The next factor that influences earnings management is the profitability variable. The t-count value of the profitability variable is 2.083 greater than the crucial t-count value of 1.673 at a significance level of 0.05. As a result, we can draw the conclusion that profitability statistics influence earnings management to a certain extent. In line with the conclusions of (Luhglatno & Novius, 2019) and (Fitriani, 2018) , this research shows that the profitability of an organization has a large influence on whether or not to use earnings management techniques. The findings of this research provide support for incentive plan theory, which states that managers have an obligation to take responsibility for their actions both as actors and managers. As a result, executives are motivated to participate in earnings management with the ultimate goal of producing profitable results for shareholders, especially by achieving high levels of profitability.

#### IV. CONCLUSION

Based on the research and discussion presented in the previous chapter, this research concludes that Sales Growth has a partial influence on Earnings management in companies operating in the consumer products sector whose shares are traded on the Indonesia Stock Exchange between 2017 and 2021. There is no evidence that this is true. Tax planning has any influence regarding earnings management in companies operating in the consumer products industry listed on the Indonesia Stock Exchange between 2017 and 2021. For companies in the consumer goods industry listed on the Indonesia Stock Exchange between 2017 and 2021, the size The company does not have a big influence regarding earnings management. Furthermore, Earnings management is influenced by profitability in food and beverage companies traded on the Indonesian stock market between 2018 and 2021, the results are quite small. Therefore, some suggestions that can be offered are as follows: Business actors should strive to be more open in information disclosure in order to increase the level of transparency in the process of conveying company performance to investors and investors. reducing the possibility of actions that could damage the trust of investors and other stakeholders. The aim of implementing this strategy is to increase the level of public trust and certainty regarding the company, including investors and other stakeholders. Considering that this choice will have an impact on the company's performance, it is hoped that company management will also review it before making a decision regarding the earnings management plan.



Increasing research coverage by including consumer product industry companies listed on the IDX is recommended in order to improve research. In addition, combining independent variables such as leverage, audit quality and good corporate governance can provide insight into the influence of these factors on earnings management. In addition, other formulas such as profitability measured by ROE and earnings management evaluated by Excel index can be used for the purpose of conducting additional research.

## REFERENCES

- Astuti, A. Y., Nuraina, E., & Wijaya, A. L. (2017). Pengaruh Ukuran Perusahaan Dan Leverage Terhadap Manajemen Laba. *The 9th FIPA: Forum Ilmiah Pendidikan Akuntansi*, 5(1), 501–514.
- Destiana, S., Luhglatno, & Widaryanti. (2020). Analisis Pengaruh Pertumbuhan Penjualan, Leverage, Profitabilitas dan Beban Pajak Tangguhan terhadap Manajemen Laba. *Prosiding Seminar Nasional Unimus*, 3, 1148–1156.
- Dewi, M. K., & Rahmi, F. A. (2022). Pengaruh Perencanaan Pajak Dan Ukuran Perusahaan Terhadap Manajemen Laba Pada Perusahaan Perbankan Swasta yang Terdaftar Di Bursa Efek Indonesia Tahun 2018-2020. *Jurnal Pundi*, 6(1), 89–102. <https://doi.org/10.31575/jp.v6i1.384>
- Febriyanti, G. A. (2020). Pengaruh Pertumbuhan Perusahaan, Ukuran Perusahaan, Perencanaan Pajak Terhadap Manajemen Laba Dengan Good Corporate Governance Sebagai Pemoderasi. *Etika Bisnis Dan Profesi*, 4(2), 107–122.
- Fitriani, A. (2018). “Pengaruh Profitabilitas, Ukuran Perusahaan, dan Financial Leverage terhadap Praktik Perataan Laba(Income Smoothing) pada perusahaan Farmasi yang Terdaftar di Bursa Efek Indonesia Periode 2011-2015”. *Jurnal Samudra Ekonomi Nan Bisnis*, 9(1), 50-59.
- Lubis, I., & Suryani. (2018). Pengaruh tax planning, beban pajak tangguhan dan ukuran perusahaan terhadap manajemen laba. *Jurnal Akuntansi Dan Keuangan*, 7(1), 41–58.
- Luhglatno, L., & Novius, A. (2019). Pengaruh Perencanaan Pajak Dan Profitabilitas Terhadap Manajemen Laba Pada Perusahaan Manufaktur Sub Sektor Tekstil Dan Garmen Yang Terdaftar Di Bursa Efek Indonesia Tahun 2014 - 2017. *Solusi*, 17(4), 235–252. <https://doi.org/10.26623/slsi.v17i4.1782>
- Rioni, Y. S., & Junawan. (2021). Pengaruh Perencanaan Pajak Terhadap Manajemen Laba Pada Perusahaan Non Manufaktur Yang Terdaftar Di Bursa Efek Indonesia. *Jurnal Akuntansi Bisnis & Publik*, 11(2), 116–126.

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# Factors Employee Performance with Compensation as Moderating Variables

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## ABSTRACT

**Purpose:** The purpose of this study is to investigate the relationship between employee performance and human resource development as well as views of organizational support, with remuneration serving as a moderating factor in the assessment of this relationship.

**Design/methodology/approach:** The investigation will be carried out at PT. International Chemical Industry for the purpose of conducting a case study. Two models are generated by the PLS analysis, which are referred to as the outer model and the inner model. A bootstrapping scenario was used to test the hypothesis, and the results of the t test (t-statistics) were used to interpret the data. PT. International Chemical Industry, which is based in Surabaya, was the location where the research was carried out.

**Findings:** Based on these data, it can be concluded that improvement in human resource management has a favorable and significant impact on employee performance. Based on these data, it can be concluded that the perception of organizational support does not have a positive or statistically significant impact on the performance of employees. Based on these findings, it appears that the provision of money does not have a positive or statistically significant impact on the performance of any employees. According to the findings of this study, human resource development has a considerable detrimental influence on employee performance, which is compensated by increases in wage. The data presented here demonstrates that when salary is taken into consideration, perceived organizational support does not have a statistically significant positive impact on the performance of employees.

**Practical implications:** The findings of this study underline the significance of aligning compensation with the capabilities of employees in order to increase both level of productivity and motivation. It underlines the necessity for organizations to prioritize fair compensation and give sufficient managerial assistance for employee happiness and performance improvement.

**Keyword:** Human Resources Development, Perception of Organizational Support, Employee Performance and Compensation

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## I. INTRODUCTION

The main role of a company's human resources department is to motivate employees to achieve company goals. To manage, coordinate and use people in an organization successfully, human resources are essential (Astuti et al., 2022). In this way, employees can make efficient steps towards achieving company goals. However, Stuti et al. (2022) noted that increasing work efficiency is not an easy thing. To achieve company goals, it is very important to have strong leadership and personnel who are ready to follow task patterns and be supervised. An organization's total output correlates most strongly with the efficiency and effectiveness of its workforce (Aida, 2022). If Agustini (2023) is to be believed, this company relies on the fact that its workers will improve their performance and contribute to the achievement of predetermined goals. The relationship between employee performance and a company's capacity to achieve its goals is clear to see. In high performing employees,

individuals help the organization achieve its goals; for low-performing employees, these individuals hinder the company's progress (Aida, 2022).

According to Jamaludin, Sihabudin, Wanta, Firmansyah, and Mudzakir (2021), work motivation, leadership style, knowledge, job design, personality, as well as skills and experience are several factors that may influence performance. Some of the topics covered in this course include leadership, organizational culture, feeling supported by superiors, job happiness, work environment, loyalty, devotion, and work ethic. Increasing employee motivation can be done by providing incentives in the form of money as a form of appreciation for the extraordinary contribution they have made to the company. According to Astuti et al. (2022), workers receive overall compensation when they are paid for the tasks they have performed. Providing compensation to workers can be done in monetary and non-monetary form. Salaries, bonuses, salaries, and commission payments are part of what is known as "financial compensation" for workers. This kind of compensation mainly deals with direct monetary compensation. Any monetary benefits that are not given directly to employees are referred to as non-financial compensation by Adam, Suryani, and Tarigan (2021). This kind of compensation is sometimes also called allowances. Compensation for PT employees. International Chemical Industry in the form of cash bonuses paid individually. This award is given in addition to their regular salary and is given in recognition of the work they have done. An employee's salary is based on various criteria, such as their position, level of recognition, and the extent to which there and their families' needs are met. Paying workers more will allow them to take on more responsibilities, move up the ranks, and meet their needs to a greater degree. There are many main purposes of enterprise payment systems. This includes rewarding employees for their efforts, ensuring all staff feel fair, increasing employee retention, attracting the best talent, and creating systems that motivate people to do their best.

Human resource development has the potential to impact performance. The aim of developing human resources in the company environment is to grow employees who have good characteristics, are tough, intelligent, skilled, independent and have a sense of unity. The individual must also be diligent, productive, creative, innovative, disciplined and future-oriented, with the ultimate goal of improving the quality of his life (Mus Aidah, 2022). Improving the quality of human resources is carried out in accordance with the competencies, knowledge and professional prerequisites required in each area of growth. Resource development in a company includes many variables, including education and training, career planning and management, improving work quality and productivity, as well as improving occupational health and safety (Simamora, 2014: 411). This is in line with the scenario at PT. International Chemical Industry, where all workers consistently improve their skills, resulting in competency development and increased proficiency. By using this approach, organizations can improve staff performance thereby enabling the achievement of the company's vision and goals. This finding is in line with research by Agustini (2023) which states that human resource development has a positive and substantial impact on staff performance in the company environment. Selayar Islands DPRD Secretariat Office

Employees will be happier and more productive at work as a result of this situation. Specifically regarding compensation, Astuti et al. (2022) stated that the extent to which each employee is satisfied with their work has a major influence on achieving organizational goals and performance assessment. This is supported by the results of Aida's research (2022) because it shows that compensation has the potential to increase employee productivity. An organization's capacity to achieve its goals may be hampered by inadequate compensation. Therefore, in this particular case, it is important to think about matters related to human resource growth (Agustini, 2023). To ensure that people are able to fulfill their role as workers or members of a company, human resource development programs aim to provide them with the necessary information, training and mindset. Adam, Suryani, and Tarigan (2021) stated that this route is more suitable for people to face and overcome obstacles related to their workplace. The relevance of human resource development is greatly influenced by both the results of labor productivity and the quality of the work performed.

Compensation, if used as a moderating variable, has the capacity to increase the correlation between Human Resources Development, organizational support and employee performance. Organizations can effectively encourage workers to be actively involved in Human Resources Development programs by offering appropriate incentives and fair remuneration. Human resource development has the ability to influence performance. The aim of developing human resources in the company environment is to grow employees who have good characteristics, are tough, intelligent, skilled, independent and have a sense of solidarity. These employees are expected to be diligent, productive, creative, innovative, disciplined and future-oriented, with the ultimate goal of improving their quality of life (Mus Aidah, 2022). Improving the quality of human resources in accordance with the competencies, competencies and professional prerequisites required in all areas of growth. Resource development in a company includes many variables, including education and training, career planning and management, improving work quality and productivity, as well as improving occupational health and safety (Simamora, 2014: 411). Elements of work motivation and performance appraisal are components included in the realm of human resource development. Apart from that, work culture has the potential to influence performance. These findings are in line with research by Agustini (2023) which shows that human resource development and remuneration

have a good and big influence on employee performance. This study shows that compensation can effectively increase human resource development and improve employee performance.

The competitiveness of a company is positively correlated with the degree of knowledge possessed by its human resources, according to Marlana and Bustami (2021). No two people are the same; we all have unique skills and unlimited creative potential. A person must intentionally cultivate and enhance their talents, inventive powers, and creative potential through coaching if they are to reach their maximum potential. The company's internal efforts to develop its workforce are very important. For a company to be successful in the long term, it needs help from its workers and the company itself. Staff development and training program carried out by PT. The International Chemical Industry that was launched has not been successful. Seminars, workshops, and other forms of formal education that are highly relevant to their primary responsibilities are greatly underrepresented. So far, workforce competency has not been improved through existing technical supervision and workshops. As a result, the supply of skilled individuals in certain fields is limited. Considering the importance of work performance, alignment of compensation, fulfillment of professional development criteria, and identification of deviations or deficiencies in work, performance assessments must be carried out (Mudayana, 2020). In particular, this method is useful in PT. International Chemical Industry to assess and analyze the implementation of tasks, compare them with the set goals, and improve performance in the coming period (Marlana & Bustami, 2021). This argument is supported by research conducted by Agustini in 2023. The results of this research show that investment in human resources has a significant and positive effect on productivity in the workplace. In terms of developing competent and high-achieving employees, the company is the main player. In terms of employee performance, the company has a big role in determining and shaping results. Workers will feel comfortable and enthusiastic about their work if the company effectively fulfills its obligations and duties. Each employee has a unique social role, and they all consciously carry out their assigned tasks. However, by rewarding employees who demonstrate exceptional performance during their tenure, companies can provide great support to their workforce.

According to Khairunisa (2023), when employees feel supported by their organization, it influences their perception of how much the company values and compensates them for their work. In short, workers will feel that the company cares about them and is there for them every step of the way. This is how employees see it. Overall employee performance is influenced by the organizational environment, which includes physical, social and psychological factors. Employees' assessment and recognition of their pay can also be influenced by the extent to which they feel well supported by the company. The use of a Point of Sale (POS) system can influence employee perceptions regarding the fairness of their compensation. Giving workers a sense of ownership will increase the likelihood that they will see the salary plan as open and honest. The amount of money they received should still be discussed more openly, even if it is not very significant. The idea of organizational support is critical to fostering a sense of belonging and connection between a company and its employees. Feelings of ownership of the company can influence employee performance levels, according to research conducted by Khairunisa, F. (2023). This is why it is so important for employees to truly love their jobs; that is the only way they can contribute to the organization's goals. Undoubtedly, these opportunities help the company achieve its main goals or execute existing strategies. Prasetyo and Frianto (2020) and Khairunisa, F. (2023) show that workers' perceptions of organizational support have a significant and positive effect on their performance. The researcher plans to use the background information provided to conduct scientific research with the title "The Impact of Human Resource Development and Perceptions of Organizational Support on Employee Performance, With Compensation as a Moderating Variable: Case Study at PT. International Chemical Industry." Business performance can be improved with the help of this research.

## **A. Literature Review and Hypothesis Development**

### **1. Employee Performance Evaluation.**

Performance refers to an individual's work performance or the actual achievements they make in their work. Performance refers to the implementation or result of an action. Mangkunegara (2017) defines performance as a consequence of an employee's work, which is assessed by the quality and quantity of tasks completed in accordance with the responsibilities given. Meanwhile, Priansa (2018) defines performance as measurable output or success that a person achieves through their work. "The results are carefully documented to facilitate a thorough evaluation of how performance should compare to the current state." This research uses the following indicators:

1. Work quality
2. Working quantity
3. Cooperation
4. Responsibility
5. Initiative

## **2. Human resource development can also have an impact on performance.**

The aim of developing banking human resources is to produce individuals who are good, tough, intelligent, skilled, independent and have a sense of unity. These employees are diligent, diligent, imaginative, and inventive. They are also disciplined and forward-thinking, seeking to build a more prosperous future. Improve the quality of human resources in line with talents, skills and vocational requirements in all areas of growth. (Basrie, 2018). This research uses the following indicators:

1. Instruction
2. Rotation of work units.
3. Practice work instructions

## **3. Perceived organizational support.**

Perceived organizational support is the extent to which a person feels they have support from their employer. Workers' feelings that their employers care about them and their success are known as "perceived Organizational Support" (POS) (Khairunisa, F., 2023). According to Rhoades and Eisenberger (2002), employees' views of organizational support are their overall beliefs based on their experience of organizational policies and their contacts with management. Their impression of the organization's concern for them shapes this idea. The following metrics are used in this analysis:

1. Appreciate Employee Contributions
2. Support for Career Growth and Development
3. Fairness and Consistency in Care
4. Availability of Information about the Organization
5. Superior Manager and Support
6. Security and Fairness in Employment
7. Social Support in Teams and Organizations
8. Support for Work-Personal Life Balance

## **4. Compensation awards, or compensation**

Include all forms of remuneration given to employees as an expression of appreciation for their contribution to the organization. Hasibuan (2018) defines compensation as compensation received by employees in exchange for services or products provided to a company or organization. This investigation uses the following indicators:

1. Wages and salaries
2. Incentive
3. Pocket money
4. Facility

## **5. Hypothesis**

In an organization, human resource development aims to improve living standards by developing employees who have integrity, resilience, intelligence, expertise, autonomy, a sense of togetherness, perseverance, productivity, ingenuity and novelty, self-control, and a focus on the future. views (Mus Aidah, 2022). Improving the quality of human resources in line with professional standards, skills and abilities required in all development domains. Resource development in a company includes improving work quality and productivity, as well as improving health and safety in the workplace, through education and training, career planning and management (Simamora, 2014: 411). These results are in line with research by Agustini (2023) which states that employee performance and human resource development have a good and statistically significant relationship. As a result, the following theory can be established:

H1: It is suspected that employee performance is significantly influenced by human resource development.

Feelings of attachment and reciprocal affinity between the organization and its workforce will be fostered by employees' impressions of organizational support. Research conducted by Prasetyo and Frianto (2020) found that an employee's level of connection may influence how well they work. Therefore, encouraging workers to have a sense of commitment to their work can help achieve overall organizational goals. This opportunity is undoubtedly considered to have helped the organization achieve one of its main goals or follow a planned action. Research by Khairunisa, F. (2023) shows that employee performance increases significantly with perceived organizational support. As a result, the following theory can be established:

H2: There is a possibility that perceptions of organizational support have a large influence on worker performance.

Compensation has the potential to strengthen the relationship between human resource development, organizational support, and employee performance in its role as a moderating variable. Employers can increase staff participation in Human Resources Development initiatives by offering appropriate rewards and fair remuneration. Human resource development can also influence performance. In an organization, human resource

development aims to improve living standards by developing employees who have integrity, resilience, intelligence, expertise, autonomy, a sense of togetherness, perseverance, productivity, ingenuity and novelty, self-control, and a focus on the future. views (Mus Aidah, 2022). The results reported here are consistent with research conducted by Agustini (2023), which states that employee performance is strongly influenced by a combination of Human Resources Development and salary. As a result, it has been proven that salary can strengthen the impact of human resource development on worker performance. As a result, the following theory can be established:

H3: There is an opinion that salary can increase the impact of human resource development on worker performance.

Additionally, adequate compensation has the potential to improve workers' opinions of the help the company offers, which in turn can create stronger bonds between workers. and company. Therefore, this research is expected to provide a comprehensive understanding of how the best combination of HRD, organizational support, and salary can influence overall worker productivity. Feelings of attachment and mutual affinity between the organization and its workforce will be fostered by an employee's impression of organizational support. Research conducted by Prasetyo and Frianto (2020) found that an employee's level of connection may influence how well they work. Therefore, encouraging workers to have a sense of commitment to their work can help achieve overall organizational goals. This opportunity is undoubtedly considered to have helped the organization achieve one of its main goals or follow a planned action. According to research by Khairunisa et al. (2023), there is a significant positive relationship between employee performance and perceptions of organizational support. This conclusion is supported by Mus Aidah et al. (2022) and Agustini et al. (2023), which confirms that remuneration has a positive and substantial impact on employee performance. As a result, salary was proven to strengthen the relationship between employee performance and perceived organizational support. As a result, the following theory can be established:

H4: It is suspected that remuneration increases the influence of workers' perceptions of organizational support on their performance.

## II. METHODS

To test research ideas and concepts and find solutions to research problem designs, Partial Least Square (PLS) Model Analysis is used. There are two models resulting from PLS analysis. These models are known as Outer Model and Inner Model. Using a bootstrapping scenario, the hypothesis is tested, and the t-test results are used to determine the experimental results. Surabaya is the location of the company conducting the research, namely PT. International Chemical Industry. In this research, the population consists of individuals who work at PT. International Chemical Industry and is part of the Distribution Production Division. There are 47 people in total, who work full time or part time. The measuring instrument used was a Likert scale, and the group used consisted of one hundred people. In this research, the type of sample used was non-probability sampling, and the sampling technique used was saturated sampling.

## III. RESULTS AND DISCUSSION

### A. Results

#### 1. Results of Descriptive Statistical Testing

Descriptive statistics are used to determine the description of respondents' answers to research variables. The following table explains it

*Table 1. Descriptive Statistics*

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Means</i>	<i>Std. Deviation</i>
<i>Human Resources Development</i>	47	2.67	5.00	4.0426	.49936
<i>Perceived Organizational Support</i>	47	3.80	5.00	4.6213	.42166

Compensation	47	3.75	5.00	4.4734	.45215
Show	47	3.40	5.00	4.4766	.43048
Valid N (list)	47				

Source: Primary data processed, 2024

The table above displays statistics showing that the minimum value for the statement is 2.67, while the maximum value reported by respondents is 5. However, the average value is between the range of 4.0426 and 4.6213. The standard deviation is in the range of 0.4216 to 0.4993.

### 2. Item Validity and Reliability Test

Because the probability value of the correlation coefficient for each statement item is less than 0.05, it can be concluded that all instruments studied for the Human Resources Development, POS, Compensation and Employee Performance variables are valid and appropriate. for further testing. Because their Cronbach's Alpha value is higher than 0.6, the findings regarding Human Resources Development, point-of-sale (POS), salary, and employee performance are all suitable for use in further research.

### 3. Results of Convergent Validity testing

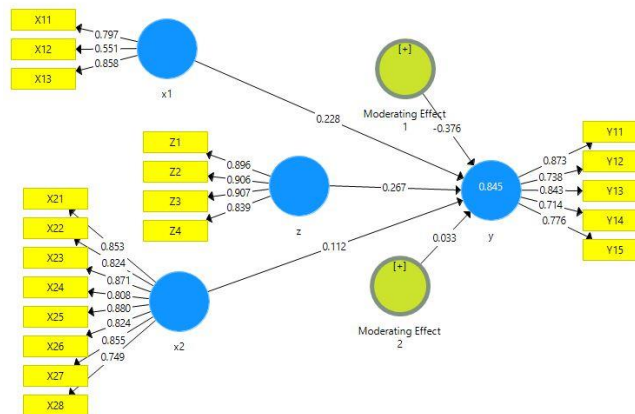


Figure 1. Partial Least Square (PLS) Algorithm Model.

Source: Primary data processed, 2024

For convergent validity, the outer loading value should be more than 0.7, according to Chin as quoted by Ghozali (2014:39). Smart PLS processing findings are shown in the table above. The Human Resources Development, POS, Remuneration and Employee Performance indicators all have outer loading values greater than 0.7 and outer model values that converge or correlate with the variables as a whole. Human Resources Development, POS, compensation, and employee performance variables all pass the model adequacy test, so you can use this data for whatever you want.

### 4. Results of Discriminant Validity Testing

Table 2. Discriminant Validity Test with Average Variant Extracted (AVE)

Variable	road	Information
Human Resources Development	0.558	Valid

<i>Perceived Organizational Support</i>	0.695	<i>Valid</i>
<i>Compensation</i>	0.788	<i>Valid</i>
<i>Employee performance</i>	0.626	<i>Valid</i>

Source: Primary data processed, 2024

The table above compares the AVE value for leadership style, remuneration, motivation and performance. Each variable has an AVE higher than 0.5. The real indicators of the questionnaire show strong validity values for Human Resources Development, POS, Compensation and Employee Performance.

**5. Results of Composite Reliability testing**

*Table 3. Results of Composite Reliability Testing*

<i>Variable</i>	<i>Composite Reliability</i>	<i>Information</i>
<i>Human Resources Development</i>	0.786	<i>Reliable</i>
<i>Perceived Organizational Support</i>	0.948	<i>Reliable</i>
<i>Compensation</i>	0.937	<i>Reliable</i>
<i>Employee performance</i>	0.893	<i>Reliable</i>

Source: Primary data processed, 2024

The data clearly shows that each construct or variable has a composite reliability rating that exceeds 0.6. This shows that both endogenous variables (employee compensation and performance) and exogenous variables (Human Resources Development and Perception of Organizational Support) have a high level of internal consistency and dependence.

**6. Results of reliability testing with Cronbach Alpha**

*Table 4. Results of reliability testing with Cronbach Alpha*

<i>Variable</i>	<i>Cronbach's Alpha</i>	<i>Information</i>
<i>Human Resources Development</i>	0.590	<i>Reliable</i>
<i>Perceived Organizational Support</i>	0.938	<i>Reliable</i>
<i>Compensation</i>	0.911	<i>Reliable</i>
<i>Employee performance</i>	0.849	<i>Reliable</i>

Source: Primary data processed, 2024

The table shows that all research variables have a Cornbach alpha value above 0.7. The findings presented show that all study variables meet Cornbach's alpha criteria, indicating a high degree of dependability.



**7. Results of Goodness of Fit Model testing**

Table 5. Results of Goodness of Fit Model testing

Variable	R squared value
Employee Performance (Y1)	0.845
employee (Z )	0.213

Source: Primary data processed, 2024

The information in the table above shows that 84.5% of the variation in work compensation (Z1), perceived organizational support (X2), and Human Resources Development (X1) can be attributed to employee performance. Employee performance is measured by Y1 and the R square value is 0.845. The motivation variable (Z1) has an R square value of 0.213, meaning that motivation contributes 21.3% to the variance in perceptions of organizational support (X2) and Human Resources Development (X1). The correctness of the suitability assessment is measured by the Q-square value. Similar to the use of the coefficient of determination (R square) in regression analysis, a higher Q-square value indicates a better fit of the model to the data.

The results obtained from calculating the Q-squared value are as follows:

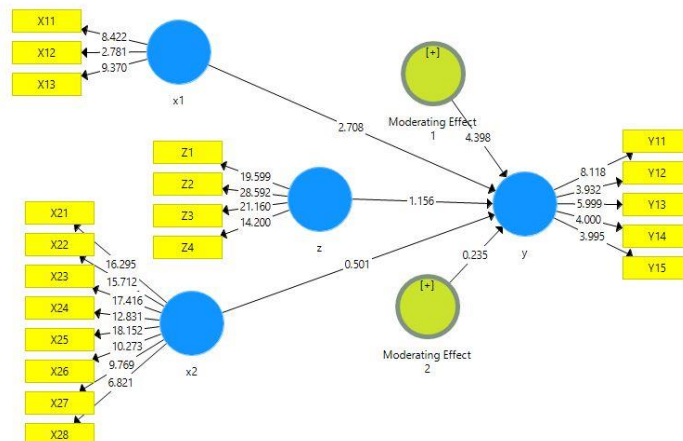
$$\begin{aligned}
 \text{Q-squared} &= 1 - [(1-R^2_1) \times (1-R^2_2)] \\
 &= 1 - [(1-0.845) \times (1-0.213)] \\
 &= 1 - [0.155 \times 0.787] \\
 &= 1 - 0.123 \\
 &= 0.877
 \end{aligned}$$

It can be seen that the Q-squared value is 0.877 from the calculation results above. This proves that the research model can explain 87.7 percent of the variance in the research data, and the remaining 13.5 percent is likely caused by factors outside the scope of this research. This research model appears to have reasonable suitability, based on the results obtained.

**8. Results of research hypothesis testing**

A model explaining the impact of leadership style and pay on employee motivation and performance is shown below. You can see the overall correlation of each variable in this model. The construct correlation has a value of more than 0.5 so the model shown in the attached image does not need to be deleted.

Figure 2. Partial Least Square (PLS) Bootstrapping Model.



Source: Primary data processed, 2024

By analyzing t statistical values and p values, it is possible to ascertain output estimates for structural model testing. According to Yamin and Kurniawan's statement in 2011 (page 54), the research hypothesis is considered accepted if the p value is less than 0.005. In PLS, statistical testing for each suspected link is carried out through the use of simulations with researchers. For this particular example, the bootstrap method is used as a sample. The solution to the problem of non-normality in research data is something that bootstrap testing aims to address. The following is a list of test results obtained using bootstrapping from PLS analysis:

*Table 6 Results of statistical testing of t and p values*

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T statistics ( O/STDEV )</i>	<i>P value</i>
<i>Moderating Effect 1 -&gt; y</i>	-0.376	-0.378	0.085	4,398	0,000
<i>Moderating Effect 2 -&gt; y</i>	0.033	0.028	0.142	0.235	0.814
<i>Human Resources Development -&gt; Performance</i>	0.228	0.232	0.084	2,708	0.007
<i>Perceived Organizational Support -&gt; Performance</i>	0.112	0.121	0.223	0.501	0.617
<i>Compensation -&gt; Performance</i>	0.267	0.247	0.231	1,156	0.248

Source: Primary data processed, 2024

The next explanation is regarding the results of research model hypothesis testing regarding the relationship between employee motivation and performance, leadership style, and remuneration using Smart PLS.

1. First, human resource development affects worker performance. The test shows a 2.709 and 0.28% path coefficient between Human Resources Development and employee performance. A significant link is indicated. A p-value of 0.007 is statistically significant at a significance level of 5% (p<0.05). In statistical analysis, this value exceeds the t value of 1.960. These data show that human resource development improves employee performance. Given this, the theory is accurate.
2. Performance impact of employees' views of organizational support. The study found that employee performance measures and organizational support perceptions have a path coefficient of 0.112 and 0.501. A significant relationship is shown. For statistical significance, the p-value of 0.617 exceeds the 5% barrier (P<0.05) and is below the required t-table value of 1.960. The evidence presented here shows that perceived organizational support does not improve employee performance. This invalidates the hypothesis.
3. Compensation Impacts Employee Performance. The test shows a 1.156 and 0.267 path coefficient between employee performance and remuneration variables. A significant link is indicated. While the p-value of 0.248 above the 5% significance level (P<0.05), it is significantly lower than the required t-value of 1.960. This study found that compensation does not improve employee performance. This shows the notion is inappropriate. Compensation moderation examines how HRD affects employee performance.
4. Human Resources Development negatively affects employee performance with a path coefficient of -0.376 and 4.398. Test results suggest a negative association. Human resource development affects employee performance based on organizational salary, according to this research. At a 5% significance level (p<0.05), the p-value of 0.000 is significant. Furthermore, this number exceeds the required t value of 1.960. These findings show that human resource development negatively impacts employee performance notwithstanding regulated remuneration. The theory looks correct given this.
5. How changes in job remuneration affect employee performance based on company support. The test shows that employee performance indicators and organizational support perceptions have a path coefficient of 0.033 and 0.235, respectively. The p-value of 0.814 above the 5% significance level (p<0.05) but falls below the t-table critical value (1.960). This study found that when salary is managed, employer support does not improve worker performance. Thus, the hypothesis fails.

## **B. Discussion**

### **1. The Impact of Human Resource Development on Employee Performance**

Human resource development has the potential to impact performance. The aim of developing human resources in the company environment is to grow employees who have good characteristics, are tough, intelligent, skilled, independent and have a sense of unity. The individual must also be diligent, productive, creative, innovative, disciplined and future-oriented, with the ultimate goal of improving the quality of his life (Mus Aidah, 2022). Improving the quality of human resources is carried out in accordance with the competencies, knowledge and professional prerequisites required in each area of growth. Resource development in a company includes many variables, including education and training, career planning and management, improving work quality and productivity, as well as improving occupational health and safety (Simamora, 2014: 411). This is in line with the scenario at PT. International Chemical Industry, where all workers consistently improve their skills, resulting in competency development and increased proficiency. By using this approach, organizations can improve staff performance thereby enabling the achievement of the company's vision and goals. This finding is in line with research by Agustini (2023) which states that human resource development has a positive and substantial impact on staff performance in the company environment. Selayar Islands DPRD Secretariat Office.

### **2. The Impact of Perceived Organizational Support on Employee Performance**

The idea of organizational support creates a sense of connectedness and belonging between workers and the company. According to Prasetyo and Frianto (2020), the extent to which a person feels connected to their work can influence their level of performance. Therefore, if an employee has an interest in his work, it will make it easier to realize the company's goals. Undoubtedly, these opportunities help the company in achieving its core goals or pre-defined plans. Previous literature regarding employee performance, including research by Mursidita (2017) and Khairunisa (2023), has found a strong correlation between Perceived Organizational Support and employee performance. Khairunisa's research specifically concluded that Perceived Organizational Support has a significant positive influence on employee performance. In contrast to the findings of this research, Perceived Organizational Support does not have any influence on the performance of PT personnel. Global chemical industry. This is in line with conditions that occur in the field, where there is still a lack of support from top management for employee performance. Therefore, it is hoped that these results can become an important focal point for companies to prioritize their support for employee performance. According to research conducted by Arianto et al. (2019), shows that Perceived Organizational Support does not have a significant impact on employee performance.

### **3. The Impact of Compensation on Employee Performance**

Agustini (2023) defines compensation as the cumulative amount of all benefits received by workers as compensation for the services they have provided. Compensation refers to the overall reward a person receives in return for the services they have provided. The remuneration given to workers fosters a sense of recognition and gratitude for their hard work so far (Mus Aidah, 2022). However, PT. International Chemical Industry prioritizes employee salaries above remuneration, potentially representing the company's future management practices. The International Chemical Industry should prioritize employee remuneration in order to improve employee performance. An organization's focus on employee welfare can significantly influence employee performance. The findings of this research contradict the findings of Mus Aidah (2022) and Agustini (2023) who concluded that remuneration has a beneficial and large influence on employee performance in the Selayar Islands DPRD secretariat office. However, according to research findings by Rianda and Winarno (2022), remuneration does not have a big impact on the performance of workers at PT. Rajasaland is located in Bandung.

### **4. The impact of compensation in moderating the relationship between human resource development and employee performance.**

Compensation, if used as a moderating variable, has the capacity to increase the correlation between Human Resources Development, organizational support and employee performance. Organizations can effectively encourage workers to be actively involved in Human Resources Development programs by offering appropriate incentives and fair remuneration. Human resource development has the ability to influence performance. The aim of developing human resources in the company environment is to grow employees who have good characteristics, are tough, intelligent, skilled, independent and have a sense of solidarity. These employees are expected to be diligent, productive, creative, innovative, disciplined and future-oriented, with the ultimate goal of improving their quality of life (Mus Aidah, 2022). Improving the quality of human resources in accordance with the competencies, competencies and professional prerequisites required in all areas of growth. Resource development in a company includes many variables, including education and training, career planning and management, improving work quality and productivity, as well as improving occupational health and safety (Simamora, 2014: 411). Elements of work motivation and performance appraisal are components included in the realm of human

resource development. Apart from that, work culture has the potential to influence performance. These findings are in line with research by Agustini (2023) which shows that human resource development and remuneration have a good and big influence on employee performance. This study shows that compensation can effectively increase human resource development and improve employee performance.

#### **5. This study examines the impact of compensation in moderating the relationship between perceived organizational support and employee performance.**

The findings of this research indicate that consideration of remuneration does not function as a moderating variable in the relationship between perceived company support and employee performance. Simply put, the level of remuneration that workers receive has no impact on their performance, even though they are able to feel or receive support from the company. Research conducted by Rianda and Winarno (2022) found that salary does not have a big influence on employee performance. This suggests that salary elements may have little impact on how perceived organizational support influences employee performance. According to research conducted by Arianto et al. (2019), Perceived Organizational Support is proven not to have a big influence on employee performance. Another potential explanation is that there may be other influential elements beyond salary that influence this relationship. These factors may be internal to the company, so that perceived support from the organization has no impact on the performance of part-time workers. The International Chemical Industry operates in challenging conditions with minimal support from top management, which has a significant impact on employee performance. This highlights the need for companies to prioritize and increase support for employee performance.

### **IV. CONCLUSION**

Several conclusions can be drawn based on research findings obtained through distributing questionnaires and using Smart PLS for data analysis. These conclusions include the following: Research findings show that employee performance is positively and significantly influenced by human resource development. These statistics lead to the conclusion that employee performance is not significantly and positively influenced by organizational support. Based on these findings, employee performance is not positively and statistically significantly influenced by their income. From this fact, it can be concluded that employee performance is negatively or significantly influenced by HRD, and this impact is reduced by employee salaries. These findings imply that, even when remuneration is taken into account as a moderating factor, perceived organizational support does not significantly have a beneficial impact on employee performance. This is true even when workers' perceptions of organizational support impact their performance. In order to have a good impact on the company's development, the author's recommendations must be studied thoroughly by the Company. The research results show that to improve employee performance and achieve the company's vision, goals and objectives, companies must place a high focus on providing compensation and support to their employees. This is very important for service provider companies PT. chemical industry operating globally. Future research efforts that aim to expand the domain of analysis to include elements beyond those examined in this study, such as reward and punishment, could use the findings of this study as a guide. By using this technique, it is hoped that research findings can identify more problems and provide research findings that are more useful for more stakeholders.

### **REFERENCES**

- Agustini. (2023). Pengaruh Pengembangan Sumber Daya Manusia Dan Kompensasi Terhadap Kinerja Pegawai Pada Kantor Sekretariat DPRD Kepulauan Selayar. *Jurnal Ilmiah Bisnis & Kewirausahaan*, 12(1).
- Aidah, M. (2022). Pengaruh Pengembangan Sumber Daya Manusia Dan Kompensasi Terhadap Kinerja Pegawai Pada CV. Karya Bina Mandiri. *Nobel Management Review*, 3(3).
- Astuti, N. dini, Nasir, H., & Selamat. (2022). Determinan Kompensasi Dan Pengembangan Sumber Daya Manusia Terhadap Kinerja Pegawai (Studi Kasus: Dinas Pertanahan Dan Lingkungan Hidup Kabupaten Pesawaran). *Prosiding Seminar Nasional Ekonomi Dan Bisnis Ke-II*, 2(2), 1–8.
- Basrie, Fariansyah Hassan., (2018). Pengaruh Pengembangan Sumber Daya Manusia, Budaya kerja Dan Motivasi Terhadap Kinerja Karyawan Pt. Pertamina (Persero) Unit Pengolahan Balikpapan - Kalimantan Timur. *Jurnal Bisnis Dan Manajemen (BISMA)*. Vol. I, No. 1.
- Busro, M. 2018, teori-teori Manajemen Sumber Daya Manusia. Edisi pertama. Peranadamedia Group, Jakarta
- Daft, Richard L. (2013). *Manajemen Sumber Daya Manusia*, Penerbit Erlangga, Jakarta
- Edison, Anwar, dkk. 2017. *Manajemen Sumber Daya Manusia.*, Bandung.

- Ghozali, I. (2012). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 19. Universitas Diponegoro: Semarang.
- Harahap, D. S., & Khair, H. (2019). Pengaruh Kepemimpinan Dan Kompensasi Terhadap Kepuasan Kerja Melalui Motivasi Kerja. *Jurnal Ilmiah Magister Manajemen*, 2(1), 69–88.
- Hasibuan, Malayu S.P. (2016). Manajemen Sumber Daya Manusia. Edisi Revisi: PT. Bumi Aksara, Jakarta.
- Hasibuan, Malayu. S.P. (2010). Manajemen, Dasar Pengertian dan Masalah, PT Gunung Agung, Jakarta.
- Hidayat, Rahmat, (2021). Pengaruh Motivasi, Kompetensi dan Disiplin Kerja Terhadap Kinerja. *Widya Cipta: Jurnal Sekretari dan Manajemen*. Volume 5 No. 1
- Kasmir. 2018. Manajemen Sumber Daya Manusia. Teori Dan Praktik, Rajawali Pers, Depok.
- Khairunnisa, F. (2023). Pengaruh Perceived Organizational Support (POS) dan Lingkungan Kerja Terhadap Kinerja Karyawan. *Youth & Islamic Economic Journal*, 04(01), 1–7.
- Mangkunegara. (2017). Manajemen Sumber Daya Manusia Perusahaan. Bandung.
- Mathis, Robert L. dan John H. Jackson. 2006. Human Resources Management (Manajemen Sumber Daya Manusia). Edisi 10. Jakarta: Salemba Empat.
- Prastyo, B. (2020). Pengaruh Perceived Organizational Support Terhadap Kinerja Karyawan Melalui Employee Engagement: Sebuah Studi Literatur. *BIMA: Journal of Business and Innovation Management*, 3(1), 59–72. <https://doi.org/10.33752/bima.v3i1.310>
- Rivai, Veithzal. (2005). Manajemen Sumber Daya Manusia, Edisi 1, PT Raja Grafindo Persada, Jakarta.
- Sedarmayanti. (2017). Perencanaan Dan Pengembangan Sumber Daya Manusia Untuk Meningkatkan Kompetensi, Kinerja Dan Produktivitas Kinerja. PT. Refika, Bandung.
- Siagian, T. S., & Khair, H. (2018). Pengaruh Gaya Kepemimpinan Dan Lingkungan Kerja Terhadap Kinerja Karyawan Dengan Kepuasan Kerja Sebagai Variabel Intervening. *Maneggio: Jurnal Ilmiah Magister Manajemen*, 1(1), 59– 70.
- Simamora, Henry. (2014). Manajemen Sumberdaya Manusia. Yogyakarta: STIE YKPN.
- Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Alfabeta, Bandung.
- Sutrisno. Edy. (2016). Manajemen Sumber Daya Manusia. Prenamedia Group, Jakarta

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# Characteristics of Good Governance and its Impact on Village Financial Management

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## ABSTRACT

**Purpose:** This study aims to test and analyze the characteristics of good governance and its impact on village financial management in Sumpira village, Baebunta Selatan sub-district.

**Design/methodology/approach:** This research uses quantitative methodology based on quantitative through distributing questionnaires. In this study the population was employees in the Sumpira village office. While the sampling technique is saturated side (census) which means that sampling utilizes the entire population. Then the data was analyzed with the SPSS 26 program.

**Findings:** Show your finding here Accountability has a positive effect on village financial management in Sumpira Village, while transparency has a positive effect on village financial management in Sumpira Village.

**Research limitations/implications:** The study also revealed several obstacles in the implementation of good governance, such as the lack of human resource capacity and resistance to change.

**Practical implications:** By applying the characteristics of good governance in village financial management, it is expected that transparent, accountable, participatory, efficient, fair, responsive, consensual, and law-abiding management can be achieved. This will have a positive impact on improving the welfare of village communities and sustainable development.

**Originality/value:** This title is not only original but also has significant potential value in various aspects both theoretical and practical. By examining the characteristics of good governance and its impact in the context of village financial management, this research can make a meaningful contribution to improving governance and welfare at the village level.

**Paper type:** Research paper

**Keyword:** *Characteristics of Good Governance, Village Financial Management*

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## I. INTRODUCTION

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results. Explain how you addressed the problem and clearly state the aims of your study. As you compose the introduction, think of readers who are not experts in this field. Introduction must be written using 750 until 1000 words. Law No. 6/2014 on Villages Article 1 explains that the village is a legal community unit that has boundaries that are authorized to regulate and manage government affairs, the interests of the local community based on community initiatives, origin rights, and/or traditional rights that are recognized and respected in the government system of the Unitary State of the Republic of Indonesia. Based on this law, villages are given the authority to oversee their governance independently, including in managing finances. Based on the Regulation of the Minister of Home Affairs Number 113 of 2014 concerning Village Financial Management states that village finances are all village rights and obligations that can be valued in money and everything in the form of money and goods related to the implementation of village rights and obligations, besides that village finances must be managed based on the principles of transparency, accountability, participation, and carried out in an orderly and disciplined budget.

Sumpira Village itself received the Village Fund Allocation (ADD) in 2023, phase I amounting to IDR 95,588,838, phase II amounting to IDR 97,387,679, and phase III amounting to 76,200,970. Thus, the total allocation of village funds in 2023 is 269,177,487 rupiah. The amount of the village fund allocation budget, therefore in realizing good management of village funds in Sumpira Village, South Baebunta Subdistrict, it is necessary to apply the principles of good governance as a basis for the preparation and implementation of policies in the implementation of village financial management (APBDes). Governance is a process of managing, managing, directing, guiding, organizing, and can also be interpreted as government (Syairozi, 2021). (Ngakil & Kaukab, 2020). Good governance in financial management has been widely proven to have a positive effect on governance. (Sukmawati & Nurfitriani, 2019) stated that the two most important terms in good governance are accountability and transparency.

Accountability is the obligation to provide accountability and explanation of the performance and activities of the legal authority that governs an organization to people who have the right or authority to request information or accountability (Goo & Sanda, 2022). Accountability will improve if the accounting system produces accurate, reliable, timely, and accountable information. This study refers to previous research, namely research (Faizzatus Solihah et al., 2022) which shows that accountability has a positive effect on village financial management. However, this research contradicts research (Agustina & Andayani, 2016) which shows that accountability for financial management of village fund allocations has a significant negative effect.

Not only accountability but transparency is also very necessary in village financial management. Transparency is information about government finances that is processed and published in a timely, accurate, complete, current, reliable, and available in sufficient time to allow analysis and evaluation by relevant stakeholders (Alfiani & Estiningrum, 2021). Transparency in the village fund management system is to realize an open and responsible government. The principle of transparency guarantees access for everyone to obtain available information about government operations that can be reached by the public (Sari & Mildawati, 2020). This research refers to previous research, namely research (Septian et al., 2022) which shows that transparency has a significant effect on village financial management. However, this research contradicts research (Making & Handayani, 2021) which says that transparency has no effect on the management of village funds.

Based on the things that have been explained and presented, this study aims to determine the effect of accountability and its impact on village financial management, and the effect of transparency and its impact on village fund management. As for some of the benefits that are then to be obtained from this research, among others, from a theoretical point of view, the results of the study are expected to be a means of proving (verification) the applicability of the theories referred to in this study, such as Stewardship Theory in relation to empirical proof of the characteristics of good governance and its impact on the management of village funds. Meanwhile, from a practical point of view, it provides an overview in conducting village financial management such as improving the conditions of planning, implementation, administration, accountability, and reporting in presenting them so as to produce transparent and accountable financial reports.

## **A. Literature Review**

### **1. Stewardship Theory**

*Stewardship theory* is built on the philosophical perception of human nature, namely that people are, in fact, reliable, capable of acting with full responsibility, integration, and honesty towards others. In other words, *stewardship theory* states that management can be relied upon in acting in the interests of the general public and shareholders in particular (Astuti & Yulianto, 2016). The implications of *stewardship* theory for this research can explain the existence of the Village Government (*stewardship*) as an institution that can be trusted to act in the public interest by carrying out its duties and functions effectively for the welfare of the community (principal). The village government fulfills its obligation to ensure financial responsibility by providing accountable and transparent financial reports that are in line with the characteristics of financial statements (relevant, reliable, understandable and comparable).

#### **a. Accountability**

According to (Dewi, 2016) accountability is the obligation to report failure or success in achieving organizational goals. The concept of accountability in public responsibility dictates that the entire law enforcement process, including planning, preparation, and implementation, must be fully reportable and accountable to the DPRD and the community. The public has the right to know the budget as well as accountability for the budget plan or implementation.

#### **b. Transparency**

Transparency is the government's ability to make local financial policies in an open manner, allowing the public and DPRD to easily know and oversee them. In the end, transparency in financial management will create horizontal accountability between local governments and their communities, thus creating a government that is clean, transparent, responsible, effective, efficient, and responsive to the aspirations and desires of the community (Sari & Mildawati, 2020). Transparency is necessary to ensure that people's

rights are maintained and to prevent any conflicts. Oversight of village finances can be carried out by the authorities when transparency is implemented (Mutia Basri et al., 2020).

c. **Village Financial Management**

Permendagri No. 113/2014 article 1 paragraph 5 on Village Financial Management, explains that village finances are all village rights and obligations that can be valued in money and everything in the form of money and goods related to the implementation of village rights and obligations. There are various ways to examine the condition of village finances. By definition, village finances are all rights followed by monetary responsibilities, as well as everything in the form of goods and money related to the implementation of village rights and obligations. When viewed through its management cycle, it covers one fiscal year, from January 1 to December 31, including the phases of planning, implementation, administration, reporting, and accountability (Mais & Palindri, 2020).

**B. Hypothesis Development**

**1. The Effect of Accountability on Village Fund Management**

Accountability is the village financial management team to the community, where the village head is the main responsible party. According to (Siregar, 2020) accountability is the ability to give answers to higher authorities for the actions of individuals or groups of individuals against the general public in an organization. With accountability, the party responsible for managing village funds must be able to provide clear accountability related to the use of these funds. This creates strong internal controls.

Accountability also encourages the management of village funds in a more efficient and effective manner. Good oversight and rigorous monitoring can help ensure that village funds are used for their intended purpose and deliver the expected results. Therefore, it is imperative that mandatory accountability is implemented by government and oversight organizations with legal consequences. After that, government law enforcement mechanisms will try to implement the concept of accountability in government management, including financial management. From the explanation above, it is in line with research (Faizzatus Solihah et al., 2022) which says that accountability has a positive effect on village financial management. Based on this, the hypothesis in this study is:

H1: Accountability has a positive effect on village financial management

**2. The Effect of Transparency on Village Fund Management**

Authorities must be informed of all activities related to village financial management. Transparency means openness, namely the government provides parties who need information about the management of public resources to parties who need information (Ardelia & Handayani, 2022). Transparency helps build public trust in the management of village funds. When information related to the use of village funds is clearly available and easily accessible to the community, this creates a sense of trust that the funds are being used for the common good. Transparency also allows the community to monitor the use of village funds. Open information allows the community to more easily understand how the funds are used and whether there is potential for misuse. From the explanation above, it is in line with the research (Septian et al., 2022) which says that transparency has a significant effect on village financial management. Based on this, the hypotheses in this study are:

H2: Transparency has a positive effect on village financial management

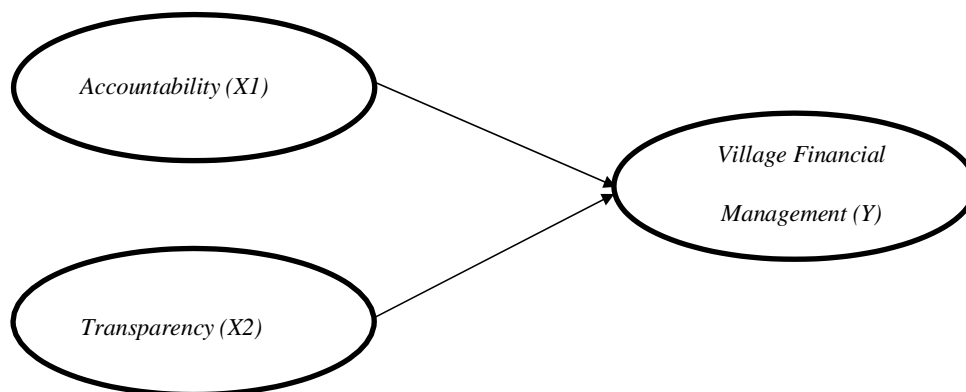


Figure 1. Framework



**II. METHODS**

This research is quantitative research with a causality approach by distributing questionnaires to respondents measured using a Likert scale. The population in this study was Sumpira Village, South Baebunta District while the sampling technique was saturated sampling. According to (Sugiyono, 2016) this technique is a sampling that uses the entire population. This method is used because the population in the Sumpira Village office is less than 50 people. This study all data were processed and tested with SPSS 26. By using descriptive statistical analysis, validity test, reliability test, classical assumption test consisting of data normality test, multicollinearity test, heteroscedasticity test, multiple linear regression test, t test, f test, and coefficient of determination test.

**III. RESULTS AND DISCUSSION**

**A. Results**

The number of samples in the study amounted to 40 respondents. Of the 40 questionnaires, the questionnaires used in this study were 40 (100%). Because all questionnaires were returned and no questionnaires were missed. The following is a table of descriptive statistics on several variable results calculated using the SPSS26 program.

*Table 1 Descriptive Statistical Analysis Test*

<i>Descriptive Statistics</i>					
	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
<i>Accountability</i>	40	15.00	34.00	27.0250	3.47509
<i>Transparency</i>	40	18.00	31.00	23.3250	2.81377
<i>Village Fund Management</i>	40	22.00	35.00	29.1750	3.71337
<i>Valid N (listwise)</i>	40				

Source: IBM spss output 26, 2023

Based on table 1. 3 general descriptions of the research results can be drawn as follows. First, Accountability data (X1) has a minimum score of 15.00 and a maximum score of 34.00. The average score is 27.0250 with a standard deviation of 3.47509. The large enough standard deviation indicates a large variation from the lowest value and the highest value for variable X1. Second, the Transparency (X2) data has a minimum score of 18.00 and a maximum score of 31.00. The average score is 23.3250 with a standard deviation of 2.81377. A large enough standard deviation indicates a large variable from the lowest and highest values for variable X2. And third, village financial management data has a minimum score of 22.00 and a maximum score of 35.00. The average score is 29.1750 with a standard deviation of 3.71337. A large enough standard deviation indicates a large variation from the lowest value and the highest value for the Y variable.

Validity test (validity test) is a tool for which is used to measure whether the questionnaire is valid or not. The validity test is carried out by testing the correlation between the item score and the total score of each variable, using the Pearson correlation. The statement item is said to be valid if the significant level is below 0.05.

*Table 2 Validity Test Results*

<i>Variables</i>	<i>Item</i>	<i>N</i>	<i>Significant</i>	<i>r-count</i>	<i>r-table</i>	<i>Description</i>
	<i>X1.1</i>	40	0,000	0,726	0,263	<i>Valid</i>
	<i>X1.2</i>	40	0,000	0,720	0,263	<i>Valid</i>

	X1.3	40	0,000	0,703	0,263	Valid
<i>Accountability (X1)</i>	X1.4	40	0,000	0,665	0,263	Valid
	X1.5	40	0,000	0,667	0,263	Valid
	X1.6	40	0,002	0,483	0,263	Valid
	X1.7	40	0,001	0,511	0,263	Valid
<i>Transparency (X2)</i>	X2.1	40	0,003	0,454	0,263	Valid
	X2.2	40	0,000	0,562	0,263	Valid
	X2.3	40	0,002	0,466	0,263	Valid
	X2.4	40	0,000	0,682	0,263	Valid
	X2.5	40	0,000	0,681	0,263	Valid
	X2.6	40	0,001	0,523	0,263	Valid
	X2.7	40	0,001	0,509	0,263	Valid
<i>Village Financial Management (Y)</i>	Y.1	40	0,000	0,771	0,263	Valid
	Y.2	40	0,000	0,770	0,263	Valid
	Y.3	40	0,000	0,930	0,263	Valid
	Y.4	40	0,000	0,915	0,263	Valid
	Y.5	40	0,000	0,626	0,263	Valid
	Y.6	40	0,004	0,447	0,263	Valid
	Y.6	40	0,000	0,678	0,263	Valid

Source: IBM spss output 26, 2023

Based on table 2, it shows that all indicators used for the Accountability, Transparency, and Village Financial Management variables used in this study show a significant level smaller than 0.05 or 5% and Cronbach alpha is greater than the r-table with a number of 0.263. This means that all indicators and statements in each variable in this study are said to be valid, so that the reliability test can be carried out for the next test.

The tool for measuring a questionnaire that functions as an indicator of a variable or construct is the reliability test. This reliability test was carried out using the Cronbach's Alpha statistical method with a significance value of more than (>) 0.6 to assess the consistency of respondents' answers based on the statements given.

*Table 3 Reliability Test Results*

<i>Variables</i>	<i>Cronbach Alpha</i>	<i>Description</i>
<i>Accountability</i>	<i>0,756</i>	<i>Reliable</i>
<i>Transparency</i>	<i>0,616</i>	<i>Reliable</i>
<i>Village FinancialManagement</i>	<i>0,855</i>	<i>Reliable</i>

Source: IBM spss output 26, 2023

Table 3 shows that the variables of Supervision, Control, Audit and Quality of Financial Statements have a Cronbach's alpha value greater than 0.6 which indicates the reliability of the measurement results. This shows the validity of the statement items used in this study. to ensure that each statement item used can produce consistent data and if the statement is submitted again,a response is obtained that is mostly similar to the previous response.

The normality test aims to test whether in the regression model, confounding or residual variables have a normal distribution or not. The normality test in this study used the KolmogorovSmirnov test processed with SPSS version 26. The conclusion of the normality test results can be seen, namely, if the significance value > 0.05, then it is stated that the data is normally distributed and if the significance value < 0.05, then it is stated that the data is not normally distributed.

*Table 4 Normality Test Results*

		<i>Unstandardized Residual</i>
<i>N</i>		<i>40</i>
<i>Normal Parameters<sup>a,b</sup></i>	<i>Mean</i>	<i>.0000000</i>
	<i>Std. Deviation</i>	<i>2.59360022</i>
<i>Most Extreme Differences</i>	<i>Absolute</i>	<i>.058</i>
	<i>Positive</i>	<i>.053</i>
	<i>Negative</i>	<i>-.058</i>
<i>Test Statistic</i>		<i>.058</i>
<i>Asymp. Sig. (2-tailed)</i>		<i>.200<sup>c,d</sup></i>

Source: IBM spss output 26, 2023

Based on table 4, it shows that the significance value of 0.200 is greater than 0.05 so it can be concluded that the data of the three variables tested are declared normally distributed.

The multicollinearity test aims to test whether the variables in the regression model are determined by the correlation between the independent variables. The multicollinearity test can be done in two ways, namely by looking at the VIF (Variance Inflation Factor) and tolerance value. If VIF > 10 and tolerance value < 0.10 then multicollinearity occurs. Below are the results of the multicollinearity test by looking at the Tolerance and Variance Inflation Factor (VIF).

*Table 5. Multicollinearity Results (Tolerance and VIF)*

<i>Model</i>	<i>Unstandardized</i>		<i>Standardized Coefficients</i>			<i>Collinearity</i>	
	<i>Coefficients</i>		<i>Beta</i>	<i>t</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>VIF</i>
	<i>B</i>	<i>Error std.</i>					
<i>(Constant)</i>	3.86	4.094		0.943	0.35		
<i>Accountability</i>	0.366	0.135	0.342	2.705	0.01	0.825	1.213
<i>Transparency</i>	0.662	0.167	0.502	3.966	0	0.825	1.213

a. Dependent Variable: Village Financial Management

Source: IBM spss output 26, 2023

The data in table 5 shows that all the VIF values of the independent variables are below 10, which is 1.213, which means that there is no multicollinearity.

Table 6 presents the results of heteroscedasticity testing using Spearman rank where each variable obtained numbers 0.844, 0.634 and 0.794 which are greater than 0.05 so the conclusion is that there is no heteroscedasticity problem.

*Table 6 Heteroscedasticity Test*

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
<i>(Constant)</i>	0.469	2.374		0.198	0.844
<i>Accountability</i>	0.038	0.078	0.086	0.48	0.634
<i>Transparency</i>	0.025	0.097	0.047	0.263	0.794

Source: IBM spss output 26, 2023

*Table 7 Regression Analysis Results*

<i>Model</i>	<i>Coefficients<sup>a</sup></i>	
	<i>Unstandardized Coefficients</i>	
	<i>B</i>	<i>Std. Error</i>
<i>(Constant)</i>	3.860	4.094

<i>Accountability</i>	.366	.135
<i>Transparency</i>	.662	.167

a. Dependent Variable: Village Financial Management

Source: IBM spss output 26, 2023

From this table, a multiple linear regression equation can be compiled as follows:

$$Y=3.860+0.366X1+0.662X2 + e$$

Based on the multiple linear regression equation above, it can be described as follows:

- The Village Financial Management variable has not been influenced by the Accountability variable (X1) and the Transparency variable (X2), so the constant value (a) is conditioned at 3.860.
- The accountability variable regression coefficient is positive, which is 0.366. This shows that if Accountability (X1) increases, then Village Financial Management (Y) will increase by 0.366 assuming other independent variables are constant.
- The regression coefficient of the Transparency variable (X2) is positive, namely 0.662. This shows that if Transparency (X2) increases, then Village Financial Management (Y) will increase by 0.662, assuming that the other independent variables are constant.

After testing whether the data is suitable for use or not the test results say the data is suitable for use, the next test is hypothesis testing. Hypothesis testing aims to predict how much influence the independent variables (internal audit influence and accounting understanding) have on how to test the hypothesis by testing the coefficient of determination (R<sup>2</sup>), F test, and t test. From the calculation and processing of data using SPSS 26 is obtained.

*Table 8 Test Results of the Coefficient of Determination*

<i>Model Summary</i>				
<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>
1	.716 <sup>a</sup>	0.512	0.486	2.66278

a. Predictors: (Constant), Transparency, Accountability

b. Predictors: (Constant), Transparency, Accountability

Source: IBM spss output 26, 2023

Table 8 shows that the Adjusted R Square value is 0.486 or 48.6%, this means that the independent variable affects the dependent variable by 48.6% while the remaining 51.4% is influenced by other variables not included in this study.

The simultaneous test (F-test) was conducted to see how much influence all independent variables (Accountability and Transparency) had on the dependent variable (Village Financial Management).

*Table 9 F test*

<i>ANOVA<sup>a</sup></i>					
<i>Model</i>	<i>Sum of Squares</i>	<i>Df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Regression</i>	275.431	2	137.716	19.423	.000 <sup>b</sup>

<i>Residuals</i>	262.344	37	7.09
<i>Total</i>	9537.77572.510	39	

Dependent Variable: Village Financial Management

Predictors: (Constant), Transparency, Accountability Source:

Source: IBM spss output 26, 2023

Table 9 shows that the F-count value is 32.707 and the significant F-table value is 0.05 with the formula, namely  $F\text{-table} = F(k; n-k) = F(2; 40-2) = F(2; 37)$  so that the F-table becomes 3.25. The results obtained are  $F\text{-count} > F\text{-table}$  ( $19.423 > 3.25$ ) with a significance of  $0.000 < 0.05$ . So that the Accountability and Transparency variables have a significant influence on Village Financial Management in Sumpira Village (Y).

The next stage is partial testing (t-test) aims to determine the effect of each independent variable on the dependent variable. The test criteria used are if the value  $< 0.05$  then  $H_a$  is accepted and if the value  $> 0.05$  then  $H_0$  is rejected.

*Table 10 Partial Test Results (t Test)*

<i>Model</i>	<i>Coefficients<sup>a</sup></i>				
	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>		
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>	<i>t</i>	<i>Sig.</i>
<i>(Constant)</i>	3.860	4.094		.943	.352
<i>Accountability</i>	.366	.135	.342	2.705	.010
<i>Transparency</i>	.662	.167	.502	3.966	.000

a. Dependent Variable: Village Financial Management

Source: IBM spss output 26, 2023

1. Accountability (X1)

Based on the table above, the processing results of the Accountability variable (X1) obtained a t value of 2.705 with a probability of 0.010. With t count  $2.705 >$  from table 0.025 (37) 2.02619 or probability 0.010  $<$  from 0.05; then  $H_0$  is rejected, which means that the Accountability variable (X1) partially or individually has a significant positive effect on Village Financial Management in Sumpira Village.

2. Transparency (X2)

Based on the table above, the results of managing Transparency (X2) obtained a t value of 3.966 with a probability of 0.000. With t count  $3.966 >$  from t table 0.025 (37) 2.02619 or probability 0.000  $<$  0.05; then  $H_0$  is rejected, which means that the Transparency variable (X2) partially or individually has a significant positive effect on Village Financial Management in Sumpira Village.

**B. Discussion**

**1. The Effect of Accountability on Village Fund Management in Sumpira Village.**

Accountability has a positive effect on village financial management in Sumpira Village. This means that the higher the level of accountability that village financial management in Sumpira Village is also getting better. Accountability encourages the management of village funds in a more efficient and effective manner. Good oversight and close monitoring can help ensure that village funds are used for their intended purpose and deliver the expected results. Therefore, it is very important that accountability must be implemented by the village government to create Good Governance in financial management. Accountability affects village financial management, namely with high accountability encouraging active community participation in supervision and

decision making related to village finances. Involved communities can oversee budget implementation, ensuring village funds are used in accordance with local needs and priorities. Good accountability can help ensure that village funds are used efficiently and effectively. With good performance measurement and reporting mechanisms in place, villages can assess whether financial resources are being used optimally to achieve development goals. Accountability is a bulwark against corruption. With rigorous monitoring systems and fraud prevention mechanisms in place, the risk of corruption can be reduced. This helps ensure that village funds are not misused by irresponsible parties. A high level of accountability increases community trust in the village government. Communities that feel that village financial management is done well and transparently are more likely to support government policies and contribute positively to local development.

Accountability also includes compliance with applicable rules and regulations. An accountable village government will strive to comply with established accounting standards and financial regulations. It is important to remember that accountability is not only the responsibility of the village government, but also involves the active participation of the community and other relevant parties. In the context of *good governance*, the involvement of all stakeholders can form a mutually supportive system to achieve village development goals in a sustainable manner. In the context of village financial management and *good governance*, *Stewardship* theory can play an important role in strengthening accountability. *Stewardship* theory emphasizes the understanding that village governments act as "stewards" who have the responsibility to manage resources in good faith. The application of this concept can increase awareness of responsibility towards the community and the owners of village finances, which in turn can strengthen accountability. The *Stewardship* concept can create awareness of the importance of involving the community in decision-making related to village finances. By empowering the community to understand and oversee the management of village funds, this theory can strengthen accountability through active participation. *Stewardship* highlights the importance of accountability and performance measurement. A village government based on *Stewardship* theory can develop an effective performance evaluation system to assess the achievement of development goals and responsible financial management. By integrating *Stewardship* theory in village financial management practices, it can be expected that village leaders will focus more on their duties as "stewards" and thus, will improve their accountability to the community and the owners of village funds.

The result of the first hypothesis of this study is that accountability has a positive effect on village financial management in Sumpira Village. Thus, it can be concluded that  $H_a$  is accepted while  $H_o$  is rejected. This is in accordance with the findings of previous research by (Faizzatus Solihah et al., 2022) which states that accountability has a positive effect on village financial management.

## **2. The Effect of Transparency on Village Fund Management in Sumpira Village.**

Transparency has a positive effect on village financial management in Sumpira Village. This means that the higher the level of transparency, the better the village financial management in Sumpira Village. Transparency helps build public trust in the management of village funds. When information related to the use of village funds is clearly available and easily accessible to the community, this creates a sense of trust that the funds are being used for the common good. Transparency affects village financial management by having a very important role in the context of good governance, especially in relation to village financial management. Transparency is a key element in building public trust in the village government. Communities that have easy access to transparent village financial information are more likely to trust government policies and decisions. This creates a more positive relationship between the village government and the community. With transparent financial information, village governments can be evaluated more effectively. Communities and stakeholders can help identify areas where fund management can be improved, thereby increasing the efficiency and effectiveness of the use of village funds. Transparency empowers communities by giving them access to information needed to make better decisions. With a better understanding of village finances, communities can participate in development planning processes and advocate for policies that better suit local needs. Transparency supports village government compliance with applicable rules and regulations. By openly presenting financial information, village governments can demonstrate that they comply with accounting standards and financial regulations. Overall, transparency contributes significantly to *good* village financial management and creates an enabling environment for *good governance*. By strengthening transparency, village governments can build trust, encourage community participation, and improve accountability in the management of village funds.

*Stewardship* theory can strengthen the influence of transparency in *good governance* on village financial management by focusing on the roles and responsibilities of those responsible for managing village resources. *Stewardship* theory emphasizes responsibility and ethics in resource management. By applying *Stewardship* principles, village governments are directed to be ethically responsible in the management of village funds. Transparency reinforces this by allowing interested parties to see directly how resources are managed. *Stewardship* and transparency support each other in improving accountability. *Stewardship* theory asserts that *stewards* should be accountable to owners or the community. With transparency, relevant parties can monitor and evaluate the

performance of the village government, thereby increasing accountability. *Stewardship* encourages the active involvement of stakeholders in decision-making. With transparency, easily accessible financial information can motivate the participation of the community and other parties in monitoring and providing input on village financial management. *Stewardship* theory and transparency contribute to increased public trust. The combination of being ethically responsible (*stewardship*) and information disclosure (transparency) creates a situation where the public feels confident that village financial management is done in good faith. By combining *stewardship* theory with transparency practices, village governments can create an enabling environment for good governance and effective village financial management. *Stewardship* provides the philosophical basis for responsible action, while transparency provides the concrete tools to make that action open and accountable.

The result of the second hypothesis of this study is that accountability has a positive effect on village financial management in Sumpira Village. Thus, it can be concluded that  $H_a$  is accepted while  $H_o$  is rejected. This is in accordance with the findings of previous research by (Septian et al., 2022) which states that transparency has a significant effect on village financial management.

#### IV. CONCLUSION

The results of this study, it can be concluded that accountability has a positive effect on village financial management in Sumpira Village. This means that the higher the level of accountability that village financial management in Sumpira Village is also getting better. Accountability encourages the management of village funds in a more efficient and effective manner. Good oversight and close monitoring can help ensure that village funds are used for their intended purpose and deliver the expected results. Therefore, it is very important that accountability must be implemented by the village government to create *Good Governance* in financial management. The results of the research on transparency variables have a positive effect on village financial management in Sumpira Village. This means that the higher the level of transparency that village financial management in Sumpira Village is also getting better. Transparency helps build public trust in the management of village funds. When information related to the use of village funds is clearly available and easily accessible to the community, this creates a sense of trust that the funds are being used for the common good. Transparency affects village financial management by having a very important role in the context of good governance, especially in relation to village financial management. Transparency is a key element in building public trust in the village government.

The author provides suggestions for the Government in Sumpira Village, especially those involved in village financial management, namely to increase the accountability and transparency.

#### REFERENCES

- Agustina, L., & Andayani. (2016). Pengaruh Kinerja Keuangan, Ukuran Perusahaan, Dan Pertumbuhan Perusahaan Terhadap Kebijakan Dividen. *Jurnal Ilmu Dan Riset Akuntansi*, 5(10), 1–23.
- Alfiani, A., & Estiningrum, S. D. (2021). Pengaruh Akuntabilitas, Transparansi dan Sistem Akuntansi Keuangan Desa dalam Pengelolaan Keuangan Desa. *Ekuitas: Jurnal Pendidikan Ekonomi*, 9(2), 222. <https://doi.org/10.23887/ekuitas.v9i2.36125>
- Ardelia, S. N., & Handayani, N. (2022). Pengaruh Akuntabilitas dan Transparansi Pengelolaan Keuangan Desa serta Partisipasi Masyarakat terhadap Kesejahteraan Masyarakat. *Jurnal Ilmu Dan Riset Akuntansi*, 11(04), 01–16.
- Astuti, T. P., & Yulianto, Y. (2016). Good Governance Pengelolaan Keuangan Desa Menyongsong Berlakunya Undang-Undang No. 6 Tahun 2014. *Berkala Akuntansi Dan Keuangan Indonesia*, 1(1), 1–14. <https://doi.org/10.20473/baki.v1i1.1694>
- Dewi, D. E. (2016). Transparansi, Akuntabilitas, Partisipasi Masyarakat Dalam Pengelolaan Keuangan Dana Desa. *Fakultas Ekonomika Dan Bisnis Universitas Kristen Satya Wacana*, 01, 1–23.
- Faizzatus Solihah, Biana Adha Inapty, & Adhitya Bayu Suryantara. (2022). Pengaruh Transparansi, Akuntabilitas Dan Peran Perangkat Desa Terhadap Pengelolaan Keuangan Desa (Studi Empiris Pada Desa Se-Kecamatan Suralaga Kabupaten Lombok Timur). *Jurnal Riset Mahasiswa Akuntansi*, 2(1), 136–154. <https://doi.org/10.29303/risma.v2i1.191>
- Goo, E. E. K., & Sanda, E. M. S. (2022). Analisis Pelaksanaan Tata Kelola Rencana Strategis, Akuntabilitas Dan Transparansi Dana Desa Terhadap Pengelolaan Keuangan Desa (Studi di Desa Magepanda Kecamatan Magepanda). *Accounting Unipa*, 1(1), 20–34.
- Mais, R. G., & Palindri, L. (2020). Penerapan Prinsip Akuntabilitas Dan Transparansi Dalam Mengelola



- Keuangan Desa. *Jurnal Akuntansi Dan Governance*, 1(1), 57. <https://doi.org/10.24853/jago.1.1.57-66>
- Making, A. A., & Handayani, N. (2021). PENGARUH AKUNTABILITAS, TRANSPARANSI, DAN PENGAWASAN TERHADAP PENGELOLAAN DANA DESA Nur Handayani Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya. *Jurnal Riset Manajemen Dan Bisnis*, 6(1), 11–18.
- Mutia Basri, Y., Desti Mariani, T., & Rofika, R. (2020). Pengelolaan Keuangan Desa : Analisis Faktor Yang Mempengaruhinya. *JAK (Jurnal Akuntansi) Kajian Ilmiah Akuntansi*, 8(1), 34–50. <https://doi.org/10.30656/jak.v8i1.2379>
- Ngakil, I., & Kaukab, M. E. (2020). Transparansi dan Akuntabilitas Pengelolaan Keuangan Desa di Kabupaten Wonosobo. *Journal of Economic, Management, Accounting and Technology*, 3(2), 92–107. <https://doi.org/10.32500/jematech.v3i2.1283>
- Sari, M. T., & Mildawati, T. (2020). Pengaruh Akuntabilitas Pengelolaan Keuangan Desa, Transparansi, Dan Kebijakan Desa Terhadap Kesejahteraan Masyarakat. *Jurnal Ilmu Dan Riset Akuntansi*. e-ISSN:2460-0585. *Ilmu Dan Riset Akuntansi*, 8(12), 1–17.
- Septian, R. L., Wawo, A., & Jannah, R. (2022). Pengaruh Transparansi Dan Akuntabilitas Terhadap Pengelolaan Keuangan Desa Dengan Sifat Amanah Sebagai Variabel Moderasi. *ISAFIR: Islamic Accounting and Finance Review*, 2(2), 179–193. <https://doi.org/10.24252/isafir.v2i2.25485>
- Siregar, M. (2020). Pengaruh akuntabilitas, transparansi, dan partisipasi masyarakat dalam pengelolaan keuangan desa terhadap pembangunan desa (Studi Kasus di Desa Paluh Manis, Kecamatan Gebang, Kabupaten Langkat). *Jurnal Ilmiah Kohesi*, 4(2), 3–15.
- Sugiyono. (2016). Metode Penelitian Kuantitatif Kualitatif dan RD. *Alfabeta*.
- Sukmawati, F., & Nurfitriani, A. (2019). Pengaruh Transparansi dan Akuntabilitas terhadap Pengelolaan Keuangan Desa ( Studi pada Pemerintah Desa di Kabupaten Garut ). *Jurnal Ilmiah Bisnis, Pasar Modal, Dan UMKM*, 2(1), 52–66.
- Syairozi, M. I. (2021). Analisis Penerapan Good Governance. ... *Dan Pengabdian 2021*, 4, 49–59.

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# **The Influence of Promotion Mix, Brand Image and Lifestyle on Purchase Decisions at Tokopedia with Consumer Behavior as An Intervening Variable**

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## **ABSTRACT**

**Purpose:** The purpose of this research is to determine and analyze the influence of Promotion mix on Consumer Behavior, Brand image on Consumer Behavior, Lifestyle on Consumer Behavior, Promotion mix on Purchase Decisions, Brand image on Purchase Decisions, Lifestyle on Purchase Decisions, Consumer Behavior on Purchase Decisions, Promotion mix on purchase decisions with consumer behavior as an intervening variable, brand image on purchase decisions with consumer behavior as an intervening variable, lifestyle on purchase decisions with consumer behavior as an intervening variable on Tokopedia.

**Design/methodology/approach:** The data collection technique used to fill out a questionnaire using the Purposive Sampling method which was distributed to the sample population of 100 respondents and processed using the SEM-PLS application.

**Findings:** And the research results show that there is a significant influence of Promotion mix on Consumer Behavior, there is a significant influence of Brand image on Consumer Behavior, there is a significant influence of Lifestyle on Consumer Behavior, there is a significant influence of Promotion mix on Purchase Decisions, there is a significant influence of Brand image on Purchase Decisions, there is a significant influence of Lifestyle on Purchase Decisions, there is a significant influence of Consumer Behavior on Purchase Decisions, there is a significant influence of Promotion mix on Purchase Decisions with Consumer Behavior as an intervening variable, in this research it is known that there is no significant influence of Brand image on Purchase Decisions with Consumer Behavior as an intervening variable, there is a significant influence of lifestyle on purchase decisions with consumer behavior as an intervening variable in Tokopedia.

**Paper type:** Research paper

**Keyword:** *Promotion Mix, Brand Image, Lifestyle, Consumer Behavior, Purchase Decisions*

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## **I. INTRODUCTION**

The Covid-19 pandemic requires people to reduce activities outside the home such as working, studying and meeting daily needs. Various activity restrictions have been implemented by the government with social distancing and stay at home efforts to reduce the rate of spread of the Covid-19 virus. Therefore, all activities are carried out online and have become a new habit that has emerged as a form of human adaptation to the world health crisis that has occurred for almost the last year. This new habit is formed causing a change in consumer behavior, which previously was through direct shopping, now to online shopping. This shift in consumer behavior is also supported by an increase in internet use from year to year, especially with the current Covid-19 pandemic where people are using the internet as a primary need in carrying out activities to meet daily needs.

Tokopedia is an E-Commerce under the auspices of PT. Tokopedia was founded by William Tanuwijaya and Leontinus Alpha Edison in 2009. Tokopedia has transformed into a unicorn that is influential not only in Indonesia but also in Southeast Asia. Tokopedia has become an E-Commerce that sells various kinds of products, both daily necessities and electronic devices, not forgetting that Tokopedia provides financial technology products

such as digital wallets, investments and investments. Tokopedia is also a place to pay for various activities such as paying vehicle tax, purchase electricity tokens and so on. Tokopedia is also in demand by its users because there are attractive discounts and free shipping promos which make Tokopedia preferable to similar e-commerce.

In this case, Tokopedia has accommodated and analyzed consumer behavior by providing a variety of credible financial products and services to meet the needs of its users. Tokopedia uses promotion mix as a form of marketing strategy. Promotion mix is the best strategic combination of promotional elements used to achieve company goals (Kotler and Keller, 2016). In doing this, everything must also be supported by a good brand image. Brand image is a consumer's response to a brand which is based on the good and bad things that consumers remember about the brand (Keller & Swaminathan, 2020). In this case, it is very important for Tokopedia to have a good brand image among its users. In this case, you must also pay attention to the lifestyle of the consumer, which according to Laksono and Iskandar (2018: 157), lifestyle is a person's attitude in describing a real problem that is in the person's mind and tends to join in various things related to psychological and emotional problems. or it can also be seen from what people are interested in and what they think about an object.

Based on the various strategies above, including Promotion Mix, Brand Image, and Lifestyle, this is to direct consumers to purchase decisions, which according to Kotler and Keller (2016: 194) state that consumer purchase decisions are part of consumer behavior, namely the study of how individuals, groups, and organizations select, purchase, use, and how goods, services, ideas or experiences satisfy their needs and wants. Purchase decisions are inseparable from the nature of a consumer (consumer behavior) so that each consumer has different habits in making purchases. Therefore, the researchers raised the title "The Influence of Promotion Mix, Brand Image and Lifestyle on Purchase Decisions on Tokopedia with Consumer Behavior as an Intervening Variable".

## **A. Literature Review**

### **1. Promotion Mix**

According to Kotler and Keller (2016) Promotion mix is the best strategic combination of promotional elements used to achieve company goals.

### **2. Brand image**

According to Keller (2000) brand image is the consumer's perception of the brand or product that will be used or utilized. And according to Schiffman and Kanuk (2007), Schiffman and Kanuk describe brand image as a collection of associations about a brand that are stored in consumers' minds or memories.

### **3. Lifestyle**

According to Laksono and Iskandar (2018: 157), lifestyle is a person's attitude in describing a real problem that is in a person's mind and tends to join in various things related to psychological and emotional problems or it can also be seen from what they are interested in and what they think about something. object.

### **4. Consumer Behavior**

According to Nugroho (2019:2) consumer behavior is the actions directly involved in obtaining, consuming and disposing of products or services, including the decision processes that precede and follow these actions.

### **5. Purchase Decision**

According to Kotler and Keller (2016: 268) purchase decisions are an activity of individuals who are directly involved in obtaining and using the goods offered.

## **B. Conceptual Framework**

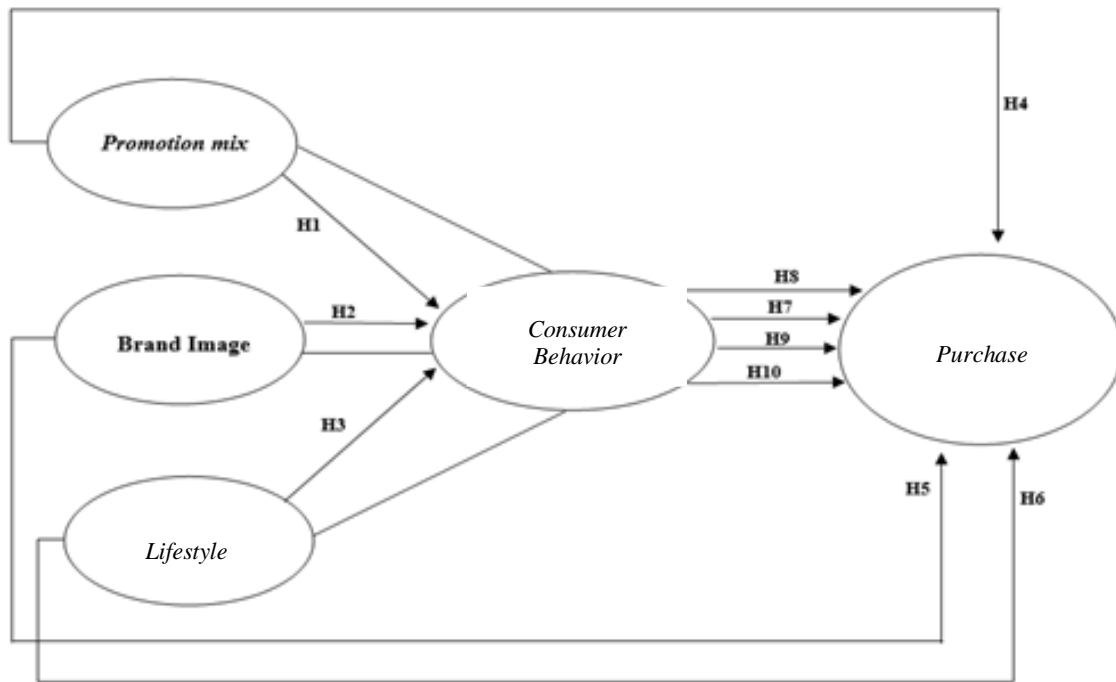


Figure 1. Research Conceptual Framework

### C. Hypothesis

H1: There is a significant influence of promotion mix on consumer behavior.

H2: There is a significant influence of brand image on consumer behavior.

H3: There is a significant influence of lifestyle on consumer behavior.

H4: There is a significant influence of promotion mix on purchase decisions.

H5: There is a significant influence of Brand Image on purchase decisions.

H6: There is a significant influence of lifestyle on purchase decisions.

H7: There is a significant influence of consumer behavior on purchase decisions.

H8: There is a significant influence of Promotion mix on purchase decisions at Tokopedia with consumer behavior as an intervening variable.

H9: There is a significant influence of brand image on purchase decisions at Tokopedia with consumer behavior as an intervening variable.

H10: There is a significant influence of lifestyle on purchase decisions at Tokopedia with consumer behavior as an intervening variable.

## II. METHODS

The research objects chosen in preparing this research were Tokopedia users or consumers in the Surabaya area. The approach to this research uses a quantitative approach. The type of data used by researchers is quantitative data. The data sources used in this research are primary data and secondary data. The sampling method used in this research is the Purposive Sampling method, namely a method where the researcher determines several criteria to be used as a sample. The population in this research is Tokopedia users in the city of Surabaya, with the characteristics of respondents being Tokopedia users with a minimum of 2 or more purchases in the last 6 months. The sampling method used in this research is by taking the number of samples using the Bernoulli formula (Sugiyono, 2017). Based on the sample calculation results, the figure was 96.04 for the minimum sample size, but the author rounded it up to 100 respondents to reduce errors in filling out the questionnaire. The data collection technique used by researchers is a questionnaire with a Likert scale of 1-5. The data analysis technique in this research uses Structural Equation Modeling (SEM). The analytical method used in this research is external model analysis, internal model analysis, to test the hypothesis, the P-Values test is carried out using the Structural Equation Modeling (SEM) application.

### III. RESULTS AND DISCUSSION

#### A. Results

##### 1. Characteristics of Respondents based on Gender

*Table 1. Characteristics of Respondents Based on Gender*

<i>No</i>	<i>Gender</i>	<i>Frequency</i>	<i>Percentage (%)</i>
1	Man	28	28%
2	Woman	72	72%
	<i>Total</i>	<i>100</i>	<i>100%</i>

Source: Processed primary data (2023)

Based on table 1, it is known that there were 28 male respondents (28%), while there were 72 female respondents (72%). Based on the characteristics of the respondents above, it shows that the majority of respondents are women.

##### 2. Characteristics of Respondents based on Age

*Table 2. Characteristics of Respondents Based on Age*

<i>No</i>	<i>Age</i>	<i>Frequency</i>	<i>Percentage (%)</i>
1	18-25 Years old	30	%
2	26-30 Years old	22	%
3	31-35 Years old	15	%
4	36-40 Years old	12	%
5	41-45 Years old	10	%
6	46-50 Years old	6	%
7	51-55 Years old	3	%
8	> 55 Years old	2	%
	<i>Total</i>	<i>100</i>	<i>100%</i>

Source: Processed primary data (2023)

Based on table 2, it can be seen that the percentage of respondents aged 18-25 years is 30%, then respondents aged 26-30 years are 22%, respondents aged 31-35 years are 15%, respondents aged 36-40 years are 12%, respondents 10% aged 41-45 years, 6% respondents aged 46-50 years, 3% respondents aged 51-55 years, and 2% respondents aged over 55 years. The majority of respondents were aged 18-25 years.

### 3. Characteristics of Respondents Based on Education

*Table 3. Characteristics of Respondents Based on Education*

<i>No</i>	<i>Education</i>	<i>Frequency</i>	<i>Percentage (%)</i>
1	<i>Elementary School</i>	4	4%
2	<i>Junior High School</i>	22	22%
3	<i>Senior High School</i>	56	56%
4	<i>University</i>	18	18%
	<i>Total</i>	100	100%

Source: Processed primary data (2023)

Referring to table 5.3, the percentage of respondents with Elementary school is 4%, respondents with Junior high school is 22%, respondents with Senior high school is 56%, and respondents with up to University is 18%. Most of the respondents had Junior high school backgrounds.

### 4. Characteristics of Respondents Based on Frequency of Purchase Transactions on Tokopedia

*Table 4. Characteristics of Respondents Based on Frequency of Purchase Transactions on Tokopedia*

<i>No</i>	<i>Frequency of purchase transactions in the last 6 months</i>	<i>Frequency</i>	<i>Percentage (%)</i>
1	<i>1-2 times a month</i>	58	58%
2	<i>3-5 times a month</i>	25	25%
3	<i>&gt; 5 times a month</i>	17	17%
	<i>Total</i>	100	100%

Source: Processed primary data (2023)

According to table 4 above, it can be seen that the percentage of respondents who made purchase transactions in the last 6 months 1-2 times a month was 58%, 3-5 times a month was 25%, and more than 5 times a month was 17%. The majority of respondents made purchases 1-2 times a month in the last 6 months.

### 5. Partial Least Square (PLS)

Model Scheme In this research, hypothesis testing uses the Partial Least Square (PLS) analysis technique with the smartPLS 3.0 program. The following is a schematic of the PLS program model being tested:

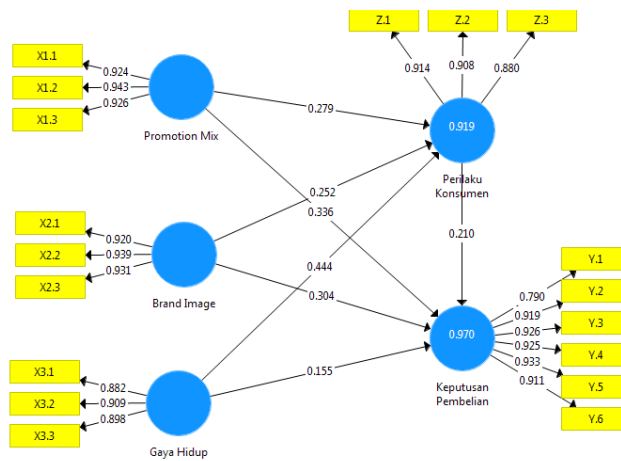


Figure 2. Model schematic

**6. Outer Model Testing**

**a. Convergent Validity**

To test convergent validity, the outer loading or loading factor value is used. An indicator is declared to meet convergent validity in the good category if the outer loading value is > 0.7. The following are the loading factor values for each indicator on the research variables:

Table 5. Loading Factor

Variable	Indicator	Loading Factor	Rule of Thumb	Conclusion
Promotion Mix (X1)	X1.1	0,924	0,7	Valid
	X1.2	0,943	0,7	Valid
	X1.3	0,926	0,7	Valid
Brand Image (X2)	X2.1	0,920	0,7	Valid
	X2.2	0,939	0,7	Valid
	X2.3	0,931	0,7	Valid
Lifestyle (X3)	X3.1	0,882	0,7	Valid
	X3.2	0,909	0,7	Valid
	X3.3	0,898	0,7	Valid
Consumer Behavior (Z)	Z.1	0,914	0,7	Valid
	Z.2	0,908	0,7	Valid
	Z.3	0,880	0,7	Valid

<i>Variable</i>	<i>Indicator</i>	<i>Loading Factor</i>	<i>Rule of Thumb</i>	<i>Conclusion</i>
<i>Purchase Decision (Y)</i>	<i>Y.1</i>	<i>0,790</i>	<i>0,7</i>	<i>Valid</i>
	<i>Y.2</i>	<i>0,919</i>	<i>0,7</i>	<i>Valid</i>
	<i>Y.3</i>	<i>0,926</i>	<i>0,7</i>	<i>Valid</i>
	<i>Y.4</i>	<i>0,925</i>	<i>0,7</i>	<i>Valid</i>
	<i>Y.5</i>	<i>0,933</i>	<i>0,7</i>	<i>Valid</i>
	<i>Y.6</i>	<i>0,911</i>	<i>0,7</i>	<i>Valid</i>

Data Source: 2023 PLS Data Processing Results

The data presented in table 5 above shows that each research variable indicator has an outer loading value of > 0.7. According to Chin, as quoted by Ghazali (2016), an outer loading value between 0.5 - 0.6 is considered sufficient to meet the convergent validity requirements. The data above shows that there are no variable indicators whose outer loading value is below 0.5, so that all indicators are declared suitable or valid for research use and can be used for further analysis.

**b. Discriminant Validity**

In this section, the results of the discriminant validity test will be described. The discriminant validity test uses cross loading values. An indicator is declared to meet discriminant validity if the cross loading value of the indicator on the variable is the largest compared to other variables (Ghozali, 2016). The following is the cross loading value of each indicator:

*Table 6. Cross Loading*

<i>Indicator</i>	<i>Variable</i>				
	<i>Promotion Mix</i>	<i>Brand Image</i>	<i>Lifestyle</i>	<i>Consumer Behavior</i>	<i>Purchase Decisions</i>
<i>X1.1</i>	<i>0,924</i>	<i>0,895</i>	<i>0,903</i>	<i>0,876</i>	<i>0,903</i>
<i>X1.2</i>	<i>0,943</i>	<i>0,903</i>	<i>0,880</i>	<i>0,865</i>	<i>0,923</i>
<i>X1.3</i>	<i>0,926</i>	<i>0,861</i>	<i>0,854</i>	<i>0,881</i>	<i>0,883</i>
<i>X2.1</i>	<i>0,866</i>	<i>0,920</i>	<i>0,907</i>	<i>0,882</i>	<i>0,887</i>
<i>X2.2</i>	<i>0,897</i>	<i>0,939</i>	<i>0,863</i>	<i>0,870</i>	<i>0,915</i>
<i>X2.3</i>	<i>0,894</i>	<i>0,931</i>	<i>0,870</i>	<i>0,865</i>	<i>0,899</i>
<i>X3.1</i>	<i>0,801</i>	<i>0,793</i>	<i>0,882</i>	<i>0,815</i>	<i>0,820</i>
<i>X3.2</i>	<i>0,848</i>	<i>0,875</i>	<i>0,909</i>	<i>0,891</i>	<i>0,86</i>



X3.3	0,889	0,874	0,898	0,837	0,872
Z.1	0,850	0,847	0,853	0,914	0,960
Z.2	0,816	0,812	0,826	0,908	0,962
Z.3	0,868	0,874	0,876	0,880	0,964
Y.1	0,765	0,784	0,774	0,812	0,890
Y.2	0,896	0,893	0,873	0,856	0,919
Y.3	0,896	0,910	0,906	0,898	0,926
Y.4	0,896	0,893	0,911	0,899	0,925
Y.5	0,918	0,896	0,881	0,877	0,933
Y.6	0,867	0,867	0,839	0,839	0,911

Data Source: 2023 PLS Data Processing Results

According to the data in table 6, it shows that the loading value of each indicator item on the construct is greater than the cross-loading value. Thus, it can be concluded that all constructs or latent variables have good discriminant validity, where in the block the construct indicators are better than the other block indicators.

Apart from observing the cross-loading value, discriminant validity can also be determined through other methods, namely by looking at the average variant extracted (AVE) value for each indicator, the required value must be  $> 0.5$  for a good model (Ghozali, 2014).

*Table 7. Average Variant Extracted (AVE)*

<i>Variable</i>	<i>AVE</i>
<i>Promotion Mix</i>	<i>0,867</i>
<i>Brand Image</i>	<i>0,865</i>
<i>Lifestyle</i>	<i>0,804</i>
<i>Consumer Behavior</i>	<i>0,811</i>
<i>Purchase Behavior</i>	<i>0,814</i>

Data Source: 2023 PLS Data Processing Results

The data presentation in table 7 above shows that the AVE value of the Promotion Mix, Brand Image, Lifestyle, Consumer Behavior and Purchase Decision variables is  $> 0.5$ . So it can be stated that each variable has good discriminant validity. The indicators in the construct indicator block are better than the indicators in the other blocks.

**c. Composite Reliability and Cronbach’s Alpha**

Besides construct validity testing, construct reliability testing was also carried out as measured by composite reliability and Cronbach's alpha of the indicator block that measures the construct. The following are the results of composite reliability and Cronbach's alpha testing from Smart PLS:

*Table 8. Composite Reliability and Cronbach’s Alpha*

<i>Variable</i>	<i>Composite Reliability</i>	<i>Rule of Thumb</i>	<i>Cronbach’s Alpha</i>	<i>Rule of Thumb</i>	<i>Conclusion</i>
<i>Promotion Mix</i>	<i>0,924</i>	<i>0,7</i>	<i>0,952</i>	<i>0,6</i>	<i>Reliable</i>
<i>Brand Image</i>	<i>0,922</i>	<i>0,7</i>	<i>0,950</i>	<i>0,6</i>	<i>Reliable</i>
<i>Lifestyle</i>	<i>0,878</i>	<i>0,7</i>	<i>0,925</i>	<i>0,6</i>	<i>Reliable</i>
<i>Consumer Behavior</i>	<i>0,884</i>	<i>0,7</i>	<i>0,928</i>	<i>0,6</i>	<i>Reliable</i>
<i>Purchase Decision</i>	<i>0,954</i>	<i>0,7</i>	<i>0,963</i>	<i>0,6</i>	<i>Reliable</i>

Data Source: 2023 PLS Data Processing Results

A variable is declared reliable if it has a composite reliability value above 0.7 and Cronbach's alpha above 0.60. From the SmartPLS output results above, all variables have composite reliability values above 0.70 and Cronbach's alpha above 0.60. So it can be concluded that validity has good reliability.

**d. Inner Model Testing**

This research will explain the results of the path coefficient test, goodness of fit test and hypothesis test.

**a. Path Coefficient Test Results**

Path coefficient testing is used to show how strong the effect or influence of the independent variable is on the dependent variable. Meanwhile, the determination coefficient (R-Square) is used to measure how much endogenous variables are influenced by other variables.

*Table 9. Path Coefficient*

<i>Variable</i>	<i>Original Sample</i>	<i>Category</i>
<i>Promotion Mix → Consumer Behavior</i>	<i>0,279</i>	<i>Weak</i>
<i>Brand Image → Consumer Behavior</i>	<i>0,252</i>	<i>Weak</i>
<i>Lifestyle → Consumer Behavior</i>	<i>0,444</i>	<i>Medium</i>

<i>Promotion Mix → Purchase Decision</i>	<i>0,336</i>	<i>Medium</i>
<i>Brand Image → Purchase Decision</i>	<i>0,304</i>	<i>Weak</i>
<i>Lifestyle → Purchase Decision</i>	<i>0,155</i>	<i>Weak</i>
<i>Consumer Behavior → Purchase Decision</i>	<i>0,210</i>	<i>Weak</i>
<i>Promotion Mix → Consumer Behavior → Purchase Decision</i>	<i>0,059</i>	<i>Weak</i>
<i>Brand Image → Consumer Behavior → Purchase Decision</i>	<i>0,053</i>	<i>Weak</i>
<i>Lifestyle → Consumer Behavior → Purchase Decision</i>	<i>0,093</i>	<i>Weak</i>

Data Source: 2023 PLS Data Processing Results

The inner model scheme shown in Table 9 above can be explained that the largest path coefficient value is shown by lifestyle on consumer behavior of 0.444. Then the smallest influence is brand image on purchase decisions through consumer behavior of 0.053.

**2. Model Goodness Test (Goodness of Fit)**

Based on data processing that has been carried out using the smartPLS program, the R-Square values are obtained as follows:

*Table 10. R-Square Value*

<i>Variable</i>	<i>Nilai R-Square</i>
<i>Consumer Behavior</i>	<i>0,970</i>
<i>Purchase Decision</i>	<i>0,919</i>

Data Source: 2023 PLS Data Processing Results

Based on the data presented in table 10 above, it can be seen that the R-Square value for the Consumer Behavior variable is 0.970. Obtaining this value explains that a large percentage of Consumer Behavior can be explained by Promotion Mix, Brand Image and lifestyle at 97%. Then the R-Square value obtained for the Purchase Decision variable is 0.919. This value explains that purchase decisions can be explained by Promotion Mix, Brand Image and Consumer Behavior by 91.9%.

The goodness of fit assessment is known from the Q-Square value. The Q-Square value has the same meaning as coefficient determination (R-Square) in regression analysis, where the higher the Q-Square, the better or more fit the model can be to the data.

The results of calculating the Q-Square value are as follows:

$$\begin{aligned}
 \text{Q-Square} &= 1 - [(1 - R^2_1) \times (1 - R^2_2)] \\
 &= 1 - [(1 - 0,970) \times (1 - 0,919)] \\
 &= 1 - (0,03 \times 0,081) \\
 &= 1 - 0,00243 \\
 &= 0,997
 \end{aligned}$$

From the Q-Square calculation, it is known that the Q-Square value is 0.997. This shows that the large diversity of research data that can be explained by the research model is 99.7%. Meanwhile, the remaining 0.003% is explained by other factors outside this research model. Thus, from these results, this research model can be stated to have good goodness of fit.

**e. Hypothesis Testing**

Based on the data processing that has been carried out, the results can be used to answer the hypothesis in this research. Hypothesis testing in this research was carried out by looking at the T-Statistics values and P-Values values. The research hypothesis can be declared accepted if the P-Values value is <0.05 (Yamin and Kurniawan, 2011). The following are the results of hypothesis testing obtained in this research through the inner model:

*Table. 11 Hypothesis Testing*

<i>Hypotheses</i>	<i>Influence</i>	<i>T-statistics</i>	<i>P-Values</i>	<i>Result</i>
<i>H1</i>	<i>Promotion Mix → Consumer Behavior</i>	<i>2,451</i>	<i>0,015</i>	<i>Accepted</i>
<i>H2</i>	<i>Brand Image → Consumer Behavior</i>	<i>2,252</i>	<i>0,025</i>	<i>Accepted</i>
<i>H3</i>	<i>Lifestyle → Consumer Behavior</i>	<i>4,044</i>	<i>0,000</i>	<i>Accepted</i>
<i>H4</i>	<i>Promotion Mix → Purchase Decision</i>	<i>4,472</i>	<i>0,000</i>	<i>Accepted</i>
<i>H5</i>	<i>Brand Image → Purchase Decision</i>	<i>4,034</i>	<i>0,000</i>	<i>Accepted</i>
<i>H6</i>	<i>Lifestyle → Purchase Decision</i>	<i>2,495</i>	<i>0,013</i>	<i>Accepted</i>
<i>H7</i>	<i>Consumer Behavior → Purchase Decision</i>	<i>3,170</i>	<i>0,002</i>	<i>Accepted</i>
<i>H8</i>	<i>Promotion Mix → Consumer Behavior → Purchase Decision</i>	<i>2,037</i>	<i>0,042</i>	<i>Accepted</i>
<i>H9</i>	<i>Brand Image → Consumer Behavior → Purchase Decision</i>	<i>1,653</i>	<i>0,099</i>	<i>Rejected</i>
<i>H10</i>	<i>Lifestyle → Consumer Behavior → Purchase Decision</i>	<i>2,506</i>	<i>0,013</i>	<i>Accepted</i>

Data Source: 2023 PLS Data Processing Results

Based on the data presented in the table. 11 above, it can be seen that of the Ten hypotheses proposed in this research, they are as follows:

- a. The effect of Promotion Mix on consumer behavior has a P value of 0.015 or smaller than 0.05. This means that the Promotion Mix variable has a significant effect on consumer behavior.
- b. The influence of Brand Image on consumer behavior has a P value of 0.025 or smaller than 0.05. This means that the Brand Image variable has a significant influence on consumer behavior.
- c. The influence of lifestyle on purchase decisions has a P value of 0.000 or less than 0.05. This means that the Lifestyle variable has a significant influence on Purchase Decisions.
- d. The influence of Promotion Mix on purchase decisions has a P value of 0.000 or less than 0.05. This means that the Promotion Mix variable has a significant influence on purchase decisions.
- e. The influence of Brand Image on purchase decisions has a P value of 0.000 or less than 0.05. This means that the Brand Image variable has a significant influence on purchase decisions.
- f. The influence of lifestyle on purchase decisions has a P value of 0.013 or smaller than 0.05. This means that the Lifestyle variable has a significant influence on purchase decisions.
- g. The influence of consumer behavior on purchase decisions has a P value of 0.002 or less than 0.05. This means that the Consumer Behavior variable has a significant influence on Purchase Decisions.

- h. The influence of Promotion Mix on Purchase Decisions through Consumer Behavior has a P value of 0.042 which can be or is smaller than 0.05. This means that the Consumer Behavior variable is able to significantly mediate the influence of Promotion Mix on Purchase Decisions.
- i. The influence of Brand Image on Purchase Decisions through Consumer Behavior has a P value of 0.099 or greater than 0.05. This means that the Consumer Behavior variable is unable to significantly mediate the influence of Brand Image on Purchase Decisions.
- j. The influence of lifestyle on purchase decisions through consumer behavior has a P value of 0.013 or smaller than 0.05. This means that the Consumer Behavior variable is able to significantly mediate the influence of Lifestyle on Purchase Decisions.

## **B. Discussion**

In this sub-chapter, the results of the hypothesis testing that has been carried out are explained. The discussion of this research hypothesis will be explained as follows:

### **1. Effect of Promotion Mix on Consumer Behavior**

Referring to the results of the first hypothesis test, statistically the p-value shows a value of 0.015 which is smaller than 0.05, so the first hypothesis which states "Promotion Mix influences Consumer Behavior among Tokopedia Consumers" is accepted. Thus, it can be stated that the quality of the Promotion Mix influences Tokopedia Consumer Behavior.

The results of this research are supported by the results of research conducted by (Pura & Madiawati, 2021), (Tambunan, 2019), and (Joeda, 2019). This research states that the Promotion mix has a positive influence on purchase decisions, which means that the higher the Promotion mix, will make higher purchase decision too, and this means that the purchase decision will have a more positive and significantly influence.

### **2. Influence of Brand Image on Consumer Behavior**

Based on the results of the second hypothesis test, statistically the p-value shows a value of 0.025 which is smaller than 0.05 so that the second hypothesis which states "Brand Image influences Tokopedia Consumer Behavior" is accepted. Thus it can be stated that the more positive the Brand Image, the better the Consumer Behavior. On the other hand, if the Brand Image is bad, it will influence consumer behavior that does not support the Tokopedia company.

Having a good brand image can influence positive consumer behavior and benefit the company. The brand image must be well built by the company, which will influence consumer behavior in relation to encouraging consumers to make purchase decisions about goods or services. The results of this research are supported by research (Anisya, 2023) and (Baha, 2017) which states that brand image has a positive and significantly influence on consumer behavior, where the higher or better the brand image, the higher the influence on consumer behavior.

### **3. Influence of Lifestyle on Consumer Purchase Behavior**

Referring to the results of the second hypothesis test, statistically the p-value shows a value of 0.000 which is smaller than 0.05 so that the Third hypothesis which states "Lifestyle influences Tokopedia Consumer Behavior" is accepted. Thus it can be stated that the better the Brand Image, the better the Consumer Behavior. Conversely, if lifestyle is low, the less supportive consumer behavior is towards the company.

The existence of a high lifestyle can influence a company's consumer behavior. Thus, the higher the lifestyle that consumers have, the more it will encourage changes in consumer behavior. The results of this research are in accordance with the results of research conducted by (Trisnani et.al, 2019). Consumption can be interpreted as an activity to fulfill a lifestyle that can indicate social status in society. Changing lifestyles also influence consumer behavior in searching for goods and making purchases. The results of this research are also supported by research (Fitri & Basri, 2021) and (Krishnan, 2011) which states that there is an influence of lifestyle on consumer behavior.

### **4. Effect of Promotion Mix on Purchase Decisions**

Based on the results of the third hypothesis test, statistically the p-value shows a value of 0.000 which is smaller than 0.05 so that the fourth hypothesis which states "Promotion Mix influences Tokopedia Consumer Purchase Decisions" is accepted. Thus it can be stated that the better the Promotion Mix, the higher the Purchase Decision. On the other hand, if the Promotion Mix is bad, the Tokopedia Consumer Purchase Decision will be lower.

The results of this research are supported by research (Pura & Madiawati, 2021), (Tambunan, et al, 2020), (Junifar, 2021), (Mardani & Aransyah, 2022), (Baskara, 2011), (Tambunan, 2019), (Joeda, 2019), (Jasmani & Sunarsi, 2020), (Oktari et al, 2020), (Khanfar, 2016). This research states that the Promotion mix has a positive influence on purchase decisions, which means that the higher the Promotion mix, the higher the purchase decision will be, and this means that the purchase decision will have a more positive and significantly influence.

## **5. Influence of Brand Image on Purchase Decisions**

Based on the results of the fourth hypothesis test, statistically the p-value shows a value of 0.000 which is smaller than 0.05 so that the fifth hypothesis which states "Brand Image influences Tokopedia Consumer Purchase Decisions" is accepted. Thus it can be stated that the more positive the Brand Image, the higher the consumer behavior. On the other hand, if the Brand Image is bad, the lower the purchase decisions of Tokopedia consumers will be.

The results of this research are supported by research (Pintubatu & Saputri, 2021), (Jasmani & Sunarsi, 2020). This research states that Brand Image has a positive and significant influence on purchase decisions, where the higher or better the brand image, the greater the impact on purchase decisions made by consumers. Brand Image and purchase decisions are two things that are closely related. Brand Image is very important in efforts to increase consumer purchase decisions. Efforts to shape a brand image will increase consumer purchase decisions.

## **6. Influence of Lifestyle on Purchase Decisions**

Based on the results of the fourth hypothesis test, statistically the p-value shows a value of 0.000 which is smaller than 0.05 so that the sixth hypothesis which states "Brand Image influences Tokopedia Consumer Behavior" is accepted. Thus it can be stated that the better the Brand Image, the better the Tokopedia Consumer Behavior. Conversely, if the Brand Image is bad, the consumer behavior will get worse.

The results of this research are supported by research (Pura & Madiawati, 2021), (Mardani & Aransyah, 2022), (Amri, 2021), (Andi & Ali 2023) concluding that there is a positive and significant relationship between lifestyle and purchase decisions. A person's lifestyle reflects their personal values and preferences. When a product or brand fits these lifestyles and values, individuals are more likely to choose and purchase that product. For example, someone who adheres to a healthy lifestyle may be more likely to purchase organic food products or fitness products.

## **7. Influence of Consumer Behavior on Purchase Decisions**

Based on the results of the fifth hypothesis test, statistically the p-value shows a value of 0.000 which is smaller than 0.05 so that the Seventh hypothesis which states "Consumer behavior of members influences purchase decisions" is accepted. Thus it can be stated that the better the Consumer Behavior, the better the Purchase Decision. On the other hand, if consumer behavior is bad, then Tokopedia consumer purchase decisions will be worse.

The results of this research are supported by previous research results from (Nurkholiq, 2019) and (Surapati & Mahsya, 2020), which stated that consumer behavior influences purchase decisions. Consumers follow certain stages in making purchase decisions, including need recognition, information search, alternative assessment, purchase, and post-purchase evaluation. Consumer behavior at each of these stages can influence how the final purchase decision is made. For example, how much information is sought, how alternatives are evaluated, and what factors are prioritized.

## **8. Effect of Promotion Mix on Purchase Decisions through Consumer Behavior**

Based on the results of the sixth hypothesis test, statistically the p-value shows a value of 0.042 which is smaller than 0.05 so that the eighth hypothesis which states "Promotion Mix influences Consumer Behavior Through Behavior" is accepted. Thus it can be stated that the better the Consumer Behavior, the stronger the influence of the Promotion Mix on Purchase Decisions. On the other hand, if consumer behavior is bad, it will be weaker in encouraging or mediating the influence of Promotion Mix on Tokopedia Consumer Purchase Decisions.

This promotion mix is a strategy carried out in conjunction with analyzing consumer behavior which directs consumers to purchase decisions for both products and services. The results of this research are in line with research by (Pura & Madiawati, 2021) and (Jasmani & Suryani, 2020) concluding that there is a positive and significant relationship between Promotion mix and purchase decisions through consumer behavior as an intervening variable. When consumer behavior supports the company and its products, it will be able to mediate the influence of Promotion Mix on purchase decisions. Positive consumer behavior can help the promotional mix influence purchase decisions.

## **9. Influence of Brand Image on Purchase Decisions through Consumer Behavior**

Based on the results of the first hypothesis test, statistically the p-value shows a value of 0.099 which is greater than 0.05 so that the ninth hypothesis which states "Brand Image influences Purchase Decisions through Consumer Behavior" is rejected. Thus, it can be stated that changes in consumer behavior cannot support the promotional mix in influencing purchase decisions.

This research is not in line with the research results of (Pura & Madiawati, 2021) and (Jasmani & Suryani, 2020) concluding that there is a positive and significant relationship between brand image on purchase decisions and consumer behavior as an intervening variable.

The research results state that consumer behavior is unable to mediate the influence of brand image on purchase decisions because there are situations where purchase decisions are driven more by practical factors than by brand image. For example, in urgent purchases or transactions involving commodity products, consumers may be more likely to decide based on practical factors rather than brand image.

In some cases, the influence of brand image and promotional mix interact in complex ways. This means that their influence on purchase decisions cannot always be explained by simple mediation mechanisms.

There are situations where purchase decisions are driven more by practical factors than by brand image. For example, in urgent purchases or transactions involving commodity products, consumers may be more likely to decide based on practical factors rather than brand image.

#### **10. Influence of Lifestyle on Purchase Decisions through Consumer Behavior**

Based on the results of the first hypothesis test, statistically the p-value shows a value of 0.013 which is smaller than 0.05 so that the tenth hypothesis which states "Brand Image influences Purchase Decisions Through Consumer Behavior" is accepted. Thus, it can be stated that the better consumer behavior, the stronger the influence of lifestyle on purchase decisions. Conversely, if consumer behavior is bad, the influence of lifestyle on purchase decisions will be weaker.

The results of this research are supported by research by (Pura & Madiawati, 2021) and (Andi & Ali, 2019) concluding that there is a positive and significant relationship between lifestyle on purchase decisions and consumer behavior as an intervening variable. Consumer lifestyle is the first point that is analyzed to determine consumer behavior which is very useful for directing consumers to purchase decisions.

When Tokopedia consumers have positive behavior, this consumer behavior will encourage lifestyle in creating purchase decisions. Consumer behavior mediates the influence of lifestyle on purchase decisions.

### **IV. CONCLUSION**

In accordance with the research results described in the previous chapter, several conclusions can be drawn, including:

1. Promotion Mix influences Consumer Behavior in Tokopedia.
2. Brand Image influences Consumer Behavior in Tokopedia.
3. Lifestyle influences Consumer Behavior in Tokopedia.
4. Promotion Mix influences Purchase Decisions in Tokopedia.
5. Brand Image influences Purchase Decisions in Tokopedia.
6. Lifestyle influences Purchase Decisions in Tokopedia.
7. Consumer behavior influences Purchase Decisions in Tokopedia.
8. Promotion Mix influences on Purchase Decisions through Consumer Behavior as an intervening variable in Tokopedia
9. Brand Image not influences on Purchase Decisions through Consumer Behavior as an intervening variable in Tokopedia.
10. Lifestyle influences on Purchase Decisions through Consumer Behavior as an intervening variable in Tokopedia.

#### **A. Suggestions**

Based on the conclusions and limitations of the research, the researchers suggest:

1. Advice for consumers  
Consumers need to realize that lifestyle influences purchase decisions. Consumers need to consider whether the product or service to be purchased is in line with consumer values and preferences.  
Consumers need to carry out in-depth information searches before making purchase decisions. It is also worth considering how promotions, brand image and lifestyle can influence your perception of the product.  
Always compare different product or service options before making a decision. Consider how each option impacts the consumer's lifestyle, whether it fits the desired brand image, and whether it meets promotional criteria that appeal to your consumers.
2. Suggestions to Company Management:  
Company management needs to pay attention to ensure that the brand image remains consistent with the values and lifestyle of the target market. A strong brand image can strengthen the influence of promotions on purchase decisions.  
Identify the market segments that are most relevant to the promotion, brand image and lifestyle you want to target. This will help companies design more effective campaigns.

Companies need to ensure that the quality of the products or services offered is in accordance with the brand image and values being promoted. Good quality will strengthen the positive influence on purchase decisions.

### 3. Suggestions to Further Researchers:

Future researchers can explore the interactions between the factors studied more deeply. For example, how consumer behavior as an intervening variable mediates the relationship between promotion mix, brand image, lifestyle and purchase decisions.

Future researchers can consider the effects of moderator variables that might influence the relationship between these variables. For example, how demographics or certain contextual factors influence it.

Future researchers who can conduct research in different industries or product categories can help understand how these variables influence purchase decisions in different contexts.

## REFERENCES

- Amri, Sirly and Prihandono, Dorajatun. 2021. Influence lifestyle, consumer ethnocentrism, product quality on purchase decision through purchase intention. Vol 8 No 1 (2019): Management Analysis Journal.
- Andi, Ryan Tantri and Ali, Mochammad Mukti. 2019. Analysis of the Influence of Lifestyle on Purchase Decision for Samsung Smartphone Products in Jakarta. European Journal of Business and management research.
- Anisya, Septi, Askandar, Noor Shodiq and Siti Aminah Anwar. 2023. The influence of brand image, halal awareness, convenience and trust on Muslim consumer behavior in choosing beauty products on Tokopedia. Islamic Economic and Finance Journal Vol. 4, no. 1.
- Baha, Gregory Klemencino. 2017. Analysis of the influence of brand image, price, facilities and quality on consumer behavior in purchase a product. Sanata Darma University.
- Baskara, Tito. 2011. The influence of the promotion mix on consumer purchase decisions at the "x" Kiaracandong department store, Bandung, Faculty of Business and Management, Widyatama University. Bandung.
- Fitri, Nuri Annisa and Basri, Hezbollah. 2021. The Influence of Lifestyle on Consumer Behavior in the Millennial Generation in the Covid-19 Pandemic Era with Economic Knowledge as a Moderating Variable. Unived Journal.
- Ghozali, I. 2014. Structural Equation Modeling Alternative Method with Partial Least Square (PLS), Semarang: Publishing Body – UNDIP.
- Jasmani and Sunarsi, Denok. 2020. The Influence of Product Mix, Promotion Mix and Brand Image on Consumer Purchase Decisions of Sari Roti Products in South Tangerang. UNM Journal.
- Joedha, RR. 2019. The Effect of Promotional Mix on Consumer Behavior in Purchase (Survey of OVO E-Payment Users in Malang City). JEMMA (Journal of Economics, Management, and Accounting)
- Junifar, Imanda. 2021. The Effect of the 4C Promotion Mix on Online Purchase Satisfaction with Purchase Decisions as an Intervening Variable. LPP Munindra Journal Vol 13, No 3 (2021): Socio e-Cons - Articles
- Keller, Kevin Lane. 2000. Strategic brand management; building, Measuring, and Managing Brand Equity. : Prentice Hall. New Jersey. 2000
- Keller, K. L., & Swaminathan, V. 2020. Strategic Brand Management Building, Measuring, and Managing Brand Equity (Fifth Edition). Pearson Education.
- Khanfar, Dr. Iyad A. 2016. The effect of promotion mix elements on consumers purchase decisions of mobile service: the case of umniah telecommunication company at zarqa city- Jordan.
- Khrisnan, J. 2011. Lifestyle – A Tool for Understanding Buyer Behavior. Int. Journal of Economics and Management.
- Kotler, Phillip and Keller K.L. 2016. Marketing Management 12th edition Volumes 1 & 2. Jakarta: PT. Index.
- Laksono, D. D, and Iskandar, D. A. 2018. The Influence of Lifestyle and Income on the Decision to Purchase a KBC Helmet. Journal of Management and Business Research (JRMB) UNIAT Faculty of Economics.
- Mardani, Hardi and Aransyah, Muhammad. 2022. The Influence of Fashion Lifestyle, Promotional Mix and Product Presentation on Recycle Stuff.Id Purchase Decisions in Samarinda City. Unkris economic journal vol 10 no 3.
- Nugroho J. Setiadi. 2019 Consumer Behavior: Contemporary Perspectives on Consumer Motives, Goals, and Desires. Prenadamedia group.
- Nurkholiq, Indra. 2019. The influence of consumer behavior on purchase decisions for sympathy cards in the city of Bandung. Telkom University, Bachelor of Business Administration.
- Oktari, Rizana, Wahab, Zakaria, and Widiyanti, Marlina. 2020. The Effect of Promotion Mix on Consumer Decisions using Grab-Food in Palembang. International Journal of Management and Humanities (IJMH) ISSN: 2394-0913 (Online), Volume-4 Issue-5, January 2020.
- Pintubatu, Claudia and Mahreni Eka Saputri. 2021. The influence of brand image and brand ambassadors on purchase decisions on Tokopedia. Telkom University, Bachelor of Business Administration.



- Pura, M.P.I.R and Madiawati, P.N. 2021. The Influence of Promotion Mix and Lifestyle on Purchase Decisions at Shopee with Consumer Behavior as an Intervening Variable. JEMMA (Journal of Economics, Management, and Accounting)
- Schiffman and Kanuk. 2007. Consumer Behavior. Second Edition, Jakarta: PT. Scholastic Index
- Sugiyono. (2014). Educational Research Methods Quantitative, Qualitative and R&D Approaches. Bandung: Alfabeta.
- Surapati, Untung and Mahsya, Syariful. 2020. Relationship between consumer behavior, discounts and purchase decisions. International Journal of Economics, Business and Accounting Research (IJEBAR) Peer Reviewed – International Journal Vol-4, Issue-1.
- Tambunan, Philemon. Iranita. Lia, Suprihartini (2020) The influence of promotional mix and e-commerce on purchase decisions with satisfaction as an intervening variable at PT. Pegadaian (Persero) Tanjung Pinang Timur branch. Bachelor thesis, Raja Ali Haji Maritime University.
- Tambunan, Theresia Luna. 2019. Dominant factors influencing the promotional mix on consumer behavior in purchase decisions for a product. Unilak Journal Vol 16 No 1.
- Trisnani, S. A., Adriyai, A. D., Wandansari, R. A., & Isthika, W. (2019). Consumption behavior and the lack of financial literacy among teenagers. Journal of Islamic Economics, Management, and Business, 1(1), 191–206.
- Yamin, Sofyan and Heri Kurniawan. 2011. New Generation of Processing Research Data with Partial Least Square Path Modeling: Application with XLSTAT, SmartPLS, and Visual PLS Software. Salemba Infotek. Jakarta.

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# The Effect of Corporate Culture and Employee Commitment and Transformational Leadership on Employee Performance at PT. Swabina Gatra (Cement Indonesia Group)

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## ABSTRACT

**Purpose:** Knowing and analyzing the effect of Corporate Culture on Employee Performance, Employee Commitment on Employee Performance, and Transformational Leadership on Employee Performance, data collection techniques using questionnaire filling with quantitative methodology distributed to a sample population of 110 people and processed using the Amos version 26 application and for the results of the study indicate that there is a significant effect of Corporate Culture on Employee Performance, as well as Employee Commitment on Employee Performance, and also Transformational Leadership on Employee Performance.

**Design/ Methodology/ Approach:** Quantitative Approach

**Findings:** aspects that affect employee performance

**Research limitations/ implications:** Implementation during working hours and in-house repairs

**Practical Implications:** Culture, commitment, and transformational leadership affect employee performance

**Originality/ value:** there is an influence on employee performance from the variables used

**Paper Type:** Research Paper

**Keyword:** Corporate Culture, Employee Commitment, Transformational Leadership, Employee Performance

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## I. INTRODUCTION

In today's world there is only one successful basis for competitive advantage for companies and that is how to manage the Human Resource factors of the company. Proper HR management can meet the needs of employees in several ways in line with the durability of the company, the expansion and improvement of their profitability, the company provides job security, and more career opportunities and high wages (Schuler and Jackson, 1997).

Existing human resources will develop their personal capabilities. They have a perspective of work not as a source of income but a place to provide something meaningful to the company and view work as an opportunity to develop themselves and their careers (Atmosoeparto, 2001).

One of the factors in managing HR management by paying attention to employee performance. performance that focuses on the overall result or level of success of a person during a certain period in carrying out tasks compared to various possibilities, such as work results standards, targets or goals, or criteria that have been determined in advance and have been agreed upon (Kaswan, 2012). The company incorporated in Semen Indonesia Group (SIG), Tbk illustrates the problem of lack of performance is PT Swabina Gatra. The lack of performance of employees at PT Swabina Gatra has an impact on not achieving maximum target achievement.

The problem of lack of performance in PT Swabina Gatra employees can be seen from the fact that there are still employees who do not carry out procedures, make repeated mistakes, and low achievement of work targets. Indications of the lack of performance of PT Swabina Gatra employees were shown during 1 (one) observation. Organizational culture is a philosophy based on a view of life as values that become traits, habits and driving forces, cultured in the life of a group of people or organizations, then reflected in attitudes into behavior (Supriyadi and Triguno, 2001).

Generally, philosophically, it can function as a demand that binds employees because it can be formulated formally in the number of company rules and regulations. The standardization of corporate culture, being a reference to the provisions or regulations that apply, the leaders and employees will not be exclusively bound as a result can produce behavior that reflects the vision and mission to the company's tactics.

The corporate culture viewed by employees of PT Swabina Gatra has a major factor in improving performance. The corporate culture viewed by PT Swabina Gatra employees will shape employees to interpret the proper management of work and other activities that show important things including work attitudes, leadership, management, and achievements. This situation is able to increase the understanding of performance goals caused by PT Swabina Gatra employees in working can lead to organizational and work unit goals.

Employee commitment is a sense of identification, involvement and loyalty expressed by an employee to his organization (Soonhee Kim, 2002), and employees will contribute to completing the work assigned by the company with more quality and efficiency in the work environment will increase because employees feel part of a very close relationship that adds value to all company activities (Halimsetiono, 2014).

The managerial or leadership level at PT Swabina Gatra basically illustrates good commitment. The phenomenon of employee commitment is the result of various changes that occur. employee work behavior that is undergoing rapid change is employee commitment to the organization where they work. For employees, technological advances and globalization issues encourage organizations to change the way the organization is managed, and indirectly this condition will have an impact on employee behavior for work as well as the organization that employs them.

The scope of organizational change, whether planned or not, the most important aspect is individual change. This change in the individual is not practical, but must go through a process. The leader means the example of the organization, so change must start from the top level (leader). Transformational leadership increases follower motivation and performance more than transactional. This leadership function reflects that followers feel trust, admiration, loyalty and respect for the leader and are motivated to do more than what is required of them (Yukl, Gary, 2010).

The transformational leader at PT Swabina Gatra devotes attention to the matters and development needs of each follower's origin. Transformational leaders renew followers' enlightenment of obstacles by helping them look at old cases using a new approach, and enlighten followers to spend extra effort to achieve goals. Employees of PT Swabina Gatra will improve performance as a form of self-appreciation for the target from the leader because they see the leader encouraging and explaining how to achieve the target work goals.

Partially, corporate culture has a positive and significant effect on performance and transformational leadership has an influence on the performance of employees (Ahmad Rivai, 2020). This is in line with what is explained by research conducted (Kardinah I. M. and Cahyadi H., 2019) proving that organizational culture is an important factor that can explain variations in employee performance, which means that strong ties can lead to employee motivation to improve employee performance in completing work to the maximum.

The employee commitment side of previous research conducted by (Tri Joko, 2019) explains that employee commitment has a positive and significant effect on performance, in detail explaining that the more consistent employee commitment will improve employee performance. This is also supported by research conducted by (Kenly R. and Jantje L., 2014) that employee commitment partially has a significant effect on employee performance.

Furthermore, the effect of transformational leadership on performance takes source data based on previous research conducted by (Ahmad Prayudi, 2020) explaining that transformational leadership style has an indirect effect on employee performance through performance motivation. Contrary to the results of research conducted (Eko Yudhi S., 2015) said that the effect of transformational leadership style has no significant effect on employee performance. this is due to other influences that can affect employee performance such as salary and corporate culture.

Based on these events, there is a relationship between the lack of work relatedness of PT Swabina Gatra employees. The pre-survey resume and previous research and the gap between previous research on the influence of corporate culture, employee commitment, and transformational leadership on performance, became the basis for conducting research related to performance on PT Swabina Gatra employees.

## II. METHODS

This study uses a quantitative research approach, namely as an approach in research based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis with quantitative / statistical, with the aim of testing predetermined hypotheses (Sugiyono, 2010). The data collection method used in this study was a questionnaire and the population used was employees of PT

Swabina Gatra (Semen Indonesia Group). The use of a sample of 110 respondents using the sampling technique is Random Sampling. According to Sugiyono, (2013) random sampling is sampling that is functioned when the population has a composition of groups / elements that are generally not homogeneous and do not have proportional levels.

### III. RESULTS AND DISCUSSION

#### A. Results

In this study, the normality test was carried out to determine whether the information / data used in this study had a normal distribution or vice versa. In this study using a Q-Q Plot (Quantile-Quantile Plot) or quantile-quantile plot that illustrates reasonable assumptions and the distribution of these teritis comes from the same distribution. The following is an illustration of the normality test for performance, normality test for culture, normality test for commitment, and normality test for leadership can be seen in the figure below:

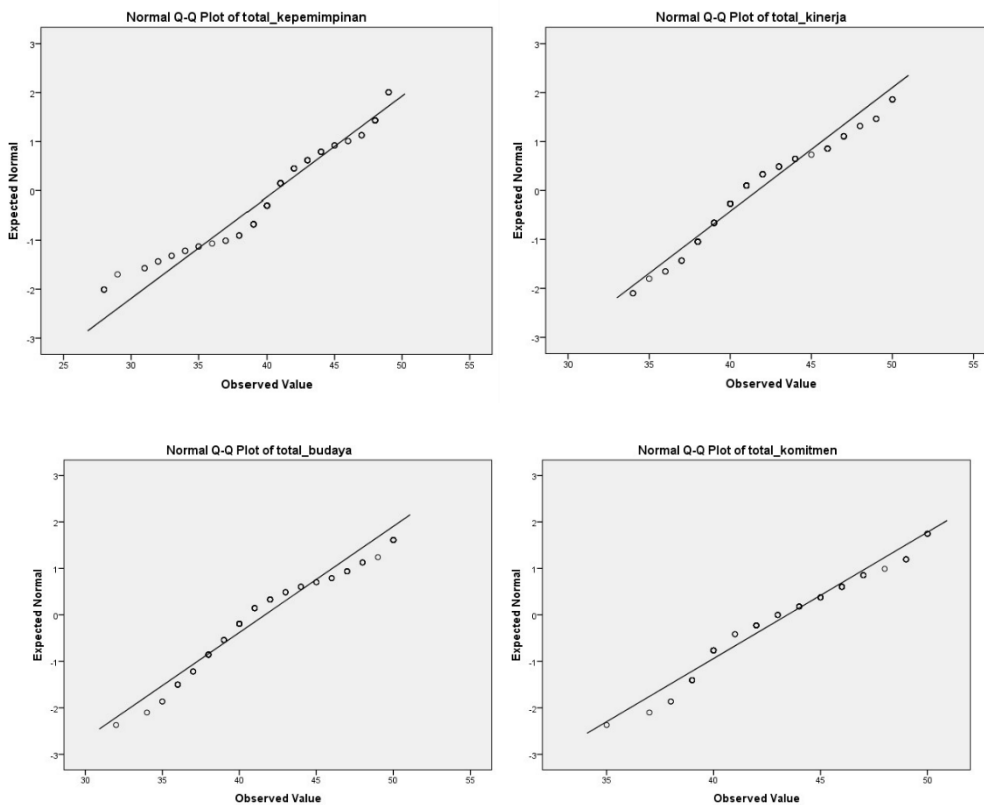


Figure 1 Normality Test Results

Judging from the graph above, the quantiles of the empirical data and the quantiles of the theoretical distribution come from the same distribution so that the graph obtained forms a straight line. The image forms a straight diagonal line and the points spread around the diagonal line and follow the direction of the diagonal line. It can be said that the residuals are normally distributed.

#### B. Discussion

The regression equation can be seen from the coefficient values in the following table:

*Tabel 1 Koefisien Regresi*

<i>Variabel</i>	<i>Koefisien</i>	<i>Standardized Coefficients Beta</i>	<i>t hitung</i>	<i>Sig.</i>	<i>Description</i>
<i>Konstanta</i>	4.835		1.815	0.072	
<i>Culture (X1)</i>	0.494	0.537	6.702	0.000	<i>There is a positive effect</i>
<i>commitment (X2)</i>	0.269	0.250	2.894	0.005	<i>There is a positive effect</i>
<i>Leadership (X3)</i>	0.112	0.137	1.996	0.049	<i>There is a positive effect</i>
R	= 0.820				
R Square	= 0.673				
Adjusted R	= 0.664				
Sig	= 2.292				

From calculations using a computer program using SPSS (Statistical Program For Social Schedule) Versi 23 found:

a = 4,835

b1 = 0,494

b2 = 0,269

b3 = 0,112

In table 3 the regression test results above illustrate the relationship between variables about the regression equation obtained from the analysis results are:

Employee Performance (Y) = 4.835 + 0.494X1 + 0.269X2 + 0.112X3

The equation above shows that all independent variables (corporate culture, employee commitment and transformational leadership) have positive values so that it can be interpreted that if corporate culture, employee commitment and transformational leadership are increased, it will improve performance, or all independent variables have a direct influence on variable Y (performance).

Testing the effect of independent variables (X) on the dependent variable (Y) can be seen in the following table:

*Table 2 t test*

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>	<i>Collinearity Statistics</i>	
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			<i>Tolerance</i>	<i>VIF</i>
<i>1 (Constant)</i>	4.835	2.664		1.815	.072		
<i>Budaya</i>	.494	.074	.537	6.702	.000	.480	2.083
<i>Komitmen</i>	.269	.093	.250	2.894	.005	.414	2.418
<i>Kepemimpinan</i>	.112	.056	.137	1.996	.049	.653	1.532

The table above explains the results of the t test showing the effect of each variable, namely corporate culture, employee commitment, and transformational leadership on employee performance with the results of comparison to the sig value as follows:

1. Corporate Culture Variable

The value of  $t = 6.702 > sig \text{ value} = 0.000$  which means that the corporate culture variable affects employee performance.

2. Employee Commitment Variable

The value of  $t = 2.894 > sig \text{ value} = 0.005$ , which means that the employee commitment variable affects employee performance.

3. Transformational Leadership Variable

The value of  $t = 1.996 > sig \text{ value} = 0.049$  which means that the transformational leadership variable has an effect on employee performance.

The discussion of the 3 variables above can be concluded that all variables, namely corporate culture, employee commitment, and transformational leadership, have a significant value, so they can be used to measure the value of employee performance levels.

By looking at the R-Square, it can be seen how the actual contribution value of the three independent variables to the dependent variable:

*Table 3 R-Square values*

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>Durbin-Watson</i>
<i>1</i>	<i>.820a</i>	<i>.673</i>	<i>.664</i>	<i>2.292</i>	<i>2.096</i>

The table above explains that the magnitude of the correlation or relationship value (R) is 0.820. From this output, the coefficient of determination (R Square) of 0.673 is obtained, which means that the effect of the independent variable on the related / dependent variable is 67.3% and the remaining 32.7% is influenced by other variables outside the study.

#### IV. CONCLUSION

The conclusion of this study after the process of data collection, data processing and analysis that tests the four hypotheses and is proposed in the previous discussion, the conclusion of the study is that there is a reference in the research has gone through a valid and reliable process. After carrying out the regression test process on the variables used to be able to see and it is known that all variables, namely corporate culture, employee commitment and transformational leadership, have a positive influence on employee performance at PT Swabina Gatra (Semen Indonesia Group).

Research on the effect of corporate culture, employee commitment, and transformational leadership on employee performance provides the following recommendations or suggestions:

- a. Regarding improving employee performance, companies are required to be able to have a healthy organizational culture and have commitment to every employee at the top to bottom level.
- b. Another important factor that influences employee performance is the pattern and wisdom of the leadership level, because the form of motivation, work culture, and the way the leadership level works will be an example to the employees below.

Other researchers are expected to be able to provide other differentiating factors that influence variables such as work environment, employee experience and employee satisfaction and others. So that increasing employee performance will help the company achieve company goals and benefit other researchers.

**REFERENCES**

- Agus Purwanto, Innocentius Bernarto, Masduki Asbari, Laksmi Mayesti Wijayanti, & Choi Chi Hyun (2020), The Impacts Of Leadership And Culture On Work Performance In Service Company And Innovative Work Behavior As Mediating Effect.
- Achmad Faisal A. Sapada, H. Basri Modding, Ahmad Gani, Syamsu Nujum (2017), The effect of organizational culture and work ethics on job satisfaction and employees performance.
- Ahmad Fauzan, Zulaspan Tupti, Fajar Pasaribu, Hasrudi Tanjung, Pengaruh Kepemimpinan Transformasional dan Budaya Organisasi Terhadap Kinerja Pegawai dimediasi oleh Komitmen Organisasi. *Jurnal Ekonomi & Ekonomi Syariah* Vol 6 No. 1, Januari 2023.
- Ahmad Rivai. 2020. Pengaruh Kepemimpinan Transformasional dan Budaya Organisasi Terhadap Kinerja Pegawai. *Jurnal Ilmiah Magister Manajemen* Volume 3, Nomor 2.
- Ahmad Rivai, 2020, Pengaruh Kepemimpinan Transformasional dan Budaya Organisasi Terhadap Kinerja Karyawan, *MANEGGGIO: Jurnal Ilmiah Magister Manajemen* Volume 3, Nomor 2 , September 2020 <http://jurnal.umsu.ac.id/index.php/MANEGGGIO>
- Ahmad Prayudi. 2020. Pengaruh Gaya Kepemimpinan Transformasional Terhadap Kinerja Pegawai dengan Motivasi Kerja sebagai Variabel Intervening. *Jurnal Manajemen Universitas Medan* Volume 6 Nomor 2 (2020).
- Ala'aldin Alrowwad, Bader Yousef Obeidat, Ali Tarhini, Noor Aqqad (2017), The Impact of Transformational Leadership on Organizational Performance via the Mediating Role of Corporate Social Responsibility: A Structural Equation Modeling Approach.
- Atmosoeparto, K. (2001), *Produktivitas Aktualisasi Budaya Perusahaan: mewujudkan Organisasi yang Efektif dan Efisien melalui SDM Berdaya*. Jakarta: Elex Media Komputindo.
- A. Rochim Sidik & Sutoyo., 2020, Analisis Kepemimpinan Transformasional, Komitmen dan Budaya Organisasi Terhadap Kinerja Pegawai PT. Angkasa Pura I (PERSERO) di Masa Pandemi Covid 19. *Jurnal Manajemen dan Bisnis* Volume 5, Nomor 1, 2020.
- Chusmir, L.H 1992. Job Commitment And The Organizational Women. *The academy of management review* pg. 595.
- Danieal Martins Abelha, Paulo Cesar Da Costa Carneiro, Flavia de Souza Costa Neves Cavazotte, Transformational Leadership and Job Satisfaction: Assessing the Influence of Organizational Contextual Factors and Individual Characteristics. *Revista Brasileira de Gestao de Negocios Review of Business Management*. V.20. 2018.
- Desak Putu Butsi T., Pengaruh Gaya Kepemimpinan Transformasional Terhadap Kinerja Pegawai Pada Dinas Koperasi, Umkm, Perindustrian Dan Perdagangan Kabupaten Barito Timur, *PubBis : Jurnal Ilmu Administrasi Publik & Bisnis* Vol. 3, No. 1, Maret 2019, Web : <http://jurnal.stiatabalong.ac.id>
- Eko Yudhi Setiawan. 2013. Pengaruh Gaya Kepemimpinan Transformasional dan Transaksional terhadap Kinerja Pegawai. *e-Jurnal Ilmu Manajemen MAGISTRA* Vol. 1 No. 1 Februari 2015.
- Faiza Manzoor, Longbao Wei, Mohammad Nurunnabi, Qazi Abdul Subhan, Syed Irshad Ali Shah and Samaher Fallatah (2019), The Impact of Transformational Leadership on Job Performance and CSR as Mediator in SMEs
- Geertz, Clifford. 1973. *The Interpretation of Culture*. New York : Basic Books.
- Gibson, Ivancevich, Donnelly. 2013. *Organisasi* Jilid 1. Penerbit Binarupa Aksara, Jakarta.
- Gibson, Ivancevich, Bonnelly. 1996. *Organisasi Perilaku Struktur Proses*. Jilid I. Jakarta: Bina Rupa Aksara.
- Halimsetiono, E. (2014). Peningkatan Komitmen Organisasi untuk menurunkan angka Turnover Pegawai. *Jurnal Kesehatan Masyarakat Nasional*. Vol. 8, No. 8. 339-345.
- Handoko, T Hani. (1999). *Manajemen*. BPFE: Yogyakarta.
- Hellriegel, D. dan J. W. Slocum, (1998), *Rlanagement. Seventh edition Southwestern College*: ITP Company.
- Imelda Andayani dan Satria Tirtayasa, Pengaruh Kepemimpinan, Budaya, dan Motivasi Terhadap Kinerja Pegawai, *Maneggio: Jurnal Ilmiah Magister Manajemen* Vol 2, No. 1, Maret 2019, 45-54 DOI: <https://doi.org/10.30596/maneggio.v2i1.3367>
- Isthofaina ASTUTY, Udin (2020), The Effect of Perceived Organizational Support and Transformational Leadership on Affective Commitment and Employee Performance
- Kardinah Indrianna Meutia, Cahyadi Husada. 2019. Pengaruh Budaya Organisasi dan Komitmen Organisasi Terhadap Kinerja Pegawai. *Jurnal Riset Manajemen dan Bisnis (JRMB) Fakultas Ekonomi UNIAT* Vol.4, No.1 Februari 2019: 119-126.
- Kaswan. 2012. *Manajemen Sumber Daya Manusia*. Yogyakarta: Graha Ilmu
- Kelsey Dappa, Feyza Bhatti, and Ahmad Aljarah, A Study on the Effect of Transformational Leadership on Job Satisfaction: The Role of Gender, Perceived Organizational Politics and Perceived Organizational Commitment. *Management Science Letters*. 2019.

- Kenly Rimpulaeng dan Jantje L. Sepang, Motivasi Kerja, Komitmen Karyawan, Dan Budaya Organisasi, Pengaruhnya Terhadap Kinerja Karyawan Pt. Gudang Garam Manado, Jurnal EMBA 137 Vol.2 No.3 September 2018
- Luthans, Fred. (2011). *Perilaku Organisasi*, Edisi Sepuluh. Yogyakarta: Penerbit Andi.
- Ling-Hui Yang, Exploring The Relationship Among Transformational Leadership, Employees Commitment to an Organization, Clan Culture and Adhocracy Culture Within Taiwan's Nurturing Foundation for the Disabled Within Taiwan. *International Journal Of Organizational Innovation* volume 15 Number 2 October 2022.
- Mahmoud Kamal Abouraia, Saad Mohammed Othman, Transformation Leadership, Job Satisfaction, Organizational Commitment, and Turnover Intentions: The Direct Effects Among Bank Representatives. *American Journal of Industry and Business Management*, 2017,7, 404-423.
- Mangkunegara Anwar Prabu. 2000. *Manajemen Sumber Daya Manusia*. Cetakan Pertama. Rosda. Bandung.
- Mangkunegara, A.A. Anwar Prabu. (2001). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung :Remaja Rosda Karya.
- Mega, K., & Surya, U. (2016). Peran Knowledge Sharing Dalam Meperkuat Pengaruh Kompetensi dan Rotasi Kerja Untuk Meningkatkan Kinerja Sdm (Studi Pada Dinas Koperasi Dan Umkm Provinsi Jawa Tengah).
- Malik, Waqas Umer; Javed, Muqaddas; Hassan, Syed Taimoor (2017), Influence of transformational leadership components on job satisfaction and organizational commitment
- Marihot Tua Efendi Hariandja, 2002, *Manajemen Sumber Daya Manusia*, Penerbit Grasindo
- Ngalim Purwanto, 2008, *Budaya Perusahaan*, penerbit PT Remaja Rosdakarya, Bandung Keputusan Menteri Keuangan Nomor KMK-454/KMK.01/2011 tanggal 30 Desember 2011, tentang Pengelolaan Kinerja di Lingkungan Kementerian Keuangan.
- Nitisemito, A.S. 2000. *Manajemen Personalialia (Manajemen Sumber Daya Manusia)*. Jakarta:Ghalia Indonesia.
- Pradana, M. Andy., B. S. S. Haryo., dan D. Hamid. 2013. Pengaruh gaya kepemimpinan transformasional dan transaksional terhadap kinerja pegawai studi pada pegawai tetap PT. Mustika Bahana Jaya, Lumajang.
- Rahmadin, Syukri.2010.Hubungan Antara Persepsi Gaya Kepemimpinan Transformasional Dan Transaksional Dengan Sikap Pegawai Terhadap Pekerjaan.Malang: Universitas Islam Negeri Malik Ibrahim repository.upi.edu/operator/upload/s\_a505 1\_0606524\_chapter3.pdf.
- Putu Darmawan Putra1, I Wayan Bagia1, dan Ni Nyoman Yulianthini, Pengaruh Gaya Kepemimpinan Transformasional Dan Disiplin Kerja Terhadap Kinerja Pegawai, Bisma: Jurnal Manajemen, Vol. 5 No. 1, Bulan Maret Tahun 2019
- Rachmawati, Ike Kusdyah. 2008. *Manajemen Sumber Daya Manusia*. Penerbit Andi, Yogyakarta.
- Rafiq, A. (2019). Pengaruh Budaya Organisasi Dan Motivasi Kerja Terhadap Kinerja Pegawai Yayasan Dompot Dhuafa Jakarta. *Widya Cipta -Jurnal Sekretari Dan Manajemen*, 3(1), 105– 114. <https://doi.org/10.31294/widyacipta.v3i1.5127>
- Robbins, Stephen P. Dan Coulter, Mary.2010. *Manajemen Edisi Kesepuluh*. Jakarta: Penerbit Erlangga.
- Robbins, Stephens P. 2007, *Perilaku Organisasi*, Jilid I & II ( alih bahasaHadyana Pujaatmaja ), Jakarta: Prentalindo.
- Robbi dan Meita Pragiwani, Pengaruh Budaya Perusahaan, Komitmen Efektif Dan Komitmen Normatif Terhadap Kinerja Karyawan (Studi Pada Karyawan Pt. Bank Bukopin, Tbk Kantor Pusat), *Responsive*, Volume 2 No. 1 April 2019
- Robbins, Stephen P, Judge, Timothy A., 2008. *Perilaku Organisasi*, Edisi kedua belas, Jakarta, Salemba Empat.
- Schuler, S. R., Jackson, S.E. (1997), *Manajemen SDM menghadapi abad ke- 21*, Ed 6, jilid 1, Jakarta : Erlangga.
- Schein, E.H., 1985, *Organizational Culture, American Psychologist* 4 (2) : 109-119.
- Sedarmayanti. 2007. *Manajemen Sumber Daya manusia, Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil*. Cetakan Pertama. Bandung : PT Refika Aditama.
- Setria Feri, Adi Rahmat, Bambang Supeno. 2020. Pengaruh Motivasi, Gaya Kepemimpinan Transformasional dan Budaya Organisasi Terhadap Kinerja Karyawan melalui Kepuasan Kerja Sebagai Variabel Intervening Studi pada PT. Champion Kurnia Djaja Technologies. *Jurnal Inovasi Bisnis dan Manajemen Indonesia* Volume 4, Nomor 1, Desember 2020.
- Sopiah. 2008. *Perilaku Organisasi*. Andi, Yogyakarta.
- Soonhee Kim. (2002), "Participative Management and Job Satisfaction : Lesson for Management Leadership", *Public Administration Review*, Vol 62, No. 2, P. 231 – 241.
- Sumarsid, 2017, Pengaruh Budaya Perusahaan dan Motivasi Terhadap Kinerja Karyawan dana Pensiun Pertamina di Jakarta, *Jurnal CKI On SPOT*, Vol. 10, No. 1, Juni 2017, StikomCKI.ac.id
- Supriyadi dan Triguno. (2001), *Budaya Kerja Organisasi Pemerintah*. Jakarta.
- Sule, E. T., & Saefullah, K. (2019). *Pengantar Manajemen (Revisi.)*. Jakarta: Prenadamedia Group.
- Tika H. Moh. Pabundu, 2006. *Budaya Organisasi dan Peningkatan Kinerja Perusahaan*, Cetakan Pertama, PT. Bhumi Aksara, Jakarta.



- Tri Joko. 2019. Pengaruh Pengembangan Karir, Pengawasan, dan Komitmen Pegawai Terhadap Kinerja Pegawai. *Jurnal Management STIE Amkop Makasar* Volume 2 No. 2 2019.
- Tri Joko, Pengaruh Pengembangan Karir, Pengawasan Dan Komitmen Pegawai Terhadap Kinerja Pegawai Di Dinas Pengendalian Penduduk Dan Keluarga Berencana Kabupaten Bantaeng, *YUME : Journal of Management* Volume 2 No. 2 2019 Available at : <https://journal.stieamkop.ac.id/index.php/yume>
- Wibowo. (2011). *Budaya Organisasi: Sebuah Kebutuhan untuk Meningkatkan Kinerja Jangka Panjang*. Jakarta: Rajawali Pers.
- Wulan Sari Girsang, Pengaruh Budaya Organisasi dan Komitmen Terhadap Kinerja Karyawan RS Putri Hijau No. 17 Medan, *AJIE - Asian Journal of Innovation and Entrepreneurship* (e-ISSN: 2477- 0574 ; p-ISSN: 2477-3824) Vol. 04, Issue. 02, May 2019
- Valentine R. Sean. Jackson H. John. and Mathis L. Robert. 2014. *Human Resource Management*. 4th Edition. Stamford-USA. Cengage Learning.
- Yukl, Gary. 2010. *Leadership in Organization*. Alih Bahasa oleh Udaya Jusuf: Kepemimpinan dalam Organisasi. Jakarta: Prehallindo.



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