IJEBD

International Journal of Entrepreneurship and Business Development

Vol 7 No 1 (January 2024)

www.jurnal.narotama.ac.id/index.php/ijebd

ISSN 2017
2597-4785
2597-4750

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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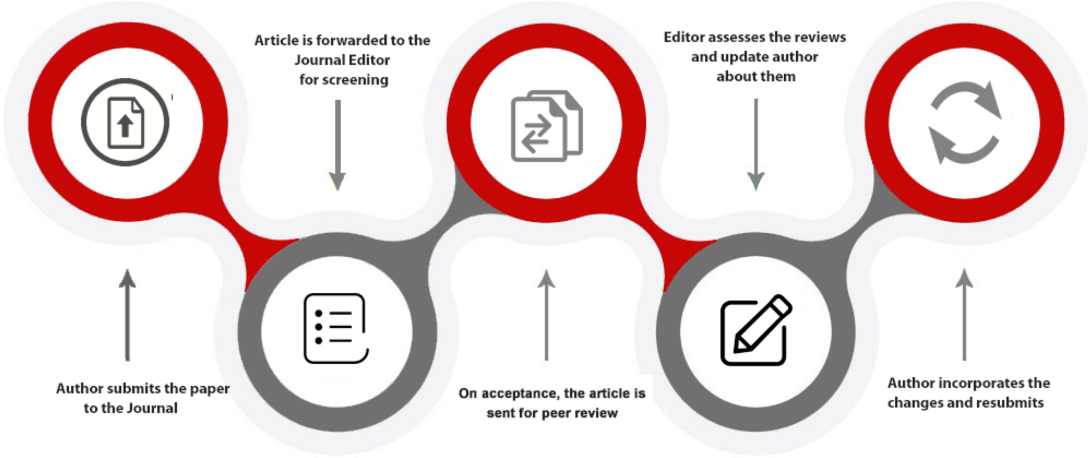

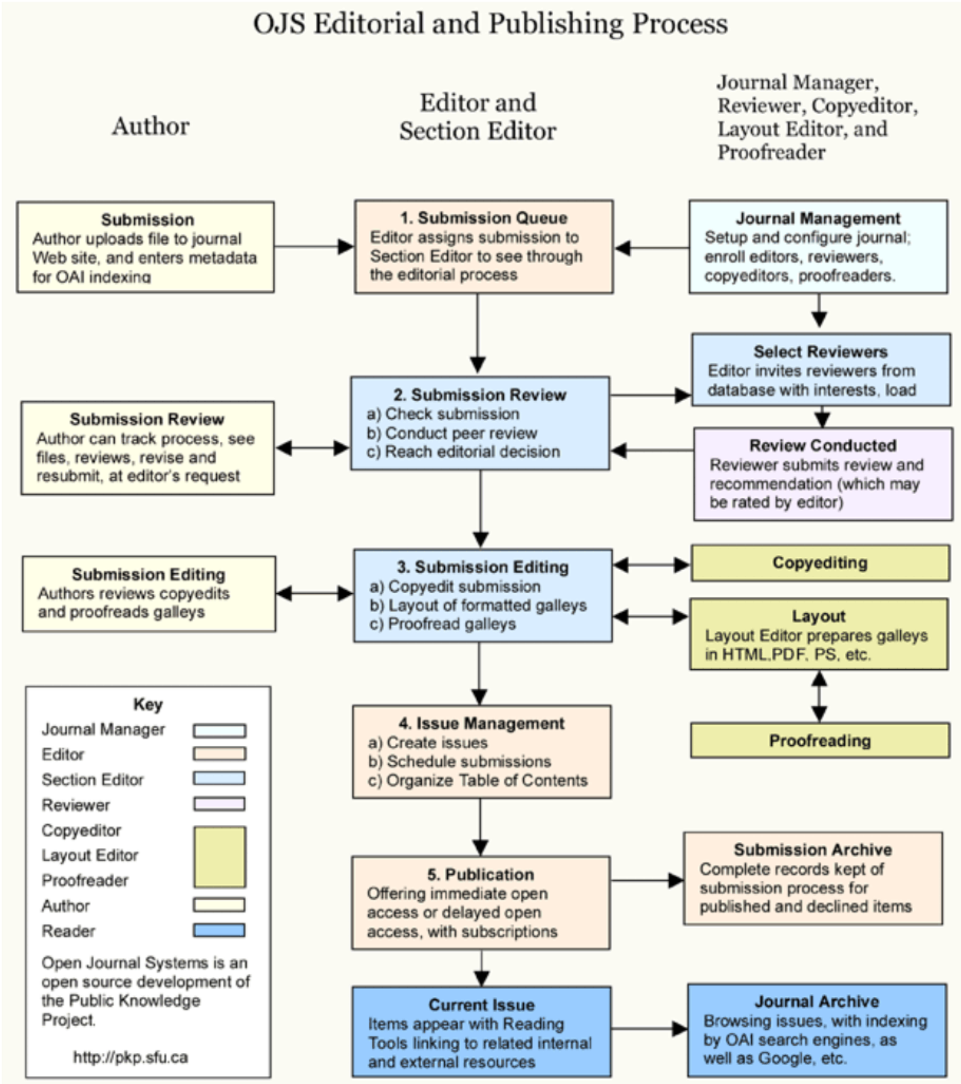

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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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(International Journal of Entrepreneurship and Business Development)
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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Impact of Education and Training on Product–Service Design: The Moderation of Competitive Advantage

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ABSTRACT

Purpose: This study attempted to investigate the impact of education and training on product-service design by including competitive advantage as a moderating variable to provide more insight into the nature of this relationship.

Design/methodology/approach: A quantitative research approach was employed and primary data was collected from TAZARA management employees. Model fit, reliability, and validity were tested using regression analysis, factor analysis, and principal component analysis using Jamovi software.

Findings: The results of the study present a significant positive relationship between education training and product-service design. The results also show that competitive advantage negatively moderates the relationship between education training and product-service design.

Practical implications: The study provides more insights by providing empirical evidence on the nature of the relationship between education and training and product-service design. Organizations need to foster a culture of continuous learning and innovation. Managers should communicate the importance of adapting to changes in the marketplace, even when a competitive advantage exists. Balancing the preservation of what makes the organization successful with an openness to new ideas is critical to long-term sustainability and continued success in product-service design.

Paper type: Research paper

Keywords: product-service design, education, training, competitive advantage, moderation

I. INTRODUCTION

The design of goods and services is strongly influenced by education and training in a wide range of industries. The effects are complex, ranging from the enhancement of personal skills to the expansion of organizational capacity. One of the most popular methods of merging product and service offerings in a consumer market is called Product-Service Design, or PSD. Industries and design firms alike are constantly looking for new and improved ways to meet the ever-changing needs and preferences of their customers (Zakaria & Lim, 2016). Education and training have a significant impact on the design of products and services, affecting everything from organizational strategies to individual skills. To foster innovation, meet user needs, and produce goods and services that benefit both society and the economy, the design workforce must be educated and experienced. Conversely, to stay ahead of the competition and survive in today's volatile, dynamic environment, companies need to differentiate themselves from other competitors (Yangailo, 2024). Businesses everywhere are trying to find new and creative ways to attract more customers and increase profits by improving the skills of their employees. Over the past two decades, there has been a surge in the implementation of competitive strategies within organizations. These strategies include TQM techniques that are essential for achieving competitive advantage (Yangailo, 2024; Yangailo, 2023a,2023b; Yangailo & Mkandawire, 2023; Yangailo & Kaunda, 2021; Chauhan & Nema, 2017). These techniques also include product-service design and education and training.

While some studies (Damali et al., 2016; Mourtzis et al., 20-23; Torkkeli & Lallimo, 2019) have shown a relationship between education and training and product-service design, very few have thought to include contingency variables to shed more light on the nature of this relationship. To shed more light on the nature of this relationship, this study included competitive advantage as a moderating variable to further explore the influence of education and training on product-service design.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Conversely, not much research has been done in the area of this study. Research on the railway industry has been scarce despite the industry's significant contribution to the global economy (Yangailo & Mpundu, 2023; Yangailo, 2023b; Talib & Rahman, 2010; Yangailo, 2022; Janelle & Beuthe, 1997; Yangailo et al., 2023). This gap also made it necessary to conduct this study in the context of the railway industry.

The main objective of this study was to explore the nature of the relationship between education and training, competitive advantage, and product and service design. This was the first empirical study to examine this relationship.

To address the gap identified in the literature, this study developed the following objectives:

1. To relate education and training with product-service design.
2. To determine if competitive advantage moderates the relationship between education and training, and product-service design.

II. LITERATURE REVIEW

1. Education and Training

In addition to ensuring behavioral change and commitment to quality improvement, education and training support managers in creating a common quality language within an organization (Mosadeghrad, 2014). Increased employee knowledge and skills through education and training reduce operational errors and increase the competitiveness of the organization (Hamburg, 2014). Porter (2008) states that the ability of an organization to differentiate itself from its competitors is largely influenced by the training, experience and skills of its employees. The training process should be continuous to maintain competitiveness (Singh et al., 2019).

2. Competitive Advantage

According to Kotler (2000), an organization's ability to conduct its business differently from its competitors gives it a competitive advantage. Competitive advantage allows a firm to consistently outperform its competitors and earn significant profits from a large portion of its market (Yangailo, 2023a). Quality and cost/price are the competitive advantage capabilities that differentiate a firm from its competitors (Tracey et al., 1999).

3. Product Service Design

Furrer (1997) defines the product-service concept as proposing a mix of tangible products and intangible services that are designed and combined to optimize product use and performance. The design process involves forecasting, organizational skills, ideas for improvement, and motivation. Development, innovation, and research are essential steps in the production process. Given the potential influence that product and service design can have on an organization, it is recommended that the design process be integrated into the business plan. Peruzzini et al. (2014) describe product-service design as a novel strategy for conscientious industrial innovation. The integration of a tangible product and an intangible service is known as product-service design or PSD. It involves a lot of design data to create a better package design that meets customer needs. Organizing and making easily accessible all the data and information during the design analysis, such as product-service cost, configuration, and quality, is the main challenge faced by designers (Zakaria & Lim, 2017).

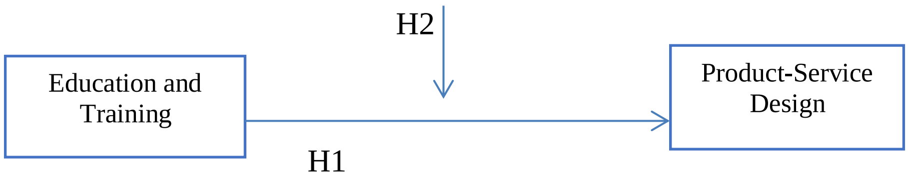
4. Education and Training and Product-Service Design

Education and training have a significant impact on the design of products and services, affecting everything from organizational strategies to individual skills. To foster innovation, meet user needs, and produce goods and services that benefit both society and the economy, the design workforce must be educated and experienced. This study adopted the following hypothesis, as research has shown a positive relationship between product-service design and education and training (see Damali et al., 2016; Mourtzis et al., 20-23; Torkkeli & Lallimo, 2019).

Hypothesis 1: Education and training have a positive significant effect on product-service design.

5. Conceptual Framework

An understanding of the relationships between the variables in this study and the literature review led to the development of the conceptual framework shown in Figure 1.



Source: Author (2024)

Figure 1 Hypothesized Model

Based on the literature and the proposed model, the following hypothesis was adopted to address the objective of the research study:
Hypothesis 2: Competitive advantage has a moderating effect on the relationship between education and training and product-service design.

6. Research Hypotheses

The following hypotheses are based on the objective of this study, the results of the literature review, and a hypothesized model.
Hypothesis 1: Education and training has a positive significant effect on product-service design.
Hypothesis 2: Competitive advantage has a moderating effect on the relationship between education and training and product-service design.

III. METHODOLOGY

This study was conducted on the Tanzania Zambia Railway Authority. Since its construction in the 1970s, TAZARA has been operated by Tanzania and Zambia under a 50/50 ownership arrangement.

Of the 240 managers in the target population, 200 received a structured questionnaire. One hundred and fifty-six (156) respondents, or 78% of the sample, completed and returned the questionnaire. A quantitative research methodology was used to analyze the data collected using Jamovi software. When the adequacy of the sample was assessed using Krejcie and Morgan's (1970) formula, it was found to be sufficient (see Table 1 below).

Table 1 Determining Sample Size of a given Population by using Krejcie and Morgan (1970) formula

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367

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N	S	N	S	N	S
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note: N is the population size.

S is size of the sample.
Krejcie and Morgan (1970)

Five-point Likert scales were used to measure the constructs, with one (1) being strongly disagree and five (5) being strongly agree. The measures of education and training, competitive advantage, and product-service design were adopted from a quiet number of previous studies (see Porter & Parker, 1993; Ang et al., 2000; Rao et al., 1999; Wai et al., 2011; Bayraktar et al., 2008; Coşkun, 2011; Prajogo & Sohal, 2006; Claver et al., 2003; Terziovski, 2006; Berhanu, 2019; Hilmy, 2016).

IV. RESULT AND DISCUSSION

The results of the study are presented in the form of descriptive statistics, figures, tables, and hypothesis tests.

1. Response Rate

Out of the 200 questionnaires against the target of 240, hundred and fifty-six (156) questionnaires were completed and returned representing 78% response rate performance.

2. Descriptive Statistics

The mean, standard deviation, kurtosis, and skewness for the constructs used in this study are presented in Table 2.

Table 2 Mean, Standard Deviation, Kurtosis & Skewness of Constructs (N = 156)

	CA	ET	PSD
N	156	156	156
Mean	2.90	2.80	3.18
Standard deviation	0.760	0.916	0.850
Skewness	-0.0578	-0.0795	-0.322
Std. error skewness	0.194	0.194	0.194
Kurtosis	-0.0336	-0.484	-0.0890
Std. error kurtosis	0.386	0.386	0.386

Source: Jamovi computation

The mean values for all three constructs indicate favourable respondent responses. Kurtosis and skewness are within the recommended threshold range of -2 to +2, indicating no serious deviation from normality for each construct.

3. Reliability and Validity

Factor analysis was used to test the validity and reliability of the sample data. Four (4) assumptions must be met by the collected data for principal component analysis to be performed and provide reliable results. According to Landau and Everitt (2003), these assumptions include a linear relationship between the variables, the absence of significant outliers, the measurement of multiple variables at the continuous or ordinal levels, and adequate sampling. Upon review, the sample data used in this study met each of the four assumptions. According to Fan et al. (2008), principal component analysis requires a minimum of 150 cases; therefore, the sample size of 156 cases was sufficient for this type of analysis.

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A reliability test was conducted to obtain reliable measures of the good internal fit and consistency of the measures. Using a reliability analysis and the suggested minimum threshold of seven points (0.7) for each construct, the Cronbach alpha was determined (Nunnally, 1978; Hair et al., 2006).

4. Results of Reliability and Validity Tests

The factorability of twelve (12) items in the instrument was measured and it was observed that all the 12 items correlated at least point four (0.4) with another item, indicating a good reasonable factorability. Kaiser Meyer Olkin (KMO) measure of sampling adequacy was 0.847 above the 0.6 value. The proportion of variance in the variables that could be caused by the underlying factors is represented by the KMO measure of sampling adequacy. The Bartlett's sphericity test was statistically significant ($\chi2$ (66) = 662, $p < .001$). Based on the results described above, principal components analysis was considered highly appropriate for the 12 items shown in Table 3.

Table 3 Kaiser-Meyer-Olkin and Barlett's Test result

Kaiser-Meyer-Olkin and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.847
Bartlett's Test of Sphericity	Approx. Chi Square	662
	Degrees of freedom	66
	Significance	.000

Source: Jamovi computation

The results of the analysis showed that the Cronbach's alpha for the instrument was above the recommended minimum threshold of seven points (0.7) (Nunnally, 1978; Hair et al., 2006). The alpha coefficients for the instrument ranged from 0.767 to 0.812. The alpha coefficient for the competitive advantage scales was 0.790, the alpha coefficient for the product-service design scales was 0.767, and the alpha coefficient for the education and training scales was 0.812. The three Cronbach alpha coefficients were all within the recommended acceptable threshold of greater than 0.7, as shown in Table 4.

Table 4 Test Results of Cronbach Alpha

Items	Cronbach's Alpha	McDonald's Mega	Number of Items	Comment
Overall	.849	.852	12	Accepted
Competitive Advantage	.790	.792	5	Accepted
Education and Training	.812	.814	4	Accepted
Product-Service Design	.767	.770	3	Accepted

Source: Jamovi computation

5. Linearity

The relationship between the variables was linear. This assumption was verified by calculating Pearson and Spearman correlation coefficients, as shown in Table 5.

Table 5 Correlation Matrix

		CA		PSD		ET
CA	Pearson's r	—				
	Spearman's rho	—				
	N	—				
PSD	Pearson's r	0.506	***	—		
	Spearman's rho	0.449	***	—		
	N	156		—		
ET	Pearson's r	0.292	***	0.514	***	—
	Spearman's rho	0.253	**	0.489	***	—
	N	156		156		—

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Table 5 Correlation Matrix

	CA	PSD	ET

Note. * p < .05, ** p < .01, *** p < .001

Source: Jamovi computation

The results show positive significant correlations among competitive advantage, education and training, and product-service design. Competitive advantage and product-service design have positive significant Pearson and Spearman correlation coefficients of 0.506 and 0.449, and competitive advantage and education and training have positive significant Pearson and Spearman correlation coefficients of 0.292 and 0.253. Product-service design and education and training have positive significant Pearson and Spearman correlation coefficients of 0.514 and 0.489.

6. Fitness of Model

A regression model test was run before estimating the proposed model.

Overall Regression Model Test

Regression models were tested with the following hypotheses.

H0 : β1=β2= β3 ..……. Bi = 0

Ha : At least one regression coefficient isn't equal to zero

Table 6 shows that there were strong significant relationships between the constructs based on the regression analyses performed. The first model that presented the proposed effect of education and training on product service design showed a good fit and significant values of R(0.514), R^2(0.264), and a significant F-value of 55.3. This means that education and training explain 26% of the variation in product-service design. The second model that proposed the impact of education and training on competitive advantage shows a good fit and statistically significant values of R(0.292), R^2(0.0851), and a significant F-value of 14.3. This means that education and training explain 8% of the variation in competitive advantage. The last model that proposed the effect of product-service design on competitive advantage shows a good fit and significant values of R(0.506), R^2(0.257), and a significant F-value of 53.1. This indicates that product-service design explains 25% of the variation in competitive advantage.

Table 6 Regression Model Fit Measure Summary

					Overall Model Test	
Model		R	R²	Adjusted R²	F	P
1	ET predicting PSD	0.514	0.264	0.259	55.3	< .001
2	ET predicting CA	0.292	0.0851	0.0792	14.3	<. .001
3	PSD predicting CA	0.506	0.257	0.252	53.1	< .001
ET = Education and Training						
PSD= Product-Service Design						
CA= Competitive Advantage						

Source: Jamovi computation

7. Hypotheses Testing

This research study undertook two hypotheses concerning the direct relationship and moderating effect. Tables 7, 8, and 9 present the results of the hypotheses tested.

Table 7 Impact of Education and Training on Product-Service Design

Model Fit Measures

							Overall Model Test			
Model	R	R²	Adjusted R²	AIC	BIC	RMSE	F	df1	df2	p
1	0.514	0.264	0.259	349	358	0.727	55.3	1	154	< .001

Model Coefficients - PSD

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Model Fit Measures

							Overall Model Test			
Model	R	R^2	Adjusted R^2	AIC	BIC	RMSE	F	df1	df2	p

Predictor	Estimate	SE	t	p
Intercept	1.841	0.1888	9.75	< .001
ET	0.477	0.0642	7.43	< .001

Source: Jamovi computation

Table 8 Moderation Effect of Competitive Advantage on Education and Training and Product-Service Design

Moderation Estimates

			95% Confidence Interval			
	Estimate	**SE**	**Lower**	**Upper**	**Z**	**p**
ET	0.380	0.0569	0.268	0.491	6.68	< .001
CA	0.433	0.0683	0.299	0.567	6.33	< .001
ET ✻ CA	-0.128	0.0655	-0.257	3.94e-5	-1.96	0.050

Simple Slope Estimates

			95% Confidence Interval			
	Estimate	**SE**	**Lower**	**Upper**	**Z**	**p**
Average	0.380	0.0574	0.267	0.492	6.62	< .001
Low (-1SD)	0.477	0.0785	0.323	0.631	6.07	< .001
High (+1SD)	0.283	0.0735	0.138	0.427	3.84	< .001

Note. shows the effect of the predictor (ET) on the dependent variable (PSD) at different levels of the moderator (CA)

Table 9 Summary of the Hypotheses

No	Hypothesis	Results
1.	Hypothesis 1: Education and training have a positive significant effect on product-service design.	Supported
2.	Hypothesis 2: Competitive advantage has a moderating effect on the relationship between education and training and product-service design.	Supported

The model path coefficients of this study and the results are presented in Tables 7 and 8. The relationship and the moderation effect hypothesized in this study are both supported.

The results of hypothesis one H1, on the effect of education and training on a product-service design, show a positive significant ($\gamma = 0.477$, $p<0.001$), so, H1 is supported.

8. The Moderation Effect Analysis

The moderating effect of competitive advantage on education and training and product-service design is negative and statistically significant ($\gamma = -0.128$, $p=0.05$). This indicates that competitive advantage negatively moderates the relationship between education and training on product-service design. Thus, hypothesis 2 is supported. Table 8 shows that competitive advantage hurts the relationship between education and training on product-service design at all levels (low, average, high), with a low impact on high-level moderation and a low impact on the high-level moderation.

9. Discussion

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Overall, the results have provided strong support for the theoretical model of the relationship between education and training, and product-service design.

The study also showed that education and training have a positive and significant impact on the design of products and services, which addressed the first research objective. This is consistent with the findings of some previous studies (see Damali et al., 2016; Mourtzis et al., 20-23; Torkkeli & Lallimo, 2019), which demonstrated the positive relationships between education and training and product and service design.

The second objective of the study was also met, as the moderating effect of competitive advantage on product-service design and education and training was empirically tested for the first time. The results of the study indicate that the relationship between product-service design and education and training is negatively moderated by competitive advantage. This implies that the impact of education and training on product service design may be limited or hindered by a competitive advantage. This suggests that the organization where the study was conducted has become stale and has placed too much emphasis on its current procedures. Because of this, the organization has been reluctant to accept new information and skills through education and training because it seems that its current status is adequate. This finding also implies that resistance to change occurs when there is a competitive advantage. Fearful of disrupting the tried-and-true formula for success, employees are reluctant to accept new ideas or methods presented to them through training and education. The findings also show that employees tend to avoid exploring new options offered by training programs, preferring to stick with what has worked in the past. In-house training has no positive impact on product-service design if it is not tailored to increase competitiveness.

This study makes an important theoretical contribution to the literature by being the first to empirically test this relationship with competitive advantage as a moderating variable.

V. CONCLUSIONS

This research is the first to explore the association among education and training, competitive advantage, and product-service design. The study found that education and training have a positive significant effect on product-service design, and that competitive advantage negatively moderates this relationship. While the relationship between education and training, competitive advantage, and product-service design involves complex interactions, the study sheds lighter by providing empirical evidence on the nature of the relationship between education and training and product-service design. The study contributes to a better understanding of the association between education and training and product-service design by including a moderating variable of competitive advantage.

The study recommends that it's important for organizations to foster a culture of continuous learning and innovation. Managers should communicate the importance of adapting to changes in the marketplace, even when a competitive advantage exists. Balancing the preservation of what makes the organization successful with an openness to new ideas is critical to long-term sustainability and continued success in product-service design.

VI LIMITATION AND FUTURE RESEARCH

The study focused on one railway company, which limits the generalizability of the study's findings to other industries. It is also hoped that this study will be replicated in other industries and that future studies will include other contingency variables as either moderating or mediating variables to provide further insight into the nature of this relationship.

ACKNOWLEDGEMENT

This article was not preliminarily sponsored by any organization and there is no conflict of interest to disclose. A special thanks goes to the editor and reviewers for their valuable time in reviewing this paper.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Intervening Role of Absorptive Capacity in the Nexus of Effectual Actions and Performance in Small Businesses

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ABSTRACT

Purpose: This study interrogates the interfering role of absorptive capacity in the relationship between the effectual actions of small businesses and their performance.

Design/methodology/approach: Structured questionnaires were used to generate primary data from 685 small businesses from a variety of sectors in South Africa. The data was used to interrogate the hypothesized relationships using the partial least squares structural equation modeling technique.

Findings: The findings report a significantly positive relationship between effectuation and small business performance. Further, it is revealed that absorptive capacity partially mediates the relationship between effectuation and small business performance.

Research limitations/implications: The limitations of this study include the use of primary data from a sample of small businesses in South Africa and dependence on specific modeling techniques. The implications of this research provide a deeper understanding of the mediating effects of absorptive capacity on the relationship between effectual actions and small business performance.

Practical implications: This study provides fresh insights into the mediating effects of the absorptive capacity capability of small businesses in the continuous interaction between their effectual actions and performance. As such, it highlights the connection between the growing theory of effectuation and existing theories in the field of management sciences. This study enables the emergence of knowledge that could spur small businesses to effectively navigate the endemic uncertainties prevalent in their contexts.

Originality/value: This study contributes to the understanding of the role of absorptive capacity in the relationship between effectual actions and small business performance, thus adding value to the literature on small business management.

Paper type: This research is empirical.

Keywords: Effectuation; Business Performance; Absorptive Capacity; Entrepreneurial Action.

I. INTRODUCTION

Entrepreneurs operate in extremely fluid and uncertain environments (Fisher *et al*., 2020; Townsend *et al.*, 2018). To navigate and mitigate the impact of such contexts, entrepreneurs employ a variety of behaviors and actions. In recent times, effectuation has attracted attention in the extant literature as one such behavior that describes the actions of entrepreneurs as they traverse continuously changing contexts (Reymen *et al.*, 2015; Sarasvathy and Dew, 2008; Welter and Kim, 2018). The traditional understanding of effectuation captures the concept as a decision process used by expert entrepreneurs in the development of new ventures (Sarasvathy, 2001). Increasingly, however, effectuation has assumed a much broader understanding as a set of heuristics, actions, capabilities, reasoning, behaviors, or decision-making logics employed by entrepreneurs as they navigate uncertainty and strive to exert control over the environment (McKelvie *et al.*, 2020).

The significance of effectual actions for the success of entrepreneurial endeavors is buttressed by the increasing number of empirical studies (see Eyana, *et al*., 2018; Laskovaia *et al*., 2017; Osuigwe and Eresia-Eke, 2022) interrogating the relationships between effectuation and business performance. However, despite the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

avowed importance of effectuation in entrepreneurial activities, the findings presented by these studies have been varied. The mixed outcomes of these studies warrant the need to investigate the relationship between effectuation and other concepts within the context of firm performance. Such studies will respond to the call by Perry et al., (2012) who argue for the interrogation of the possible interconnectivity of the concept of effectuation with other recognized management concepts.

It is against this background that the current study is poised to investigate the connections between small businesses' effectual actions, absorptive capacity, and firm performance. The current study leverages Zahra and George (2002)'s conceptualization of absorptive capacity as a dynamic capability. Consequently, absorptive capacity is perceived as the acquisition of external knowledge, assimilation of the acquired knowledge, transformation of the new knowledge with existing knowledge as well as the exploitation of the recombined knowledge for value creation. On this score, this study therefore projects that the ability of small businesses to identify, assimilate, transform, and exploit emergent data from their context may strengthen the connection between their effectual actions and firm performance.

Consequently, the purpose of this study is to explore the possible intervening role of absorptive capacity on the relationship between effectual actions and firm performance in small businesses. Specifically, this study seeks to contribute to the continued development of effectuation literature by fostering an improved understanding of the concept's interactions with established constructs in management studies. More so, this study adds to the scholarly debates on the relationship between predictive and non-predictive logic of control. Extant literature (Djuricic and Bootz, 2019; Smolka *et al.*, 2018; Steinert *et al.*, 2020) supports the link between non-predictive logics such as effectuation and predictive logics that comprise absorptive capacity. Additionally, the study also aims to provide empirical evidence on the nature of the relationship between effectual actions and firm performance. Additionally, it is anticipated that the findings of this study would engender deeper insights as it concerns the nexus between effectual actions and firm performance by evaluating the intervening effects of absorptive capacity.

II. LITERATURE REVIEW

2.1 Effectuation and absorptive capacity

Absorptive capacity has been recognized for its ability to interact with other theories in a variety of disciplines (Apriliyanti & Alon, 2017). Insights from extant literature related to key areas of uncertainty and information acquisition, as well as the exploitation of opportunities are used to deductively project possible connections between effectuation and absorptive capacity.

Uncertainty describes the disparity between available information and the required information that is needed to complete defined tasks (Brettel *et al*., 2012). While navigating uncertainty, effectual actors tend to use trial-and-error and iterative learning techniques to gather information (Sarasvathy, 2001). Arend *et al*., (2015) argue that the generation of new information is consistent with the iterative process employed by effectual actors. As they interact and collaborate with others within their social network, effectual actors explore emergent information used in creating multiple outcomes (Djuricic and Bootz, 2019).

Notably, Patel (2019) recognizes absorptive capacity as an essential ability that ensures that effectual actors are alert to insights for opportunity creation emergent from the prevalent uncertainty in their context. Flatten *et al*., (2011) specifically refer to absorptive capacity as a capability that boosts the sensing, understanding, transformation, and exploitation of emergent information in an uncertain environment. These perspectives from the literature encourage the present study to propose that effectual actors utilize absorptive capacity to leverage information emergent from their uncertain environment.

Jiang and Rüling (2019) as well as Patel (2019) suggest that effectual actors continuously create and select between multiple possible opportunities as the typical outcome of the effectual process. Such possible future outcomes are, however, unclear and require that effectual actors remain alert to emergent insights from the external environment. Using the concept of isotropy, Sarasvathy (2008) explains that in decisions and actions involving uncertain future consequences, it is not always clear, in advance, which data sets are worth paying attention to and which are not.

Consequently, when confronted by such decisions on multiple emergent opportunities, effectual actors may exploit substandard opportunities (Leenders *et al*., 2007). Fernhaber and Patel (2012) argue that absorptive capacity combines the procedures and activities of small businesses thereby enabling them to interpret and exploit emergent opportunities for beneficial outcomes. Volberda (2010) concurs with this perspective and argues that businesses with absorptive capacity capabilities can create more effects from emergent opportunities in their context. On this note, it is conceivable that small businesses with absorptive capacity capabilities may be able to choose the ideal opportunities to pursue in uncertain times.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

2.2 Effectuation and small business performance

Arguably, the view by Roach et al., (2016) that the theory of effectuation delivers a stimulating viewpoint into the understanding of small business performance provides the impetus for this study to utilize the effectual lens to examine small business performance. Scholars (see Arend et al., 2015; Bhowmick, 2015; Ye, 2016), in response to the call by Perry et al., (2012), have employed a variety of approaches in a bid to understand the appropriate outcomes of the effectual process. Despite the significant strides achieved in this endeavor, empirical research on effectuation and its wider implications in the entrepreneurship field remains scarce (McKelvie et al., 2013). Conceptually, Sarasvathy (2001) argues that effectuation may not be a predictor of small business performance while Read et al., (2009) provide an alternative view that holds that small business performance might be predicted by effectuation. Interestingly though, a study by Read and Sarasvathy (2005), proposes a possible relationship between effectuation and new business growth.

Meta-studies by McKelvie et al. (2020) and Perry et al. (2012) highlight the significance of more survey-based empirical research to interrogate this relationship. Despite the importance ascribed to such an interrogation, extant empirical studies have had varied results. For instance, researchers (see Eyana et al., 2018; McKelvie et al., 2013; Smolka et al., 2018; Osuigwe and Eresia-Eke, 2022) report findings that show varied outcomes in the relationship between effectuation, its dimensions, and business performance indicators. Other researchers (see Cai et al., 2017; Guo et al., 2016; Laskovaia et al., 2017; Peng et al., 2020; Wiltbank et al., 2009; Yu et al., 2018) however, report positive and/or significant effects in the relationship between effectuation and business performance indicators. Empirical studies by Eijdenberg et al. (2017) and Muhd Yusuf et al. (2018) have shown negative or non-significant impacts of effectuation on business performance indicators.

Cognizant of these findings from extant literature that provides some evidence of the existence of a relationship between effectuation and various strands of business performance, the present study chooses to hypothesize that:

H1: Effectuation has a positive relationship with small business performance

2.3 Effectuation, absorptive capacity, and small business performance

Volberda (2010) asserts that absorptive capacity can serve as a veritable node of various concepts in management studies given its appeal to a variety of disciplines. Instructively, Engelen et al. (2014) and Escribano et al. (2009) highlight that businesses operating in uncertain contexts require absorptive capacity to rapidly adapt to fluid situations. Additionally, Fernhaber and Patel (2012) as well as Patel (2019) note that absorptive capacity enhances the capability of small businesses to identify the worth of novel opportunities. In light of this, it is conceivable that absorptive capacity enables the swift detection and exploitation of emergent insights for the benefit of entrepreneurial ventures. In an attempt to understand the possible intervening role of absorptive capacity, several studies (Aljanabi, 2018; Khachlouf and Quélin, 2018; Patel et al., 2015) employing absorptive capacity as an intervening variable, have reported its mixed effects on the relationship between different business-related concepts.

There is an interest in understanding the effects of other variables in the relationship between effectual actions and performance indicators (Fischer et al., 2021). Specifically, a study by Cai et al. (2017) finds that exploratory learning plays a fully mediating role in the relationship between effectuation and net profit rate, investment return rate and market share rate, sales growth speed, employee growth speed, and market share growth speed. Evidence from a study by Guo (2019) demonstrates that opportunity shaping fully mediates the relationship between effectuation and innovation strategy. The preceding provides a compelling basis to anticipate that absorptive capacity might interfere, in a mediating role, with the relationship between effectuation and small business performance. Therefore, this study hypothesizes that:

H2: Absorptive capacity mediates the relationship between effectuation and small business performance.

III. METHODS

The current study used self-administered questionnaires to obtain data from 685 small businesses in South Africa. An electronic survey was preferred for the data collection to accommodate the dispersed nature of the target population. The questionnaire technique used to obtain data was designed in the form of closed statements related to the research variables. All the items associated with the research variables were accompanied by 5-point Likert-type answer options anchored on 1 (not satisfied = small business performance or strongly disagree = effectuation and absorptive capacity) to 5 (very satisfied = small business performance or strongly agree =

effectuation and absorptive capacity). Data from the study was analyzed using the partial least squares structural equation modeling (PLS-SEM) technique.

IV. RESULTS AND DISCUSSION

4.1 Pearson correlations

Table 1 shows the correlations (*r*) between the key variables of the study. The outcome is consistent with the theoretical arguments presented in this study. There is statistical evidence that effectuation and absorptive capacity ($r = 0.321$; $p < 0.01$), effectuation and small business performance ($r = 0.190$; $p < 0.01$), as well as absorptive capacity and small business performance ($r = 0.269$; $p < 0.01$) have statistically significant and positive relationships between them.

Table 1: Descriptive statistics and Pearson correlations [a]

Variables	Mean	S.D.	1	2
1. Effectuation	3.60	1.03		
2. Absorptive Capacity	3.55	0.89	0. 321**	
3. Small business performance	3.14	1.18	0.190**	0.269**

[a] N = 685; *$p < 0.05$. **p < 0.01 (two-tailed)

4.2 Factor analysis

To establish the suitability of the key variables for the study, the measurement model employed in the study was assessed. This enabled the study to determine whether the observed variables loaded effectively about the characteristics that they were intended to measure while also assessing the distinctiveness of these factors. Following suggestions by Hulland (1999), that loadings upside of 0.5 indicate sufficient reliability, the items with such loadings were kept and those that did not satisfy this requirement were eliminated. Tables 2 and 3 represent the values of the item loadings derived from factor analysis. These values are shown to be higher than the advised 0.5 threshold. This outcome confirms that the effectuation, absorptive capacity, and small business performance measures are suitable for estimating the structural models.

4.3 Convergent and discriminant validity

The study assessed the composite reliability (CR), average variance extracted (AVE), and the Fornell-Larcker criterion for discriminant validity values to establish convergent and discriminant validity (construct validity) as well as the internal consistency of the measurement model. As shown in Tables 2 and 3, the CR values for the study's variables are higher than the cut-off of 0.70, which confirms the internal consistency of the scale items.

Table 2: Factor loadings and construct validity assessment for effectuation and small business performance

	Variable				Fornell-Larcker Criterion Output				
		Item Loadings	AVE	CR	1	2	3	4	5
Effectuation	1. Experimentation	0.868 0.729 0.612	0.553	0.784	0.744				
	2. Affordable loss	0.866 0.901 0.841	0.756	0.903	0.008	0.870			
	3. Flexibility	0.813 0.565 0.854 0.567	0.508	0.799	0.177	0.283	0.713		
	4. Pre-commitment	0.884 0.878	0.776	0.874	0.241	0.126	0.188	0.881	
5. Small business performance		0.904 0.913 0.858 0.882 0.753 0.694	0.702	0.933	-0.053	0.216	0.283	0.062	0.838

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The AVE establishes convergent validity based on a value output ≥ 0.5, which shows the degree to which items measuring a construct are related to one another, by the standards outlined in the study by Fornell and Larcker (1981). The AVE values as shown in Tables 2 and 3 confirm convergent validity on the evidence of all the variables' AVE values being greater than the threshold value of 0.5. The output for the Fornell-Larcker criterion for the assessment of discriminant validity is represented by the diagonal values in the tables. These values are the square root of the AVE of the latent variables and must be the highest values in their respective columns and rows. The square root of the AVE values of the effectuation, small business performance, and absorptive capacity factors are all greater than all other values within their respective columns and rows.

Table 3: Factor loadings and construct validity assessment for absorptive capacity

	Variable				**Fornell-Larcker Criterion Output**			
		Item Loadings	AVE	CR	1	2	3	4
Absorptive Capacity	1. Acquisition	0.786 0.844	0.665	0.799	0.815			
	2. Assimilation	0.904 0.925	0.837	0.911	0.377	0.915		
	3. Transformation	0.693 0.776 0.805 0.586	0.519	0.810	0.388	0.512	0.842	
	4. Exploitation	0.825 0.858	0.708	0.829	0.469	0.659	0.619	0.720

This outcome confirms that the latent variables of the effectuation, small business performance, and absorptive capacity scales are discriminant of each other. Further, the correlations between the constructs and the multicollinearity assessment of the data based on variance inflation factor (VIF) values showed that the data do not have multicollinearity issues. The correlations (which ranged between 0.008 and 0.328) between the constructs were significantly below the 0.90 cut-off point established by Hair et al. (2019), indicating that the data was free of multicollinearity. The outer and inner VIF values were within the thresholds of 5.0 with ranges between 1.087 and 2.505.

4.4 Assessing Hypothesized Relationships

To evaluate the proposed hypotheses, the study examined two structural models. The first model focused on the direct relationship between effectuation and small business performance and the second model examined the mediation effects of absorptive capacity. In model one, the PLS algorithm was used to confirm the path coefficients of the direct relationship, and the bootstrapping process was performed to assess the significance of the relationships. Further, the R^2 and the predictive relevance (Q^2) values were calculated as measures of the predictive power and predictive relevance of the models (goodness of fit of the models), respectively.

As shown in Table 4, the path coefficients of the proposed relationships between small business performance and effectuation have sufficient values. The table further presents the results of the evaluation of the structural model related to the significance levels of the hypothesized direct relationship. On this score, the outcome confirms that effectuation ($\beta = 0.250$, $t = 6.435$, $p < 0.01$) has a statistically significant positive relationship with small business performance. This result confirms that $\boldsymbol{H_1}$ is statistically supported. The R^2 coefficient is 0.062, which means that effectuation accounts for approximately 6 % of the variance in the endogenous variable. The Q^2 value was greater than zero ($Q^2 = 0.078$), which confirms that the model has predictive relevance.

Table 4: Results of the test of the hypothesized relationship between effectuation and small business performance

Hypothesis	Relationship	Std Beta	Std Error	|t-value|^	*p-value*	Decision	Q^2	R^2
H1	Effectuation → Small business performance	0.250	0.039	6.435	0.000	Supported	0.078	0.062

In model two, the mediation effect of absorptive capacity was evaluated according to the three-step procedure proposed by Baron and Kenny (1986) for the estimation of mediation effects, and this is required for certain conditions to be met. Using the PLS-SEM technique, the study assessed for mediation effects by calculating the weights and t-statistics for the indirect, direct, and total effects as well as confidence intervals (C.I.) using the bias-corrected bootstrapping technique (Carrión et al., 2017; MacKinnon et al., 2002).

As presented in Table 5, the results of the evaluation of the mediation effects show a significant indirect relationship from effectuation to small business performance through absorptive capacity ($\beta = 0.088$, $t = 5.075$, $p < 0.01$). Nonetheless, the total effect between effectuation and small business performance ($\beta = 0.161$, $t = 4.200$,

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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

p < 0.01) is much stronger. This result confirms that the relationship between effectuation and small business performance is complementary and partially mediated by absorptive capacity, considering that all the relationship paths are significant.

Table 5: Total and indirect effects output for hypothesized mediation effects

Effects	Hypotheses	Std Beta	Std Error	|t-value|^	*p-value*	Bias corrected 95 % C.I.		F^2	R^2
Total Effect	Absorptive capacity → Small business performance	0.277	0.041	6.822	0.000	0.204	0.342	0.079	
	Effectuation → Absorptive capacity	0.320	0.046	6.916	0.000	0.243	0.398	0.115	0.103
	Effectuation → Small business performance	0.161	0.038	4.200	0.000	0.095	0.221	0.027	0.131
Indirect Effect	H_2: Effectuation → Absorptive capacity → Small business performance	0.088	0.018	5.075	0.000	0.061	0.118	Supported	

This outcome implies that the absorptive capacity capabilities of small businesses mediate the relationship between their use of effectuation and the resultant business performance. As depicted in Figure 1, the R^2 value of the paths from effectuation and absorptive capacity to small business performance was 0.131 while the R^2 value of the path from effectuation to absorptive capacity was 0.103. These values show that effectuation and absorptive capacity contribute 13% of the changes in small business performance, while effectuation explains 10% of the variance in absorptive capacity.

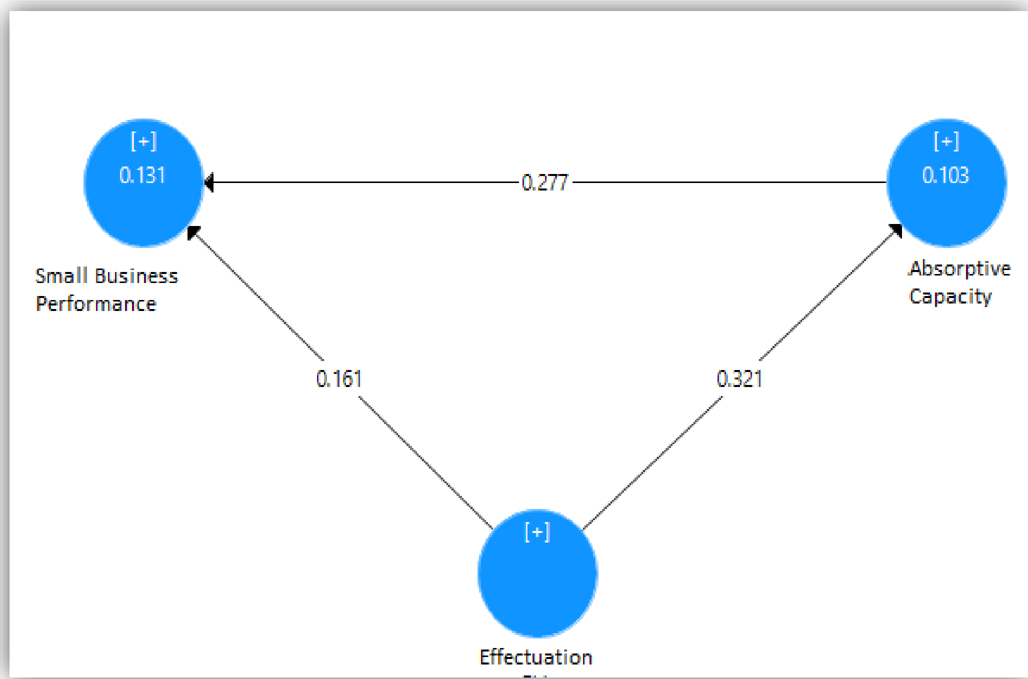

Figure 1: Mediation model for effectuation, absorptive capacity, and small business performance

V. CONCLUSION

The current study interrogated the intervening role of absorptive capacity in the relationship between effectuation and small business performance. The study's findings confirm that empirical data supported the hypothesized direct and indirect relationships between effectuation, absorptive capacity, and small business performance. The finding in the current study regarding the statistical significance of the relationship between effectuation and small business performance is congruent with the propositions and findings from existing studies (Peng *et al.*, 2020; Read and Sarasvathy, 2005; Yu *et al.*, 2018). Further, the statistically significant relationship confirmed between absorptive capacity and small business performance is consistent with findings in extant literature (Eresia-Eke and Osuigwe, 2022; Flatten *et al.*, 2011; Mamun *et al.*, 2017).

Based on the empirical evidence provided in the current study, it is established that small businesses utilize their effectuation capabilities to achieve business performance. Further evidence shows that a portion of this relationship between small businesses' effectuation and their performance is explained by their use of absorptive capacity capability. This indicates that small business performance can be enabled by effectuation and absorptive capacity capabilities. This study has significant theoretical implications for the continuous development of the theory of effectuation as well as specific practical implications for small businesses in developing countries considering the source of the data used.

This study responds to the call by Perry *et al.* (2012) on the need to broaden an understanding of the interaction between effectuation and other concepts. The current study contributes to scholarly discourse in the spheres of absorptive capacity and effectuation by providing empirical evidence for the understanding of the relationship between absorptive capacity (an established strategic management theory) and effectuation (an emergent entrepreneurship theory).

Interrogating the mediation effects of absorptivism in this relationship aligns the study to two categories of research interests in extant literature. These include studies interrogating the mediating effects of absorptive capacity between key concepts in management sciences and literature examining the different variables that play mediating roles in effectuation studies. The first category draws impetus from studies (see Ferreras-Méndez *et al*., 2019; Hernández-Perlines and Xu, 2018; Huang *et al*., 2018) that confirmed absorptive capacity as an appropriate mediating variable in the relationship between different management constructs. The other highlights the scant but increasing research (see Cai *et al*., 2017; Guo, 2019; Pacho and Mushi, 2020) assessing the suitable mediator variables in effectuation studies.

The current study has practical implications for practitioners and researchers working towards the advancement of entrepreneurial activities. On the balance of the well-documented resource predicaments and environmental uncertainties within which entrepreneurial activity takes place, this study contributes to the emergence of knowledge that could enable small businesses to effectively navigate the endemic constraints.

Consistent with the assertion by McKelvie *et al.* (2020) that effectuation has grown beyond its traditional understanding, the current study, considering the spread of respondents, provides evidence of its application by expert and non-expert entrepreneurs. Consequently, this study will invigorate relevant effectuation curriculum development meant to enhance the effectual heuristic abilities of entrepreneurs. To advance entrepreneurial activities, these heuristics must be learned and utilized effectively by entrepreneurs to achieve business outcomes.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Influence of Procurement Compliance in Public Procurement Performance: A Case of Bahi District Council, Tanzania

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ABSTRACT

Purpose: This paper aims to investigate the factors influencing procurement compliance in public procurement performance within the Bahi District Council in Tanzania.

Design/methodology/approach: A descriptive research design was employed to gather data from 55 respondents through a closed-ended questionnaire.

Findings: The study found that internal control systems, users' knowledge, and ethics significantly affect procurement compliance at a significance level of $p < 0.05$.

Practical implications: To enhance compliance with public procurement acts and regulations, policymakers are urged to create an enabling environment for the implementation of internal control systems, users' knowledge, and ethical standards in public entities.

Paper type: Empirical research.

***Key Words*:** Procurement Compliance; Public procurement Performance; Bahi District Council

1. INTRODUCTION

Globally, public procurement has become a concern of public concentration and debate and has been subjected to reforms, restructuring, rules, and regulations. Reforms and regulations aim to address issues like corruption, favoritism, and inefficiency that can arise in procurement processes. By implementing stricter rules and improving oversight mechanisms, governments strive to enhance accountability and promote competition among suppliers, ultimately benefiting taxpayers and service recipients. According to Khan (2018), public bodies in countries in the World have always been big purchasers, dealing with huge budgets. It is reiterated that public procurement represents 13% to 20% of the world's Gross Domestic Product (World Bank, 2020). Although several developing countries have taken steps to reform their public procurement systems, the process is still covered by secrecy, inefficiency, and corruption. Therefore, in all of these conditions, huge amounts of resources are misused (Ivambi, 2016).

Public Procurement regularly constitutes the largest domestic market in developing countries. Depending on how it is controlled, public procurement adds to the economic development of developing countries (Garcia & Furtado, 2014). Certainly, public procurement is the principal means through which governments meet developmental needs such as the provision of physical infrastructure and the supply of essential medicines (Ivarsson, 2014). To overcome regional economic imbalances, and support marginalized communities, many governments use public procurement to support the development of industries (World Bank, 2020). Being improved public procurement matters through public laws and regulations, procurement sections with appropriate professional staff have become an increasingly important sector in economic development as well as, in organizational performance in many Local Government Authorities of Tanzania (Mwandobo, 2013).

Procurement performance has been an area of interest for practitioners, researchers, and those from the academic field. This is mostly due to low levels of performance, high levels of corruption, failing contracts, and variations in contract prices in public sectors resulting from non-adherence to procurement regulations (Kakwezi & Nyeko, 2010). There has been a considerable number of reported improper procurements in government

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

departments. Numerous allegations have been leveled against public entities relating to irregularities in procurement processes and procedures. There is rampant misuse of public funds and even though the Procurement Act of 2011 is there to guide entities in handling public procurement (Shija, 2019).

Relying on procurement performance, there are inefficient measures to ensure that government departments follow the proper procedures in the procurement of goods and services (Mgani, 2014). The misuse of such funds has resulted in high levels of corruption, inefficiency, and defying the procurement general principles of fairness, competitiveness, transparency, equitability, and cost-effectiveness. Public entities have also been confronted with procurement issues such as professionalism, limited career development opportunities for procurement staff, and weak contract management (Ivambi, 2016).

Reports on the levels of compliance with public procurement continue to be unsatisfactory in Tanzanian public procuring entities despite some efforts made by the oversight bodies such as the Public Procurement Regulatory Authority (PPRA) and Controller and Auditor General (CAG). Most procurement audits carried out have revealed non-compliance with procurement regulatory requirements (Matto, M. C. (2017). The analysis of the audit report highlighting poor compliance with the Public Procurement Laws and Regulations is a serious concern. It suggests a deeper understanding of the specific areas where procuring entities are failing to meet regulatory requirements and can help identify systemic problems that need to be addressed. Research on procurement compliance in public procurement performance is a vital endeavor that delves into the intricate dynamics of governmental purchasing processes. This field of study investigates the extent to which adherence to regulations, policies, and ethical standards impacts the overall internal control system, users' knowledge, and ethics of procurement practices within the public sector. Based on the above information, this study set to find out the influence of procurement compliance in public procurement performance with a focus on Bahi District Council.

The compliance of public procurement is essential to eradicating public illnesses of preference in tendering processes which have severally been reported to the general public through auditing reports. Manrique de Lara, Tacoronte, and Ting Ding (2007) found when a situation of normlessness is created; conflict of interest advances into an anomic state that can easily derail public procurement management. On the other hand, in recruitment sometimes the procurement professionals are not valued, and yet the recruitment of the right professionals can add value to the organization (Tukuta & Saruchera, 2015).

Consequently, the regulatory framework of public procurement in Tanzania has passed through several reforms and changes to improve the public procurement system for better legal provisions that could facilitate the achievement of economies. Despite all such reforms and changes, public institutions in Tanzania continue to be reported by the PPRA to have non-compliance with the public procurement laws and acts (PPRA, 2019). Non-compliance with the Law in LGAs has resulted in a loss of government money, poor local service delivery, and an adverse impact on the implementation of some development projects.

Various studies have reported on compliance with the Public Procurement Act and regulations. For instance, it was revealed that the implementation of the Act was hindered by poor information dissemination, inadequate capacity and training, delay in payment of works executed by service providers, and challenges with the law itself (Esan, *et al*., 2015). It is also reported that factors that limited the application of Public Procurement Act procedures include lack of procurement knowledge, lack of inadequacy funds due to high dependency on donors, and improper positioning of Procurement Management Units (Mburu, 2012). Furthermore, it was revealed that the generalization of the Public Procurement Act 2011 in all institutions was the major challenge in the procurement of road construction works (Biramata, 2014).

Nowadays there are so many complaints that, the Public Procurement Process does not comply with the Public Procurement Act during the procurement process in public institutions. Despite the existence of procurement laws and regulations, instances of non-compliance persist, leading to inefficiencies and suboptimal procurement outcomes in internal control systems, users' knowledge, and ethics. This lack of compliance not only undermines the integrity and transparency of the procurement process but also jeopardizes the government's ability to deliver goods and services effectively to its citizens. This disconnect raises concerns about the effectiveness of existing compliance mechanisms and their impact on overall procurement performance within the Tanzanian public sector.

Furthermore, the impact of non-compliance extends beyond the internal control system, users' knowledge, and ethics to encompass broader socio-economic ramifications, such as reduced investor confidence, skewed market competition, and compromised service delivery. Therefore, there is an urgent need to address the root causes of non-compliance in public procurement in Tanzania. By identifying and understanding the factors contributing to non-compliance, stakeholders can devise targeted strategies and interventions to enhance compliance levels, thereby improving overall procurement performance and fostering sustainable development. Consequently, there is a need to thoroughly investigate the factors contributing to this gap in compliance and their implications for procurement performance, with the ultimate goal of proposing actionable recommendations to enhance procurement practices and governance in Tanzania.

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ISSN : 2597-4750 (PRINTED)

A. Literature Review

A study conducted by Hawkins & Muir (2014) in the United States sought to exploration of knowledge-based factors affecting procurement compliance. The study used a regression model by using the data from the survey of 219 US government procurement professionals. It was revealed that the extent of compliance is influenced by buyer experience, personnel turnover, the sufficiency with which service requirements are defined, post-award buyer-supplier commission, and the sufficiency of procurement lead time.

A study conducted by Mwakibinga and Buvick (2013) about coercive means of enforcing compliance in public procurement in Tanzania, sought to investigate the effectiveness of the monitoring and sanction arrangements in enhancing procurement rule compliance in the Tanzania context. The author used data generated from cross cross-sectional survey conducted between December 2006 and May 2007.

A study established that the effectiveness of such enforcement means in the public sector is situational contingent and has to take into account other context-specific factors, which tend to influence the outcome. A study differs from this study hence it relies on public procurement and not public procurement auditing but also the study is based on the coercive means of enforcing compliance while this study will focus on accountability.

Thumbi & Mutiso (2018) conducted a study about the influence of procurement process audits on procurement performance in public health facilities in Kiambu County, Kenya. A study used a descriptive research design to collect data from a targeted population of 117 health facilities by using questionnaires. Data were analyzed by using descriptive analysis whereas qualitative data were analyzed by using themes and contents analysis.

The study findings revealed that the audit of procurement procedures involves both compliance audit and performance audit in most cases. Compliance criteria, against which the process is to be assessed, are based on the legal framework applicable in the particular context of the procurement law. Public procurement procedures are necessary because the public sector cannot always be presumed to behave as a normal customer in the market with a focus on choosing the best quality at the lowest price. Government auditing standards place a strong emphasis on strengthening internal controls and ensuring compliance with laws and regulations.

The study was conducted in Kenya about factors affecting the implementation of the Public Procurement Act in SACCO Societies. The main focus of the study was to assess factors affecting implementation of the public procurement in SACCO societies in Kenya. A stratified random sampling technique was used to select a sample of 20% which makes a sample size of 86 respondents. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS and presented through percentages, means, standard deviations, and frequencies.

The findings revealed that 55% of the respondents believe that, the impact of the regulator on SACCO is high. The findings indicate that, on the issue of the SACCO culture favoring good procurement procedures, 53% of the respondents strongly agree. On recommendation, the study observed that the procurement process should uphold integrity and ensure that there are no malpractices and there is informed decision-making, which requires public bodies to base decisions on accurate information and ensure that requirements are being met.

A study was conducted in Tanzania about local government authorities' compliance with public procurement law (Mnyasenga & Athanace, 2019). The main objective of the study was to examine the law governing public procurement in LGAs and its enforcement mechanism with the view to determining why LGAs fail to comply with the law and, come up with recommendations to improve compliance with the public procurement law in Mainland Tanzania. The Questionnaire, survey, and in-depth interviews were used in the collection of field data while the documentary review was used in the collection of documentary data.

The findings of this study showed that there are several weaknesses in the legal and regulatory framework of public procurement in Mainland Tanzania which mainly contribute to LGAs' non-compliance with the public procurement law. One of the major weaknesses is the complexity of the law, toothless organs, and institutions of enforcing compliance, centralization of the PPRA, and lack of independent oversight authority.

A study conducted in Tanzania by Mrope, Namusonge, & Iravo, in 2017, focused on determining the effect of compliance with the procurement legal and regulatory framework on the performance of the procurement function in public entities in Tanzania. The study adopted the descriptive survey as a research design combining both quantitative and qualitative then the study identified all procuring entities in Tanzania (as defined by the Public Procurement Act) to be the target population. The sampling frame consisted of 298 procuring entities that were covered (audited) in the three years under consideration whereas as sampled population of 298 entities (0 .333 x 298) was calculated to obtain the sample size of 100 entities. The chosen sampling frame of 298 entities was taken from the PPRA Annual Performance Evaluation Report for the 2013/14 FY.

The regression analysis indicated a positive linear relationship between compliance with rules and regulations (legal and regulatory framework) and the performance of the procurement function in public entities. The coefficient for "compliance with rules and regulations" is 0.471 and the t-test value is 2.634 and this coefficient is significant (p-value = 0.009 < 0.05). The implication here is that 47% of the variation in the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

performance of the procurement functions in public entities was explained by the level of compliance with procurement rules and regulations attained by respective entities.

II. METHODS

A. Participant Characteristics

The target population comprises 55 respondents such were, PMU staff, Tender Board Members, Planning Officers, Human Resource Officers, District Finance Department, District Councilors, District Engineers, District Medical Officers, Ward Executive Officers, District Education officers, and Quantity surveyors.

B. Sampling Procedures

Sampling helps to determine the accuracy of the research (Singh & Masuku, 2014), also other scholars define sampling techniques as a way of selecting respondents or participants by deciding who or what to be researched (Cohen & Marrison, 2007). In this case, simple random sampling was used to select respondents; hence every respondent had an equal chance to participate in the study and thus no bias.

1. Sample Size

The sample size was calculated using the population-known formula by Yamane (1967). Then the sample size was 48 respondents from the Bahi District Council. The author held a questionnaire to the PMU staff, Tender Board Members, Planning Officers, Human Resource Officers, District Finance Department, District Councilors, District Engineers, District Medical Officer, Ward Executive Officers, District Education Officer, and Quantity Surveyor.

2. Measures

In identifying the factors that influenced credit risk, the parameters of the model for the study need to be specified. The specification procedure adopted was in line with the procedure used by Kakwezi & Nyeko (2010), Mwandobo (2013), Mgani (2014), and Garcia & Furtado (2014) were followed where the functional forms of the model to estimate the determinants of Procurement Compliance in Public procurement Performance. The structured questionnaire was developed using 5 and 3-point Likert scale items. The items for each construct were extracted from reliable research that meets the reliability and validity requirements. The pilot study was conducted in a few health centers and respondents from the selected area to check the effectiveness of the research tools before the real study.

3. Research Design

Research design is the framework that guides the research process and strategy on how the study will be collected and analyzed (Creswell, 2014). The research design aims to make sure about the accuracy, validity, and reliability of the study. This study is a cross-sectional survey. A non-probability purposive and convenience sampling technique was used to collect data from respondents such as PMU staff, economists, human resources, councilors, engineers, District medical officers, Ward executive officers, district education officers, and Quantity surveyors. This study adopted a descriptive research design. Descriptive research design aims to describe phenomena and their characteristics. Descriptive research is more concerned with what rather than how or why something has happened (Nassaji, 2015).

III. RESULTS AND DISCUSSION

A. Factors Affecting Procurement Compliance in Procurement Performance

Multiple regression method was used to analyze the objective and the study findings were presented as it shown in the following Table 1 below:

Table 1: Model Summary for Procurement Compliance

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*	*Durbin-Watson*
1	*.779a*	*.607*	*.586*	*.559*	*2.121*

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

From Table 1 above**,** it is evident that the adjusted R^2 for the overall model was 58.6%. Therefore, the variables of choice (internal control system, users' knowledge and ethics) have affected the Procurement Compliance by 58.6% and the rest was affected by exogenous factors which are beyond the current study.

Table 2: ANOVA for Procurement Compliance

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	27.073	3	9.024	28.860	.000b
1	Residual	17.511	56	.313		
	Total	44.583	59			

The results have been further shown in Table 2 of ANOVA above where the model as a whole proved to be significant to predict the Procurement Compliance as $F (3,56) = 28.86$, $p<0.000$ as shown in ANOVA Table 11 above. From these observations, the equation of the model will be as shown below:

Y = .144 + 0.042 (Internal Control System) + 0.234 (Users' knowledge) + 0.646 (Ethics).

Table 3: T-test

Model		B	Std. Error	Beta	t	Sig	Tolerance	VIF
1	(Constant)	0.144	.185		0.781	0.002		
	Internal Control System	0.037	.083	0.042	0.442	0.001	0.771	1.297
	Users' Knowledge	0.217	.083	0.234	2.620	0.001	0.881	1.135
	Ethics	0.674	.104	0.646	6.458	0.000	0.701	1.427

The adjusted R^2 for the overall model was 58.6%. Therefore, the variables of choice (Internal Control System, Users' Knowledge, and Ethics) have affected Procurement Compliance by 58.6% and the rest was affected by exogenous factors which are beyond the current study. The conclusion was based on the adjusted R square to Potters's (2021) affirmation that Adjusted R-squared is a modified version of R-squared that has been adjusted for the number of predictors in the model. Thus, the use of R squared is misleading.

The results show that the unit increase of the internal control system resulted in a 0.042 increase in Procurement Compliance, likewise, a unit increase in users' knowledge has individually led to an increase in Procurement Compliance by 0.234 and finally, the unit increase of organizational culture has led to increasing of the Procurement Compliance by 0.646. These results support those of Scoleze *et al.* (2020) that the project governance domain and its tensions affect the project-success holistic view in both efficiency and effectiveness since the elements of internal control and compliance can create tensions that favor one project success perspective to the detriment of the others. They further increase of internal control system by the appropriate use of public procurement procedures.

IV. CONCLUSION

Timeliness, availability of resources, and risk control mechanisms are positive and significantly related to procurement compliance with the Public Procurement Act and its regulations. The government should strengthen control activities by the provision of instructions that will lead to ensuring that procurement compliance in public procurement acts and regulations comply. Also, the government should spend on the quality of reports and organizational culture by providing training related to public procurement officers about procedures of public procurement through acts and regulations to equip and upgrade them with new techniques and knowledge. In the feeling of the gap in this study, however; further study can be done to examine the influence of procurements auditing in ensuring procurement compliance with Public Procurement Act and its regulations of a private institution related to public institutions. Therefore, procurement performance studies will counterpart the issue of procurement audit to a private and public institution to show procurement compliance with the Public Procurement Act.

A. Study Conclusion

In conclusion, this research has shed light on the critical issue of procurement compliance and its impact on public procurement performance in Tanzania. Through a comprehensive analysis of the current state of compliance, underlying factors contributing to non-compliance, and the implications of such non-compliance, several key findings have emerged. Firstly, it is evident that non-compliance with procurement regulations remains a significant challenge in Tanzania, undermining the effectiveness of the internal control system, users' knowledge, and ethics in public procurement processes. This non-compliance not only leads to inefficiencies and corruption but also hampers the government's ability to deliver goods and services efficiently to its citizens, thereby impeding socio-economic development.

Secondly, the research has identified various factors contributing to non-compliance, including internal control systems, users' knowledge, and ethics. Addressing these underlying factors is essential for improving compliance levels and enhancing procurement performance in Tanzania. Thirdly, the impact of non-compliance extends beyond financial implications to encompass broader socio-economic ramifications, such as reduced investor confidence, skewed market competition, and compromised service delivery. Therefore, there is an urgent need for concerted efforts from stakeholders to strengthen compliance mechanisms and promote an internal control system, users' knowledge, and ethics in public procurement processes.

B. Study Implications

The findings of this research have several implications for policy, practice, and further research. Firstly, policymakers and practitioners need to prioritize efforts to address the root causes of non-compliance and strengthen compliance mechanisms through reforms, capacity-building initiatives, and enhanced oversight mechanisms. Secondly, stakeholders must collaborate closely to promote the internal control system, users' knowledge, and ethics in public procurement processes, thereby fostering the internal control system, users' knowledge, and ethics in the procurement system.

Thirdly, the findings underscore the importance of investing in research and knowledge-sharing initiatives to deepen understanding of procurement compliance issues and identify effective strategies for enhancing compliance levels and improving procurement performance. Furthermore, the research highlights the need for continuous monitoring and evaluation of compliance levels and procurement performance to track progress, identify gaps, and inform evidence-based decision-making.

C. Area for Further Studies

While this research has provided valuable insights into procurement compliance issues in Tanzania, there are several avenues for further studies. Firstly, future research could focus on exploring the effectiveness of specific interventions and strategies aimed at improving compliance levels in public procurement processes. Secondly, comparative studies across different sectors and regions within Tanzania could provide a more nuanced understanding of the factors influencing compliance and procurement performance.

Thirdly, longitudinal studies tracking changes in compliance levels and procurement performance over time could help assess the impact of policy reforms and initiatives aimed at strengthening compliance mechanisms. Lastly, research could also delve into the role of technology and innovation in enhancing transparency, efficiency, and accountability in public procurement processes, particularly in the context of emerging trends such as e-procurement and blockchain technology. Overall, further research in these areas is essential for advancing knowledge, informing policy and practice, and ultimately, improving public procurement performance in Tanzania.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Influence of Product Quality on Purchase Decision Through Brand Image: A Case Study On 3second Fashion

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ABSTRACT

Purpose: A deep understanding of the factors influencing purchasing helps companies become more responsive, effective, and successful in marketing their products or services. This study aims to assess the impact of product quality on purchasing decisions involving the brand image factor in 3-second Fashion Surabaya.

Design/methodology/approach: The research method employed a quantitative approach with the participation of 100 respondents. Structural equation model analysis was used as the analytical technique.

Findings: The study results indicate that product quality influences the purchasing decisions for 3-second Fashion products. In other words, the better the product quality, the higher the consumer's decision to make a purchase. The research findings also show that brand image has an impact on purchasing decisions for 3-second Fashion products. In other words, the better the brand image, the higher the consumer's decision to make a purchase. This study also reveals that brand image serves as an intervening variable that mediates the relationship between product quality and purchasing decisions for 3-second Fashion Surabaya products.

Research limitations/implications: This research focuses on the influence of product quality and brand image on purchasing decisions without considering other variables that may play a role in the purchasing process.

Practical implications: Understanding the influence of product quality on purchasing decisions through the brand image in 3second Fashion Surabaya has several practical implications that can aid decision-making at the managerial and marketing levels. Practitioners and business managers can take specific steps to enhance the performance and competitiveness of the company.

Originality/value: This research provides a new and original contribution, particularly regarding the relationship between product quality, brand image, and purchase decisions in the field of fashion retail.

Paper type: Research paper

Keywords: brand image, product quality, purchase decision

I. INTRODUCTION

Understanding the factors that influence purchase decisions is key for businesses to create products and services that meet the needs of their target market and drive growth (Murtiawati & Fataron, 2019). Knowledge of the consumer decision-making process enables companies to design more focused and efficient marketing strategies (Šostar & Ristanović, 2023). By understanding the factors that influence purchase decisions, companies can increase their chances of winning over consumers and achieving their business goals. Several elements play a role in shaping purchase decisions, which encompass factors such as product quality, brand image, and promotional efforts (Brata et al., 2017; Y. Rahmawati & Nilowardono, 2018).

The initial determinant is product quality, defined as the assurance that the products provided meet consumers' expectations and offer anticipated advantages (Razak & Nirwanto, 2016). Consequently, companies strive to uphold the quality of their products, comparing them with those of rival companies. If a product effectively fulfills its functions, it is deemed to possess good quality. In fact, in some studies, some findings show that product quality does not have a significant effect on purchasing decisions. This is contained in the research (Mohd et al., 2013; Shaharudin et al., 2013; Yani & Ngora, 2022) With the inconsistency of the results of this study, further research on the influence of quality on purchasing decisions needs to be done.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

One factor that is thought to mediate the influence of product quality on this purchase decision is brand image (Arifin et al., 2022; Nuraini & Maftukhah, 2015) Brand image, or the perception associated with a company's name, term, symbol, sign, and design, serves to differentiate its products from competitors (Aulia & Briliana, 2017). This image can be cultivated using various media owned by the company and is enduring, delivering a message through visual media, symbols, atmosphere, and events. The brand's image is connected to customer attitudes, manifested in their beliefs and preferences toward a specific brand (Monzoncillo, 2023).

The study was carried out at Fashion 3Second Surabaya, a popular clothing brand widely embraced by the youth. 3Second is recognized for offering products with a trendy and stylish concept, characterized by comfortable materials and subtle colours. The 3Second product line emphasizes diverse fonts, incorporating simple yet unique designs, making it particularly appealing to consumers. Therefore, the author proposes a study that further studies the effect of product quality on purchasing decisions mediated by brand image, which in this case takes a case study in the fashion industry with the brand 3 Second in Surabaya.

A. Literatur Review

1. Product Quality

Product quality as the totality of the form and characteristics of goods or services that show their ability to satisfy consumer needs and desires (Monzoncillo, 2023). Consumer selection is determined by the quality of the products offered. The products offered must be appropriate and well-tested regarding their quality. This is because consumers will prefer and choose products that have better quality when compared to similar products that can only meet their needs and desires (Zhao et al., 2021). Product quality is the ability or characteristic possessed by a product, either goods or services, to meet and satisfy consumer needs (Purwanto & Hapsari, 2021). In addition, product quality is also a public perception where the products offered by a company have advantages over competitors' products. So that the company will try to maintain the quality of the products it offers and compare with the products offered by competing companies (Rita et al., 2019).

2. Brand Image

Brand image or brand image is the name, term, symbol, sign, and design used by the company to compete with competing products (Tsabitah & Anggraeni, 2021). Brand image also has the meaning of trust, where the existence of brand image shows that consumers assume that certain brands physically have differences from competing brands (Oetama, 2022). According to Yudhanto (2018), stating that brand image is a set of assumptions that exist in the minds of customers or consumers towards a brand arising from information and experience. The image of a brand relates to customer attitudes in the form of beliefs and preferences towards a particular brand.

3. Purchase Decision

Purchase Decision is a selection between two or more options that can be purchased by consumers, where consumers will determine what to buy based on the significance value of the purchase (Limpo et al., 2018). Purchasing decisions are problem-solving actions carried out by individuals in choosing alternative behaviour from two or more options and are considered the most appropriate or appropriate actions through the decision-making stages (Roy & Datta, 2022). In addition, according to Roy & Datta (2022), purchasing decisions are problem-solving processes involved in trying to meet consumer wants or needs.

4. Conceptual Framework

Based on the background of the problem, problem formulation, theories described above, and previous research that has been described, the framework of thinking in this study is as follows:

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

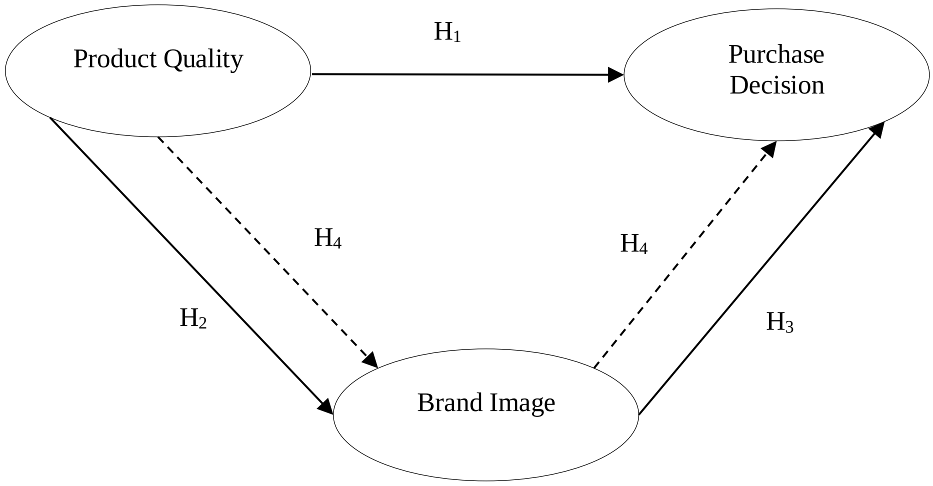

Figure 1 Conceptual framework

5. Hypothesis
The research hypotheses proposed in this study are as follows:

H1: Product quality has a significant effect on Purchasing Decisions

H2: Product Quality has a significant effect on Brand Image

H3: Brand Image has a Significant Influence on Purchasing Decisions

H4: Product Quality has a significant effect on Purchasing Decisions with Brand Image as a mediating variable

II. METHODS

The research method in this study is quantitative research. Quantitative research is a systematic scientific research method for studying social phenomena using numerical data. This data is collected through various instruments such as surveys, questionnaires, tests, and experiments. The purpose of quantitative research among others is to test hypotheses where researchers formulate hypotheses about relationships between variables and then test them with the collected data. In addition, quantitative research is used to explain the relationship between variables: Researchers want to understand how the variables studied are related to each other (Sheard, 2018).

The object in this study is fashion 3Second consumers at the Royal Plaza Surabaya shopping center. The population used is consumers, namely those who have purchased fashion brand products 3 Second Royal Plasa Surabaya. The research sample is the portion of the population selected to represent the entire population in the study. A good sample must be representative, that is, it has the same characteristics as the population studied (Martínez-Mesa et al., 2016). The number of this population is not known with certainty, therefore the determination of the number of samples in this study uses the Lemeshow formula approach (Wan Ahmad et al., 2013).

The sampling technique used in this study was incidental sampling. According to Setia (2016), incidental sampling is a sampling method that is carried out by chance. Therefore, in this study, samples were taken from consumers who coincidentally made purchases at Fashion 3Second Royal Plaza Surabaya. The study utilized a quantitative methodology, involving the engagement of 100 participants. The analysis was conducted using the structural equation model as the chosen analytical method (Urbach & Ahlemann, 2010).

Product quality in this study is the ability of a product to perform its functions which include durability, reliability (Khoironi et al., 2018). Brand image is a consumer's perception or impression of a particular brand (R. Rahmawati et al., 2023). Brand Image in this study has three indicators, namely corporate image, user image and product image. The purchase decision in this study is the stage in the decision-making process where consumers actually buy. Purchasing decision is a decision-making process carried out by individuals or groups to choose a product or service to be purchased (Ramli et al., 2021). Purchasing decision variables in this study have four indicators consisting of need recognition, information search, alterative evaluation and purchase decision.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The analysis technique used for the study titled "The Influence of Product Quality on Purchase Decision Through Brand Image: A Case Study On 3second Fashion" involves the application of Smart PLS (Partial Least Squares) modelling.

Smart PLS is a structural equation modelling (SEM) technique that is particularly suitable for exploratory research and prediction-oriented studies. It allows researchers to analyse complex relationships among latent variables and observed variables, making it well-suited for understanding the causal relationships proposed in this study. To analyse the influence of product quality on purchase decisions through brand image, the following steps are typically followed using Smart PLS (Garson, 2018):

1. Model Specification
   Define the research model by specifying the relationships between latent variables (product quality, brand image, purchase decision) based on the proposed hypotheses (H1, H2, H3, H4).
2. Measurement Model Assessment:
   a. Assess the measurement model to ensure the reliability and validity of the measurement instruments (indicators) used to represent each latent variable.
   b. This involves evaluating indicator loadings, convergent validity, discriminant validity, and composite reliability.
3. Structural Model Assessment:
   a. Evaluate the structural model to examine the relationships between latent variables.
   b. Test the significance and strength of the hypothesized paths (direct effects) between product quality and purchase decision, product quality and brand image, brand image and purchase decision, as well as the indirect effect of product quality on purchase decision through brand image (mediating effect).
4. Model Interpretation and Conclusion:
   a. Interpret the results of the analysis, including the significance of the relationships between variables and the strength of the effects.
   b. Draw conclusions based on the findings, addressing the research hypotheses and providing insights into the relationships among product quality, brand image, and purchase decision.

III. RESULTS AND DISCUSSION

A. Validity and Reliability of Research Variable

There are several ways to check if the information gathered is reliable. One important factor is looking at the outer loading values. If the value is higher than 0.7, it means the information is trustworthy. Another thing to consider is the Composite Reliability rating, which should be above 0.6 to be considered reliable. After processing the data using SmartPLS 3, we can draw the following conclusions:

Table 1. Validity and Reliability of Research Variables

Indicator Variable		*Loading Factor*	*Validity*	*CR*	*Reliable*
Product Quality	*X1.1*	*0,988*	*Valid*	*0,881*	*Reliable*
	X2.2	*0,985*	*Valid*		
Brand Image	*X2.1*	*0,824*	*Valid*	*0,986*	*Reliable*
	X2.2	*0,818*	*Valid*		
	X2.3	*0,888*	*Valid*		
Purchase Decision	*Y1*	*0,63*	*Valid*	*0,855*	*Reliable*
	Y2	*0,803*	*Valid*		

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Y3	0,861	Valid
Y4	0,782	Valid

The provided table offers insights into the validity and reliability of various research variables, as determined through the SmartPLS 3 analysis. Validity, which pertains to the accuracy and appropriateness of measurements, is assessed through loading factors, while reliability, indicating the consistency and stability of measurements, is evaluated via Composite Reliability (CR) ratings.

Starting with the assessment of Product Quality, both indicators X1.1 and X2.2 exhibit remarkably high loading factors of 0.988 and 0.985 respectively, suggesting a robust relationship with the construct of product quality. This implies that the information gathered regarding product quality is likely to be trustworthy. Additionally, the Composite Reliability (CR) for X1.1 is reported as 0.881, surpassing the threshold of 0.6, thus indicating reliability. However, CR for X2.2 is not provided, which limits a comprehensive evaluation of its reliability.

Moving on to Brand Image, all three indicators (X2.1, X2.2, X2.3) demonstrate substantial loading factors, with values ranging from 0.818 to 0.888. These high loading factors suggest a strong relationship between the indicators and the construct of brand image, reinforcing the validity of the gathered information. Furthermore, the Composite Reliability (CR) values for all brand image indicators exceed the threshold of 0.6, indicating a high level of reliability in measuring brand image.

Concerning Purchase Decision, the indicators Y1, Y2, Y3, and Y4 exhibit loading factors ranging from 0.63 to 0.861, indicating moderate to strong relationships with the construct of purchase decision. While these loading factors suggest acceptable validity, the absence of Composite Reliability (CR) values for Y2, Y3, and Y4 limits the comprehensive assessment of reliability within this construct. However, the reported CR value for Y1, which is 0.855, meets the reliability threshold.

In conclusion, the analysis of the validity and reliability of research variables reveals generally strong findings. The measurements for product quality, brand image, and purchase decision demonstrate validity based on their loading factors, with indications of reliability for certain indicators based on the provided Composite Reliability (CR) values.

B. Hypothesis Testing

The outcomes of each hypothesis test are presented in the table. SmartPLS 3 was used to conduct the experiments, running an analytical test path to examine how an exogenous variable influences an endogenous variable. To assess significance in this test, a significance threshold of 0.05 is applied. Further details can be found in Table 2 below.

Table 2. Hypothesis Testing

Hypothesis	*Influence*	*Coefficient Original*	*Test t*	*P Value*	*Information*
H1	*Product Quality → Purchase Decision*	*0,767*	*13,830*	*0,000*	*Significant*
H2	*Perceived Quality → Brand Image*	*0,363*	*3,788*	*0,000*	*Significant*
H3	*Brand Image → Purchase Decision*	*0,168*	*2,975*	*0,003*	*Significant*
H4	*Product Quality → Brand Image → Purchase Decision*	*0,278*	*3,840*	*0,000*	*Significant*

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ISSN : 2597-4750 (PRINTED)

The table presents the outcomes of hypothesis testing conducted using SmartPLS 3 to analyze the influence of exogenous variables on endogenous variables. Each hypothesis is tested for significance using a significance threshold of 0.05. Starting with Hypothesis 1 (H1), which examines the influence of Product Quality on Purchase Decision, the coefficient value is reported as 0.767. The test statistic (Test t) is calculated as 13.830 with a corresponding p-value of 0.000. This indicates that the relationship between Product Quality and Purchase Decision is statistically significant, as the p-value is less than the significance threshold of 0.05. Therefore, Hypothesis 1 is supported.

In real-world scenarios, this suggests that when consumers perceive a product to be of high quality, they are more likely to make a purchase decision in favor of that product. This aligns with common consumer behavior, where individuals tend to gravitate towards products that are perceived to be reliable, durable, and of superior quality. For businesses, understanding and maintaining high product quality standards can thus directly impact consumer purchasing behavior, leading to increased sales and market competitiveness. Therefore, the robust statistical significance of Hypothesis 1 underscores the practical importance of prioritizing and enhancing product quality as a key driver of consumer purchasing decisions.

Moving on to Hypothesis 2 (H2), which investigates the influence of Perceived Quality on Brand Image, the coefficient value is reported as 0.363. The test statistic (Test t) is calculated as 3.788 with a p-value of 0.000, indicating statistical significance. This suggests that Perceived Quality has a significant impact on Brand Image, thereby supporting Hypothesis 2. In practical terms, this implies that consumers' perceptions of a product's quality directly influence their perception of the brand associated with that product. In real-world scenarios, when consumers perceive a product to be of high quality, they are more likely to develop positive associations with the brand, considering it trustworthy, reputable, and desirable. Conversely, poor perceived quality can tarnish the brand's image and erode consumer trust and loyalty. Therefore, businesses operating in competitive markets must prioritize maintaining and enhancing perceived product quality to bolster their brand image. The significant support for Hypothesis 2 underscores the crucial role of perceived quality in shaping consumer perceptions of brands and highlights the importance of strategic branding efforts aligned with product quality standards to maintain a positive brand image in the marketplace.

Next, Hypothesis 3 (H3) explores the influence of Brand Image on Purchase Decision, with a coefficient value of 0.168. The test statistic (Test t) is calculated as 2.975 with a p-value of 0.003. Since the p-value is less than 0.05, the relationship between Brand Image and Purchase Decision is considered statistically significant, supporting Hypothesis 3. In practical terms, this suggests that the perception consumers have of a brand directly influences their purchasing decisions. In real-world scenarios, a strong and positive brand image can instill trust, loyalty, and positive associations among consumers, thereby influencing their decision to purchase products or services offered by that brand. Conversely, a negative or weak brand image may deter consumers from engaging with a brand's offerings, leading to decreased sales and market share. Therefore, businesses must invest in building and maintaining a favorable brand image through consistent messaging, customer experiences, and brand identity. The statistically significant support for Hypothesis 3 underscores the pivotal role of brand image in driving consumer purchase decisions and underscores the importance of strategic brand management in today's competitive marketplace.

Lastly, Hypothesis 4 (H4) examines the combined influence of Product Quality and Brand Image on Purchase Decision. The coefficient value is reported as 0.278, with a test statistic (Test t) of 3.840 and a p-value of 0.000. This indicates that the combined influence of Product Quality and Brand Image on Purchase Decision is statistically significant, thereby supporting Hypothesis 4. In practical terms, this implies that both product quality and brand image play significant roles in influencing consumers' purchasing decisions when considered together. In real-world scenarios, consumers often evaluate both the quality of a product and the reputation of the brand before making a purchase. A positive perception of both factors can strengthen consumers' confidence in their decision to buy a product, leading to increased sales and brand loyalty. Conversely, a discrepancy between perceived product quality and brand image can lead to skepticism and hesitation among consumers, potentially resulting in lost sales opportunities for businesses. Therefore, it is essential for companies to consistently deliver high-quality products while also maintaining a positive brand image through effective branding strategies and marketing efforts. The strong statistical support for Hypothesis 4 underscores the intertwined relationship between product quality, brand image, and purchase decisions in influencing consumer behavior and highlights the importance of holistic approaches in driving business success in competitive markets.

The outcomes of hypothesis testing demonstrate robust support for all hypotheses, with each relationship between the exogenous and endogenous variables proving to be statistically significant. These findings offer valuable insights into the intricate interplay between the variables under investigation, contributing to a more profound understanding of the underlying dynamics within the research context.

In practical terms, these results hold significant implications for businesses and researchers alike. By confirming the statistical significance of the relationships between variables such as product quality, perceived quality, brand image, and purchase decisions, organizations can make informed strategic decisions to enhance

ISSN : 2597-4785 (ONLINE)
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their market positioning and competitiveness. For instance, understanding the influential role of product quality in driving purchase decisions underscores the importance of maintaining high-quality standards to meet consumer expectations and foster brand loyalty. Similarly, recognizing the impact of brand image on consumer behaviour highlights the need for businesses to invest in effective branding strategies to cultivate positive perceptions and differentiate themselves in the marketplace.

Moreover, these findings provide researchers with valuable insights into consumer behaviour and decision-making processes, paving the way for further exploration and refinement of theoretical frameworks in fields such as marketing, psychology, and consumer studies. By deepening our understanding of the relationships between key variables, researchers can develop more nuanced models and theories that accurately reflect the complexities of real-world dynamics.

In essence, the statistically significant relationships uncovered in this study offer practical guidance for businesses seeking to optimize their marketing strategies and enhance their competitive advantage in today's dynamic market landscape. Furthermore, they contribute to the advancement of knowledge in academic circles, driving ongoing research and innovation in the fields of consumer behaviour and strategic management.

Based on the findings of the SmartPLS analysis, it can be concluded that the product quality variable has a positive and statistically significant impact on purchase decisions. This is in line with research conducted by Arifin et al. (2022) who researched product quality influences on purchasing decisions in a study of 150 Zara Women consumer respondents shopping centers in Tunjungan Plaza, Galaxy Mall, and Pakuwon Mall in Surabaya, where it was found that product quality had a positive and significant effect on purchasing decisions. In addition, the results of this study prove that durability and reliability indicators have an important role in consumers' decisions to buy 3Second fashion products.

Following the conclusion of the hypothesis test in this study, it can be concluded that product quality has an impact on brand image. This is by research conducted by Diahtaradipa & Sri (2021), which researched 150 consumers of H&M fashion products in Denpasar, where it was found that product quality had a positive and significant effect on brand image.

The results of this study also show that brand image with its indicators of corporate image, user image, and product image proved to be influential on purchasing decisions. This also supports research conducted by Kusuma et al. (2022) who have researched the influence of brand image on consumer purchasing decisions research was conducted on 100 consumers of Uniqlo fashion products at a mallproduk fashion in Semarang, where the results showed the influence of brand image on purchasing decisions.

And in the next hypothesis regarding the hypothesis that product quality affects purchasing decisions through brand image in this study has a positive and significant influence, therefore this study provides alternative solutions to the existence of gap in several previous studies where product quality does not have a significant effect on purchase decisions. The mediating role of brand image on the influence of product quality on purchase decisions also supports research conducted by Akbari et al. (2024) who researched the role of brand image in mediating the influence of social media marketing and product quality on purchase decision Uniqlo in Indonesia. In addition, it also supports research conducted by Ketut (2018) in their research on the role of brand image mediating the effect of product quality on repurchase intention.

IV. CONCLUSION

These results indicate that all proposed hypotheses are by the influence of perceived quality on purchase decision through brand image for consumers 3 second fashion product n Surabaya proven to be accepted. So that it can be stated that (1) product quality has a positive and significant effect on purchase decision, (2) product quality has a positive and significant impact on brand image, (3) brand image has a positive and significant effect on purchase decision, (4) product quality has a positive and significant effect on purchase decision through brand image.

In this study, we thoroughly explored the relationship between product quality and purchasing decisions, taking into account the role of brand image as a mediating variable. The results showed that product quality has a significant impact on brand image perception, which in turn influences consumer purchasing decisions. Our findings confirm the important role of brand image as a significant intermediary between product quality and purchasing decisions. This confirms that brand image becomes a critical factor in shaping consumers' perception of products and, ultimately, influencing their purchasing decisions. Although this study provides significant insights, there are still opportunities for further research. In-depth research can be directed at the specific factors that shape a brand's image, as well as their impact on different types of purchasing decisions, such as impulse buying decisions or repeat buying decisions. It is important to remember that contextual factors and market variability can influence the dynamics between product quality, brand image, and purchasing decisions. Therefore,

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

further research that considers specific industrial or geographical contexts can add to an in-depth understanding of this complexity. This research opens a window to further understanding of the complex relationship between product quality, brand image, and purchasing decisions. Our conclusions provide a foundation for advanced research and provide valuable guidance for practitioners to optimize their marketing strategies.

Recommendations for Future Research:

1. Investigation into Specific Brand Image Factors: Future research could delve deeper into the specific factors that shape a brand's image within the context of 3second Fashion. Exploring elements such as brand reputation, brand personality, and brand associations can provide a more nuanced understanding of how brand image influences consumer behaviour.
2. Exploration of Different Types of Purchasing Decisions: While this study focuses on the influence of product quality and brand image on overall purchase decisions, future research could examine their impact on specific types of purchasing decisions. For example, studying the effects of product quality and brand image on impulse buying decisions or repeat purchasing decisions can provide valuable insights into consumer behaviour.
3. Consideration of Contextual Factors and Market Variability: It's important to recognize that contextual factors and market variability can influence the dynamics between product quality, brand image, and purchasing decisions. Future research should take into account specific industrial or geographical contexts to gain a more comprehensive understanding of these relationships.
4. Longitudinal Studies: Conducting longitudinal studies can help capture changes in consumer perceptions of product quality, brand image, and purchasing decisions over time. By tracking these variables longitudinally, researchers can identify trends, patterns, and shifts in consumer behavior, providing valuable insights for businesses.
5. Qualitative Research Methods: Complementing quantitative analyses with qualitative research methods such as interviews or focus groups can provide deeper insights into consumer perceptions and motivations. Qualitative approaches can help uncover nuanced aspects of product quality, brand image, and purchasing decisions that may not be captured through quantitative measures alone.

By addressing these recommendations, future research can build upon the findings of this study and further advance our understanding of the complex relationship between product quality, brand image, and purchasing decisions in the context of 3second Fashion. Additionally, these insights can provide valuable guidance for practitioners in optimizing their marketing strategies to effectively target and engage consumers.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Influence of Job Stress, Work Environment, and Compensation on Turnover Intention at PT. Cahaya Bintang Plastindo Lamongan

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ABSTRACT

Purpose: This research aims to analyze the influence of work stress, work environment, and compensation on turnover intention at PT. Cahaya Bintang Plastindo Lamongan.

Design/methodology/approach: This type of research uses a quantitative approach and uses primary data. The population in the study were 48 employees of PT. Plastindo Lamongan Starlight. The sampling technique in this research uses saturated samples, namely a sampling technique that uses all members of the population as samples. Data collection through questionnaires. The analysis method used is the Statistical Product and Service Solution (SPSS) Version 21 method.

Findings: The results of this research show that: (1) Job stress partially has a positive effect on turnover intention ($t_{count} > t_{table}$) so, (2.372 > 1.678) with a significance of 0.022 < 0.05. (2) The work environment partially hurts turnover intention ($t_{count} > t_{table}$) so, (-2.369 > 1.678) with a significance of 0.022 < 0.05. (3) Partial compensation does not affect employee performance ($t_{count} < t_{table}$) so, (-1.186 < 1.678) with a significance of 0.242 < 0.05. (4) Work stress, work environment and compensation together (simultaneously) influence turnover intention ($F_{count} > F_{table}$) so, (5.676 > 4.04) with a significance of 0.002 < 0.05.

Research limitations/implications: The limitations in this research are the basis for recommendations for future researchers to further develop variables that are influenced by turnover intention other than work stress, work environment, and compensation, because there are still many factors that are not available in this research, apart from that this research was also conducted at one company and The sample obtained was only 48 employees so the results in this study did not cover a wide range.

Practical implications: Based on the research results of the three variables, namely work stress, work environment, and compensation, both directly and indirectly, it turns out that they simultaneously influence turnover intention. Based on the research results, work stress has a significantly greater influence, thus the company is expected to be able to maintain conditions. work that can trigger stress for employees. To manage work stress among employees, the Company can provide a safe and comfortable work environment

Originality/value: The research conducted by the researcher stated that this research was the result of his work and was the first time at PT. Cahaya Bintang Plastindo Lamongan with the title of the research studied, except for quotations from several summaries, all of which the researcher has explained the source.

Paper type: Research paper

Keywords: Job stress, work environment, compensation, turnover intention

I. INTRODUCTION

The human resources contained in an organization or industry can be implemented according to needs so that individual or industry goals can be achieved. The achievement of organizational success is greatly influenced by employee performance in carrying out the work.

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Table 3 Employee Turnover Data at PT. Cahaya Bintang Plastindo Lamongan Year 2023

Month	*Number of existing employees*	*Employees come in*	*Employee leaves*	*Total number of employees*
January	*61*	*4*	*3*	*62*
February	*62*	*29*	*8*	*83*
March	*83*	*2*	*5*	*80*
April	*80*	*-*	*9*	*71*
Mey	*71*	*57*	*18*	*110*
June	*110*	*27*	*59*	*78*
July	*78*	*14*	*52*	*48*
Number of incoming and outgoing employees		*133*	*154*	

Source: PT. Cahaya Bintang Plastindo Lamongan

Based on the data above, many employees decide to leave the company because they are too stressed at work, the burden of information is too heavy, or because they keep up with current developments. The high level of work stress experienced by employees is one of the factors that influences employee turnover intention. Each employee has a different level of work stress, as do employees at PT. Cahaya Bintang Plastindo in Lamongan.

One of the factors that PT. Cahaya Bintang Plastindo Lamongan so that the performance of its employees is good is the work stress experienced by its employees. Robbins and Judge, (2018:429) state that work stress is a dynamic condition where an individual is faced with opportunities, demands, or resources that are related to what the individual expects and whose results are seen as uncertain and important. There is often work stress experienced by employees at PT. Cahaya Bintang Plastindo Lamongan. Employees are required to be competitive and professional in carrying out their duties, which creates a lot of pressure which results in stress in carrying out their work according to Sari, (2019).

There are several factors within a company, in how the company can manage the work environment within the company well and conductively when employees work to reduce the level of stress experienced by employees. In research conducted by Agustama and Giantari, (2020) work stress is an adjustment, which is mediated by individuals or psychological processes which are consequences originating from actions outside the environment. Work stress can be seen in the employee's performance, the role they obtain, the employee's interpersonal skills, and the career development they have achieved in the company. Stress in employees is usually caused by superiors who provide unclear and unfair instructions in distributing employee performance. If work stress on employees is not resolved immediately, it will hurt the company.

The work environment is also one of the determining factors for a company's success. An employee's work environment includes everything around the employee, both physical and non-physical. The work environment is the physical conditions around which employees work, such as the size of the workspace, room light, wall color, cleanliness of the workplace, and so on. Meanwhile, the non-physical work environment is an environment created by relationships between fellow employees, employees supervisors, and other interactions. According to Nur's research, (2022) work stress, work environment, and compensation directly influence turnover intention.

Causes that can influence turnover intention are low wages or compensation and increased workload. The amount of compensation measures the value of the work itself, so compensation is very important for the work itself.

According to Bangun in Muslimin and Iristian, (2015:254) compensation is an important factor and is a concern for many organizations in retaining and attracting quality human resources. Compensation has the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

principle of being balanced, fair, and equitable to create work harmonization that is conducive and productive for the company. Compensation that is by similar industry standards or by the desires and background of employees will make employees satisfied with their income and will not think about leaving the organization. Deviations in compensation will increase labor movement or turnover intention.

Turnover intention is the desire or intention to move employees from one workplace to another. The desire to move experienced by these employees was driven by the employee's desire to look for other alternative jobs but in the same field at another company, which the other company felt was more capable of providing job satisfaction or providing what the employees hoped and goals were compared to the previous company (Hasbie et al., 2016).

II. METHODS

This research is associative research, associative research is research that aims to determine the influence or relationship between two or more variables. This research analyses three independent variables, namely: work stress (X1), work environment (X2), compensation (X3), and one dependent variable (dependent) turnover intention (Y). According to Robbin and Judge, (2016:429), work stress is a dynamic condition where an individual is faced with opportunities, demands, or resources related to what the individual expects, Robbin and Judge, (2016) state that work stress has several indicators, namely: physiological, psychological and behavioral. Sedarmayanti, (2017:26) also states that the work environment is a place for several groups where there are several supporting facilities to achieve company goals by the Company's vision and mission and also states that work environment indicators are divided into 2, namely the physical work environment and non-physical work environment where the physical work environment includes lighting, air circulation, security, air temperature in the workplace, noise, mechanical vibrations and decoration or layout while the non-physical work environment is the work relationship between superiors and subordinates, the relationship between colleagues.

According to Simamora, (2015:442), compensation is financial rewards, services, and benefits that employees receive as part of employment relations, Simamora, (2017:445) states that several things can be used as indicators, namely: wages and salaries, incentives, and benefits and facilities received by employees. Meanwhile, Mobley et, al., (2015) stated that the tendency or intention of employees to quit their jobs voluntarily or move from one workplace to another according to their own choice, there are several indicators according to Mobley et, al., Halimah, (2016) that can trigger quitting a company, namely: thinking about leaving, looking for alternative jobs and the intention to leave a company or organization.

The population in this study were employees of PT. Cahaya Bintang Plastindo Lamongan, totaling 48 employees, used a saturated sample and the type of data used in this research was primary data researchers used Google Forms as a data collection medium which was distributed or distributed to respondents online.

The data collection technique in this research is an instrument test which consists of a validity test and a reliability test. In this research, the validity test is used to test the influence variables of Job Stress (X1), Work Environment (X2), Compensation (X3), and Turnover Intention (Y) by comparing the calculated r-value with the table r value. If the calculated r-value > is from the table r value and is positive then the validity test is declared valid, while the reliability test in this research is according to Guildford, (1956). With several reliability criteria, namely: <0.20 is included in very low reliability, 0.20-0.40 is included in low reliability, 0.41-0.70 is included in medium reliability, 0.71-0.90 is included in high reliability, and 0.91-1.0 includes very high reliability.

The classic assumption test consists of a normality test, the normality test in this study uses a normal P-P plot of the regression table concerning the questionnaire items that are detected as normal in the table, the multicollinearity test is carried out to detect whether or not there are symptoms of multicollinearity in this study by paying attention to the numbers VIF and tolerance, while the heteroscedasticity test in this research was carried out by paying attention to the presence or absence of certain patterns on the graph plot.

Multiple linear regression is to predict the relationship between one dependent variable and three independent variables, the coefficient of determination is used to measure the extent of the model's ability to explain the dependent variables, hypothesis testing consisting of the t-test (Partial) test is carried out with the criteria of acceptance and rejection separately. partial while the F test (simultaneous) is a test carried out with acceptance and rejection criteria together (simultaneous).

III. RESULTS AND DISCUSSION

The data instrument test consists of a validity test and a reliability test, below is a table of validity tests and reliability tests

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Table 4 Validity Test Results

No	Variable	R Count	R table	Information
1	Work stress (X1)			
	1	0,798	0,2845	VALID
	2	0,759	0,2845	VALID
	3	0,613	0,2845	VALID
2	Work environment (X2)			
	1	0,798	0,2845	VALID
	2	0,709	0,2845	VALID
	3	0,721	0,2845	VALID
	4	0,733	0,2845	VALID
	5	0,710	0,2845	VALID
	6	0,690	0,2845	VALID
	7	0,685	0,2845	VALID
	8	0,549	0,2845	VALID
	9	0,669	0,2845	VALID
3	Compensation (X3)			
	1	0,728	0,2845	VALID
	2	0,712	0,2845	VALID
	3	0,794	0,2845	VALID
	4	0,785	0,2845	VALID
	5	0,872	0,2845	VALID
	6	0,361	0,2845	VALID

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ISSN : 2597-4750 (PRINTED)

No	*Variable*	*R Count*	*R table*	*Information*
	7	*0,637*	*0,2845*	*VALID*
	8	*0,623*	*0,2845*	*VALID*
4	*Turnover Intention (Y)*			
	1	*0,883*	*0,2845*	*VALID*
	2	*0,914*	*0,2845*	*VALID*
	3	*0,524*	*0,2845*	*VALID*

The correlation of each statement item has a calculated r-value greater than the r-table, so based on the validity test it shows that all statement items on the variables of work stress, work environment, compensation, and turnover intention are declared valid and can be used as research instruments.

Table 5 Reliability Test Results

Variable	*Cronbach Alpha*	*Information*
Work stress (X1)	*0,553*	*moderate reliability*
Work environment (X2)	*0,863*	*high reliability*
Compensation (X3)	*0,852*	*high reliability*
Turnover Intention (Y)	*0,691*	*moderate reliability*

Based on the table above, it is known that the results of reliability testing of all indicators of the independent variable and dependent variable show reliability, so it is stated that all indicators are proven to be moderately reliable and highly reliable.

The classical assumption test consists of the normality test, multicollinearity test, and heteroscedasticity test. The following is a table of normality tests, multicollinearity tests, and heteroscedasticity tests.

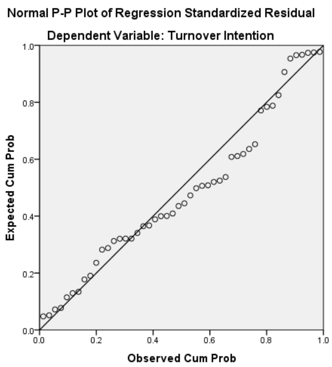

Figure 2 Normality Test Results

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ISSN : 2597-4750 (PRINTED)

Based on the table above, the regression model used in this study is normally distributed, because the questionnaire items are around the normality threshold.

Table 6 Multicollinearity Test Results

Model	*Collinearity Statistics*	
	Tolerance	*VIF*
(Constant)		
Work Stress	*.961*	*1.041*
Work Environment	*.685*	*1.461*
Compensation	*.706*	*1.417*

Based on the table above, the multicollinearity test from the data output results shows that the regression model used does not show symptoms of multicollinearity.

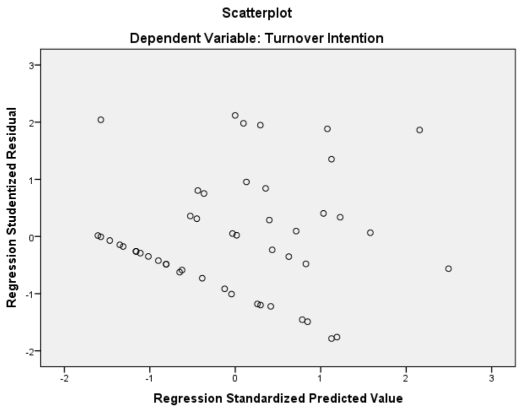

Figure 3 Heteroscedasticity Test Results

Based on the data table above, in this table the data is spread out and does not create a particular pattern, this means that in this study there was no heteroscedasticity found.

Multiple linear regression test analysis was carried out to determine the influence of work stress, work environment, and compensation on turnover intention PT. Cahaya Bintang Plastindo Lamongan.

Table 7 Multiple Linear Regression Test Results

Model	*Unstandardized Coefficients*		*Standardized Coefficients*
	B	*Std. Error*	*Beta*
(Constant)	*8.468*	*1.586*	
Work Stress	*.234*	*.099*	*.310*

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Work Environment	*-.105*	*.044*	*-.367*
Compensation	*-.060*	*.050*	*-.181*

Regression analysis is used to determine the extent of the relationship between the independent variable and the dependent variable. Based on the SPSS output results, the value a = 8.468 can be obtained, while the value b_1= 0.234, the value b_2 = -0.105, and b_3 = -0.060. In this way, a multiple linear regression equation can be formed, namely Y = 8.468 + 0.234 X1 – 0.105 X2 – 0.060 X3 + e. This explains that work stress has a positive influence on turnover intention, the work environment has a negative influence on turnover intention and compensation does not influence turnover intention.

The coefficient of determination value is 0.279. This means that the variables work stress (X1), work environment (X2), and compensation (X3) have an influence of 27.9% on turnover intention. The remainder is influenced by other variables not tested in this study, amounting to 72.1%.

Hypothesis testing consists of the t-test (partial test) and the F test (simultaneous test), the following is a table of the t-test (partial) and F test (simultaneous).

Table 8 T-test results (partial)

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
	B	*Std. Error*	*Beta*		
(Constant)	*8.468*	*1.586*		*5.341*	*.000*
Work Stress	*.234*	*.099*	*.310*	*2.372*	*.022*
Work Environment	*-.105*	*.044*	*-.367*	*-2.369*	*.022*
Compensation	*-.060*	*.050*	*-.181*	*-1.186*	*.242*

Based on the results of the t-test using SPSS version 21, it is known that the work stress variable (X1) has a positive effect on turnover intention. This can be proven by the t-count value of 2.372 which is greater than the t-table of 1.678. The work environment (X2) hurts turnover intention. This can be proven by the t-count value of -2.369 which is greater than the t-table of 1.678. Meanwhile, compensation (X3) does not affect turnover intention. This can be proven by the t-count value of -1.186, which is less than the t-table of 1.678. So, it can be concluded that H1: Accepted, H2: Accepted and H3: Rejected.

Table 9 F Test Results (simultaneous)

Model	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Regression	*70.536*	*3*	*23.512*	*5.676*	*$.002^b$*
Residual	*182.277*	*44*	*4.143*		
Total	*252.813*	*47*			

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ISSN : 2597-4750 (PRINTED)

Based on the table above, it can be seen that the significant value is 0.002, less than 0.05, so the variables of work stress, work environment, and compensation have a joint (simultaneous) effect on turnover intention at PT. Plastindo Lamongan Starlight.

The t-test results presented in Table 6 provide valuable insights into the factors influencing turnover intention within an organizational context. Firstly, the analysis reveals a significant positive relationship between work stress (X1) and turnover intention. The coefficient for work stress indicates that as stress levels in the workplace increase, so does the likelihood of employees considering leaving their jobs. This finding resonates with the common understanding that high levels of stress can significantly impact an individual's job satisfaction and overall well-being, ultimately leading to a higher turnover rate. Moreover, the statistical significance of the t-value underscores the robustness of this relationship, suggesting that organizations need to address and manage workplace stress effectively to mitigate turnover intentions among employees.

Secondly, the study highlights the adverse effect of the work environment (X2) on turnover intention. The negative coefficient associated with the work environment implies that unfavourable working conditions, such as lack of support, conflicts, or inadequate resources, are associated with higher turnover intentions among employees. The statistical significance of the t-value further solidifies this relationship, emphasizing the critical role of a positive work environment in fostering employee retention. Organizations must prioritize creating a conducive and supportive work environment that promotes employee engagement, satisfaction, and overall well-being to reduce turnover intention and enhance organizational performance.

On the other hand, the analysis indicates that compensation (X3) does not significantly influence turnover intention. While compensation remains a fundamental aspect of the employment relationship, the findings suggest that it alone may not be sufficient to deter turnover intentions among employees. This implies that while competitive compensation packages are essential, organizations must also focus on addressing other factors such as career development opportunities, work-life balance, and organizational culture to effectively retain talent.

In conclusion, the results of the t-test support the hypotheses that work stress and the work environment significantly impact turnover intention, while the influence of compensation appears to be less pronounced. Therefore, organizations must prioritize efforts to reduce workplace stress, improve the work environment, and consider a holistic approach to employee retention that encompasses various facets of the work experience beyond just compensation. By addressing these factors, organizations can cultivate a positive workplace environment conducive to employee satisfaction, engagement, and long-term retention.

IV. CONCLUSION

Based on the research results, it can be concluded that work stress influences turnover intention at PT. Cahaya Bintang Plastindo Lamongan, the work environment hurts turnover intention at PT. Plastindo Lamongan Starlight. And compensation does not affect PT's turnover intention. Plastindo Lamongan Starlight.

The suggestions given by researchers in this study are: (1) For the company PT. Cahaya Bintang Plastindo Lamongan from the results of this research it can be seen that work stress has an effect on turnover intention at PT. Plastindo Lamongan Starlight. Therefore, company owners can create a comfortable work environment with workloads that are not excessive or beyond their responsibilities so that employees feel at home and do not leave the company. (2) For employees of PT. Cahaya Bintang Plastindo Lamongan is expected to further increase the sense of desire to try to complete work responsibilities optimally by using the work abilities they have to obtain maximum work results. (3) This research is general because it appears that many other factors influence PT turnover intention. Cahaya Bintang Plastindo Lamongan, the author suggests that future researchers analyze the research more deeply by looking at the influence of various variables so that a complex analysis can be obtained by looking for other variables that influence turnover intention.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Indonesia Tourism, Socio Renewable Energy, Socio Economic and Socio Tourism Research Trend

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ABSTRACT

Purpose: Indonesia became one of the strongest economies in Asia Pacific. Sustainable tourism is crucial for Indonesia due to the country's rich biodiversity, diverse cultures, and reliance on tourism as a significant economic driver. Sustainable tourism in Indonesia refers to the practice of promoting tourism activities that minimize negative impacts on the environment, respect and preserve local cultures, and contribute to the well-being of local communities. Indonesia, with its rich biodiversity, cultural diversity, and natural beauty, recognizes the importance of sustainable tourism to ensure the long-term viability of its tourism industry and the preservation of its natural and cultural assets. Renewable energy tourism, also known as green or sustainable energy tourism, is gaining importance globally as countries seek to promote environmental sustainability and address climate change. By integrating sustainability into tourism practices, Indonesia ensures the long-term viability of its tourism industry. This approach helps balance economic growth with environmental and social considerations, preventing negative consequences that could harm the industry in the future.

Design/methodology/approach: SCOPUS analyze search results, Social Renewable Energy, Social Economic and Social Tourism 7236 documents result since 1981 to 2023, all field article.

Findings: Promising in research and publication for Social Renewable Energy, Social Economic and Social Tourism. Compare top 15 affiliations, dominant affiliations from China. Still no Indonesia research institution in top 15 of the list. Compare top 15 countries, the best 3 countries are China, USA and UK. In ASIA and ASEAN, Indonesia under China, Pakistan, India, Iran and Malaysia. This is real challenge for Indonesia research institution to expand their research in Social Renewable Energy, Social Economic and Social Tourism. Compare top 15 funding sponsors, dominant from China, ASEAN dominant from Malaysian and Vietnam, there are no Indonesia funding sponsor.

Paper type: Research Paper

Keywords: *Indonesia, Social Renewable Energy, Social Economic, Social Tourism, Sustainable Tourism*

Received : October 4th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

Several reasons highlight the importance of sustainable tourism in Indonesia, is known for its vast and diverse natural landscapes, including rainforests, coral reefs, and unique ecosystems. Sustainable tourism practices help preserve these natural resources by minimizing environmental degradation, reducing deforestation, and protecting marine habitats. Indonesia is home to a wide range of plant and animal species, many of which are endemic. Sustainable tourism ensures that biodiversity is conserved, preventing the negative impact of tourism activities on wildlife and their habitats. Indonesia boasts a rich cultural heritage with diverse traditions, arts, and historical sites. Sustainable tourism aims to protect and promote these cultural assets by encouraging respectful

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

interactions between visitors and local communities, preserving traditional practices, and supporting cultural initiatives. Tourism is a significant contributor to Indonesia's economy. Sustainable tourism practices generate economic opportunities for local communities, creating jobs, supporting small businesses, and fostering entrepreneurship. This economic development helps reduce poverty and enhances the well-being of communities. Sustainable tourism plays a role in mitigating climate change by promoting eco-friendly practices. This includes the use of renewable energy, energy-efficient infrastructure, and initiatives to reduce carbon emissions associated with transportation and accommodation. Sustainable tourism empowers local communities by involving them in tourism planning, decision-making, and benefit-sharing. Community-based tourism initiatives provide communities with a sense of ownership over tourism activities, leading to social and economic empowerment. Sustainable tourism practices enhance the resilience of the tourism industry to external shocks, such as natural disasters or global crises. Diversification of tourism products, community involvement, and responsible environmental management contribute to the industry's ability to recover from challenges. The promotion of sustainable tourism practices attracts responsible and environmentally conscious tourists. This can lead to a positive reputation for Indonesia as a destination committed to environmental conservation and community well-being. Sustainable tourism encourages responsible behavior among tourists, such as respecting local cultures, wildlife, and ecosystems. Education and awareness programs contribute to a greater understanding of the importance of conservation and responsible travel. By integrating sustainability into tourism practices, Indonesia ensures the long-term viability of its tourism industry. This approach helps balance economic growth with environmental and social considerations, preventing negative consequences that could harm the industry in the future.

A. Objectives

The research objective is to analyze the Socio Renewable Energy, Socio Economic and Socio Tourism Research Trend in the World and Indonesia

B. Literature Review

Socio-Renewable Energy Impact in Indonesia, socio-renewable energy initiatives in Indonesia have the potential to improve energy access, particularly in rural and remote areas. By providing clean and sustainable energy solutions, such projects contribute to rural development, enhancing living standards and economic opportunities. Community engagement in renewable energy projects can empower local communities. Initiatives that involve communities in decision-making processes and provide them with ownership stakes in projects can lead to increased social acceptance and long-term sustainability. The renewable energy sector has the potential to create job opportunities and contribute to skills development. Training programs and capacity-building initiatives can enhance the employability of the local workforce in the growing green energy industry. Adoption of renewable energy sources contributes to Indonesia's efforts to mitigate climate change. It helps reduce the reliance on fossil fuels, decreasing greenhouse gas emissions and supporting the country's commitment to sustainable development.

Socio-Economic Tourism Impact in Indonesia, plays a significant role in the Indonesian economy. Socio-economic tourism initiatives can contribute to local economic development by creating jobs, supporting local businesses, and fostering entrepreneurship. Sustainable tourism practices aim to preserve Indonesia's rich cultural heritage. Responsible tourism initiatives can help protect cultural assets and traditions while providing authentic cultural experiences to visitors. Community-based tourism projects that involve local communities in planning and decision-making processes can have positive socio-economic impacts. This includes income generation, improved infrastructure, and the preservation of local cultures. Sustainable tourism practices contribute to environmental conservation in Indonesia. Efforts to protect natural habitats, wildlife, and marine ecosystems are essential for the long-term viability of the tourism industry. Indonesia has diverse landscapes and cultural attractions. Socio-economic tourism can encourage the diversification of tourism offerings, including ecotourism, adventure tourism, and cultural experiences beyond mainstream destinations. Inclusive tourism policies that prioritize equitable distribution of benefits among different regions and communities can help address social disparities and promote balanced economic development.

Socio-renewable energy for tourism refers to the social impacts of integrating renewable energy into the tourism sector in Indonesia. This approach involves considering the societal benefits and consequences of adopting renewable energy sources within the context of tourism-related activities. Some potential socio-renewable energy impacts for tourism in Indonesia, the adoption of renewable energy in tourism infrastructure can involve local communities in decision-making processes. Community engagement in renewable energy projects fosters a sense of ownership and ensures that the benefits of tourism development are shared. The implementation and maintenance of renewable energy systems in the tourism sector create job opportunities. Training programs related to the installation and maintenance of solar panels, wind turbines, and other renewable technologies contribute to skills development within local communities. Socio-renewable energy initiatives enhance energy access in rural or remote tourism destinations. This improved access contributes to better lighting,

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

supports education and healthcare services, and enhances overall quality of life for local residents. Sustainable tourism practices, including the use of renewable energy, can contribute to the preservation of cultural heritage. Integrating renewable energy sources in heritage sites and cultural attractions minimizes the impact on the environment, helping to sustain cultural assets. Visitors often seek authentic and sustainable experiences. The use of renewable energy can be integrated into the tourism experience, allowing tourists to witness and learn about clean energy initiatives, fostering a positive perception of the destination. Renewable energy projects can create opportunities for community-based tourism initiatives. Green energy attractions, such as guided tours of renewable energy facilities or eco-friendly accommodations, can become sources of income for local communities. Implementing renewable energy solutions in tourism allows for educational programs that raise awareness about clean energy practices. Tourists and local communities can learn about the benefits of renewable energy, contributing to a more informed and environmentally conscious society. The adoption of renewable energy diversifies the tourism product offering. Indonesia can attract a segment of tourists specifically interested in sustainable and eco-friendly travel, leading to economic diversification within the tourism sector. The use of renewable energy reduces the environmental impact of tourism activities. This includes a lower carbon footprint, decreased dependence on non-renewable resources, and minimized disruption to natural ecosystems. Integrating renewable energy sources into tourism infrastructure contributes to climate change mitigation and adaptation. Renewable energy systems are often more resilient to the impacts of climate change, ensuring a more stable energy supply during environmental disruptions. Attention to social inclusion ensures that the benefits of socio-renewable energy initiatives are distributed equitably among different social groups. This approach prevents the marginalization of local communities and supports inclusive development.

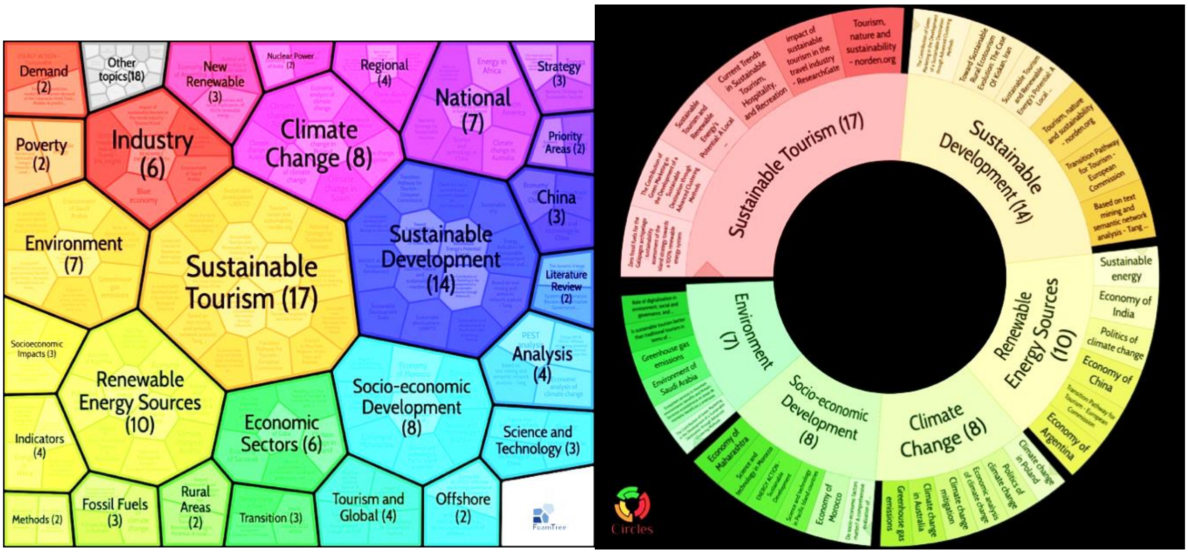

Figure 1. Socio Renewable Energy, Socio Economic and Socio Tourism, Article Research Trend, Source by Web [*https://search.carrot2.org/*](https://search.carrot2.org/)

II. METHODS

SCOPUS is a comprehensive abstract and citation database of academic research. It is widely used by researchers, academics, and institutions to access scholarly literature, track citations, and analyze research trends. SCOPUS covers a vast range of disciplines, including science, technology, medicine, social sciences, and arts and humanities. It indexes academic journals, conference proceedings, and patents. SCOPUS provides abstracts and citation data for scholarly articles. Researchers can access summaries (abstracts) of articles, along with information about how many times a particular work has been cited by other articles. SCOPUS is a global database, indexing content from publishers worldwide. It includes literature from both established and emerging research regions. The database is multidisciplinary, allowing researchers to find information across various academic fields. This makes SCOPUS a valuable tool for interdisciplinary research. SCOPUS provides details about authors, their affiliations, and publication histories. This feature helps researchers identify key contributors in specific fields and track research collaborations. Researchers use SCOPUS for citation analysis to understand the impact of a particular article, journal, or author in the academic community. Citation metrics help gauge the influence and relevance of scholarly works. SCOPUS offers journal metrics, including the journal's impact factor

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and other indicators. These metrics assist researchers in evaluating the quality and influence of journals in their field. SCOPUS provides advanced search options, allowing researchers to tailor their searches based on specific criteria, keywords, publication years, and more. Alerts and Notifications: Researchers can set up alerts to receive notifications about new publications matching their interests. This feature helps users stay updated on the latest research in their fields. SCOPUS integrates with other research tools and platforms, facilitating seamless access to full-text articles, linking to publishers' websites, and enhancing the overall research workflow. SCOPUS data is often used in bibliometric analyses and university rankings. It contributes to assessments of research productivity and impact at both individual and institutional levels. SCOPUS is regularly updated with new content, ensuring that researchers have access to the latest scholarly publications. In addition to journal articles, SCOPUS indexes conference proceedings, making it a valuable resource for researchers interested in conference contributions.

Utilize SCOPUS in research methodology, retrieve relevant publications from SCOPUS and compile the data for analysis. This may include extracting citation data, publication trends, author affiliations, and other relevant information. Assess the quality and relevance of the sources obtained from SCOPUS. Consider factors such as journal impact factor, citation counts, and the reputation of authors and institutions. Conduct bibliometric analysis using SCOPUS data to understand citation patterns, identify influential authors or works, and analyze trends within the literature. Bibliometric tools within SCOPUS can assist in visualizing citation networks and impact. Validate the data obtained from SCOPUS by cross-referencing it with other reputable databases or sources. This helps ensure the accuracy and reliability of the information used in the research. Synthesize the findings from SCOPUS data with other research elements. Interpret the results, draw conclusions, and relate them back to the research objectives.

III. RESULTS AND DISCUSSION

SCOPUS analyze search results, Social Renewable Energy, Social Economic and Social Tourism, 7236 documents result since 1981 to 2023, all field articles. The trend of adopting socio-renewable energy initiatives in the tourism sector increasing significantly, it aligns with broader global trends toward sustainable and responsible tourism

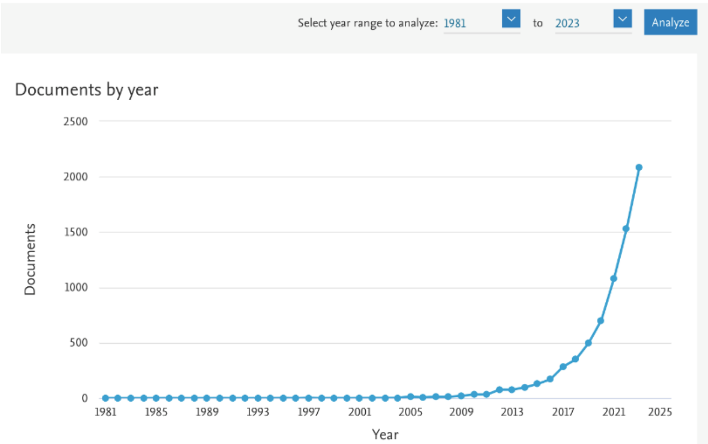

Figure 2. Documents by year Social Renewable Energy, Social Economic and Social Tourism, 7236 documents result since 1981 to 2023, all field articles

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

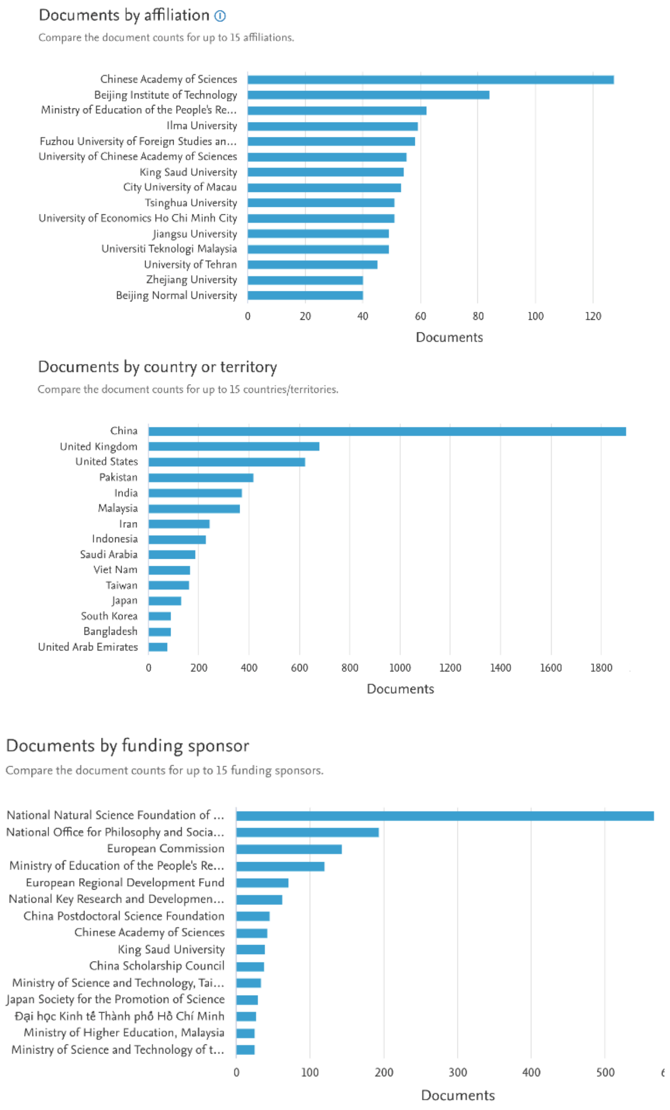

Figure 2. Documents by affiliations, by countries and by Funding Sponsors, Social Renewable Energy, Social Economic and Social Tourism, 7236 documents result since 1981 to 2023, all field articles

SCOPUS analyze search results, Social Renewable Energy, Social Economic and Social Tourism 7236 documents result since 1981 to 2023, all field article. Promising in research and publication for Social Renewable Energy, Social Economic and Social Tourism. Compare top 15 affiliations, dominant affiliations from China. Still no Indonesia research institution in top 15 of the list. Compare top 15 countries, the best 3 countries are China, USA and UK. In ASIA and ASEAN, Indonesia under China, Pakistan, India, Iran and Malaysia. This is real challenge for Indonesia research institution to expand their research in Social Renewable Energy, Social Economic and Social Tourism. Compare top 15 funding sponsors, dominant from China, ASEAN dominant from Malaysian and Vietnam, there are no Indonesia funding sponsor.

V. CONCLUSION

Socio-Renewable Energy Impact in Indonesia, socio-renewable energy initiatives in Indonesia have the potential to improve energy access, particularly in rural and remote areas. By providing clean and sustainable energy solutions, such projects contribute to rural development, enhancing living standards and economic opportunities. SCOPUS analyze search results, Social Renewable Energy, Social Economic and Social Tourism, 7236 documents result since 1981 to 2023, all field articles. The trend of adopting socio-renewable energy initiatives in the tourism sector increasing significantly, it aligns with broader global trends toward sustainable and responsible tourism. SCOPUS analyze search results, Social Renewable Energy, Social Economic and Social Tourism 7236 documents result since 1981 to 2023, all field article. So today in promising research and

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Implementation of Digital Marketing Learning to Develop Capabilities in Making Video Content Marketing

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ABSTRACT

Purpose: The aim of this research is to prepare digital marketing teaching materials and test the effectiveness of digital marketing learning to develop the ability to create content marketing videos.

Methodology: The method used in the research is experimental and ex-post facto which is explanatory. The experimental method is used to test the effectiveness of digital marketing learning in experimental classes in management study programs. An ex-post facto method to test the effectiveness of digital marketing learning through assessing content marketing videos created by student working groups.

Findings: The results of most students' video content marketing assessments are classified as very good. The content marketing video produced by the student working group is in accordance with the learning objectives. The application of digital marketing learning can grow students' ability to create content marketing videos.

Implications: Applying digital marketing strategies and learning methods through project-based learning methods can improve students' abilities in creating content marketing videos.

Practical implications: The ability to create marketing content videos can be applied through project-based digital marketing learning.

Originality/value: The resulting product can be used as a reference for digital marketing learning to grow students' abilities in making content marketing videos, so that learning outcomes are obtained that are in line with the objectives of MBKM.

Paper type: Research paper

Keyword: *Digital Marketing, Video Content Marketing*

Received : October 4th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

Minister of Education and Culture Regulation Number 3 of 2020 concerning the MBKM (Merdeka Belajar-Kampus Merdeka) program in universities makes the learning process democratic and has an impact on the repositioning of universities. All universities are currently experiencing disruption due to a paradigm shift that lecturers are not the only source of knowledge, the position of lecturers is more as a source of abundant knowledge and mentorship. The World Economic Forum 2022 predicts that upskilling and reskilling in 2022 will be very important for 54% of all workers. Upskilling is basically an effort to increase a worker's skills, while reskilling is an effort to take on a new job that requires a new set of skills from a worker. Skill development can be obtained in an experiential process which is a new currency. The repositioning of higher education is implemented through multidisciplinary, interdisciplinary and transdisciplinary learning. This repositioning encourages changes to the curriculum, methods and learning models that give students the freedom to choose the knowledge and skills they want and be able to obtain them.

The development of ICT (Information and Communication Technology) encourages universities to expand their role in various aspects of life. This repositioning makes universities a producer of knowledge products that students will use. Mastery and use of social media, marketplaces and e-commerce are digital marketing tools for marketing digitally (Pradiani, 2017). Based on the repositioning and needs of the university, an appropriate effort

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

to answer the problem is through the implementation of digital marketing learning to improve students' abilities with digital marketing skills that suit market needs, namely the ability to create content marketing videos about a product (goods and services) that has selling value.

Santoso (2019) revealed that the networking sites used in Indonesia are digital communication media, and Indonesia occupies the fourth device in the world. The use of digital communication media has now been transformed into digital marketing tools and digital selling. Utilization and use of networking sites as a marketing tool can increase brand awareness (Tarigan & Tritama, 2016); (Barri & Saerang, 2017); (Akbar, 2018) and increase sales (Puspitarini & Nuraeni, 2019). Social media is considered the most effective and efficient way to market products (goods and services) today. Increasing promotions through video content marketing can increase online sales (Susanto, et.al., 2020). The excess use of internet sites is as a medium for exchanging information, product promotions, product descriptions, catalogs, and so on (Yuliana, 2000).

Based on the explanation regarding the repositioning and role of universities in the current digital era as well as the characteristics of the FEB Unisma management study program, changes to digital marketing academics need to be made through the implementation of digital marketing learning to grow students' ability to create content marketing videos. Through digital marketing academics can open the supply and demand for current scientific product solutions. This research idea is relevant to a review (Fahmi, 2019) regarding the implementation of digital marketing learning adapted to the characteristics of each university. This research describes a system for implementing digital marketing in various scientific disciplines (Clouse, et.al., 2005). The learning method applied in this study is an innovative learning method and emphasizes contextual learning through complex activities (Cord, 2001). The focus of learning lies on the core principles and concepts of a scientific discipline, involving students in problem-solving investigations and meaningful task activities, giving students the opportunity to work autonomously in constructing their own knowledge, and reaching the peak of producing real products (Thomas, 2000).

The important thing in this study is the results of the development of digital marketing teaching materials as (1) learning references to improve the quality of digital marketing learning so as to obtain good learning outcomes, (2) implementation of learning applied in teaching and learning activities to grow the ability to create content marketing videos, (3) application to the management study program can be used to realize the distinctive advantages of the management study program, namely business digitalization so that it can achieve the expected competitive adventage.

Hermawan (2012) explains digital marketing as a form of activity to market products (goods or services) by utilizing digital media via internet networks. Internet media used by companies to promote products aimed at attracting and influencing consumers to make purchasing decisions is called digital media channels. The marketing channel that can be used is through content marketing (Chaffey, 2015). Content marketing is a marketing strategy by producing content that aims to provide information to targets (consumers) that is persuasive about the products being marketed. In the world of business, the internet is the main media and is very important for business people to offer the products (goods or services) they have. Based on this explanation, the digital era has introduced digital marketing (Muljono, 2018), so that marketing through digital media to introduce and offer brands for products owned by business actors and companies is called digital marketing.

Video content marketing is a strategy that uses video to market and promote the products or services of a business (Ratri, 2022). Video marketing is also used to increase engagement on digital channels, so it is very useful for introducing products and brand awareness to customers. Almost all business people currently use video content marketing as an effective and efficient digital marketing strategy. Through video content marketing, the prospect of market reach becomes wider, the opportunity to get sales and income will be greater. Video content marketing will also provide a detailed description of the services or products offered to the target market in a short duration.

II. METHODS

The method used in this research is experimental and ex-post facto which is explanatory. The experimental method is used to test the effectiveness of digital marketing learning in experimental classes in management study programs. An ex-post facto method to test the effectiveness of digital marketing learning through assessing content marketing videos created by student working groups. The procedure for developing digital marketing learning teaching materials in this research will use the DBR development model from Reeves (2006) which consists of four phases and is depicted in figure 1. The steps for developing the model are described as follows.

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ISSN : 2597-4750 (PRINTED)

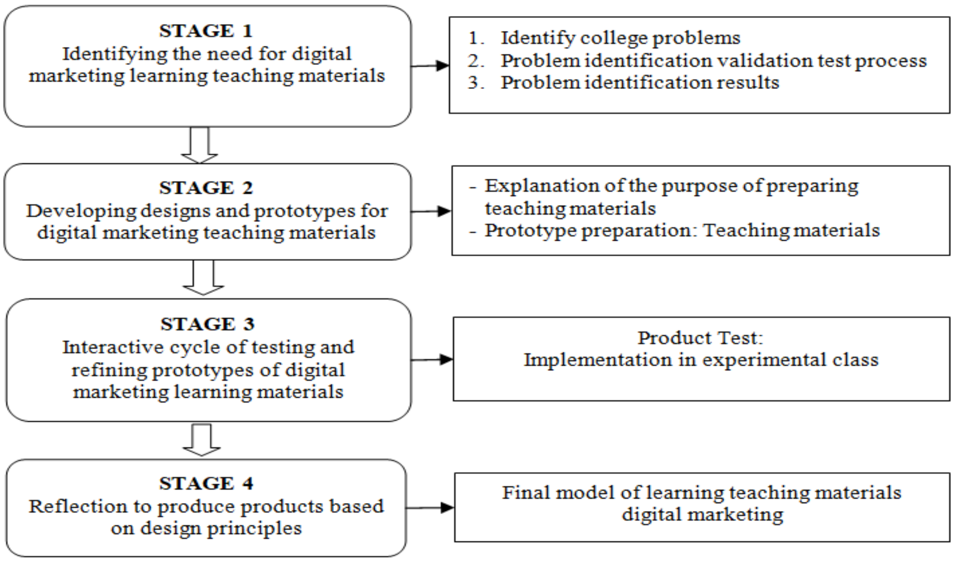

Figure 1 – Research and Development Flow (Reeves, 2006)

Based on Figure 1, the research and development procedures can be explained as follows.

1. Stage 1: Identifying the need for digital marketing learning teaching materials
   Identify the need for digital marketing learning teaching materials with the aim of finding out the needs of lecturers and students for digital marketing learning teaching materials. From the problem identification process that has been carried out, problem identification will be obtained regarding changes to learning teaching materials that suit student needs and are able to realize the distinction of management study programs.
2. Stage 2: Design development and prototype of digital marketing teaching materials
   From the results of needs identification data analysis, the next stage is to prepare a design and prototype of digital marketing learning teaching materials.
3. Stage 3: Interactive cycle of testing and refining digital marketing learning prototypes
   This stage is the stage for carrying out validation tests and perfecting prototypes of digital marketing learning teaching materials (product testing). Field trials are used to determine the effectiveness of digital marketing learning. The indicator of learning effectiveness is seen from the value of learning outcomes in the form of video content marketing. A field trial design to determine the effectiveness of digital marketing learning was carried out in an experimental class in the management study program.
4. Stage 4: Reflection to produce products according to design principles
   The results of the field test analysis are used as input for improving the final product of digital marketing learning teaching materials which are ready to be communicated and used by lecturers in learning digital marketing courses. Improvements at this stage are carried out by carrying out evaluations in accordance with the design expected in the previous stage.

III. RESULTS AND DISCUSSION

The results and discussion in this research consist of identifying and analyzing needs, developing designs and prototypes, final product trial results, the ability to create marketing content videos, and the effectiveness of digital marketing learning. It is explained in detail as follows.

A. Needs Identification and Analysis

a. The problem identification stage shows that the problems that arise are quite complex and the solution is input from the collaborative group (Ellis & Levy, 2010). The problem identification process in this research includes extracting data regarding students' understanding of digital marketing, analyzing the application and expectations of digital marketing material, student problems and the role of lecturers. The condition of students shows that they predominantly lack understanding about digital marketing. From the results of interviews conducted randomly with 15 students, it showed that 9 students did not understand digital marketing and 6 students understood digital marketing. Management study programs currently prioritize

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

efforts to develop students' digital marketing skills because students' understanding of digital marketing greatly influences the quality of learning outcomes. Apart from that, it is also influenced by several things, including learning readiness and learning maturity, student enthusiasm and intelligence. This affects the speed of learning in management study programs.

b. From this data, a validation test was carried out with cross information in the form of interviews with lecturers and students. The results of the validation test show that there are still many weaknesses in digital marketing learning teaching materials, especially the problem of the applied curriculum which is still dominated by learning in the form of theory, and the problem of students' poor understanding of digital marketing, so improvements are needed in learning strategies, materials and objectives. application of digital marketing learning.

c. Based on the description of the problem, an identification of the problem regarding changes in the implementation of learning in accordance with student needs was obtained. As input material for compiling competency teaching materials for digital marketing courses, with the following flow diagram.

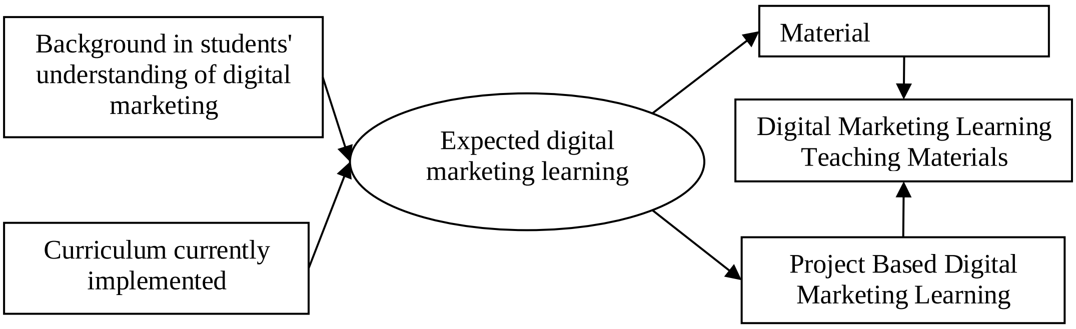

Figure 2 – Problem Identification Results

B. Design and Prototype Development

This stage is an activity to prepare a draft digital marketing learning design according to the opinion of Ellis & Levy (2010) which was selected from the results of problem identification and goal formulation. The draft design of this model was prepared by involving researchers and educational practitioners as well as the business and industrial world. The following is a description of the objectives including materials and model design.

1. Explanation of the Purpose of Model Preparation
   Explanation of the objectives of preparing models for prototypes of digital marketing learning teaching materials that are in accordance with the results of problem identification. The identification results include students' background understanding, implementation of the curriculum so far, and learning models used in delivering digital marketing material.
2. Design and Prototype Development
   This model design consists of three main components, namely objectives, learning methods, and assessment. These three aspects are the main components of a modified model of learning variables according to Reigeluth & Merrill (1978; 1979); Degeng (2013) in the form of learning conditions, learning methods, and learning outcomes. Condition variables emphasize learning objectives as a model component, while student characteristics and learning constraints (carrying capacity) are part of the analysis of problems and needs as explained in the results of the preliminary study. The learning outcomes component uses the term assessment according to Gagne, et.al. (1992) is that learning outcomes refer to capability as student learning performance, so that it becomes a reference in formulating objectives, learning methods and assessment.
3. The results of the design development and project-based digital marketing learning prototype are as follows.

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Table 1 - Results of Design and Prototype Development

No.	*Model Component*	*Explanation*
1	*Tujuan Pembelajaran*	*The structure follows the educational policy that contains:* *a. Course Objectives* *Providing new insights about digital marketing to motivate students to develop themselves and be able to change their way of thinking by developing digital marketing skills* *b. Competency standards* *After taking this course students have good digital marketing skills* *c. Basic competencies* *Students can explain the meaning of digital marketing* *Students are able to understand various types of digital media* *Students are able to understand digital marketing content* *Students are able to understand the types of content* *Students are able to understand the concept of digital marketing content* *Students are able to understand tips for creating digital marketing content* *Students are able to create marketing content videos* *Students are able to market products through promotional videos that have been made* *d. Subject matter* *Understanding Digital Marketing* *Types of Digital Media* *Digital Marketing Content* *Types of Content* *Digital Marketing Content Concept* *Tips for Creating Digital Marketing Content* *Create Marketing Content Videos* *Marketing Products Through Promotional Videos*
2	*Learning methods*	*Project-based digital marketing learning*

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		Division of student work groups
3	*Evaluation*	*Process and results of digital marketing learning (product)*

The aim of this learning is to provide new insight into the potential of marketing in the digital era to motivate students to develop themselves and be able to change their way of thinking by developing digital marketing skills. Therefore, the competency standard to be achieved from the results of developing a project-based digital marketing learning model is that students are able to have the ability to create marketing content videos.

C. Final Product Trial Results (Field Test)

a. Model test class profile

The test subjects in the research were 36 students who were taking digital marketing courses at the FEB Unisma management study program. The class used in model testing is the experimental class. The application of this learning model is based on the results of design and prototype development. The syntax of the project-based digital marketing learning model is described as follows.

Table 2 - Sintaks Model Pembelajaran Digital Marketing Berbasis Project

Stages	*Lecturer Activities*	*Student Activities*
Implementation of project-based digital marketing learning	*The lecturer conveys the learning objectives and explains the topic of the activity to students* *The lecturer asks students essential questions according to the project learning topic they will be working on*	*Students listen and listen to the lecturer's explanation* *According to the topic presented by the lecturer, students try to solve problems in groups*
	Project planning is prepared collaboratively between lecturers and students *Lecturers act as guides in project planning*	*The project plans that have been prepared are discussed with the group*
	The activity schedule and rules for implementing project learning are created collaboratively between lecturers and students	*Mahasiswa mendiskusikan mengenai deadline penyelesaian project*
	Lecturers observe project activities carried out by students	*Project implementation is carried out by student groups*
	Lecturers evaluate marketing content videos produced by students in groups *Lecturers provide feedback on a product produced*	*Student group presentation to display and show the marketing content videos that have been produced*

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	In the reflection activity, each marketing content video produced will be reviewed in detail from the negative to the positive side	*Student explanation regarding procedures for making marketing content videos*
	After going through the presentation and assessment process, the stage of concluding the marketing content video and the new findings that have been produced will be carried out	*Summarize new processes and findings from learning content marketing videos*
Ability to create student marketing content videos	*Lecturers assess students' marketing content videos to determine students' ability to create marketing content videos*	*Collect marketing content videos according to deadlines*

b. Product Assessment (Video Content Marketing)

The results of the application in the experimental class show that the marketing content videos produced by the student working group are as follows.

1) Tote Bag, a box-shaped and open tote bag equipped with two handle straps at the top.
2) Fly.Co, sandals that can be customized according to consumer wishes
3) Mini Cake, a beautiful mini cake used to celebrate birthdays, hampers or other special days.
4) Kang Flora, the ornamental plants that are promoted are planted in pots so they can be easily placed inside or outside the house.
5) Tempe Chips, a tempeh chips snack served in various flavors.
6) SBC Lotion, a body lotion product that can brighten and whiten the skin.
7) Good Friend, rents cooking equipment and prepares ingredients for grilling.
8) New Normal Kit, health products namely masks, hand sanitizer and tissue.
9) Bromonesia, the service offered is a traveling service to a very popular tourist spot, namely Mount Bromo.
10) Makaroni Cuck, a snack made from macaroni with various flavors.
11) Makaroni Ngehe, is a typical Indonesian snack with a variety of spicy flavors and sensations and is packaged in a modern way.
12) Oriflame Perfume, beauty products in the form of perfume.

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ISSN : 2597-4750 (PRINTED)

Figure 3 – Video Content Marketing

The value of the marketing content video is taken from the value of the work of the student working group in the form of promotional videos. To measure the success of project-based digital marketing learning, it is based on learning outcome assessment standards. The results of the student portfolio assessment showed that 33 students or 92% had very good learning scores (average score 80-100) and 3 students or 8% had learning scores between good & very good (average portfolio score 75 - < 80). From the results of the marketing content video assessment, it can be concluded that the application of project-based digital marketing learning adopted from The George Lucas Educational Foundation (2005) shows students' ability to determine, plan and implement the chosen project, so that the final learning results are in line with expectations.

c. Ability to Create Student Marketing Content Videos

The ability to create student marketing content videos can be seen from the work of each group. Based on the results of the marketing content video scores, it can be concluded that the 36 students who took part in project-based digital marketing learning have the ability to make marketing content videos very well. This proves that they have the ability to, among other things: (1) explain the meaning of digital marketing; (2) know about various digital media; (3) know about digital marketing content; (4) understand the types of content; (5) know and understand the concept of digital marketing content; (6) know tips for creating digital marketing content; (7) able to create marketing content videos; (8) marketing products through promotional videos.

d. The Effectiveness of Digital Marketing Learning to Develop Students' Ability to Make Content Marketing Videos

The application of the final project-based digital marketing learning model which is based on the development of DBR (Design Based Research) from Reeves (2006) is able to grow students' ability to create marketing content videos in the FEB Unisma management study program. This is shown in the results of the project-based digital marketing learning assessment which is based on the assessment of promotional videos produced by each student working group. The work results in the form of marketing content videos are based on the application of 8 main components as basic competencies for project-based digital marketing learning. The results of applying this learning are in accordance with the results of research conducted by Nugroho & Nasionalita (2020); Febriyantoro & Arisandi (2018); Santoso, et.al., (2020) stated that understanding digital marketing both in theory and practice will make it easier for sellers to promote their products so that they are able to develop the market and develop the business they are running digitally with a wider market reach.

Digital marketing activities carried out in learning are used to measure students' abilities in creating content marketing videos in the management study program. Student abilities measured based on video content marketing assessments in groups are constructed from the theory of Hermawan (2012) which explains that digital marketing

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ISSN : 2597-4750 (PRINTED)

is the activity of marketing products by utilizing digital media via the internet network, and Muljono (2018) further states that digital marketing is marketing through digital media to offering a brand owned by a company.

Thus, implementing project-based digital marketing learning is a very appropriate learning strategy and method for increasing understanding of digital marketing both in theory and practice. As students' ability to create content marketing videos increases, their desire to develop their business and expand their market increases. Apart from that, with the digital marketing skills and abilities they have, they will automatically change students' mindsets to become job creators. With the current economic conditions in Indonesia and seen from the potential of available natural resources, there are still huge opportunities open for both business people who are just starting out and those who are already running to more intensively introduce new brands with products that are attractive and have a market. potential.

IV. CONCLUSION

Based on the results and discussion, the conclusions from the research are as follows.

1. The core problems in the research include: (1) the condition of management study program students who have a poor understanding of digital marketing; (2) the implementation of the digital marketing curriculum that has been going on so far is dominated by theoretical understanding, has not been balanced with practical activities, and the learning process focuses on course teachers, so that students are more passive; (3) student attitudes and behavior during the learning process are not optimal due to differences in understanding between students about digital marketing; (4) learning activities are dominated by lecturers and are knowledge transfer; (5) The provision of practical digital marketing learning materials is currently still not implemented well.
2. The needs of the management study program are: (1) there is an improvement in the learning model where students are required to be more active in the digital marketing learning process; (2) there is a balance between theory and practice, so that the goal of digital marketing learning, namely developing the ability to create content marketing videos, can be achieved well; and (3) digital marketing learning is more directed at practicums that are applicable in nature, so that they can contribute to understanding and grow digital marketing skills in students.
3. The results of the development of project-based digital marketing learning designs and prototypes consist of learning objectives, learning methods and assessments.
4. Product testing includes model test classes in the experimental class, product assessment (value of video content marketing results) is obtained from the application of project-based digital marketing learning syntax, the assessment results show students have very good grades, and the products produced by the student work group are already in accordance with the instructions and targets that have been set.

Dissemination of research results include:

5. The products produced can be applied in the Faculty of Economics and Business to create graduates who have good learning outcomes, namely in the field of marketing.
6. This product can be applied to management study programs by implementing appropriate learning strategies and methods, namely project-based learning methods in order to improve students' abilities in creating content marketing videos.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

K-Means Analysis in Sharia Banking Intellectual Capital

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ABSTRACT

Purpose: This research aims to assess the need to manage and increase Intellectual Capital efficiently in the context of Sharia BPR.

Methodology: Using secondary data to categorize BPR Sharia banks in East Java Province based on the level of the intellectual model using the K-Means method.

Findings: The k-means method with a two-group configuration is the best approach for clustering. The second group has a high amount of Intellectual Capital, while the first group has a low amount of Intellectual Capital. Managing Intellectual Capital to increase added value for the company is a challenge for 10 Sharia BPRs in East Java Province.

Research limitations/implications: Data collection is limited to 2022 and focuses on 10 Sharia BPRs in East Java Province, which can provide a limited picture of the dynamics of change over a longer period or at the national level.

Practical implications: The results of clustering BPR Syariah using the K-Menas method provide a basis for practitioners to group BPR Syariah based on the level of intellectual capital so as to help banks identify intellectual capital management and use this information to design more targeted strategies.

Originality/value: This research involves the application of the K-Means technique in classifying intellectual capital in the context of sharia banking so as to provide more accurate and structured insight into the potential and utilization of intellectual capital in the context of sharia finance.

Paper type: Research paper

Keyword: *Sharia BPR, Intellectual Capital, Clustering, K-Means*

Received : October 4th
Revised : December 17th
Published : January 31th

I. INTRODUCTION

The presence of intellectual capital can be explained by Resource-Based Theory (RBT), which centers on organizational resources that produce value and are managed strategically to gain competitive advantage, which ultimately influences company performance. Armstrong & Shimizu (2007) asserts that resource-based theory argues that to achieve lasting competitive advantage, organizations must possess specialized resources that have qualities that are valuable, rare, difficult to imitate, and challenging to replace. Resource-based theories largely emphasize the internal dynamics of an organization, namely the resources it has, to formulate strategies that create value and lead to competitive advantage. According to (Wernerfelt, 1984; Barney, 1991) Resource-based theory asserts that intangible assets play an important role in maintaining competitive advantage. Resource-based theory posits that businesses' economic activities are sequential processes in which value is generated based on their capacity to define and organize input variables (resources), execute them with efficiency, and deliver desired outcomes (Galabova and Ahonen, 2011). Therefore, companies, like the research banks in this study, are required to formulate powerful and proficient strategies to generate value, which will give them a competitive advantage. These strategies should be based on the resources they have and the competencies they have to utilize those resources effectively. Resource-based theory highlights the need to utilize a company's internal resources, including tangible physical assets and intangible assets that have been internalized and successfully utilized, to

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

achieve competitive and profitable activities. Therefore, it is important for organizations to position themselves strategically according to their resources and capabilities, rather than just focusing on the goods and services that come from those capabilities(Galabova and Ahonen, 2011; Kamaluddin and Rahman, 2013). In a corporate climate that changes rapidly and relies on information, it cannot be denied that intellectual capital (IC) plays an important role in providing competitive advantages for companies, especially banks. IC, as a valuable resource, is closely related to the ability to innovate in the creation of products, processes and practices. Resource-based theory considers intellectual capital (IC) as a strategic resource because of the competitive advantage a company gains by using it efficiently (Ousama, Hammami and Abdulkarim, 2020).

Recognition of the importance of IC in a company's performance and competitiveness brings with it the need to manage it effectively. Identifying and assessing IC is a challenge in successful management (Chang and Hsieh, 2011). In this case, companies definitely need a certain methodology to determine and measure IC use. One of these methodologies, developed by Pulic (2000) is the value added (VA) intellectual coefficient (VAIC). The VAIC method, as described by Shiu is a standard and easy-to-use approach to measuring IC efficiency that is based on logical principles. Measuring the efficiency of a company's value creation is facilitated by utilizing financial data taken from financial reports. This approach allows comparison of companies with each other, as highlighted by (Maditinos et al., 2011). The VAIC technique emphasizes the quantification of added value (VA) generated by the capital used (CE) and intellectual capital (IC) owned by the organization (Pulic, 2008).

According to Bontis, Janošević & Dženopoljac (2015) it can be said that banks, especially Islamic banks (IB), can be classified as knowledge-intensive organizations. This classification is based on the fact that their main resources consist of intangible assets, and their operations largely depend on the utilization of intellectual capital (IC). Banks rely heavily on the use of information technology to facilitate the creation and provision of products and services. Additionally, they rely on human resources to develop complex products and maintain close relationships with clients. According to Ahuja & Ahuja (2012) successful bank performance in a competitive landscape depends on the effective allocation and deployment of intellectual capital (IC), which includes several elements such as human resources, integrated information technology, brand image and business processes.

Multivariate cluster analysis groups objects with comparable features. Clusters contain significant object similarity but low object characteristic similarity (Sreejesh, Mohapatra and Anusree, 2014). K-means sorts data into groups without a hierarchical structure. Other K-means investigations include Wisna, Rani and Kastaman (2023) who found that 3 clusters were best. Sharma, Sharma & Sharma (2016) Organizations large and small prioritize culture, engagement, leadership, and development. Because both studies used one cluster and did not test clustering results, the best cluster was not found. Then a study finds the best cluster and tests the grouping results. Therefore, this study uses K-means to determine the best group and test the results. In addition, this research classifies Sharia BPRs in East Java Province using 2022 data.

II. METHODS

Secondary data was used in this research. The data used is 13 Sharia BPRs in East Java Province in 2022. The grouping of Sharia BPRs based on Intellectual Capital includes Human Capital, Structural Capital and Employed Capital.

Cluster analysis groups objects that have similar properties using multivariate analysis. Objects in a cluster have significant similarities, while the characteristics of objects between groups are low. K-means is the most widely used non-hierarchical clustering approach Johnson, Wichern & others (2002) The algorithm or steps of the K-means method are as follows:

1. Determine the number of groups to be formed (amount k).
2. Randomly assign data to group k.
3. Determine the average centroid value for each group.
4. Using Euclidean distance, group each data set to the nearest centroid.
5. If there is still data transfer from one group to another, return to step 3 (Agusta, 2007).

The ideal number of groups is determined using pseudo F statistics Orpin & Kostylev (2006). The multivariate normal test can be carried out using the correlation coefficient test. The homogeneity test is used to determine whether the variance covariance matrix is homogeneous or not. One-way MANOVA compares the means of two or more populations with several dependent variables or tests the effect of a treatment on a response (Johnson, Wichern & others, 2002). Wilk's Lambda is a One-Way MANOVA if the tests of normality and multivariate homogeneity are met. If the normal and multivariate homogeneity tests fail, Pillai's Trace will be used. One-way MANOVA is sometimes used to evaluate group differences with a single dependent variable or between group members (Johnson, Wichern & others, 2002).

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

III. RESULTS AND DISCUSSION

Grouping Sharia BPRs based on Intellectual Capital using k-means in 2022. This research will use 13 Sharia BPRs which are divided into several groups. Grouping uses two groupings. Table 1 shows the grouping results for each group.

Table 1 Sharia BPR Grouping Results

Cluster	*Number of Members*
1	*10*
2	*3*

Source : Processed Data, 2023

Of the 13 Sharia BPRs in East Java Province, 2 clusters were formed where cluster 1 had 10 Sharia BPR members, while cluster 2 had 3 Sharia BPR members. This shows that the majority of Sharia BPRs in East Java Province have characteristics similar to those of cluster 1.

Table 2 shows the members of each group. In grouping Sharia BPRs based on Intellectual Capital, including Human Capital, Structural Capital and Employed Capital using the k-means method, it is hoped that there will be differences in the characteristics of each group in all Intellectual Capital factors.

Table 2 Clustering Results

Cluster	*Name of Sharia BPR*
1	*PT BPRS Mandiri Mitra Sukses*
	PT BPRS Artha Pamenang
	PT BPRS Madinah
	PT BPRS Syariah Magetan
	PT BPRS Al Mabrur Babadan
	PT BPRS Bakti Artha Sejahtera Sampang
	PT BPRS Annisa Mukti
	PT BPRS Baktimakmur Indah
	PT BPRS Situbondo
	PT BPRS Mitra Harmoni Kota Malang
2	*PT BPRS Lantabur Tebuireng*
	PT BPRS Sarana Prima Mandiri

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

PT BPRS Tanmiya Artha

Source : Processed Data, 2023

One-way ANOVA tests group differences in variables. Following are the findings of a one-way ANOVA.

Table 3. One-Way ANOVA Test Results

Variabel	*F*	*Sig*
HCE	*16,356*	*0,002*
SCE	*14,782*	*0,003*
CEE	*1,688*	*0,220*

Source : Processed Data, 2023

Table 3 shows the F value of each variable. This value will be compared with 3.86 F3;9;0.05. Compared with F3;9;0.05, the HCE and SCE variables have a larger F value, thereby rejecting H0. This means that the two variables have different influences on group formation. Because Sharia BPR uses more human resources and capital structure than the capital used. Employees create value, therefore they are not a burden. The operational activity system, corporate culture and intellectual property owned by BPR Syariah in East Java Province have provided value for improving the management and quality of structural capital. The CEE variable has a greater F value, so H0 is accepted, meaning that the two CEE variables have no effect on group formation because the characteristics are the same. Because Islamic BPR capital was underutilized during this research period, they may have used human capital rather than physical capital.

Table 4. One-Way MANOVA Test Results

Nilai Pillai's Trace	*Sig.*
0,780	*0,003*

Source : Processed Data, 2023

Table 4 shows that Pillai's Trace sig value is 0.003 which represents a significant value below 0.05 (sig<5%), indicating group differences and rejecting H0.

Table 5. Cluster Average

	Cluster	
	1	*2*
HCE	*-0.40691*	*1.35635*
SCE	*-0.39847*	*1.32822*
CEE	*-0.19194*	*0.63979*

Source : Processed Data, 2023

Table 5 shows that the HCE, SCE and CEE variables of cluster 1 are negative and have the lowest average value, while cluster 2 has the largest average value. In cluster 1, 10 Sharia BPRS have low Human Capital, Structur

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Capital and Employed Capital: PT BPRS Mandiri Mitra Sukses, Artha Pamenang, Madinah, Syariah Magetan, Al Mabrur Babadan, Bakti Artha Sejahtera Sampang, Annisa Mukti, Baktimakmur Indah, Situbondo, and Mitra Harmoni Malang. The first cluster shows that 10 Sharia BPRs in East Java failed to manage Intellectual Capital to increase company value. The second cluster shows that the 3 Sharia BPRS in East Java Province have been efficient in managing Intellectual Capital to increase company value.

IV. CONCLUSION

The first cluster of 10 Sharia BPRS with low Human Capital, Structural Capital, and Employed Capital is PT BPRS Mandiri Mitra Sukses, Artha Pamenang, Madinah, Syariah Magetan, Al Mabrur Babadan, Bakti Artha Sejahtera Sampang, Annisa Mukti, Baktimakmur Indah, and Group 1 has poor Human Capital, Structural Capital and Employed Capital, therefore all factors must be improved. This research has limitations in that data collection is limited to 2022 and focuses on 10 Sharia BPRs in East Java Province so that it provides a limited picture of the dynamics of change over a longer period or at the national level. Future research can use fuzzy c-means and other regional clustering approaches. Apart from that, the right approach must be chosen so that the clustering results can be used to take the right policies.

ACKNOWLEDGMENTS

Acknowledgments of people, grants, funds, etc. should be placed in a separate section on the title page. The names of funding organizations should be written in full.

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ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Analysis of Innovative Product Development of The *Boardgame* "Kewania"

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ABSTRACT

Purpose: This study aims to examine the innovation process and development of Kewania board game products within the Indonesian context, utilizing the Design Thinking (DT) framework, Business Model Canvas (BMC) method.

Design: The research employs a multi-method approach, incorporating Design Thinking for product development analysis, BMC for business model assessment. Data collection involves qualitative analysis of the Kewania board game's innovation journey and business strategies.

Findings: The analysis reveals that employing the Design Thinking approach results in responsive board game designs that cater to user needs, emphasizing family interaction and educational value. Additionally, the Business Model Canvas provides insights into key business components such as service, distribution, and cost structures.

Research limitations: Limitations of the study include potential biases in data collection and the focus on a single board game product. Future research could explore a broader range of board games and incorporate quantitative methods for a more comprehensive analysis.

Practical implications: The findings offer practical insights for board game manufacturers in Indonesia, emphasizing the importance of user-centric design, strategic partnerships, and sustainable innovation practices. Implementing the identified strategies can enhance market acceptance and foster long-term growth.

Originality: This research contributes to the understanding of board game product development and business strategies within the Indonesian market context. By integrating multiple frameworks, it provides a holistic view of the innovation process, business model dynamics, and readiness for sustainable growth.

Paper type: Research paper

Keywords: *Boardgame, Design Thinking, Business Model Canvas, KTH Innovation Readiness Level*

Received : October 4th
Revised : December 17th
Published : January 31th

I. INTRODUCTION

The early childhood phase is a time when a child has not been able to develop his potential independently (Rohmadi et al., 2020). Whatever the child gets from the environment will enter his subconscious easily (Lestari, Mudhawaroh and Ratnawati, 2020). Children have a different world from teenagers or adults, where children are born to learn through play (Zosh et al., 2017). This play activity benefits the development of all children across social, cognitive, physical, and emotional domains (White, 2013). In this phase, children need parental assistance in providing direction and the development process.

The trend of using gadgets in children has increased significantly since the Covid-19 pandemic. As a result, many children prefer to play with gadgets rather than with their friends (Zikrillah and Humardhiana, 2021). Research results Nurliana & Aini (2021), shows that the use of gadgets results in a decrease in the intensity of communication between parents and children, and can cause health problems. While the intensity of smartphone use can affect communication behavior that has an impact on children's psychology, especially the crisis of self-confidence and physical development (Maria and Novianti, 2020). So that negative impacts need to be addressed, one of which is to offer other playing media such as board games that have long been known, but are disappearing with the presence of digital games.

Board game is a game that requires media in the form of a board and is equipped with regulations as a guide to the process of physical interaction between players (Bayeck, 2020). These games facilitate the improvement of critical thinking, problem-solving abilities and social skills. The application of regulations is an important aspect for social learning and the improvement of skills, understanding and interpretation of body language between players (Chou, 2017).

According to the Indonesian Boardgame Industry Activist Association (APIBGI), global market demand for broadband products by the global community is increasing, reaching US $ 1.5 billion in the North American market in 2017 with a growth of 8% compared to 2016, which is US $ 1.38 billion (Hadyan, 2019). The global market reached US$7.8 billion in 2018. The following year, the end of 2019 is predicted to increase by 8.24% to US$8.5 billion, and the end of 2023 to reach US$12 billion, with an average annual increase of around 10%. According to information from playday.id there are 79 domestic boardgames entering the global market and 18 boardgames are still in the process of development, while according to boardgamegeek.com there are 49 Indonesian-themed boardgames, which have successfully entered the global market (Hadyan, 2019). However, the development of the boardgame industry, which is included in the category based on the Craft & Board platform, has not been the focus of the development of the Creative Economy Agency (Bekraf) responsible for the development of the creative economy in Indonesia (Marlinah, 2017). There are only 17 out of 23 creative economy subsectors that are the focus of government development. Thus, the national boardgame industry has challenges because the ecosystem has not developed and also at the same time can provide opportunities because competitors are still low.

Based on Focus Economy Outlook 2020 data, the creative economy contributed IDR 1,100 trillion to Indonesia's Gross Domestic Product (GDP) in 2020. The largest contribution to GRDP comes from three of the 17 focus subsectors of the creative economy developed (Akbar, 2021). According to Bekraf, there are 3 (three) business subsectors that are predicted to grow rapidly, namely a). film, animation, and video; b) applications and game developers; and c). music (Hariyati, 2019). From this data, it shows that game development has good potential in Indonesia.

Bekraf has recognized the potential of the global board game industry that has entered the domestic market, and welcomed its growth. The game has educational functions such as togetherness and other social values, which the game does not have (Hadyan, 2019). Research on the comparison of the performance of students who are accustomed to playing using board games with students who have never been, shows that numeracy, interrelation, and aesthetic skills in students who are accustomed to using board games are higher compared to students who are not used to using board games (Chou, 2017). The development of innovative products and local market board games for children, is expected to increase interaction between family members in fostering stronger bonds, communication, emotional skills and stress management and can introduce local wisdom.

Based on data from the Central Statistics Agency (BPS), there are currently 30.83 million early childhood children in Indonesia, consisting of 13.56% are infants (aged < 1 year), 57.16% toddlers (aged 1-4 years), and 29.28% preschool children (aged 5-6 years) (Kusnandar, 2021). This number and composition, can be a development opportunity and boardgame market for families. Board game development can be an important alternative to overcome the negative impact of gadgets, especially for children's development.

One of the new innovative products to overcome the negative impact of gadgets on children's development, namely the Kewania (BK) boardgame which was introduced to the family segment and played in groups. BK is an animal world game, where all citizens have characters, behaviors and emotions like humans (anthropomorphic animals), with the theme of natural disasters and storytelling mechanics that tell stories in rescue scenarios of various kinds of natural disasters. However, BK's innovative product has still not succeeded in netting the market, even though the board game industry in Indonesia is relatively developed.

Research that has elevation with this study are Setiawan et al (2018); Misdaniawan & Purwanto (2017); Zizlavsky (2016); Prasetyo et al. (2022); Diva & Priyadi (2020); Zikrillah & Humardhiana (2021); Mostowfi et al. (2016); Nasrulloh et al. (2019); Chou (2017); Hayhow et al. (2019); In the study, there are several research gaps when compared to previous research. The following is a mapping of the gap:

a. Research Approach: Previous research has generally used approaches, such as BMC (Business Model Canvas) or business strategy analysis. This study uses the KTH IRL (Innovation Readiness Level) approach to measure the innovation readiness of Kewania's boardgame products. This gap shows a specific change in approach to measuring innovation, especially in boardgame products.
b. Research Object: Previous research has had a lot to do with different industries or topics, such as surfactants, milk cheese, companies in the Czech Republic, or development in Bali Aga. This research

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

focuses on Kewania's boardgame products. Therefore, there is a gap in the understanding of innovation readiness in boardgame products, which have different characteristics and challenges.

Thus, this study has a significant gap in terms of approach and object of research, which distinguishes it from previous studies that have been conducted.

Based on the background described above, the problems in this study can be formulated as follows:

a. What is the process of developing Kewania (BK) boardgame innovation products?
b. What are the strategic elements in driving the business growth of Kewania (BK) boardgame innovation products?

II. METHODS

The research process uses a mix method approach, which is a combination of qualitative approach and quantitative approach. The merging of two methods is superior to a single method because it will provide rich insight into research phenomena that cannot be fully understood using only a single method. This is because the mix method approach can integrate and synergize various data sources that can help study complex problems (Dawadi, Shrestha and Giri, 2021). In business studies, the mix method approach plays an important role in the development of the business field because of its potential results to enrich understanding of business problems and questions, as well as being able to add value and contribute to the development of business field research (Azorin, 2016).

To achieve the research objectives in identifying the development process with the DT method, analyzing existing BMC BK innovation products. The research design uses an exploratory approach according to the explanation from Pasuraman (2010) in Kuncoro (2013), where this approach is to develop knowledge or conjectures that are still new and to provide direction for previous research.

The qualitative research design was carried out using the qualitative in-depth interview method with Mr. T as the designer of Kewania to identify the innovation product development process and identify the existing business model of BMC BK innovation products. In addition, a qualitative in-depth interview method was also conducted with Mr. A as the designer of the boardgame commercial product "XYZ" to identify his business model. While quantitative research design is carried out by questionnaire using worksheets.

Expert opinion by means of key-informant technique is carried out to find and interview several experts related to the situation to be studied (Kuncoro, 2013). Respondents in this study are experts in the field of children's play industry who are believed to contribute to the advancement of technology and intelligence of children and people who care about the development of children's growth. The object of this research is BK's innovation product developed by the Clampeace team that led to the birth of BK. The study time starts in July 2023 to December 2023.

Data collection and processing techniques in carrying out research are described in the following sub-chapters. Data collection techniques are carried out using three ways, namely observation, interviews, and giving questionnaires to several respondents according to needs. Analysis of 5 elements of Design Thinking on BK's innovative products, using 2 data collection techniques, namely interviews and observations. Interviews were conducted with the founders of Clampeace. while observations were conducted by observing a). boardgame fan favorite, b). children's fondness for a board game product, and c). Board game product design that is a favorite of boardgame fans and children. Analysis of 9 strategic elements of BMC using 2 data collection techniques, namely interviews and observations. Interviews were conducted with Mr. T as the designer and owner of BK and also conducted with Mr. A as the owner and designer of the commercial product of the board game "XYZ" or "Waroong Wars", so that it could be a lesson of success and reference for BK.

III. RESULTS AND DISCUSSION

A. Research Results

The boardgame "Kewania" is a game that raises the concept of a fantasy world where animals are the main characters. These animals have intelligence and the ability to speak like humans. They not only coexist, but also have their own work and uniqueness. Players in this board game enter Kewania and take on the role of one of the Kewania residents, the majority of whom have anthromorphic forms, which have human characteristics on their animal bodies. Each player will have an animal character with a job that matches its uniqueness and characteristics.

The objectives of the game vary. Players must work together to complete missions or achieve certain objectives in Kewania. Players can explore various interesting places in Kewania, such as animal markets, city parks, or even enchanted forest areas. During the game, players will face challenges and choices that affect the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

course of the story. There are conflicts between Kewania residents or external challenges, and players must work together or compete to overcome them. In addition, social interaction between players can also be an important aspect in this game, where negotiations, alliances, or strategic actions can affect the final outcome of the game.

Game components include a game board that depicts a Kewania map, character cards for each player, mission or challenge cards, and also 3D elements such as anthromorphic miniatures of animals as players' pawns. The artistic design of this game can strengthen the magical and magical atmosphere of the world of Kewania. The board game “Kewania" creates a unique and imaginative gaming experience, allowing players to explore a colorful fantasy world inhabited by intelligent animals with their own uniqueness.

Kewania boardgame is designed with two main objectives that reflect the diversity of nature and the world of professions. First of all, the game aims to introduce players to different types of animals and their uniqueness. Each animal character in Kewania has unique traits and traits, creating a rich picture of natural diversity. For example, players can get to know animals such as cheerful birds, wise turtles, or brave lions. Each animal in Kewania represents the beauty and complexity of the animal world, giving players the opportunity to learn and appreciate the diversity of nature.

In addition, the Kewania board game also aims to introduce the world of professions to players. Each animal character in Kewania has a job that suits his special nature or ability. Thus, players can explore various professions that exist in the world of Kewania, such as farmers, park rangers, zookeepers, or forest guards. Through interaction with these professions, players can learn about the positive values associated with each job, such as hard work, caring, and courage.

The main moral message that Kewania board game wants to convey is "Leave the business immediately to the experts" or "Right man for the right Job". This message emphasizes the importance of appropriate skills and expertise in carrying out a task or job. With this principle, Kewania teaches players to appreciate the diversity of talents and skills possessed by each individual, and understand that every job has positive values that can contribute to mutual success and prosperity. By bringing these two goals together, Kewania boardgames provide an educational gaming experience, combining elements of knowledge about animals and the world of professions while conveying a positive moral message to players.

The target users of the Kewania board game include children aged kindergarten to elementary school, ranging from 5 to 13 years. These are individuals who show a special interest in educational animation, including series such as Dora/Diego, Ask the StoryBots, and Wild Kratts. This target is directed at children living in urban areas in Indonesia. In general, they come from families with middle to upper socioeconomic levels (middle to upper class).

The expected users are children who have an interest in educational animations that combine educational and entertainment elements. Potential users are also expected to have access and permission from parents to watch YouTube content, especially children’s channels. Meanwhile, the parents of these users have certain characteristics, such as high care and involvement in terms of parenting. They are used to keeping up with the latest developments in the world of parenting, showing awareness of the importance of supporting their children's development.

digital platforms, including YouTube, keep occasional surveillance of the media consumed by their children. This shows that parents have a concern for the quality and safety of content accessed by their children in cyberspace. By understanding the characteristics and preferences of these target users, Kewania board games are expected to provide a good gaming experience.

Kewania boardgame has created the BMC concept at the beginning of its establishment. The picture of the existing BMC Kewania can be seen in the following figure.

<table>
<tr>
<td rowspan="2"><u>Key Partners</u>

1. Freelance illustrator
2. Board game enthusiasts
3. Other boardgame designers
4. Publisher boardgame</td>
<td><u>Key Acitivities</u>

1. Board game design
2. Social media content creation
3. Respond to customers on social media</td>
<td rowspan="2"><u>Value Propositions</u>

1. Learn while playing.
2. Tools to improve interaction between parent and child.
3. Tools to foster courage in children to convey thoughts through storytelling.
4. Tools that can make children understand roles through role play.
5. Teach children about animals and their abilities, natural disasters, and rescue tools.</td>
<td><u>Customer Relationship</u>

1. Interactive and educational content on social media
2. Reply to comments on social media</td>
<td rowspan="2"><u>Customer Segment</u>

1. Generation X parents and millennials.
2. Board game enthusiasts.</td>
</tr>
<tr>
<td><u>Key Resources</u>

1. Board game designer
2. Prototype boardgame maker
3. Social media content creators</td>
<td><u>Channel</u>

1. Kewania social media with educational content.</td>
</tr>
</table>

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ISSN : 2597-4750 (PRINTED)

Cost structure	***Revenue stream***
1. Cost of making a boardgame prototype 2. Cost of creating illustrations 3. Cost of creating social media content 4. Board game production costs	1. Revenue from *board game sales*

Figure 4 BMC existing boardgame Kewania

Kewania's business model, depicted in their initial BMC, features collaborations with several key partners. Kewania works with freelance illustrators, boardgame enthusiasts, other boardgame designers, and boardgame publishers to enrich the gaming experience and expand their product reach. Kewania's main activities involve board game design, creative social media content creation, and active responses to customers on social media.

Kewania's value proposition includes the concept of learning by playing, tools to improve interaction between parents and children, as well as tools that help foster courage in children through storytelling and role play. The product is also designed to help children understand roles, while teaching about animals, natural disasters, and rescue equipment. All of these values are intended to meet the needs of generation X and millennial parents, as well as boardgame enthusiasts looking for an educational gaming experience.

Kewania builds relationships with customers through interactive and educational content on social media, creating an effective two-way channel with their customers. The Kewania team is also active in responding to comments on social media, ensuring a positive relationship with their customers. Key resources involve boardgame designers, boardgame prototypes, and social media content creators who contribute to product development and promotion.

Kewania's main distribution channel is through their own social media, where educational content is delivered to the audience. The cost structure involves the cost of prototyping a boardgame, the cost of creating illustrations, the cost of creating social media content, and the cost of producing a boardgame. The main revenue currently comes from board game sales, but to increase funding readiness, Kewania is directed to produce full versions of their products and consider YouTube monetization options as an additional source of revenue. With this strategy, BMC Kewania reflects its mature efforts to create, market, and support their educational boardgame products.

Kewania boardgame innovation products have reached the production stage where ±100 pieces of Kewania board game lite version products have been produced (fewer components but can already get a gaming experience like a full version of the product). This lite version of the product has met the requirements as a Minimum Viable Product (MVP), which is a product with enough features to attract early adopter customers and validate product ideas early in the product development cycle.

This lite version of the product has been almost sold out and received a positive response from the first buyer. Communication with the first buyer was established through Kewania's social media, one of which was Instagram which already had 83 followers. But currently Kewania boardgame innovation products still have not started full version production or further product development. This causes Kewania to tend to stagnate and undeveloped. Based on innovation theory, currently Kewania' s boardgame innovation product is in the position of Valle of Death. If no effort is made, Kewania will be trapped in the Valley of Death.

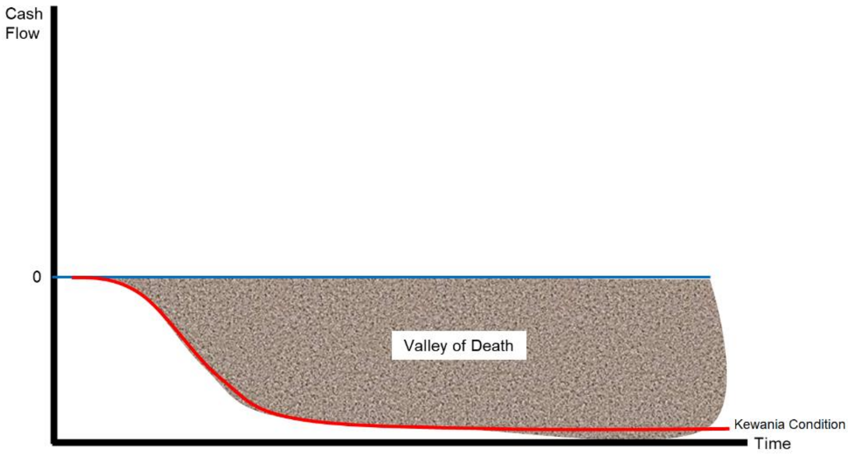

Figure 5 Graph of Kewania's current condition

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

B. Discussion

1. Kewania Innovation Product Development Process with Design Thinking Framework

The product's goal to enhance family interaction and teach values such as role play and storytelling reflects a deep understanding of the family's needs. The focus on creating fun and rewarding gaming experiences while strengthening family bonds reflects an effort to provide greater added value than just entertainment. Overall, Kewania board game has implemented the principles of design thinking in its early stages by understanding and prioritizing user needs in designing relevant solutions. An overview of the design process can be seen in the picture below;

Empathize :

1. The main goal is to increase the interaction of families who have been affected by the use of gadgets.
2. Focus on families, especially generation X and millennial parents who want to improve the quality of time with their children.
3. It takes tools that can provide a combination of gaming experiences that are not only entertaining but also educational.
4. Since the main purpose is children, it must be liked and attract the attention

Define:

1. The product is expected to be something physical and does not require the use of gadgets.
2. The product must accommodate the interaction between parents and children.
3. The product must be able to provide fun to children and parents, as well as provide learning or information that is educational.
4. Children tend to like animals and something cute and cute with bright colour combinations.

Ideate:

1. The product was chosen in the form of a board game because it is a form of physical game.
2. Board game mechanics are chosen in the form of storytelling and role play, because storytelling will train children's courage to express their thoughts, and with role play will train children' s creativity and knowledge related to the role being carried out.
3. Storytelling and role playing will encourage active interaction between parents and children.
4. Designed a boardgame titled Kewania. The world of Kewania is a world whose inhabitants are only animals. The animal can talk and act like a human. This trait is called anthropomorphic. Therefore, Animals in the world of Kewania also have jobs.
5. The theme of Kewania is about Disasters and Rescue Teams that prioritize the expertise of each animal in carrying out rescues.
6. The duration of the game time is designed to be 15-30 minutes so that children stay focused on the game and do not have time to get bored.
7. The design of all components of the Kewania game is made with cute and cute designs and uses bright colours.

Prototype:

1. The Kewania prototype is made with several main components, namely: 36 Animal Cards that have 2 sides representing residents and rescue squads, 20 Tool Cards, 8 Disaster Cards, 8 Location Cards, 8 Victim Condition Cards, 16 Event Cards, 24 Medal Tokens, 1 Game Base and 1 Pouch.
2. Cards and Game Pads are made from Hard Board material to last, while Pouches are made of canvas.
3. The game mode is made 3 difficulty levels, namely Level 1 by using all cards except the victim Condition Card and Event Card, then Level 2 by adding the victim condition card, and Level 3 by adding event cards (using all cards).
4. Several ways to play are prepared, namely: 1. All players are team heads and hold medals then hand them to the squad head who tells the best plan besides themselves, and 2. There are informants who take turns to brief all team heads.

Test:

1. Conducted several Test plays with different segments of players, namely board game fans, children with parents, and the general public.
2. Test play with boardgame fans received feedback that in terms of concept it was good and exciting to play as a party game, but it needs to be added more challenging events.
3. Test play with parents and children shows intense interactions related to animal skills and disasters that occur. The usefulness of rescue tools is also widely discussed. From this test play, it can be seen that the creativity of children in making rescue stories with their respective animal skills. The design is considered attractive enough for children.
4. Test play with the general public indicates that the game is quite fun to play together. Creativity in making storytelling is felt and is recommended to be used as a learning tool for kindergarten and elementary school children in small classes.
5. Of all the test plays carried out, the method of playing using informants is considered more appropriate in role

Figure 6 Results of design thinking analysis of Kewania's existing boardgame

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

In the define stage, the factors needed by the target consumer involve more frequent interactions with children, interaction aids, and solutions for shared activities. The advantage of the product lies in its form in the form of a board game, presenting the added value of role playing, storytelling, and storytelling mechanical innovation. Nonetheless, the product also faces obstacles such as lack of awareness about board games, traditional perceptions, challenges in market segmentation, competition with gadgets as children's main entertainment, and difficulties entering the middle to lower economic market.

The second stage of design thinking is to consolidate the information obtained during the empathy stage to define the problem and establish features and functions that will help solve the problem (Shé et al., 2022). In the define stage, the Kewania board game identifies the key factors needed by the target consumer, reflecting the continuity of understanding from the previous stage, namely empathize. These factors include more frequent interactions with your child, interaction aids, and solutions for shared activities. This analysis shows an effort to detail user needs and create solutions that can respond concretely to the challenges facing the modern family.

The advantage of the product lies in its form in the form of a board game, with added values such as role playing, storytelling, and storytelling mechanical innovation. This reflects an effort to provide a more immersive and meaningful gaming experience, while also describing the special features that set this product apart from other solutions. However, the results of the analysis also reflect some of the obstacles faced by the product. Lack of awareness about board games, traditional perceptions, challenges in market segmentation, competition with gadgets as children's main entertainment, and difficulties entering the middle to lower economic market are some aspects that need to be addressed. This indicates the need for effective marketing strategies, consumer education, and product adaptation to meet the needs of a wider market segment. Overall, the define stage of the Kewania boardgame reflects efforts in detailing the challenges and opportunities faced in creating solutions that suit the needs and desires of target consumers.

In the idea stage, the main goal is to provide interactive tools for parents to interact positively with children. Board games are chosen because they are able to provide a gaming experience without involving gadgets, create physical interaction, and provide opportunities to play together. The solution is a boardgame with mechanics focused on role playing and storytelling, which supports parents in interacting with children while teaching certain values and skills. Role playing and storytelling mechanics were chosen to meet the needs of parents who wanted to interact more intensely with children. The cute and cute character designs are designed according to the preferences of children to provide added value.

The third stage is the design thinking process, i.e. ideating or developing ideas on how to solve problems creatively (Shé et al., 2022). In the ideate stage, Kewania boardgames show a focus on creativity and idea development to create innovative solutions. The main goal is to provide interactive tools for parents to interact positively with children. The selection of board games as an interactive medium reflects an awareness of the importance of gaming experiences that do not involve gadgets, with an emphasis on creating physical interaction and opportunities to play together.

The solution is a boardgame with mechanics focused on role playing and storytelling. This decision is based on the understanding that such mechanics can support parents in interacting with children while teaching certain values and skills. Role playing and storytelling mechanics were chosen as tools to meet the needs of parents who wanted to interact more intensely with children, creating a more immersive play experience.

The cute and cute character designs are designed according to children's preferences, adding added value to the product. It reflects attention to detail and the introduction of elements that can attract the attention of the main target user. Overall, the ideate stage of the Kewania boardgame reflects efforts in generating creative and innovative ideas to create solutions that suit the goals and needs of users.

In the prototype stage, interesting factors involve family-based value propositions, innovative storytelling mechanics, and character designs that appeal especially to children. Kewania boardgames are differentiated with a focus on value for parents and children, the advantages of storytelling mechanics, as well as special character design and striking image styles, creating unique and attractive products.

Developing a draft or prototype version of the final solution is the fourth stage in design thinking (Shé et al., 2022). In the prototype stage, the Kewania boardgame shows a focus on developing a draft version or prototype as a concrete step in realizing the final solution. Interesting factors include family-based value propositions, innovative storytelling mechanics, and character designs that appeal especially to children. A family-based value proposition shows that this product not only creates a play experience, but also has added value related to family needs and values. A focus on values for parents and children demonstrates an understanding of key stakeholders.

The advantages of storytelling mechanics are the main differentiator of this product. This shows that Kewania board games not only focus on the usual gaming experience, but also create an immersive and engaging narrative through storytelling mechanics. Attractive character designs, especially for children, create visual and aesthetic appeal that can enhance the play experience. The striking style of the image gives a strong visual identity to the product, creating a unique and attractive impression of the product. Overall, the prototype stage of the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Kewania boardgame reflects a step-in product development, highlighting elements that make it unique and appealing to families, especially for parents and children.

In the test phase, Kewania's game design and planning is based on four core values: fun interaction, role play, introduction to the animal world, and storytelling. Game mechanics are tailored for families with elementary to middle school age children, focusing on using board games as a physical tool to enhance family interaction, reduce gadget use, and create a fun experience in less than 15 minutes per round. The initial goal was achieved by applying four core values to the design, utilizing storytelling mechanics to teach certain values to children, and creating a product as a family interaction tool that combines the fun of play with educational learning.

The final stage of the design thinking process is testing. This stage involves redefining and empathizing with the end user to ensure the best solution is sought (Shé et al., 2022). In the test phase, Kewania boardgame demonstrated the approach by detailing the design and planning of the game based on four core values: fun interaction, role play, introduction to the animal world, and storytelling. These four values reflect attention to fun, educative, and family-oriented play experiences.

The game mechanics are tailored specifically for families with children of elementary to junior high age, demonstrating a deep understanding of the characteristics and needs of the target user. The focus on using board games as a physical tool to improve family interaction and reduce the use of gadgets creates added value in the context of increasingly rapid technological developments.

The initial goal of the product was successfully achieved by applying four core values in the design. The utilization of storytelling mechanics to teach certain values to children shows a strong educative approach. This product successfully creates a family interaction tool that combines the fun of play with educational learning, providing a holistic solution for user needs. Overall, the test phase of the Kewania boardgame reflects efforts to ensure that the resulting solution matches the expectations and needs of the end user, with an emphasis on a sustainable and rewarding gaming experience.

2. Business Model Canvas (BMC) Analysis "XYZ" boardgame products

From the results of design thinking analysis, then BMC analysis of the product "XYZ, the results and recommendations of the analyses above can be compiled into the framework of the existing BMC Kewania in the picture. All of the above recommendations aim to improve Kewania's operational focus and efficiency, while strengthening connections with customers and partners. In addition, further exploration of collaborations and partnerships can open up new opportunities for business growth.

<table>
<tr>
<td rowspan="2"><u>Key Partners</u>

1. Boardgame fan community
2. Other boardgame designers
3. Potential partnerships with boardgame publishers
4. Potential partnerships with educational institutions such as kindergarten or elementary school
5. Potential partnerships with boardgame stores</td>
<td><u>Key Acitivities</u>

1. Board game design and development
2. Social media content creation with short stories about the world of Kewania
3. Social Media Management
4. Doing Playday to kindergarten or small-class SD</td>
<td rowspan="2"><u>Value Propositions</u>

1. Learn while playing.
2. Tools to improve interaction between parent and child.
3. Tools to foster courage in children to convey thoughts through storytelling.
4. Tools that can make children understand roles through role play.
5. Teaching children about animals and their abilities, natural disasters, and rescue tools</td>
<td><u>Customer Relationship</u>

1. Interactive and educational content on social media
2. Management of comments and suggestions on social media
3. Engagement with the internal community of boardgames and testers.
4. Feedback gathering and product iterations through playday sessions in schools</td>
<td rowspan="2"><u>Customer Segment</u>

1. Generation X parents and millennials.
2. Board game enthusiasts.
3. Special segmentation potential for teachers interested in the educative aspects of the game.</td>
</tr>
<tr>
<td><u>Key Resources</u>

1. Board game designer
2. Prototype boardgame maker
3. Social media content creators
4. In-house Illustrator Recruitment
5. Potential Partnership with</td>
<td><u>Channel</u>

1. Kewania social media with educational content.
2. Direct sales to customers.
3. Marketing through boardgame stores
4. Potential distribution through</td>
</tr>
</table>

:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

	Publisher or printing company 6. Potential partnerships with boardgame stores		resellers or other partners.	

Cost structure	***Revenue stream***
1. Cost of making a boardgame prototype 2. In-house design and illustrator team salaries 3. Cost of creating social media content 4. Board game production costs 5. Marketing and promotion costs. 6. The potential cost of collaboration with third parties.	1. Revenue from board game sales 2. Potential revenue from collaboration with third parties, such as publishers or printing companies 3. Commercialization (monetization) of Kewania social media by delivering content related to short stories in the world of Kewania.

Figure 7 BMC Kewania end (after recommendation)

In the customer segment, Kewania can specifically target parents of generation X and millennials as its main market share. This choice is based on the understanding that this group has needs that need to be met in improving family interactions that are sometimes overlooked due to the use of gadgets. In addition, the marketing strategy adopted by Kewania includes an educative approach aimed at educators at the basic education level, such as kindergarten and elementary school. This shows Kewania's commitment to not only provide fun products for families, but also plays a role in supporting children's education through its educational marketing to educators. Thus, Kewania seeks to build connections with these two main segments to create a positive impact in meeting the needs of family interaction and children's education.

Customer segment refers to understanding and identifying the different customer groups that a business will serve. In BMC, customer segments help companies to better understand the needs, preferences, and characteristics of each customer group, so that companies can develop marketing strategies, product offerings, and services that better suit the needs of each segment (Osterwalder and Pigneur, 2010).

This selection is based on the understanding that this group has needs that need to be met related to increasing family interactions that are often overlooked due to the use of gadgets. By targeting this group, Kewania seeks to provide solutions that are in accordance with the challenges faced by modern parents in maintaining the quality of family interaction. In addition, the marketing strategy that adopts an educational approach to educators at the kindergarten and elementary levels shows Kewania's commitment to not only providing fun family entertainment but also supporting children's education. By embracing this segment, Kewania hopes to build strong connections with these two main groups, creating a positive impact in meeting family interaction needs and supporting children's educational development. This analysis is done by understanding the importance of customer segments in the Business Model Canvas (BMC), which helps companies’ detail and understand the characteristics and needs of each customer segment to support the development of more effective business strategies.

In terms of value propositions, Kewania offers two main added values to its customers. First, Kewania presents interactive board games as a learning tool. Thus, this product not only serves as a source of entertainment, but also as a tool that supports children's education through interactive and educational play experiences. Second, Kewania marketing focuses on the concept of quality time in the family. This product is designed to be a hub in improving interaction between family members, reducing dependence on technology, and encouraging togetherness. Therefore, Kewania provides added value by prioritizing quality experiences with family as an integral part of using its products. This analysis is carried out in the context of value propositions, which are key elements in the Business Model Canvas (BMC) to present added value that can differentiate the products or services of a business in the market.

Value proposition refers to the promise or added value provided by a product or service to customers. Value proposition explains why customers should choose a product or service from a particular company over other competitors (Osterwalder and Pigneur, 2010). In the context of value propositions, Kewania presents two main added values presented to customers. First of all, Kewania offers interactive board games as a learning tool, showing that this product not only acts as entertainment, but also as a tool that can support children's education through interactive and educational play experiences. Thus, Kewania provides added value to customers by integrating educational elements in their entertainment products.

Furthermore, Kewania focused their marketing on the concept of quality time in the family. This indicates that the product is designed to be a link in improving interaction between family members, as well as to reduce dependence on technology and encourage togetherness. By emphasizing quality experiences with family as an integral part of using its products, Kewania provides attractive added value for customers. Value propositions help a business to differentiate itself from competitors by offering better or different added value to customers, thereby increasing the attractiveness of the product or service in the market.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

In the channel aspect, Kewania adopts two important strategies to reach customers and build their brand presence. First, Kewania actively manages social media platforms by providing educational content. In this way, they not only use social media as a conventional marketing tool, but also as a channel to convey value-added and educational information to their audience. This educational content can cover a variety of topics relevant to children's education, family interaction, and the benefits of playing board games, reinforcing Kewania's image as a brand that cares about child development and family togetherness.

Furthermore, Kewania also developed short stories related to the world of Kewania on social media platforms. These strategies help create narratives and stories around their brand, capturing the audience's attention by engaging them in a broader narrative experience. By incorporating storytelling elements in their marketing, Kewania creates an emotional bond with customers, making social media platforms an effective channel to communicate, build trust, and introduce their brand values to the target audience. This analysis is done within the channel framework, which is a key element in the Business Model Canvas (BMC) to describe the way a company delivers products or services to customers.

Channel refers to the way a company delivers its products or services to customers. Channel includes various channels or means that companies use to distribute, communicate, and convey the value of their products or services to consumers (Osterwalder and Pigneur, 2010). In channel strategy, Kewania took a strategic step by managing social media platforms as one of the main means to reach customers and strengthen their brand presence. Through being active in managing social media, Kewania not only views it as a conventional marketing tool, but also as a channel that can provide added value to the audience. They provide educational content that focuses on topics relevant to children's education, family interaction, and the benefits of playing board games. This approach reflects Kewania's commitment to their role in supporting child development and family togetherness, as well as strengthening their brand image as a carrier of positive values.

In addition, Kewania expanded their marketing strategy by developing short stories related to the world of Kewania on social media platforms. By creating narratives and stories around their brand, Kewania managed to capture the audience's attention and engage them in a broader narrative experience. This approach not only creates an emotional connection with customers but also transforms social media platforms into effective tools for communicating, building trust, and introducing the brand's core values. This strategy is implemented within the channel framework, showing how Kewania conveys and communicates their products and values to customers.

In the customer relationship aspect, Kewania puts a focus on increasing direct interaction with customers through social media and online platforms. Customer relationship refers to the way companies interact and foster relationships with their customer segments. Customer relationships include a variety of strategies and activities designed to build, maintain, and improve relationships with customers (Osterwalder and Pigneur, 2010). Kewania is actively present on social media to strengthen bonds with customers, provide relevant information, and respond quickly to questions or feedback. They not only present educational content but also create a two-way communication channel, allowing customers to interact directly with the brand.

In addition, Kewania holds regular feedback collection sessions. This approach reflects the company's commitment to continuously improve their products and services according to customer needs and expectations. Feedback collection sessions give customers the opportunity to actively participate, provide feedback, and feel that their voices are valued and heard. Thus, this customer relationship strategy helps strengthen the attachment between Kewania and their customers, supports efforts to provide a better experience, and builds long-term trust. This analysis is done within the framework of Customer Relations, which is a key element in the Business Model Canvas (BMC) to describe how companies interact with their customers.

In the aspect of revenue stream, Kewania designed three main strategies to generate revenue. Revenue stream refers to the main source of revenue generated by companies through the sale of their products or services. Revenue streams include the various ways that companies use to generate financial revenue (Osterwalder and Pigneur, 2010). First, they offer interactive board game products as the main source of revenue. By providing interactive board games that are not only fun but also support children's learning, Kewania creates attractive added value for customers, and in turn, increases their revenue potential.

The second strategy adopted by Kewania is to increase direct interaction through social media to increase sales. By actively communicating and engaging with customers on social media platforms, they create opportunities to promote products directly, obtain feedback, and increase customer awareness. Then, the third strategy increases the effectiveness of the second strategy further, namely by commercializing social media through the delivery of content related to short stories in the world of Kewania. This commercialization means using the platform to promote a particular product or brand through various content, such as short stories, related to context or stories within the world of Kewania. With the mechanism where content will be present regularly, income is also expected to come from the YouTube media monetization mechanism which can be an additional passive income when meeting the requested requirements. With this focus, Kewania hopes to achieve increased sales through social media, create additional sources of income, and support overall business growth. This strategy reflects the company's efforts to make optimal use of digital platforms to increase their revenue. This analysis is

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

done within the Revenue Source framework, which is a key element in the Business Model Canvas (BMC) to describe how companies generate revenue from the sale of their products or services.

In the key resource's aspect, Kewania focuses its main resources on supporting their design activities and presence on social media. Key resources refer to all the assets and elements required by a company to run its business model well. Key Resources cover everything essential to business operations and sustainability (Osterwalder and Pigneur, 2010). This selection shows that companies recognize the importance of strong design and presence on digital platforms as key factors for the success of their business. In addition, Kewania is considering the option of recruiting an in-house design team or illustrator. This step shows the company's efforts to have human resources who are dedicated and focused on their product design needs. By having an internal team, Kewania can be more flexible in responding to needs and changes in product design quickly.

Partnerships with boardgame publishers were also identified as one of the key resources. This shows that Kewania recognizes the importance of collaboration with external parties to expand networks, gain access to additional resources, and improve the quality of their products through the experience and support that board game publishers have. Overall, the key resource strategy taken by Kewania reflects the company's efforts to build a solid foundation in terms of design, digital presence, and external cooperation to support the development and success of their products. This analysis is carried out within the framework of key resources, which are key elements in the Business Model Canvas (BMC) to describe resources that are important to the company's operations.

Kewania carries out several key activities that are fundamental pillars in their operations. Key activities refer to a set of actions and activities that are essential to running a company's business model. Key activities include all operational activities that are essential in generating and delivering value to customers (Osterwalder and Pigneur, 2010). First, the company placed a primary focus on board game design and development. This choice shows that Kewania recognizes the importance of design quality as a major factor to create attractive products and compete in the market. Expertise in board game design becomes a core activity that supports the achievement of the company's main goals.

The next key activity is benchmarking and innovation in boardgame design. Kewania is committed to continuously developing innovative products by studying industry trends and seeking inspiration from best practices in the field of board game design. The move reflects the company's efforts to stay relevant, adapt to market changes, and deliver superior products.

Finally, Kewania involves itself in socialization through playdays with nearby kindergarten and elementary schools. This activity shows that the company is trying to get closer to its consumers directly, especially by involving children and the educational environment. Through playday, Kewania can introduce their products directly to their main target market, while building positive relationships with schools and local communities.

Overall, Kewania's key activities reflect a strategy focused on design, innovation, and direct interaction with consumers, all critical elements in building and sustaining the company's success. This analysis is carried out within the framework of key activities, which are key elements in the Business Model Canvas (BMC) to describe the core operational activities carried out by the company.

Kewania builds a strong key partners strategy with a focus on three main aspects. Key partnership refers to the strategic relationship established by a company with other entities outside the organization. Key partnerships involve working with external parties that can add value, reduce risk, or provide access to critical resources (Osterwalder and Pigneur, 2010).

First, the company prioritizes strengthening relationships with boardgame publishers. By forging close partnerships with board game publishers, Kewania can ensure access to the latest resources and information in the industry, and improve the quality of their products through collaboration with experts. This move reflects Kewania's policy to build strategic partnerships that support the growth and development of their business.

Furthermore, Kewania seeks to improve relations with the community of boardgame lovers. Actively engaging with the community provides an opportunity to get direct feedback from boardgame enthusiasts, understand trends in the market, and build a positive brand image. Partnerships with communities can also be an effective platform to promote Kewania products and build trust among influential audiences.

Finally, Kewania identifies partnership opportunities with educational institutions. By forging relationships with educational institutions, companies can incorporate further educational elements in their products and support educational initiatives at the school level. This partnership can create a win-win situation where Kewania gains access to the education market, while educational institutions get innovative solutions to improve children's learning.

By implementing this key partner strategy, Kewania shows their commitment to collaborate with external parties who can strengthen their position in the market and provide added value to their products and services. This analysis is conducted within the framework of key partners, which is a key element in the Business Model Canvas (BMC) to describe strategic partnerships that support business operations and growth.

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The cost structure strategy adopted by Kewania reflects a careful and efficient approach in managing the company's operational finances. Cost structure refers to all costs associated with operating and maintaining a company's business model. The cost structure includes all expenses required to carry out key activities, establish and maintain partnerships, and generate and deliver value to customers (Osterwalder and Pigneur, 2010).

First, Kewania concentrated efforts on adjusting its cost structure with a focus on key elements. By evaluating and identifying the most significant cost elements, companies can allocate resources effectively to support day-to-day operations and long-term growth.

Furthermore, Kewania chose to hire an in-house design team or illustrator as a strategy to reduce costs. By having an internal team, companies can manage and control production costs and minimize dependence on external parties. This step creates greater flexibility and control over the creative and production aspects of their board game products.

In order to reduce production and marketing costs, Kewania also built partnerships with board game publishers. This cooperation opens up opportunities to get financial support and access to existing production infrastructure, which can reduce the burden of production costs and speed up the marketing process.

Finally, periodic evaluations of all costs demonstrate Kewania's proactive approach in identifying potential savings. By regularly evaluating and auditing costs, companies can adjust their strategies according to changing market and economic conditions, ensuring the sustainability and success of their business in the long run.

Through these measures, Kewania built a strong foundation for their cost structure, illustrating prudent financial management policies and being responsive to market dynamics. This analysis is carried out within the framework of cost structure, which is a key element in the Business Model Canvas (BMC) to describe how companies manage and allocate their financial resources to support operations and business growth. By implementing BMC, this recommendation is expected to lift Kewania from the valley of death and be able to bring Kewania to the next stage/generation.

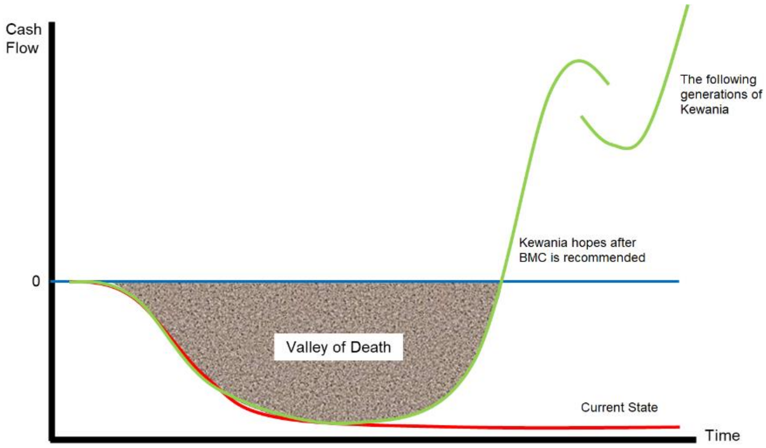

Figure 8 Expectations of Kewania condition after BMC Implementation Recommendations

IV. CONCLUSION

The conclusions that can be drawn from this study are:

a. Conclusion related to *design thinking*

The purpose of this study is to identify the process of developing the innovative board game product "Kewania" using a design thinking framework. Analysis at these stages of the development process provides an in-depth look at the design, testing, and implementation of this board game in the context of improving family interaction, especially in the digital era dominated by technology. This process consists of several stages, namely empathize, define, ideate, prototype, and test.

The empathize stage focuses on a deep understanding of the needs and expectations of the target audience, especially generation X and millennial parents. In this stage, a thorough analysis is carried out to identify consumer needs and aspirations. "Kewania" aims to address modern family challenges, such as the balance between technology use and time with children. This stage forms the basis for human-centered design, ensuring that "Kewania" not only entertains but also satisfies the emotional and practical needs of users.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The define stage establishes the key factors that are the main needs of target consumers, such as shared activities, increased interaction of children, and alternative solutions to gadget dominance. "Kewania" is geared towards being a smart and useful alternative in creating precious moments and building close connections among family members.

The ideate stage emphasizes the uniqueness of the "Kewania" product as a boardgame that combines role play and storytelling to provide a unique learning experience. Cute and cute character designs not only work visually but also as a tool to captivate children's attention. "Kewania" is not only directed to entertainment, but also to provide significant educational value.

The prototype stage highlights the core values of "Kewania," namely family interaction, innovation in storytelling mechanics, and compelling character design. Prototyping is done carefully to create a gaming experience that is not only entertaining but also provides educational value. This boardgame is expected to be a top choice for families looking for a smart and meaningful alternative to spending time together.

The test phase involves testing the product to ensure the suitability of the game mechanics to the target user. This trial reflects a commitment to ensure that "Kewania" can meet the needs of both parents and children. The results of the trial showed that "Kewania" managed to become an entertaining and educational family interaction tool.

The development of "Kewania" using a design thinking approach succeeded in creating a board game that is responsive to user needs and expectations. This product not only provides entertainment, but also has a positive impact on family interaction and children's development. Recommendations including education, pricing strategies, continued development, collaboration with the community, and periodic evaluations are expected to strengthen Kewania's position in the market and provide sustainable benefits to users.

b. Conclusion on Business Model Canvas (BMC)

Based on the Business Model Canvas (BMC) that has been presented, it can be concluded that the company's business model has several key elements that are interrelated to achieve success. Overall, BMC provides a comprehensive overview of how companies create, deliver and capture value. First, in the customer segment, the company focuses on services and solutions specifically designed to meet customer needs by offering innovative technology products. Furthermore, relationships with customers are emphasized to build long-term partnerships and increase customer satisfaction.

In terms of value proposition, the company highlights the advantages of its products through advanced technological features and high reliability. Product distribution is carried out through online and offline channels to achieve a wider market reach. The company's cost structure is mainly related to technological development, marketing, and operations. To ensure sustainability and growth, companies need to manage resources efficiently and continuously innovate.

Key partnerships and key activities show that the company recognizes the importance of collaboration with strategic partners and focus on technology development as one of the key elements in its operations. By understanding this BMC, a company can better navigate its business environment, identify growth opportunities, and address challenges that may arise. By maintaining a focus on customer needs and leveraging its internal strengths, a company can optimize its business model to achieve long-term success.

Suggestions that can be given in this study are:

a. Suggestions related to the results of this study:

1) Hire in-house illustrators
Hiring an Illustrator to be an internal part of the team can be less costly than hiring a freelance illustrator to design product illustrations, especially at the design stage.
2) Partner with boardgame publishers
Partnerships with boardgame publishers can be a solution for mass production of products. Opinions are certainly reduced because production is borne by publishers so that income will be more for publishers. However, given that publishers also have marketing distribution channels, this can be an advantage over partnerships with publishers.
3) Creating social media content in the form of short stories about the world of Kewania
By creating interesting content about the world of Kewania, it is expected to increase engagement with customers and attract the attention of the general public about Kewania.
4) Establish relationships with educational institutions at the kindergarten & elementary level
By establishing relationships with educational institutions, it is hoped that it can increase Kewania's exposure to the intended target, namely children, and can also be a teaching aid for teachers to learn about natural disasters. In addition, it is also expected to be a location for playdays with children at the kindergarten or elementary school level.

ISSN : 2597-4785 (ONLINE)
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5) Social media monetization potential
   Social media such as YouTube provide monetization facilities for original content creators who meet the requirements. By meeting these requirements, the content produced can be an additional source of income for Kewania.
6) Registration of IPR (Brand, Patent, Copyright, Industrial Design, etc.) for Kewania products and brands according to needs
   By registering Kewania's IPR, Kewania will be safe in IPR and have legal protection against the possibility of using the same brand or copyright issues.

b. Suggestions for further research:

1) This research focuses on the innovation of a boardgame product from the basis of product formation, how the business is run, and mapping the readiness of the innovation product. Researchers who want to take on the same topic can explore beyond the focus of this research to complement existing research.
2) Researchers can further explore the tastes of Indonesian boardgame fans, the position of Indonesian boardgame products towards foreign products, the general expectations of the Indonesian people towards board games, and so on.
3) Further research is expected to complement the things that were missed in this study.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Effect of Dividend Policy and Profitability on Firm Value with Corporate Social Responsibility as A Mediator

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ABSTRACT

Purpose: This study aims to examine the direct effect and indirect effect between Dividend Policy, Profitability, and CSR on Firm Value. The sample in this study is a consumer non-cyclicals company listed on the Indonesia Stock Exchange from 2019 to 2021 which uses purposive sampling, namely companies that pay dividends. The sample obtained was 152 companies

Design/methodology/approach: The analysis technique used is the regression analysis and path analysis

Findings: The results of this study indicate that: (1) Dividend Policy not affect Firm Value, CSR and Profitability affect Firm Value, (2) CSR is able to mediate the effect of Dividend Policy on Firm Value, (3) CSR is unable to mediate the effect of Profitability on Firm Value. Future researchers are expected to use all companies listed on the Indonesian stock exchange so that it is easier to get the complete data information needed because it is more widespread not only focusing on one sector.

Research limitations/implications: The implication of the results of this study is as a basis for company policy in assessing the performance of the company. Where when the company is consistent in distributing dividends, the company's value will be high, this is also supported by the profitability of the company. In addition, the CSR factor carried out by the company can certainly also increase the value of the company Where when the company is consistent in distributing dividends, the company's value will be high, this is also supported by the profitability of the company. In addition, the CSR factor carried out by the company can certainly also increase the value of the company. The more CSR that is done, the better the company's performance.

Originality/value: This research is original

Paper type: Research paper

Keyword: *Deviden Policy, CSR, Profitability, Firm Value*

Received : October 5th

Revised : December 18th

Published : January 31th

I. INTRODUCTION

Sugiono (2009) states that dividends are income distributed to company owners or shareholders. Dividends are a distribution of profits provided by companies that issue shares for the profits earned by the company. Research conducted by Selvy & Esra (2022) obtained a positive and significant direction on the effect of dividend policy on firm value, which means that the more companies that distribute dividends, the higher the value of the company. This is in line with the Bird in the Hand theory where investors will tend to choose to get dividends now rather than having to wait for capital gains in the future so that based on this thinking, the hypotheses that can be proposed in this study are:

H1: Dividend policy affects CSR

The company must provide some of the profits obtained for social programmes to cover the negative impact of the company's operational activities that it causes. So it can be said that the more profit the company gets, the more social responsibility items will be issued. This indicates that profitability is the company's ability to generate profits during a certain period. The higher the level of profitability of the company, the greater the social disclosure. Companies that have a responsibility to stakeholders to fulfil their information needs in order to

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

maintain their support. The higher the level of profitability, the more detailed the information provided by managers because management wants to convince investors of the company's profitability.

H2: Profitability affects CSR

The main goal of a company is to increase the value of the company in a sustainable manner. This goal can be achieved if the company pays attention to the economic, social, and environmental dimensions where according to legitimacy theory explains that the company continues to strive to ensure that the company operates within the norms of society and the environment in which the company is located, and ensures that the company's activities are accepted by outsiders as a legitimate activity. In the end, legitimacy through CSR disclosure will reduce conflicts of interest between managers, shareholders and stakeholders, which is also very helpful in building a positive image for investors in investing in the company. A positive company will increase the value of the company for the better and can promise to provide a rate of return or can promise a stable dividend distribution so as to attract the attention of investors.

H3: Corporate Social Responsibility affects firm value.

According to stakeholder theory, companies are not only concerned with the interests of shareholders but also must pay attention to the interests of their stakeholders. Dividends are a form of corporate social responsibility towards stakeholders. If the dividend distribution is getting smoother, it indicates that the company's responsibility towards stakeholders is getting better (Suprijani and Dina (2020).

H4: Dividend policy affects firm value.

Research conducted by Chumaidah & Priyadi (2018), Hauteas & Muslichah (2019), Ayu & Suarjaya (2017), Raningsih & Artini, (2018) shows profitability affects firm value. From this information and supported by the results of previous research, the proposed hypothesis is:

H5: Profitability affects firm value

The main goal of the company is to increase the value of the company. The company's value will be guaranteed to grow sustainably if the company pays attention to the economic, social, and environmental dimensions because sustainability is a balance between economic, environmental, and community interests. This dimension in the implementation of CSR by the company is a form of responsibility and concern for the environment around the company. In signaling theory, to reduce information asymmetry, this can be done by signalling information to outsiders, the success of the company's performance is represented by the number of CSR disclosures made. Many benefits are obtained by companies with the implementation of CSR, including products increasingly favoured by consumers, the environment around the company will be maintained, employee loyalty increases, the company's reputation increases in the eyes of the community, which means that the implementation of CSR will provide an increase in company performance so that the company is also in demand by investors. Chumaidah & Priyadi (2018) found that CSR disclosure has a positive and significant effect on firm value. Research by Raningsih & Artini (2018) also shows the same results that CSR has a positive and significant effect on firm value. Based on the explanation above, a hypothesis is formulated:

H6: Dividend policy affects firm value with CSR as an intervening variable.

The role of a company with a high level of profitability is a good performance achievement so that the company will get a lot of attention from stakeholders, thus increasing the company's obligation to report information related to CSR activities. In addition, the higher the profitability, the higher the position of the company's value in the eyes of investors. Signal theory explains that companies can provide signals to investors through information disclosure in the form of financial aspects (earnings information) and non-financial aspects (CSR activity information) with the aim of increasing company value. Companies that deliver good news related to company performance to investors are expected to be a positive signal to the level of investment return captured by investors, resulting in an increase in stock prices and an increase in company value. The results of previous research related to the role of CSR disclosure in mediating the effect of profitability variables on firm value found conflicting results. CSR disclosure can mediate the relationship between profitability and firm value as stated by the results of research conducted by Ayu & Suarjaya (2017), Robert (2019).

H7: Profitability affects Firm Value with CSR as an intervening variable.

II. METHODS

The population in this study are non-cyclical companies listed on the Indonesia Stock Exchange (IDX). The sample in this study are non-cyclicals companies listed on the IDX from 2018 to 2021, totalling 452 companies using purposive sampling technique, namely: Non-cyclicals companies that pay dividends. Hypothesis testing in this study uses multiple linear regression analysis and path analysis.

Equation I : $CRS = \alpha + \rho b(DPR) + \rho b(ROA) + e$

Equation II : $PBV = \alpha + \rho d(DPR) + \rho e(ROA) + \rho c(CSR) + e$

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

see the direct and indirect effects by adding up the total effect of ROA to PBV and by adding up the total effect of DPT to PBV.

Instruments in this study:

$$DPR = \frac{\text{Devidend Earnig Per Share (DPS)}}{Earning\ Per\ Share\ (EPS)} \text{x } 100\%$$

$$ROA = \frac{net\ profit}{Total\ Asset} \text{x } 100\%$$

$$CSRI_j = \frac{\sum X_{ij}}{n_j}$$

$$PBV = \frac{Stock\ price\ per\ share}{Book\ value\ per\ share} \text{x } 100\%$$

$$Book\ Value = \frac{Total\ Equitas}{Total\ shares} \text{x } 100\%$$

III. RESULTS AND DISCUSSION

A. Deskriptive analysis

Table 1 deskriptive analysis result

Statistics

		DPR (X1)	Profitabilitas (X2)	CSR (Z)	Nilai Perusahaan (Y)
N	Valid	152	152	152	152
	Missing	0	0	0	0
Mean		.4369920	.1034840	.4549326	4.2420066
Std. Error of Mean		.03437588	.00781513	.05344886	.60516660
Median		.3206468	.0814492	.3626374	1.8850000
Mode		.43600	.09400	.36800	.09400a
Std. Deviation		.42381435	.09635143	.65896184	7.46099496
Variance		.180	.009	.434	55.666
Range		3.31011	.52338	4.24816	56.78000
Minimum		-.25011	-.03035	.16484	.01000
Maximum		3.06000	.49303	4.41300	56.79000
Sum		66.42279	15.72957	69.14976	644.78500

a. Multiple modes exist. The smallest value is shown

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ISSN : 2597-4750 (PRINTED)

B. Hypothesis test result

Table 2 Result of the t test Profitabilitas, DPR, CSR to Firm Value

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.909	.916		.992	.323		
	DPR (X1)	.653	1.251	.037	.522	.602	.935	1.070
	PROFITABILITAS (X2)	46.749	6.127	.604	7.630	.000	.754	1.327
	CSR (Z)	-3.936	.902	-.348	-4.364	.000	.744	1.345

a. Dependent Variable: Firm Value (Y)

Table 3 Result of the t tes Profitabilitas, DPR to CSR

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.253	.081		3.145	.002		
	DPR (X1)	-.323	.110	-.208	-2.926	.004	.989	1.011
	PROFITABILITAS (X2)	3.311	.486	.484	6.814	.000	.989	1.011

a. Dependent Variable: CSR (Z)

C. Result path analysis

Table 4 result path analysis

Variable	Beta Coefficient direct effect	Variabel	Beta Coefficient direct effect	Variable	Beta Coefficient direct effect	Beta Coefficient indirect effect

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X1 to Z	*-0,323*	*Z to Y*	*-3,936*	*X1 to Y*	*0,653*	*1,27*
X2 to Z	*+3,311*	*Z to Y*	*-3,936*	*X2 to Y*	*46,749*	*-13,03*

1. Devident policy to CSR (H1)

Dividend policy variable affects CSR. According to stakeholder theory, companies are not only concerned with the interests of shareholders but also must pay attention to the interests of their stakeholders. Dividends are a form of corporate social responsibility to stakeholders. If the dividend distribution is getting smoother, it indicates that the company's responsibility to stakeholders is getting better. Companies that have a good enough net profit in each period have the potential to be able to distribute some of that net profit to shareholders and CSR activities. This is also in line with the bird ib the hand theory where according to this theory investors or shareholders will prefer the certainty of dividend distribution rather than the promise to distribute larger dividends in the future, which means that investors will prefer to benefit through dividend payments in the present rather than waiting for capital gains in the future. This will certainly increase the company's policy in managing CSR.

Based on the processed results in this study, dividend policy proxied by Dividend Payout Ratio (DPR) has a positive and significant influence on CSR. This study is in line with research conducted by Suprijani and Dina (2020) which states that dividend policy proxied by DPR has a positive and significant influence on CSR.

2. Profitability on CSR (H2)

Profitability variables affect CSR. The higher the profit owned by the company, the lower the CSR disclosure or vice versa if the profit falls, the CSR disclosure will increase. The results of this study are in accordance with the perspective of stakeholder theory where the company is obliged to provide transparency of information related to all activities that have been carried out by the company to stakeholders, one of which is the disclosure of CSR activities regardless of profit up or down (because the direction of the results of this study is negative / opposite). The high level of profitability of the company due to the achievement of good performance turns out in this study does not have an impact (because the direction of this study shows a negative arqah) on the greater amount of company resources spent on public activities. The company will disclose CSR more widely so that the company's existence can be accepted by stakeholders and can ensure the survival of the company and get greater profits in the future. The results of this study are supported by the results of research conducted by Ayu D.P and AA Gedhe (2017, Silfyanie (2016) which proves that profitability has a significant effect on CSR disclosure.

3. CSR to Firm value (H3)

CSR variables affect firm value. The results of this study are in accordance with the perspective of signal theory where companies can provide signals to external parties through reporting information related to company performance in order to increase company value. The signal is responded positively by investors through an increase in stock prices that can increase the value of the company. Broader CSR disclosure will make the company get support for stakeholder alignments for all decisions taken in order to increase company value. The results of this study are supported by the results of research conducted by Julianto and Lia (2020).

4. Dividend Policy to Firm Value (H4)

Dividend policy has no effect on firm value, one of which is because the dividend payout ratio in this sample is still low so that it is less profitable for investors and is supported by high company internal funds so that it will have an impact on retained earnings. This will result in an increase in firm value. A small dividend payout ratio will reduce the company's internal funds so that investors are less interested if the profits are reinvested to get greater profits so that this cannot increase the company's value. This is in line with dividend theory where according to this bird in the hand theory, investors or shareholders will prefer the certainty of dividend distribution rather than the promise to distribute larger dividends in the future. So that this will make shareholders or investors who choose non-competing characters prefer to benefit through dividend payments in the present rather than waiting for capital gains in the future so that this will improve company performance with the number of investors who secure their shares. The results of this study are in line with the research of Julianto and Lia (2020) and Hauteas and Muslichah (2019).

5. Profitability on Firm Value (H5)

Profitability variables affect firm value. The results of this study are in accordance with the perspective of signal theory which explains that the increase in profitability listed in the financial statements is an effort to provide positive signals to investors regarding the company's performance and future business prospects. These efforts can build positive sentiment from investors so that it affects the increase in share prices in the capital

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

market. An increase in share price can increase the value of the company in the eyes of investors, this research is supported by Ayu D.P and AA Gede (2017), also supported by Raningsih and Luh Gede (2019) and Hauteas and Muslicah (2019).

6. CSR is able to mediate dividend policy on firm value (H6)

CSR is a mediating variable between dividend policy and Firm Value. Legitimacy theory explains that companies continue to strive to ensure that the company operates within the norms of society and the environment in which the company is located, as well as ensuring that the company's activities are accepted by outsiders as a legitimate activity. In the end, legitimacy through CSR disclosure will reduce conflicts of interest between managers, shareholders and stakeholders, it is also very helpful in building a positive image for investors in investing in the company. A positive company will increase the value of the company to be better and can promise to provide a rate of return or can promise a stable dividend distribution so as to attract the attention of investors. This shows that with high CSR, the company's value will increase, supported by a stable dividend policy given to investors. This research is supported by Selvi and Marta (2022) who state that the dividends obtained by shareholders determine the welfare of shareholders which is the main goal of the company.

7. CSR is not able to mediate profitability on firm value (H7)

Mediation variables between profitability and Firm Value. According to signal theory which explains that company value can be increased by sending signals to external parties through reporting information related to company performance to minimise uncertainty about future business prospects where the higher the profitability, the higher the position of company value in the eyes of investors. But not in research that reveals that the higher the value of profitability does not guarantee the position of the company's value in the eyes of investors. Reporting information related to increased profitability and wider CSR disclosure will not always have an impact on the quality of the company's financial statements, where the report is a consideration in making investment decisions for investors. The findings of this study prove that profitability and CSR do not always describe good business prospects in the future so that it will be responded by investors as a positive signal which has an impact on increasing stock prices and company value. The results of this study do not support the findings of Silfyanie (2016), Ayu and AA Gede (2017) who found that the role of CSR can mediate the effect of profitability on firm value.

IV. CONCLUSION

This study aims to examine the effect of Dividend Policy, Profitability, CSR on Firm Value and also test whether CSR is able to mediate between dividend policy and profitability on firm value, the sample used is a non-ciclycals consumer company listed on the Indonesia Stock Exchange (IDX) for the 2018-2020 period. The test tools used in this study are descriptive statistical tests and multiple linear regression tests using SPSS 24 for windows application software. Based on the results of data analysis and hypothesis testing that has been carried out, the conclusions of this study are as follows: First, CSR is a mediating variable between dividend policy and firm value. Second, CSR is able to mediate the effect of dividend policy on firm value. Third, CSR has an effect on firm value. Fourth, dividend policy has no effect on firm value. Fifth, profitability variables affect firm value, sixth, profitability variables affect CSR. Seventh, CSR is not able to mediate the effect of profitability on firm value.

A. Suggestions

The suggestions from this research are

1. Future researchers are expected to add an observation period so that they can analyse the long term.
2. Future researchers are expected to use all companies listed on the Indonesian stock exchange so that it is easier to get the complete data information needed because it is more widespread not only focusing on one sector.
3. Further researchers can add other independent variables to analyse the firm value variable.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Effect of Product Quality and Service Quality on Repurchase Intentions through Customer Satisfaction as A Mediator

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ABSTRACT

Purpose: Competition between companies in the insurance sector is very sharp. The consequences of this increasingly sharp competition will give rise to three possibilities facing a company, namely closing its business activities, continuing with the business activities it has carried out, or remaining superior and even growing. The aim of this research is to examine and explain the role of the influence of product quality and service quality on repurchase intentions through customer satisfaction as a mediator at PT Great Eastern General Insurance Household Insurance in Bali.

Design/methodology/approach: The analysis technique used is Structural Equation Model (SEM) using an analysis tool in the form of SmartPLS 3.2.9 software

Findings: The results of the analysis show that product quality and service quality on repurchase intentions through customer satisfaction have a positive and significant effect on repurchase intentions towards repurchasing householder insurance.

Research limitations/implications: This research provides implications for companies as material for consideration and evaluation in increasing repurchase intentions. Because this can significantly influence customers' repurchase intentions with Great Eastern Insurance.

Originality/value: This research is original

Paper type: Research paper

Keyword: *Service Quality, Product Quality, Customer Satisfaction, Repurchase Intention, Insurance*

Received : October 5th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

Generally, policyholders want an insurance company to provide more benefits and there are also policyholders who want the right service products, faster, effective and efficient services. Customers who choose an insurance because of the trust factor. According to Winata et.al. (2017) trust is expected to maintain and improve the quality of service of each consumer to be able to generate a high level of trust, by paying more attention to friendly service so that consumers feel comfortable and feel trust in these services. Trust in insurance companies is an expensive thing because competition between insurance companies is getting higher at this time.

The increasingly fierce competition between insurance companies in seizing the number of existing customers because the level of repurchase intention is very low makes insurance management try to win the competition. The main thing that management must pay attention to is to meet consumer expectations regarding product quality and perceived service quality in order to survive and even dominate the market (Dedhy, 2017). The higher the level of product quality and service quality, the higher the level of repurchase intention. Repurchase intentions are increasingly popular to study because they lead positively to actual purchases and increased company revenue (Primanto & Dharmmesta, 2019).

It is important to identify the factors that influence the repurchase intention of insurance policies that are increasingly competitive. The company's goal of achieving competitive advantage can be obtained through efforts using the concept of repurchase intentions. Over the past few decades, the concept of repurchase intentions has

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

played a central role in relationship marketing literature and for now requires profitability intentions (Martinez & Soyong, 2012).

This high quality product can help companies attract new customers and retain old customers for higher profits (Utami, 2017). Good product quality can lead to satisfaction. If the product received or felt by the customer matches or even exceeds customer expectations, then the product is considered quality.

Table 1. Sales Data of House Holder Insurance Policy

Tahun	*2018*	*2019*	*2020*	*2021*	*2022*
Premi (Rupiah)	*3.505*	*2.555*	*1.525*	*1.499*	*1.307*

Source: Insurance Data of PT Great Eastern Bali Branch in Million Rupiah

Looking at the data from 2018 to 2022, househoulder insurance production for the Bali branch has decreased due to a weakening of insurance policies that are no longer renewed and move to other insurance. Meanwhile, according to report data from the Indonesian General Insurance Association (AAUI) in 2022, that householder insurance experienced growth in 2022 with residential property insurance sales in the primary market growing positively by 13.58 per cent year on year in quarter 3 - 2022 and the phenomenon of PT Great Eastern on the sale of househoulder insurance.

Another observation made through discussions with marketers such as insurance agents and insurance brokerage companies in Bali is that PT Great Eastern's house holder insurance product has been around for a long time and has not changed much since 2017. So it feels quite timely to be able to make changes to the long-running product in order to adjust to dynamic market conditionsSebuah produk asuransi yang berkualitas tinggi merupakan sebuah produk jasa keuangan yang mampu unggul dalam bersaing dalam untuk memenuhi kebutuhan konsumennya. Menurut Harahap (2018) menyatakan bahwa produk berkualitas tinggi ini dapat membantu perusahaan menarik pelanggan baru dan mempertahankan pelanggan lama untuk mendapatkan keuntungan yang lebih tinggi.

The results of research from Ramadhan & Sentosa (2017) state that product quality has no significant effect on repurchase intentions. These results contradict the research of Aryadhe & Rastini (2016) which states that product quality and brand image have a positive influence on repurchase intentions. This is in line with the results of research by Yunus (2014), product quality has a significant and positive effect on repurchase intentions.

Ana & Sondari (2018) state that product quality is the ability of a product to demonstrate its function, this includes overall durability, reliability, accuracy, ease of operation and product repair, and other product attributes. Consumers want the products they buy to their liking or product quality. Arianty (2020) states that the higher the product quality, the higher the consumer's decision to make a visit. Ehsani (2015) states that product quality is the customer's perception of the overall quality or superiority of a product or service, in relation to its purpose, relative to alternatives.

Other research gaps (previous research gaps) are also behind this research, including research conducted by Hakim (2017) that service quality variables have a positive and significant effect on repurchase intentions. Meanwhile, research (Kim et al., 2017) shows that the variable quality of the company's image has a negative and significant effect on the repurchase intention variable, consumer repurchase intentions can be measured by the quality of a company, consumers will prioritise the quality of the product and the quality of the service. Jentrasaswin et al., (2018) state that the product quality variable has a positive and significant effect on repurchase intentions by customers who have the intention to repurchase is an indicator of customers who are satisfied with the quality of service and products provided by the company.

Product quality and service quality are not enough to maintain repurchases, especially in the current era. Companies that focus on product quality and service quality do not guarantee that customers will still have the desire to repurchase when the insurance policy is renewed. Solimun (2018) where the study results show that product quality has no influence on the effect of consumer intention and behaviour to come to repurchase a product.

Satisfaction is the state of an individual comparing the expected product or service with the one obtained (Kotler & Keller, 2018: 138). Customer satisfaction is a company tool in measuring the products and services offered to customers whether these products or services can fulfil customer desires (Eliasaph and Balarabe, 2016). Customers feel satisfied when what they get is in line with expectations, while customers feel dissatisfied if expectations are far different from what they get.

There are different views on quality measurement and assessment, subjective assessments still often occur, resulting in quality measurement sometimes still difficult to measure due to the absence of a fixed number to

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

describe quality and the gap between the quality expected and the quality obtained by consumers (Kurniawati et al, 2017).

According to Kurniawati et al, (2017) perceived service quality has a significant positive effect on customer satisfaction and customer satisfaction also affects repurchase decisions. This is also in line with research from Juliana, et al (2015) which states that perceived quality has a significant positive effect on repurchase intentions. Anjarsari et al., (2018) The results showed that the satisfaction variable had a positive and significant effect on satisfaction. Fiazisyah & Purwidiari (2018) The results showed that the variables of product and service quality on repurchase intentions through mediation of customer satisfaction had a positive and significant effect.

In Zeithaml's research (2018) when customers feel the services and products received are as expected, it can be perceived that the quality provided by the agency is of high quality, but if the products and services received by customers are not in accordance with what is expected, the quality provided is considered not optimal or does not meet the quality standards set by customers.

Based on the research gap and the phenomena described in the background of the problem, this study aims to further examine the effect of product quality and service quality on intention stating that the customer satisfaction variable has a significant effect on repurchase intention of householder insurance through customer satisfaction as a mediator in Great Eastern insurance Bali branch. Thus the following hypotheses are proposed: H1: Product quality has a positive and significant effect on repurchase intention, H2: Service quality has a positive and significant effect on repurchase intention, H3: Product quality has a positive and significant effect on customer satisfaction, H4. Service quality has a positive and significant effect on customer satisfaction, H5. Customer satisfaction has a positive and significant effect on repurchase intentions, H6: Customer satisfaction is able to mediate the effect of product quality on repurchase intentions, H7: Customer satisfaction is able to mediate the effect of service quality on repurchase intentions.

II. METHODS

Associative research with quantitative methods is the basis of this research design. The research was conducted at PT Great Eastern Bali Branch located at Jaya Giri, Dauh Puri Klod. This study is to measure product quality and service quality on repurchase intention through customer satisfaction as a mediator in Great Eastern Insurance in Bali Province. The exogenous variables in this study are Product Quality (X1) and Service Quality (X2). The endogenous variable in this study is Repurchase Intention (Y). The intervening variable in this study is Customer Satisfaction (M). The population in the study were insurance policyholders for the 2021 - 2022 period at Great Eastern Bali Insurance. The sampling method used in this study is probability sampling. With a population of all policyholders from 2021 to 2022 at Great Eastern Bali totalling 1108 people, a sample was drawn using the Slovin formula with an error limit of 10%. Then the number of research samples obtained is as follows.

Table 2. Populaition Data

District/ city	*Policyholder Population*	*Percentage*	*Slovin's sample size (n)*
Denpasar	*470*	*42*	*46*
Karangasem	*40*	*3,6*	*22*
Buleleng	*300*	*27*	*42*
Gianyar	*50*	*4,5*	*24*
Tabanan	*74*	*6,6*	*30*
Badung	*174*	*15*	*38*
Total	*1108*	*100*	*202*

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ISSN : 2597-4750 (PRINTED)

Source: Insurance Data of PT Great Eastern Bali Branch

The data collection method used in this research is a questionnaire. In this study, the data analysis techniques used were descriptive statistics and inferential statistics. This research was conducted using the Structural Equation Model (SEM) method with the Partial Least Square (PLS) approach.

III. RESULTS AND DISCUSSION

To analyse the research model, the Partial Least Square (PLS) method was used with the SmartPLS 3.2.9 program tool. There are two basic model evaluations in this test, namely the outer model and the inner model. Inner model testing in PLS is done through bootstrap resampling with the following results:

Table 3. Testing Result Convergent Validity

	M (Customer Satisfaction)	*X1* (Product quality)	*X2* (Service quality)	*Y* (Repurchase intent)
X1.1		*0.793*		
X1.2		*0.825*		
X1.3		*0.811*		
X2.1			*0.756*	
X2.2			*0.710*	
X2.3			*0.812*	
X2.4			*0.806*	
Y1.1	*0.862*			
Y1.2	*0.803*			
Y1.3	*0.739*			
Y1.4	*0.770*			
Y2.1				*0.864*
Y2.2				*0.830*
Y2.3				*0.820*
Y2.4				*0.758*

Source: Processed Data, 2023

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The results of convergent validity testing in Table 3, show that all variable indicator outer loading values have a value greater than 0.50. Thus, it can be concluded that all indicators have met the requirements of convergent validity.

Table 4. Discriminant Validity Result

Research Variables	*AVE*	*Roots AVE*	*Korelasi*			
			Product Quality (X_1)	*Service Quality (X_2)*	*Customer satisfaction (Y_1)*	*Repurchase intent (Y_2)*
Product Quality (X_1)	*0,655*	*0,810*	*1.000*	*0.439*	*0.679*	*0.687*
Service Quality (X_2)	*0,596*	*0,772*	*0.439*	*1.000*	*0.600*	*0.580*
Consumer Quality (Y_1)	*0,632*	*0,795*	*0.679*	*0.600*	*1.000*	*0.778*
Repurchase intent (Y_2)	*0,671*	*0,819*	*0.687*	*0.580*	*0.778*	*1.000*

Source: Processed Data, 2023

Based on Table 4, it can be explained that the square root value of the AVE of the product quality variable (X1) is 0.810 and the correlation of the product quality variable is greater than the correlation of latent variables with other variables. The AVE square root value of the service quality variable (X2) is 0.772 and the correlation of the service quality variable is greater than the correlation of latent variables with other variables. Furthermore, the AVE square root value of the customer satisfaction variable (Y1) is 0.795 and the correlation of the customer satisfaction variable is greater than the correlation of latent variables with other variables. The AVE square root value of the repurchase intention variable (Y2) is 0.819, and the correlation of the repurchase intention variable is greater than the correlation of latent variables with other variables.

Thus, all variables in the tested model meet the discriminant validity criteria. The model is said to be good if the AVE of each variable is greater than 0.50. The output results show that the AVE value of all variables is greater than 0.50 so that the model can be said to be valid.

Table 5. Instrument Reliability Research Results

Variabel	*Cronbachs Alpha*	*Composite Reliability*	*Description*
Product quality (X_1)	*0,738*	*0,851*	*Reliabel*
Service quality (X_2)	*0,776*	*0,855*	*Reliabel*
Customer Satisfaction (Y_1)	*0,807*	*0,872*	*Reliabel*
Repurchase intent (Y_2)	*0,836*	*0,890*	*Reliabel*

Source: Processed Data, 2023

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The output results of composite reliability and Cronbachs alpha of product quality, service quality, customer satisfaction, and repurchase intention variables are all above 0.70. Thus, it can be explained that all variables have good reliability.

Table 6. Nilai R-square

Variabel	*R-square*	*R-square Adjusted*
Service quality (Y_1)	*0,574*	*0,570*
Repurchase intent (Y_2)	*0,669*	*0,664*

Source: Processed Data, 2023

Based on Table 6, the model of the effect of product quality and service quality on customer satisfaction provides an R-square value of 0.574 which can be interpreted that the variability of the customer satisfaction variable can be explained by the variability of the product quality and service quality variables by 57.4 per cent, while 42.6 per cent is explained by other variables outside the study. Furthermore, the model of the effect of product quality, service quality, and customer satisfaction on repurchase intention provides an R-square value of 0.669 which can be interpreted that the variability of the repurchase intention variable can be explained by the variability of product quality, service quality, and customer satisfaction variables by 66.9 per cent, while 33.1 per cent is explained by other variables outside the study.

To measure how well the observation value is generated by the model and also the parameter estimate, it is necessary to calculate the Q-square (Q2) as follows:

$$
\begin{aligned}
Q^2 &= 1-(1-(R_1)^2)(1-(R_2)^2) \\
&= 1-(1-0{,}574)(1-0{,}669) \\
&= 1-(0{,}426)(0{,}331) \\
&= 1-0{,}141 \\
&= 0{,}859
\end{aligned}
$$

The Q2 value has a value with a range of 0 < Q2 < 1, where the closer to 1 means the better the model. The results of these calculations obtained the Q2 value is 0.859 so it can be concluded that the model has good predictive relevance. Thus, it can be explained that 85.9 percent of the variation in repurchase intentions is influenced by product quality, service quality, and customer satisfaction, while the remaining 14.1 percent is influenced by other variables not examined in this study.

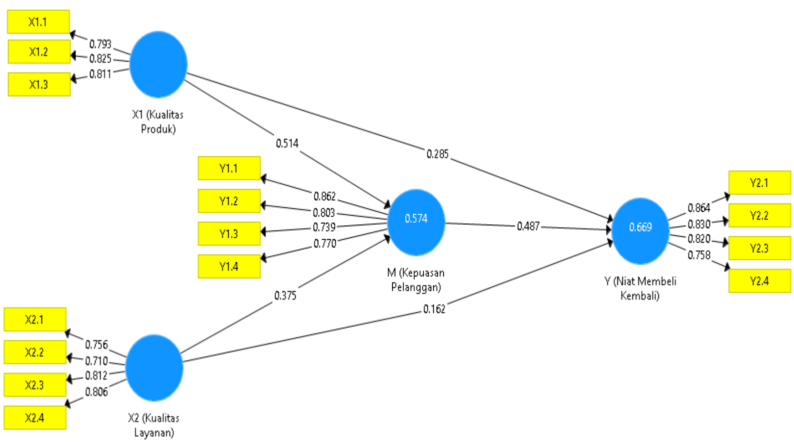

Figure 1 Empirical model of direct effect

Figure 1 explains that product quality has a direct effect on repurchase intention with a coefficient of 0.285, service quality has a direct effect on repurchase intention with a coefficient of 0.162. Product quality has a direct effect on customer satisfaction with a coefficient of 0.514. Service quality has a direct effect on customer

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

satisfaction with a coefficient of 0.375. Customer satisfaction has a direct effect on repurchase intentions with a coefficient of 0.487.

Table 7. Test Results of Total Influence Between Variables

Path Coefficient Between Variables	*Path Coefficient*	*t Statistics*	*P Value*	*Description*
X1 (Product quality) -> Y (Repurchase intent)	*0.285*	*4.174*	*0.000*	*Positively Significant*
X2 (Service quality) -> Y (Repurchase intent)	*0.162*	*2.518*	*0.012*	*Positively Significant*
X1 (Product quality) -> M (Customer Satisfaction)	*0.514*	*9.922*	*0.000*	*Positively Significant*
X2 (Service quality) -> M (Customer Satisfaction)	*0.375*	*7.130*	*0.000*	*Positively Significant*
M (Customer Satisfaction) -> Y (Repurchase intent)	*0.487*	*6.718*	*0.000*	*Positively Significant*

Source: Processed Data, 2023

Hypothesis testing on the effect of product quality on repurchase intention results in a correlation coefficient of 0.285, so product quality has a positive effect on repurchase intention. The t Statistics value obtained is 4.174 (> t-critical 1.96) with a p value of 0.000 <0.050, so the effect of product quality on repurchase intentions is significant. Thus, hypothesis 1 (H1) which states that product quality has a positive and significant effect on repurchase intentions is accepted. The results of this study also support the results of research by Agiesta et.al. (2021) which shows that product quality has a positive and significant effect on repurchase intention. Similar research by Brusch et al, (2019), Anwar & Dastagir (2019) and Saidani & Arifin (2012) also shows that product quality has a positive and significant effect on repurchase intention.

Hypothesis testing on the effect of service quality on repurchase intentions results in a correlation coefficient of 0.162, so service quality has a positive effect on repurchase intentions. The t Statistics value obtained is 2.518 (> t-critical 1.96) with a p value of 0.012 <0.050, so the effect of service quality on repurchase intentions is significant. Thus, hypothesis 2 (H2) which states that service quality has a positive and significant effect on repurchase intentions is accepted. Similar research by Hongdiyanto et al., (2020) found that physical quality associated with service consumption, friendly staff behaviour stimulates positive customer emotions that influence the desire to reuse the product. According to Oh et al., (2017) stated that service quality has a positive and significant effect on repurchase decisions. And Parawansa's research (2018) also found that service quality has the greatest influence, so that service quality is maintained.

Hypothesis testing on the effect of product quality on customer satisfaction results in a correlation coefficient of 0.514, so product quality has a positive effect on customer satisfaction. The t Statistics value obtained is 9.922 (> t-critical 1.96) with a p value of 0.000 <0.050, so the effect of product quality on customer satisfaction is significant. Thus, hypothesis 3 (H3) which states that product quality has a positive and significant effect on customer satisfaction is accepted. This study supports the results of previous research by Waluya et al. (2016) that product quality has a positive and significant effect on customer satisfaction. The results of this study also support the results of Laura and Siska's (2017) research which shows that product quality has a significant positive effect on customer satisfaction.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Hypothesis testing on the effect of service quality on customer satisfaction results in a correlation coefficient of 0.375, so service quality has a positive effect on customer satisfaction. The t Statistics value obtained is 7.130 (> t-critical 1.96) with a p value of 0.000 <0.050, so the effect of service quality on customer satisfaction is significant. Thus, hypothesis 4 (H4) which states that service quality has a positive and significant effect on customer satisfaction is accepted. This study supports the results of previous research by Levy & Hino (2016) which shows the results that service quality has a significant positive effect on customer satisfaction. The results of this study also support the results of Tuan's research (2012) which shows that service quality has a significant positive effect on customer satisfaction. High service quality inspires customers to keep using the company's brand. It can be attributed to a brand that reflects the results of a long-term relationship between customers and service providers determined by service quality. Similar research by Jahanzeb et al., (2017), Wijayasari & Mahfudz (2018), Nathadewi & Sukawati (2019) which found that service quality has a significant positive effect on customer satisfaction..

Hypothesis testing on the effect of customer satisfaction on repurchase intention results in a correlation coefficient of 0.487, so customer satisfaction has a positive effect on repurchase intention. The t Statistics value is obtained 6.718 (> t-critical 1.96) with a p value of 0.000 <0.050, so the effect of customer satisfaction on repurchase intentions is significant. Thus, hypothesis 5 (H5) which states that customer satisfaction has a positive and significant effect on repurchase intentions is accepted. This research supports the study conducted by Kazmi et al., (2016) which found that customer satisfaction has a positive and significant effect on repurchase intentions. Individual purchasing decisions on a particular brand occur after an in-depth evaluation, so that individuals who have positive feelings towards certain brands can increase repurchase intentions.

Table 8. Recapitulation of Mediation Variable Test Results

Mediation Variable	*Effect*				*Information*
	(A)	*(B)*	*(C)*	*(D)*	
Product Quality (X1) → Customer Satisfaction (M) → Repurchase intent (Y)	*0,251 (Sig.)*	*0,285 (Sig.)*	*0,514 (Sig.)*	*0,487 (Sig.)*	*Partial Mediation*
Service quality (X2) → Customer Satisfaction (M) → Repurchase intent (Y)	*0,182 (Sig.)*	*0,162 (Sig.)*	*0,375 (Sig.)*	*0,487 (Sig.)*	*Partial Mediation*

Source: Processed Data, 2023

Description : significant (Sig.) = t-statistic > 1,96 to a= 5%
: the indirect effect of the independent variable on the dependent variable
: the direct effect of the independent variable on the dependent variable
: the direct effect of the independent variable on the mediating variable
: the direct effect of the mediating variable on the dependent variable

Customer satisfaction is able to positively mediate the indirect effect of product quality on repurchase intention. This result is shown from the mediation test conducted, which shows that the effects of A; C; and D have a significant positive value, while the effect of B which is the direct effect of the mediating variable (customer satisfaction) on the dependent variable (repurchase intention) has a significant value. Thus, customer satisfaction is able to partially mediate the effect of product quality on repurchase intentions. Based on these results, it can be interpreted that the higher the product quality, the higher the customer satisfaction, so that in the end the repurchase intention will increase.

Customer satisfaction is able to positively mediate the indirect effect of service quality on repurchase intentions. This result is shown from the mediation test conducted, which shows that the effects of A; C; and D have a significant positive value, while effect B, which is the direct effect of the mediating variable (customer satisfaction) on the dependent variable (repurchase intention), has an insignificant value. Thus, customer satisfaction is able to partially mediate the effect of service quality on repurchase intentions. Based on these results, it can be interpreted that the higher the quality of service, it can increase customer satisfaction, so that in the end the repurchase intention will increase.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The results of mediation testing with the VAF method in this study have met several requirements, namely, first, the direct effect is found to be significant (a) when the customer satisfaction variable (M) has not been included in the model. Second, after the customer satisfaction variable (M) is included in the model, the indirect effect (b x c) is also found to be significant. The paths, b and c, are also significant. Third, calculate the Variance Accounted For (VAF) with the formula: VAF = (0,514 x 0,487)/(0,535 + 0,514 x 0,487)
= 0,2503/0,7853
= 0,3187 or 31,87 per cent.

Because the VAF value (31.87 percent) is between 20 percent and 80 percent, it can be categorized as partial mediation. Thus, the sixth hypothesis which states that customer satisfaction mediates the influence of product quality on repurchase intentions is accepted. The results of this research support the study conducted by Aryadhe and Rasini (2016) which found that product quality through product quality has a positive and significant effect on repurchase intentions. Based on research conducted by Anggitan (2013), it shows that product quality has a direct positive influence on repurchase intentions and indirectly through consumer satisfaction.

The results of mediation testing using the VAF method in this research have fulfilled several requirements, namely, first, the direct effect was found to be significant (a) when the customer satisfaction variable (M) had not been included in the model. Second, after the customer satisfaction variable (M) was entered into the model, the indirect effect (b x c) was also found to be significant. Paths namely b and c are also significant. Third, calculate the Variance Accounted For (VAF) using the formula: VAF = (0,375 x 0,487)/(0,345 + 0,375 x 0,487)
= 0,1826/0,5276
= 0,3461 atau 34,61 persen.

Because the VAF value (34.61 percent) is between 20 percent and 80 percent, it can be categorized as partial mediation. Thus, the seventh hypothesis which states that customer satisfaction mediates the influence of service quality on repurchase intentions is accepted. The results of this research support the study conducted by Mukerjee (2018) where customer satisfaction plays a positive and significant role in mediating the influence of service quality on repurchase intentions. A service provider's long-term efforts to build brand personality and build positive emotional relationships with customers. Building customers' feelings of insurance to feel appreciated, proud, and offering facilities that suit the customer's personality can create loyalty. Emotional customer satisfaction is influenced by service quality.

IV. CONCLUSION

Based on the results of the research analysis and the results of the discussion in the previous chapter, the conclusions of this research are as follows: Product quality has a positive and significant effect on repurchase intentions. This means that the higher the product quality at Great Eastern Insurance in Bali Province, the higher the intention to repurchase Great Eastern Insurance household products in Bali Province. Service quality has a positive and significant effect on repurchase intentions. This means that the higher the quality of service at Great Eastern Insurance in Bali Province, the higher the intention to repurchase Great Eastern Insurance in Bali Province. Product quality has a positive and significant effect on customer satisfaction. This means that the higher the product quality at Great Eastern Insurance in Bali Province, the higher the customer satisfaction at Great Eastern Insurance in Bali Province. Service quality has a positive and significant effect on customer satisfaction. This means that the higher the quality of service at Great Eastern Insurance in Bali Province, the higher the customer satisfaction at Great Eastern Insurance in Bali Province. Customer satisfaction has a positive and significant effect on repurchase intentions. This means that the higher customer satisfaction with Great Eastern Insurance in Bali Province, the higher the customer's intention to repurchase Great Eastern Insurance in Bali Province. Customer satisfaction is able to positively mediate the indirect influence of product quality on repurchase intentions. Based on these results, it can be interpreted that the higher the quality of the product provided, the greater the customer satisfaction, so that ultimately the intention to repurchase will increase. Customer satisfaction is able to positively mediate the indirect influence of service quality on repurchase intentions. Based on these results, it can be interpreted that the higher the quality of service, the greater the customer satisfaction, so that ultimately the intention to repurchase will increase.

Based on the results of research analysis, discussion and conclusions, there are several suggestions that can be given, for further research it is recommended to add other variables besides product quality, service quality and customer satisfaction. For example, by adding price variables, promotions or other variables.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Evaluation of International Safety Management (ISM) Code Implementation using Quantitative Descriptive Methods and Quality Function Deployment on Passenger Ferries

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ABSTRACT

Purpose: The International Safety Management Code (ISM Code) has been coming into force for passenger ferries in Indonesia since 1998—ships that are mandatory to apply the ISM Code are subject to audit periodically by the competent authorities. Even so, there are still many non-conformities found in the implementation of the ISM Code, also the number of ship accidents is not significantly reduced to close to zero accidents. It is necessary to carry out an analysis related to the implementation of the ISM Code from another point of view, hence from the point of view of the implementing party of the ISM Code. In this research, the level of implementation analysis is measured by the requirement elements in the ISM Code and the existing obstacles.

Design/methodology/approach: The method used is a mixed method, which is quantitative methods and Quality Function Deployment (QFD). Quantitative methods are carried out using literature studies, interviews, and surveys by distributing questionnaires.

Findings: The results of the quantitative method are analyzed and followed by the QFD method with the main instrument the House of Quality (HOQ), to obtain input (technical response) from ISM Code experts. The technical answer is then selected based on priority level and will become a proposal for improving the level of implementation of the ISM Code. The ship data taken in this study are passenger ferries which are serving routes of Lembar - Padangbai and Lembar - Kayangan. From the results of the descriptive quantitative analysis, ten indicators of implementation and five indicators of obstacles were obtained and became priorities for improvements. Based on these results, twenty-two priority technical responses were received to improve the implementation of the ISM Code on passenger ferries serving routes of Lembar – Padangbai and Lembar – Ketapang.

Paper type: Research paper

Keywords: *ISM Code, Passenger Ferries, QFD, HOQ*

Received : October 6th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

The Government of the Republic of Indonesia itself has regulated the safety and security of shipping through Law No. 17 of 2008 concerning shipping. According to the law, shipping safety and security is a condition of fulfilment of safety and security requirements concerning transportation in waters, ports, and the maritime environment. The elements of shipping safety are the seaworthiness of the ship and the safety of the ship. Ship seaworthiness is the state of a ship that meets the requirements of ship safety, prevention of pollution of waters from ships, manning, loading lines, loading, crew welfare, and passenger health, the legal status of ships, safety management, and prevention of pollution from ships, and management of ship security for sailing in certain waters. While ship safety is the condition of the ship that meets the requirements of material, construction, building, machinery and electricity, stability, arrangement, and equipment including auxiliary equipment and radio, and ship electronics, as evidenced by certificates after inspection and testing.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Governments and world maritime organizations such as the International Maritime Organization (IMO), also put pressure on shipping companies to pay more attention to safety than their crews. IMO's slogan of Safe, Secure, Efficient Shipping on Clean Oceans must mean that shipping must pay attention to safety, security, efficiency, and a clean marine natural environment. For this reason, IMO issued many regulations related to shipping safety and to protect the marine environment. International shipping safety is enshrined in Safety of Life at Sea (SOLAS) 1974 Article IX i.e. the International Safety Management (ISM) Code amended by the 1978 Amendment applies to all ships sailing between ports in the world. This ISM Code is intended to protect the crew including passengers/cargo from accidents at sea, as well as to protect the marine environment from pollution, by implementing ship operation management in accordance with the provisions in the ISM Code.

There are many job activities in operating a vessel, both light and heavy, both in the office and on board the ship itself, and this poses a risk to the safety of the vessel. This risk can be minimized if a company in work activities related to ship operation management has implemented the ISM Code. Currently, this ISM Code must be applied by companies that own and operate ships. As for Indonesia, the basis of the obligation to implement ISM has been regulated in the Decree of the Director General. Sea Transportation No. No.PY. 67/1/6-96 dated July 12, 1996. The implementation of the ISM Code needs to be assessed periodically through verification of the company, including its ships.

PT. Indonesian Classification Bureau (Persero) commonly referred to as PT. BKI is a state-owned enterprise engaged in inspection services authorized by the Government to verify the implementation of the ISM Code. PT. BKI also has a mission to improve transportation safety. Organizations such as PT. BKI which is authorized to verify the implementation of the ISM Code is called the Recognized Organization (RO).

For companies that have been verified and declared to meet the requirements, a Document of Compliance (DOC) will be issued and every ship that has met the requirements will be issued a Safety Management Certificate (SMC). Both DOC and SMC have a validity period of 5 years. These DOC and SMC will be mandatory documents owned by companies and ships as part of the seaworthiness document requirements. Therefore companies and their vessels that cannot meet the requirements of the ISM Code will face difficulties in their operational activities, both in international and domestic waters.

In conducting audits to verify the implementation of the ISM Code, problems or obstacles are still often encountered. This was revealed during the audit that there were still many non-conformities that reflected the lack of implementation of the ISM Code in the company. If a common thread is drawn, this discrepancy correlates with the high number of ship accidents in Indonesia.

Looking at the current problems, this study was conducted to evaluate the implementation of the ISM Code and also look at the obstacles encountered during the implementation process. This research is also expected to facilitate safety auditors in verifying the implementation of the ISM Code in Indonesia by focusing more on certain areas during the audit. The object of this research is limited to shipping companies that operate crossing ships or ro-ro ferry types on the Lembar - Padangbai and Lembar - Ketapang routes.

Evaluation of the implementation of the ISM Code has been carried out by ship safety auditors through an audit process. The evaluation of the implementation in this study is different from the evaluation of the implementation of the ISM Code which is carried out through the ship safety audit process. In the ship safety audit process, the auditor verifies the fulfillment of the 12 elements in the ISM Code through interviews with crew and office employees accompanied by a review of documents and other supporting records, then will issue discrepancies if there are discrepancies between written procedures and what has been carried out accompanied by existing objective evidence. Meanwhile, in this study, the evaluation of the implementation of the ISM Code was carried out by soliciting opinions from respondents, namely office employees and ship crews who have been auditees during safety audits through questionnaires on what has been done by the management in implementing the ISM Code, whether it is by what is expected by employees with the crew.

Research on the implementation of the ISM Code has been conducted by previous researchers entitled Implementation of the ISM Code on Ships at Tanjung Perak Port (Wahyuni et al, 2018). This study is intended to find out how the implementation of the ISM Code is carried out on ships in Tanjung Perak Port and the level of knowledge of the crew about the ISM Code. This research was conducted by distributing questionnaires, then the results of the questionnaire carried out Importance-Performance analysis which was used to measure the level of understanding of officers about the ISM Code and implementation on board.

Another research on the implementation of the ISM Code with the Evaluation of the Implementation of Safety Management System Policies Based on the International Code of Safety Management (ISM Code) on Ships of PT. Indonesian National Shipping (Saputra, 2013). This study aims to evaluate the application of the ISM Code in PT. Pelni. The policy evaluation method used is in the form of qualitative methods with data collection carried out through interviews, document review, and observation. The model used in the study is CIPP (Context, Input, Processes, Product). This research found that the safety management system policy on ships at PT. Pelni has complied with the ISM Code.

The formulation of the problem taken in this study is:

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1. What is the level of implementation of the ISM Code on crossing vessels in the Lembar – Padangbai and Lembar – Ketapang passes?
2. What are the obstacles to the implementation of the ISM Code on vessels crossing the passage?

What steps are being taken to improve the implementation of the ISM Code on vessels crossing in Indonesia through safety audits?

II. METHODS

A. Research Parameters

Research parameters are a set of characteristics of the object under study (Timotius, 2017). The object of this research is a shipping company that operates crossing vessels on the Lembar - Padangbai and Lembar - Ketapang routes. This study evaluates the implementation of ISM Code based on the level of implementation and perceived obstacles using quantitative approach and Quality Function Deployment (QFD).

The approach used in this study is the Mix Method, which is a combination of qualitative approach and quantitative approach. The mixed method is superior to a single method because it will provide rich insight into research phenomena that cannot be fully understood using only one method. Mix methods can integrate and synergize multiple data sources that can help study complex problems (Dawadi et al., 2021).

B. Models used

The company's management is expected to be committed to improving the quality of ISM Code implementation and also reducing gaps that hinder the implementation of the ISM Code. The commitment to the implementation of the ISM Code starting from top management to the bottom line in the shipping company organization is needed to realize the policies, aims and objectives to be achieved in the implementation of the ISM Code.

This research was conducted by measuring the level of implementation and barriers of the ISM Code and conducting an inventory of the needs of employees or all company personnel (both on land and ships) involved in the implementation of the ISM Code, as well as determining priority technical attributes for improving the implementation of the ISM Code. Measurement of the level of implementation and obstacles to the implementation of the ISM Code is carried out using quantitative methods. Attributes that have low scores will be collected, then mapped to needs and expectations. These needs and expectations will later be discussed with experts to obtain technical responses that will be processed using the QFD model. The QFD model is a method used to translate customer needs into technical responses. In this QFD model, the company personnel involved in the implementation of the ISM Code are defined as customers. Understanding Voice of the Customer (VoC) is the foundation and starting point of QFD. QFD is a methodology for translating customer needs and wants into product design with specific technical requirements and quality characteristics.

The stages carried out by this research are:

1. Stages of field research
2. Stages of problem formulation
3. Data collection
4. Data processing
5. Discussion
6. Drawing Conclusions and Suggestions.

C. Research Design

The study was designed with the following steps:

1. Field studies. During the field study, researchers collected data on the results of internal and external audits of the ISM Code in the period 2019 - 2022. After the existing problem can be identified, then the formulation of the problem is carried out.
2. Based on the identification of problems that are the result of field studies and literature reviews, researchers decide to use descriptive quantitative methods to measure the level of implementation and barriers to implementing the ISM Code and to obtain dimensions or indicators that require improvement.
3. Determination of dimensions and indicators needs to be done first to compile statements that will be poured into the questionnaire, because this is related to the factors to be studied. These dimensions and indicators consist of 2 parts, namely dimensions and indicators related to the level of implementation of the ISM Code, and dimensions and indicators related to factors inhibiting the implementation of the ISM Code.

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4. After the dimensions and indicators are determined, the preparation and dissemination of questionnaires are carried out. In the preparation and dissemination of questionnaires, some of the essentials are population and research samples and data collection.
5. Population is the entire group of people, events, or things of interest that researchers want to investigate (Sekaran, 2003). In this study, the target population includes all parties in the crossing ship operator company at various structural levels, ranging from management, DPA, and staff directly involved in the implementation of the ISM Code. In addition to the company, the ship's crew ranging from captains, and officers to ratings as parties who implement the ISM Code on board are also part of the target population.

The population in this study can be seen in Table 1 below:

Tabel 1. Researh Population

No	*Company*	*Number of Employee*	*Name of Ship*	*Number of Kru*	*Path*
1	*PT. Jemla Ferry*	*15*	*Naraya*	*20*	*Lembar - Padangbai*
			Putri Yasmin	*20*	*Lembar - Padangbai*
			Nawasena	*19*	*Lembar - Padangbai*
			Parama Kalyani	*20*	*Lembar - Ketapang*
2	*PT. ASDP*	*23*	*Portlink II*	*16*	*Lembar - Padangbai*
			Roditha	*16*	*Lembar - Padangbai*
			Port Link VII	*21*	*Lembar - Ketapang*
3	*PT. Dharma Lautan Utama*	*15*	*Dharma Kencana IX*	*19*	*Lembar - Padangbai*
			Dharma Ferry VIII	*18*	*Lembar - Padangbai*
			Dharma Ferry IX	*22*	*Lembar - Ketapang*
4	*PT. Samoedra Jaya Giri Nusa*	*9*	*Rama Giri Nusa*	*16*	*Lembar - Padangbai*
			Shita Giri Nusa	*16*	*Lembar - Padangbai*
5	*PT. Gerbang Samudra Sarana*	*12*	*Gerbang Samudra III*	*20*	*Lembar - Padangbai*
			Salindo Mutiara I	*20*	*Lembar - Padangbai*
6		*10*	*Sindu Dwitama*	*19*	*Lembar - Padangbai*

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No	Company	Number of Employee	Name of Ship	Number of Kru	Path
	PT. Agung Tama Raya		Sindu Tritama	19	Lembar - Padangbai
7	PT. Trimitra Samudra	8	Wihan Bahari	18	Lembar - Padangbai
			Gemilang Viii	20	Lembar - Padangbai
			Surya 777	16	Lembar - Padangbai
8	PT. Putra Master Sarana Penyeberangan	15	Nusa Sakti	15	Lembar - Padangbai
			Nusa Bakti	15	Lembar - Padangbai
			Nusa Penida	15	Lembar - Padangbai
9	PT. Pewete Bahtera Kencana	8	Pbk Muryati	24	Lembar - Padangbai
10	PT. Munic Line	12	Munic III	23	Lembar - Padangbai
11	PT. Jembatan Nusantara	15	Marina Segunda	19	Lembar - Padangbai
			Marina Primera	19	Lembar - Padangbai
			Prima Nusantara	19	Lembar - Padangbai
			Gading Nusantara	19	Lembar - Padangbai
			Swarna Cakra	19	Lembar - Ketapang
12	PT. Duta Bahari Menara Line	10	Jambo X	23	Lembar - Ketapang
13	PT. Raputra Jaya	14	Tunu Pratama Jaya	20	Lembar - Ketapang
14	PT.Tri Sakti Lautan Mas	10	Trimas Laila	25	Lembar - Ketapang
	Karyawan Total	176	Kru Total	610	
	Populasi Total		786		

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ISSN : 2597-4750 (PRINTED)

In Table 1 above, the population in this study is employees of crossing ship operator companies and ship crews on the Lembar – Padanbai and Lembar – Ketapang routes. The employees referred to here are employees in companies directly involved with the implementation of the ISM Code who become auditees when safety audits are carried out.

1. The sample is the part of the population selected from the members of that population (Sekaran, 2003). The number of samples in this study was set as an even number, which was 270. The data collection required in this study was obtained through a survey using questionnaires. A survey is quantitative research using the same structured questions in each person, then all the answers obtained by the researcher are recorded, processed, and analysed. Structured questions are called questionnaires. The questionnaire contains questions that will be given to respondents to measure variables, relate among existing variables, and can be in the form of experiences and opinions from respondents (Sugiyono, 2014).
   The questionnaire in this study was distributed using an online survey method using mobile device media to the respondents who were sampled. Respondents who are the object of this survey are company personnel, both employees on land and ship crews with the following criteria:
   a. Office employees with a minimum of 2 years of service
   b. Placement at the head office or branch office where the ship operates
   c. Holding structural and functional positions
   d. Crew (captain, officer and rating) who have undergone a contract of at least 5 months.
   With the respondent criteria above, to meet the number of samples of 270, the questionnaire was distributed as follows:
   a. The crew selected are: Nahkoda, Mualim 1, Head of Engine Room, 1 person rating from the deck department and 1 person rating from the engine department, so the total number per ship is 5 people. With a total of 32 ships, the respondents taken from the ship's crew were as many as 160 respondents.
   b. The remaining 110 respondents were divided proportionally among all companies. With a total number of companies as many as 14, for each company 7-8 respondents were taken.
   The statements in the questionnaire were prepared to obtain respondents' opinions on the level of implementation of the ISM Code and the obstacles experienced. The questionnaire in this study was divided into three parts, namely:
   a. The first section contains a statement regarding the description of the shipping company and information about respondents
   b. The second part contains the main statements regarding respondents' perceptions and opinions regarding the level of implementation of the ISM Code
   c. The third section contains the main statements regarding respondents' perceptions and opinions regarding the obstacles experienced during the implementation of the ISM Code.
   The main statement types of the second and third parts use Likert scales. An interval scale that specifically uses five ranks: Strongly Disagree, Disagree, Neutral, Agree, and Strongly Agree. In the questionnaire used in this study, the scale used in assessing the level of implementation and barriers of the ISM Code consists of 5 rating categories.
3. Validity and reliability tests are carried out after researchers collect the results of questionnaires that have been filled out by users.
   Validity is a measure that shows that the variable measured is really the variable that the researcher wants to examine (Cooper and Schindler, in Sultane, 2006). This analysis is done by correlating each item's score with the total score. Reliability is a tool to measure a questionnaire which is an indicator of a variable or construct (Ghozali, 2009). A questionnaire is said to be reliable if a person's answers to statements are consistent or stable over time.
4. The next step is data processing with quantitative methods by measuring central tendencies and dispersion. The measurement of central movement in this study is done by measuring the mean or mean, which gives an idea of the data. Dispersion measurement is carried out by measuring the standard deviation of a sample. The results of the analysis from quantitative method calculations are then classified into two types, namely the level of implementation and obstacles to the implementation of the ISM Code. Implementation level variables and barriers with low average scores and high standard deviations will be grouped and then considered the needs and expectations of top priorities for safety management system improvement.
   At this stage there are several assumptions in the framework of using the QFD method with the House of Quality, including:
   a. All respondents according to predetermined criteria who fill out the questionnaire are summed as customers.
   b. The implementation of the ISM Code is a product that needs improvement.
5. The need and expectation of improvement of the safety management system based on the variables that have been obtained will later be prepared technical responses through the interview stage with experts in the field

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of ISM Code, namely representatives from the government who have authorization to apply the ISM Code on crossing ships (Ministry of Transportation) and ISM Code auditors from PT. BKI.

6. The results of technical responses obtained based on interviews with experts are made based on the relationship or correlation of the level of importance and need through the QFD tool, namely the House of Quality so that there will be a need for corrective steps that must be taken immediately or technical responses chosen as priorities. In this study, modifications will be made to the *House of Quality* so that it is in accordance with the implementation of the *ISM Code*.
   The steps taken in creating a House of Quality are: (Besterfield et al., 2012):
   Step 1—Create Customer Requirement Lists (WHATs)
   Step 2—List of Technical Descriptors (HOWs)
   Step 3—Develop a Relationship Matrix Between WHATs and HOWs
   Step 4—Develop a Linkage Matrix Between HOWs
   Step 5—Develop Prioritized Customer Requirements
   Step 6—Develop Prioritized Technical Descriptors

At the conclusion stage, the results of research will be explained on shipping companies that have been selected as research samples. From the results of the study, suggestions will be presented for improving the implementation of the ISM Code in each company. In addition, the results of this study can be used for ISM Code auditors to determine the focus of the audit area when auditing the implementation of the ISM Code on ships in the Lembar - Padangbai and Lembar - Kayangan crossings.

III. RESULTS AND DISCUSSION

A. Description of Research Variables

The results of the study are presented in the form of the average value of each of these items described in the following sections.

1. Implementation Variable

Tabel 2 Distribution of Implementation Variables

Indicator	*Mean*	*Deviation*	*Element (Dimention)*	*Mean*
OBJ1	*4.19*	*0,659*	*Safety Management System Objectives*	*4.24*
OBJ2	*4.30*	*0,652*		
POL1	***4.31***	*0,638*	*Environmental Safety and Protection Policy*	*4.25*
POL2	*4.19*	*0,662*		
COM1	*4.23*	*0,643*	*Corporate Responsibility and Authority*	*4.20*
COM2	*4.18*	*0,668*		
DPA1	*4.24*	*0,660*	*Designated personnel*	*4.25*
DPA2	*4.26*	*0,669*		
MAS1	*4.27*	*0,666*	*Responsibilities and Authorities of the Nahkoda*	*4.28*
MAS2	*4.30*	*0,665*		

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Indicator	*Mean*	*Deviation*	*Element (Dimention)*	*Mean*
SDM1	*4.26*	*0,649*		
SDM2	*4.26*	*0,669*		
SDM3	*4.22*	*0,656*		
SDM4	***4.14***	*0,638*	*Resources and manpower*	*4.21*
SDM5	*4.16*	*0,664*		
SDM6	*4.18*	*0,640*		
SDM7	*4.26*	*0,635*		
OPS1	*4.30*	*0,637*	*Ship Operation*	*4.30*
EMC1	*4.27*	*0,636*		
EMC2	*4.23*	*0,647*	*Emergency PreparednessEmergency Preparedness*	*4.25*
EMC3	*4.25*	*0,646*		
NCR1	*4.16*	*0,647*	*Reporting Analysis of Nonconformities, Accidents and Dangerous Events*	*4.17*
NCR2	*4.18*	*0,662*		
MAN1	*4.23*	*0,668*		
MAN2	*4.15*	*0,661*	*Ship Maintenance and Equipment*	*4.18*
MAN3	*4.15*	*0,632*		
MAN4	*4.17*	*0,688*		
DOK1	*4.22*	*0,670*		
DOK2	*4.20*	*0,638*	*Documentation*	*4.21*
DOK3	*4.20*	*0,615*		
VER1	*4.24*	*0,649*	*Company Verification, Review and Evaluation*	*4.21*
VER2	*4.20*	*0,664*		

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Indicator	*Mean*	*Deviation*	*Element (Dimention)*	*Mean*
VER3	*4.25*	*0,646*		
VER4	*4.18*	*0,634*		
VER5	*4.20*	*0,698*		

Source : data processed, 2023

The table presents data related to the distribution of implementation variables along with their corresponding means and deviations. The indicators, represented by abbreviations such as OBJ1, POL1, COM1, DPA1, MAS1, SDM1, OPS1, EMC1, NCR1, MAN1, DOK1, and VER1, pertain to different aspects of a Safety Management System. Each indicator is associated with a specific element or dimension, denoted by detailed descriptions like "Safety Management System Objectives," "Environmental Safety and Protection Policy," "Corporate Responsibility and Authority," and so on. The data was processed in the year 2023.

For each indicator, the table provides the mean and deviation values. The mean indicates the average score obtained for that particular element, and the deviation measures the variability or dispersion of the data points around the mean. The data seems to indicate relatively high mean values across most indicators, suggesting that the Safety Management System is generally well-implemented in the given context.

2. Obstacles Variable

Tabel 3. Distribution of Obstacle Variables

Indicator	*Mean*	*Deviation*	*Element (Dimention)*	*Mean*
BUD1	***3.15***	*1,082*		
BUD2	*2.53*	*1,167*	*Cultural and Behavioral Barriers*	***2.74***
BUD3	*2.54*	*1,104*		
ORG1	*2.33*	*1,074*		
ORG2	*2.32*	*1,112*		
ORG3	*2.33*	*1,092*	*Organizational Barriers*	***2.35***
ORG4	*2.48*	*1,065*		
ORG5	***2.28***	*1,083*		
TEK1	*2.47*	*1,074*		
TEK2	*2.50*	*1,042*	*Technical Obstacles*	*2.60*
TEK3	*2.81*	*1,075*		

Source : data processed, 2023

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The table provides data on the distribution of obstacle variables, along with their corresponding mean and deviation values. The indicators, represented by abbreviations like BUD1, ORG1, and TEK1, pertain to different types of barriers that might be hindering progress or implementation in a certain context.

The data suggests that various barriers exist within the context being studied, including cultural and behavioral barriers, organizational barriers, and technical obstacles. The mean values for these indicators are relatively low, indicating that these barriers may be perceived as significant challenges in the given context. Additionally, the high deviation values suggest considerable variability in responses or perceptions about these obstacles among the participants or respondents. Further analysis and understanding of these barriers would be crucial in developing strategies to overcome or mitigate their impact on the desired outcomes.

B. House of Quality (HOQ) Matrix

The house of quality matrix can explain what is needed (what) and how to meet the needs of the customer (how) including priorities for fulfillment. In this study, a complete house of quality matrix was obtained with the following components:

1. The left wall is a customer need in the form of an indicator of the level of implementation and barriers to the implementation of the ISM Code.
2. The ceiling is a technical requirement *(how)* in the form of a technical response from experts.
3. The roof is a relationship between technical requirements, that is, the relationship between one technical response to another.
4. The right wall is a prioritized customer requirement, consisting of:
   a. Customer satisfaction level, namely the average score of implementation levels and barriers to implementing the ISM Code based on survey results.
   b. Goals to be achieved to increase customer satisfaction (improve implementation and reduce barriers to implementation of the ISM Code).
   c. The amount of effort required to achieve the goals that have been set (improvement ratio).
   d. Sales point, namely the magnitude of the increase in the application of the ISM Code if improvements are made in accordance with the technical response of experts.
   e. Raw weight and normalized raw weight are indicators of implementation levels and obstacles that require the greatest improvement efforts and contribute the most improvement if improvements are made.
5. The inner content of the *house of quality* is the relationship between customer needs and technical responses, ie. how much influence the technical response will have on improving implementation and lowering barriers to implementing *the ISM Code*.

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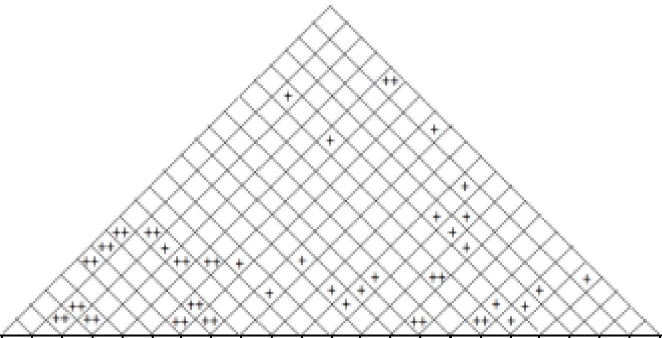
ISSN : 2597-4750 (PRINTED)



Indikator	Kebutuhan Pelanggan (What)	RESP1	RESP2	RESP3	RESP4	RESP5	RESP6	RESP7	RESP8	RESP9	RESP10	RESP11	RESP12	RESP13	RESP14	RESP15	RESP16	RESP17	RESP18	RESP19	RESP20	RESP21	RESP22	Tingkat Kepuasan Pelanggan	Goal	Improve-ment Ratio	Sales Point	Raw Weight	Normalized Raw Weight
		Respon Teknis Dari Para Expert (How)																											
Tingkat Implementasi	Perusahaan telah memastikan bahwa semua personil yang terlibat dalam panduan sistim manajemen keselamatan perusahaan memiliki pengetahuan yang cukup terhadap aturan, peraturan-peraturan, koda, dan pedoman yang relevan	e					s	s	s			n		s				s				s	n	4,14	4,91	1,186	1,50	1,779	0,051
	Perusahaan telah memastikan bahwa inspeksi dilakukan pada interval yang sesuai, segala ketidaksesuaian dilaporkan disertai dengan kemungkinan penyebabnya, dilakukan tindakan perbaikan yang sesuai, serta pencatatan terhadap aktifitas ini dipelihara		e	e	e	s					s	n							s				e	4,15	4,91	1,183	1,20	1,420	0,041
	Perusahaan telah mengidentifikasi peralatan kritis di kapal yang apabila mengalami kegagalan dapat mengakibatkan situasi berbahaya.		n	e	e							n												4,15	4,91	1,183	1,20	1,420	0,041
	Perusahaan telah menetapkan pada panduan sistim manajemen keselamatan prosedur yang memastikan bahwa ketidaksesuaian, kecelakaan, dan keadaan berbahaya dilaporkan kepada perusahaan, diselidiki dan dianalisis dengan tujuan meningkatkan keselamatan dan pencegahan pencemaran					e					e	n						s				n	e	4,16	4,91	1,180	1,50	1,770	0,051
	Perusahaan telah menetapkan dan memelihara prosedur guna mengidentifikasi dan memberikan pelatihan yang diperlukan oleh semua personil guna mendukung sistim manajemen keselamatan.	e					e	e	e			n		n	n			s	s	n	n	s	n	4,16	4,91	1,180	1,50	1,770	0,051
	Perusahaan telah memastikan bahwa semua kegiatan inspeksi terintegrasi dengan rutinitas operasional perawatan kapal		e	n	e					e		n												4,17	4,91	1,177	1,20	1,413	0,040
	Perusahaan telah menetapkan prosedur untuk pelaksanaan tindakan perbaikan beserta langkah-langkah yang diperlukan apabila terjadi ketidaksesuaian, kecelakaan dan kejadian berbahaya, untuk mencegah terulangnya kejadian tersebut.					e					e	n						n	n			s	e	4,18	4,91	1,175	1,50	1,762	0,050
	Perusahaan bertanggung jawab dan menjamin ketersediaan sumber daya yang memadai guna mendukung personil yang ditunjuk untuk dapat menjalankan tugas dan fungsinya.	e					n	n	e			e		s	e	e			s			n		4,18	4,91	1,175	1,50	1,762	0,050
	Perusahaan telah menetapkan prosedur bahwa kru dapat menerima informasi yang relevan terkait sistim manajemen keselamatan dalam bahasa yang dimengerti.											n	e	s			s	s	n			e		4,18	4,91	1,175	1,50	1,762	0,050
	Perusahaan telah memastikan bahwa personel yang melakukan audit memiliki independensi dari area yang diaudit.											n			e	e								4,18	4,91	1,175	1,20	1,410	0,040
Hambatan	Adanya resistensi personil perusahaan dan kru kapal terhadap perubahan, terkait prosedur dan instruksi	n										n	n	e			e	e	n			e		3,15	1,00	3,15	1,50	4,725	0,135
	Terlalu banyak pelaporan dan dokumentasi								s			n		s			n	n	e				s	2,81	1,00	2,81	1,20	3,372	0,096
	Sulitnya dilakukan pendekatan dengan budaya yang berbeda.								s			n	e	s						e	e	s		2,54	1,00	2,54	1,50	3,810	0,109
	Rendahnya motivasi personil baik di darat maupun kru kapal terhadap manajemen keselamatan	s				s						n	s	e				s		n	n	e	n	2,53	1,00	2,53	1,50	3,795	0,109
	Kurangnya analisis sistematis, tindakan perbaikan dan umpan balik dari manajemen terhadap pelaporan insiden											n										s	e	2,50	1,00	2,50	1,20	3,000	0,086
Tingkat Kepentingan Respon Teknis		31	21	21	21	20	15	15	21	18	18	51	22	26	21	18	13	20	21	15	15	38	30						
Prosentase Tingkat Kepentingan Respon Teknis		6,31	4,28	4,28	4,28	4,07	3,05	3,05	4,28	3,67	3,67	10,39	4,48	5,30	4,28	3,67	2,65	4,07	4,28	3,05	3,05	7,74	6,11						
Peringkat ResponTeknis		3	7	7	7	8	10	10	7	9	9	1	6	5	7	9	11	8	7	10	10	2	4						

Figure 1. House of Quality (HOQ) Matrix

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KETERANGAN :

Respon Teknis:

RESP1	Menyusun matriks pelatihan terkait peraturan nasional dan internasional yang relevan untuk semua karyawan dan kru kapal
RESP2	Membuat form rencana perawatan berkala (PMS) dan mewajibkan dilakukan pelaporan secara berkala.
RESP3	Menginventarisasi peralatan kritis di kapal sesuai kriteria bahwa apabila mengalami kegagalan dapat mengakibatkan situasi berbahaya
RESP4	Menetapkan prosedur perawatan, pengujian dan perbaikan peralatan kritis tersebut ke dalam PMS
RESP5	Membuat form pelaporan ketidaksesuaian, kecelakaan dan kejadian berbahaya beserta petunjuk teknisnya, serta melakukan sosialisasi penggunaan form tersebut
RESP6	Menetapkan kamus kompetensi untuk setiap jabatan di dalam perusahaan
RESP7	Menetapkan kamus kompetensi kru kapal mengacu pada STCW 1995 dan PP. No. 7 Tahun 2000
RESP8	Mengadakan pelatihan berkala berdasarkan kamus kompetensi masing – masing jabatan
RESP9	Memperhatikan sifat operasional kapal dalam menentukan jadwal inspeksi
RESP10	Mendefinisikan dan membuat database ketidaksesuaian, kecelakaan dan kejadian berbahaya beserta langkah antisipasinya
RESP11	Membuat pernyataan komitmen untuk manajemen puncak dalam memberikan dukungan kepada personil yang ditunjuk dalam rangka menjalankan tugas dan fungsinya masing - masing, dan memasang pernyataan komitmen tersebut pada tempat yang mudah dilihat baik di kantor maupun di kapal
RESP12	Menetapkan bahasa kerja di kapal adalah bahasa Indonesia
RESP13	Manajemen secara berkala memberikan penyegaran pengetahuan terkait deskripsi kerja kru kapal pada saat kunjungan ke kapal.
RESP14	Menyediakan internal auditor dengan jumlah yang mencukupi sesuai struktur organisasi perusahaan dan jumlah armada kapal yang dimiliki
RESP15	Mengatur penempatan masing – masing internal auditor sesuai struktur organisasi perusahaan
RESP16	Memastikan perubahan prosedur dan instruksi melalui mekanisme usulan yang dibahas secara berjenjang
RESP17	Melakukan sosialisasi setiap ada perubahan prosedur
RESP18	Menyederhanakan mekanisme pelaporan, termasuk yang bisa dilakukan secara digital, serta melakukan pembagian tugas pelaporan secara proporsional
RESP19	Menetapkan dan mendefinisikan dengan jelas budaya perusahaan
RESP20	Membuat panduan internalisasi nilai budaya
RESP21	Memberikan penghargaan kepada karyawan darat dan kru kapal terkait awareness terhadap manajemen keselamatan
RESP22	Memberikan pelatihan mengenai Analisa kecelakaan kepada para Nakhoda dan DPA dengan melibatkan pihak eksternal, misalnya KNKT dan marine adjuster

Hubungan Antara Respon Teknis dan Kebutuhan Pelanggan:

" "	Tidak Berhubungan	Nilai = 0
"s"	Sedikit Berhubungan	Nilai = 1
"n"	Berhubungan Normal	Nilai = 3
"e"	Berhubungan Erat	Nilai = 9

Korelasi Antar Respon Teknis

Hubungan Kuat dan Saling Mempengaruhi	Simbol "xx"
Saling Berhubungan Normal	Simbol "x"
Tidak Berhubungan	Tanpa Simbol

6. The floor is a prioritized technical requirement, that is, a technical response that is a priority to be implemented based on its rating.
   The complete house of quality matrix can be seen in Appendix 6. Meanwhile, after ranking technical responses according to table 4.30, the order of priority of 22 technical responses that need to be carried out by shipping companies operating vessels in order to improve the application of the ISM Code is as follows:
   a. Make a statement of commitment to top management in providing support to designated personnel in order to carry out their respective duties and functions, and post the commitment statement in a place that is easily visible both in the office and on board.
   b. The commitment of top management is needed as the main key to the successful implementation of *the ISM Code* and is the first priority.
   c. Rewarding land employees and crew for awareness of safety management.
   d. Employees both on land and on ships need to be rewarded for being more concerned about the safety management system.
   e. Prepare training matrices related to relevant national and international regulations for all employees and crew.
   f. The crossing transport industry is an industry that has a lot to do with regulations related to safety and environmental protection. It is necessary to provide knowledge and understanding for all employees both

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on land and in the kapakl regarding both national and international regulations related to the safe operation of ships.

g. Provide training on accident analysis to skippers and DPAs by involving external parties, such as HCV and marine adjusters.
h. Analysis of ship accidents and their causes so that the same incident does not repeat itself is a provision of knowledge that is needed by the ship's captain and DPA.
i. Management periodically refreshes knowledge related to the crew's job description during visits to the ship.
j. The knowledge of the crew needs to be constantly improved, especially related to their duties and responsibilities, so that the implementation of the safety management system on board can be carried out properly.
k. Establishing a working language on board is Indonesian.
l. Communication plays an important role in implementing a safety management system. Safety management guidelines must therefore be built into working language that is easily understood by the crew.

7. In the seventh rank there are 6 technical responses with the same value, namely:
   a. Create a periodic maintenance plan (*PMS*) form according to the condition of the equipment on board.
   b. Inventory critical equipment on board according to criteria that failure could lead to dangerous situations.
   c. Establish procedures for maintenance, testing and repair of critical equipment into PMS.
   d. Conduct periodic training based on the competency dictionary of each position.
   e. Provide an adequate number of internal auditors according to the company's organizational structure and the number of ships owned.
   f. Simplifying reporting mechanisms, including those that can be done digitally, as well as proportionally distributing reporting tasks.
8. In the eighth rank there are 2 technical responses with the same value, namely:
   a. Create a form for reporting nonconformities, accidents and dangerous events along with technical instructions, and socialize the use of the form.
   b. Socialize every time there is a change in procedure.
9. In the ninth rank there are 3 technical responses with the same value, namely:
   a. Pay attention to the operational nature of the vessel in determining the inspection schedule.
   b. Define and create a database of nonconformities, accidents and dangerous events along with anticipatory steps.
   c. Arrange the placement of each internal auditor according to the company's organizational structure.
10. In the tenth rank there are 4 technical responses with the same value, namely:
   a. Establish a competency dictionary for each position within the company.
   b. Establish a dictionary of crew competence referring to STCW 1995 and PP. No. 7 of 2000.
   c. Establish and clearly define the corporate culture.
   d. Create guidelines for internalizing cultural values.
11. Ensure changes in procedures and instructions through a proposed mechanism that is discussed in stages.

At the last stage of prioritized technical response, it is necessary to ensure that changes to procedures or instructions have been through the mechanism of proposals from employees both on land and on ships whose activities will be affected by the change in procedures.

V. CONCLUSION

Based on the analysis, it can be concluded that the results of the evaluation of the application of the ISM Code on crossing vessels in the Lembar – Padangbai and Lembar – Ketapang trajectories are as follows:

1. The implementation rate of the ISM Code is at the level of 4.14 – 4.31 which illustrates that the implementation of elements in the ISM Code is at a good level.
2. Barriers to the implementation of the ISM Code are at levels 2.28 – 3.15. This illustrates that the majority of obstacles are in the category between rarely experienced and sometimes experienced. However, there is one indicator of obstacles that fall into the category often experienced, namely the resistance of company personnel and crew to changes, related to procedures and instructions. These barriers fall into the category of cultural and behavioral factors.
3. There are ten implementation level indicators and five obstacles that require priority of technical response to improvement and become focus areas according to the elements in the ISM Code when conducting safety audits, namely:

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a. Implementation Level

1) The Company has ensured that all personnel involved in the Company's safety management system guidelines have sufficient knowledge of the relevant rules, regulations, codes and guidelines (*ISM Code* Element 6.4).
2) The Company has ensured that inspections are carried out at appropriate intervals, that any nonconformities are reported with possible causes, appropriate corrective actions are taken, and that records of these activities are maintained (ISM Code Element 10.2).
3) The Company has identified critical equipment on board that failure could lead to dangerous situations (ISM Code Element 10.3).
4) The Company has established in its guiding safety management system procedures that ensure that nonconformities, accidents and hazardous circumstances are reported to the Company, investigated and analyzed with the aim of improving safety and pollution prevention (ISM Code Element 9.1).
5) The Company has established and maintained procedures to identify and provide training required by all personnel to support the safety management system (ISM Code Element 6.5).
6) The Company has ensured that all inspection activities are integrated with the operational routine of ship maintenance (ISM Code Element 10.4).
7) The Company has established procedures for the implementation of corrective actions along with necessary measures in case of nonconformities, accidents and dangerous events, to prevent the recurrence of such occurrences (ISM Code Element 9.2)
8) The Company is responsible for and ensures the availability of adequate resources to support the personnel appointed to be able to carry out their duties and functions (ISM Code Element 3.3).
9) The Company has established procedures that crews can receive relevant information related to the safety management system in an understandable language (ISM Code Element 6.6).
10) The Company has ensured that the personnel conducting the audit have independence from the area being audited (ISM Code Element 12.5).

b. Obstacles

1) There is resistance of company personnel and crew to changes, related to procedures and instructions (ISM Code Element 11.2).
2) Too much reporting and documentation (ISM Code Element 11.3)
3) Difficult approach with different cultures (ISM Code Element 6.6)
4) Low motivation of personnel both on land and crew towards safety management (ISM Code Element 6.2).
5) Lack of systematic analysis, corrective action and feedback from management on incident reporting (ISM Code Element 9.1).

Suggestions that can be given in this study are:

1. Shipping companies operating vessels in Indonesia can consider carrying out 22 technical responses to improve the application of the ISM Code produced by this study, because the 14 shipping companies that are respondents in this study generally also operate crossing vessels in other passages in various regions in Indonesia.
2. ISM Code auditors can consider focus areas when conducting safety audits on vessels crossing in Indonesia on elements related to improving implementation and reducing barriers according to the results of this study.

This study has limitations in collecting questionnaires due to tight deadlines, so socialization of the material from the questionnaire has not been carried out optimally. Because most respondents are crossing ship crews with daily work activities that are relatively denser than other ship crews (freighters, oil tankers and others), in the next study it is recommended to make direct visits to each ship and conduct more detailed socialization of the material from the questionnaire, in the hope of obtaining more accurate results.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Influence of Communicative Skills and Appearance on Manipulative Marketing Techniques at Point Coffee in Surabaya

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ABSTRACT

Purpose: At this modern era, there are currently a lot of intense competition in starting a business in the field of coffee shops, especially in the Surabaya area.

Design/methodology/approach: This research aims to explain the influence contained in the barista Point Coffee whether by having communicative skills and attractive appearance is able to influence the manipulative marketing techniques that can attract customers to purchase the product, the experiment uses correspondents totalling 33 correspondents, using a quantitative type with multiple questionnaire samples.

Findings: The results of this assessment are found to come out valid and reliabaly, normatively distributed, heterosccedasticity freedom, multicoleniarity freedom, and autocollinearity freedom. Obtained multiple linear models Y 2.087 + 0.552X1 + 0.499X2 + e. with overall f test results Communicative skills (X1) and appearance (X2) have a simultaneous effect with marketing manipulative techniques (Y). As well as communicative skills (X1) have a significant impact with Manipulative Marketing (Y) at Point Coffee Surabaya and attractive appearance (X2) has a significant impact with Manipulative Marketing (Y) at Point Coffee Surabaya. Based on this, the companies also needed attention to their Human Resources to develop and improve the progress of companies engaged in coffee shops.

Paper type: Research paper

Keyword: *Communicative Skills, Appearance and Manipulative Marketing Techniques*

Received : October 6th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

Lately, many businesses have become a trend for young people, such as for example drinks that have a contemporary concept that has gone viral recently, that is coffee shop. Especially for the Surabaya area which is made as one of the metropolitan cities after Jabodetabek. So it's not surprising that there are so many businesses with coffee shop themes in this city with the second-most population after Jabodetabek. Coffee shop is an outlet or cafe that serves drinks made from milk coffee, which is packed with a variety. Of coursing for you is very familiar with the name latte, cappuccino, mochachino, caramel macchiatto, and others, the latte name comes from a Latin language from Italy which means milk, and for coffee is caffe.

After the many coffee shops in Surabaya, like Coffee Kenangan, Starbuck, Excelso, Janji jiwa, and many more. The competition between business people is getting tighter, starting to show off the speciality of each coffee shop business, one example of this is point coffee. Point coffee is a coffee shop from a company named PT. Indomarco Primatama with the theme Grab & Go, which means that it has a very fast serving for only 3 minutes, the menu is ready to be served. Besides that, point coffee also provides 100% using original Indonesian coffee beans which can increase the income of sellers or business people in the coffee bean sector.

The researcher believes that according to the factors by which point coffee was finally able to opening its 56th branch in Surabaya in 2023, is not only the quality and uniqueness of the drinks obtained, there are supporting internal factors that are something that must be considered, namely its Human Resources. With communicative

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

skills that are able to provide comfort for coffee lovers who purchase it, they also don't forget that good communicative skills are always accompanied by an attractive appearance to attract customers to buy the product. And that human resource is a barista.

Based on Fatmawati (2023) about Zulhanan (2016) said “Communicative is a technique that makes new innovations and strategies where speaking skills will develop faster if directly practised in active communication”. From that point on, baristas are required to have communicative abilities which have the aim of creating good relationships with customers, being able to overcome problems that are often faced by customers. Starting from matching the taste of coffee, avoiding milk due to allergies or reducing certain sugar levels, etc. In addition, the customer and the company will get the best of both worlds. In addition, customers and companies will get positive feedback from various kinds of transactions, whether customers will receive promotional prices, benefits from members, and the right taste like what they want. If the company will receive, namely an increase in income from a transaction, get a positive response from customers so that there will be such a thing as a repeat order, and will be recognised by many people to attract other customers.

Also, customers will be more interested if they have a barista who is tidy, inexpensive, and attractive to look and feel. This is confirmed by a theory from M.G. Hartiti Hendarto and Drs. F.X. Tulusharyono stated that a positive or negative response from people is based on the image conveyed, for example through dress, attitude and behaviour, manners, and others. Based on research in the journal "attractive appearance requirements in job vacancy information as one of discrimination in the world of work" by students from Universitas Negeri Surabaya. There is one very interesting quote according to the researcher, namely "Looking attractive is not directly defined as beauty / good looks or a person's body image but in fact that is what then becomes the benchmark for attractive appearance requirements (Ihsanullah, Rahayu, and Edwar 2020)". This inference concludes that attractive appearance is a stronger factor in a manipulative marketing technique to increase income at point coffee surabaya.

Manipulative marketing technique was a technique that hypnotised customers showing the superiority of a thing without any reasonable doubt inside the customer. As mentioned by scott Oldford (2018) on the website entrepeneur.com, "starts with in-depth knowledge of your offering or product. e.g. Are those "vitamins" or "hangover cures"? Are they, and you, the best? Would the impact be real and large for others? You must truly believe in what you do and commit to being the best at it. Once you've done that, you should know who needs to be helped. At the same time, you also want to get to know your target market in depth. Just what is the greatest problem they have right now? Without a doubt, what's the biggest pain they're feeling? Are they hiding from this pain and refusing to act?". What the researcher concludes is that communicative skills make it useful to explain what the advantages of the product being sold are, convincing the doubts that exist in the buyer, and the customer's desire to be satisfied with what they want. Besides communicative skills, appearance is also a necessary manipulative marketing technique because with the first impression before interacting with a barista, customers will always see the first sight before making a transaction, one of which is the appearance of a barista.

II. METHODS

Sugiyono (2017) stated that research is a science-based way to obtain information for specific purposes and uses. . this research has 2 types of free variables and also one dependent variable including Communicative Skills (X1 stimulus variable), Appearances attractive (X2 stimulus variable) for Marketing manipulative techniques (Y dependent variable). Through some client located in the place. Data collection techniques consisting of primary data collection techniques consisted of several questions, including questions that were asked to collect information about the marketing manipulative technique (dependent variable Y). The primary data collection technique consists of several questions asked by respondents in a Google form. This questionnaire format includes 5 indicators including Strongly Disagree (STS), Disagree (ST), Moderately Agree (CS (S), Agree), Strongly Agree (SS). The objective of Multiple Linear Regency Analysis was to find out in which direclty and how much the stimulus variable was related to the dependent variable. (Ghozali, 2018).

Classical hypothesis testing consisting of normality, multicholinearity, heteroskedastisity, and auto correlation testing was then carried out to ensure that the resulting logistic regression equation was normal. The final stage is a partial T test to investigate the influence of each stimulus variable on the dependent variable and a simultaneous F test to determine the effect of the three stimulus variety on the bound variable at the same time. From the explanation above,

the conceptual framework and hypothesis can be derived as follows:

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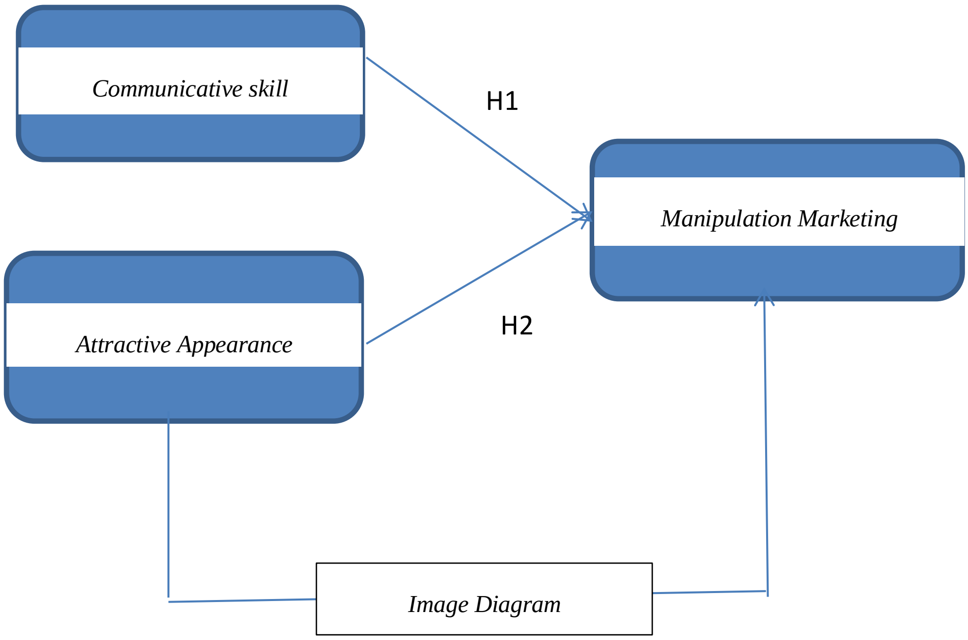
ISSN : 2597-4750 (PRINTED)



The hypothesis proposed is as follows

H1 : Communicative Skill (image diagramX1 significantly affecting Purchasing Decisions (Y)

H2 : Attractive Appearance (X2) significantly influencing the Purchasing Decision (Y)

H3 : Communicative Skill (X1) and Attractive Appearance (X2) have a simultaneous and significant effect on manipulative marketing techniques (Y).

III. RESULTS AND DISCUSSION

A. Results

1. The Instrument Testing

a. Validation Test

Sugiyono (2018: 267) explained this validity study was applied to determine whether the survey data used was valid or not. Thats a stated to be valid if the value of sig> 0.05 with the value of r-count > r-table. The results of each research instrument have been tested for validity with a sig value <0.05 with a r count > r table (0.3440) obtained from df - k (33-2). From these results it simply means that all research instruments are declared valid or valid because they are in accordance with the stipulated provisions.

b. Reliability Test

Reliability test by estimating the consistency of the questionnaire used in the study, namely the indicator variable. The statement is declared reliable if Cronbach alpha> 0.60 (Ghozali, 2016).

Table 1. Determined

Variety	*Cronbach Alpha*	*Statement*
Communicative Skill	*0,764*	*Determined*
Appearance	*0,749*	*Determined*

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ISSN : 2597-4750 (PRINTED)

Marketing Manipulative Technique	*0,770*	*Determined*

The table above states that Cronbach alpha values > 0.60, so the data is considered realisable.

c. Classical Assumption Test

Normality Reporting Test Based on Sugiyono (2017), a normality test is a check to verify whether the variation of residuals is distributed in normality. The test for normality uses the Colmogorov-Smirnov method. If a significant score > 0.05, to say that the residuals are distributed normality and the reverse.

Table 2. Classical Assumption Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		33
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	2,41266187
Most Extreme Differences	Absolute	,127
	Positive	,127
	Negative	-,095
Test Statistic		,127
Asymp. Sig. (2-tailed)		,190[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

d. Table Normalcy Test

That table above, using the column-based Kolmogorov-Smirnov test table, which concluded that the asymp. Sig> 0.05, then the data above is said to be normal data.

e. Heteroscedasticity Test

Ghozali (2017: 47) states that the heteroscedasticity test is useful for determining whether there is a clear unequal variance in a regression model. A study declared free of heteroscedasticity can be seen in the scatterplot diagram.

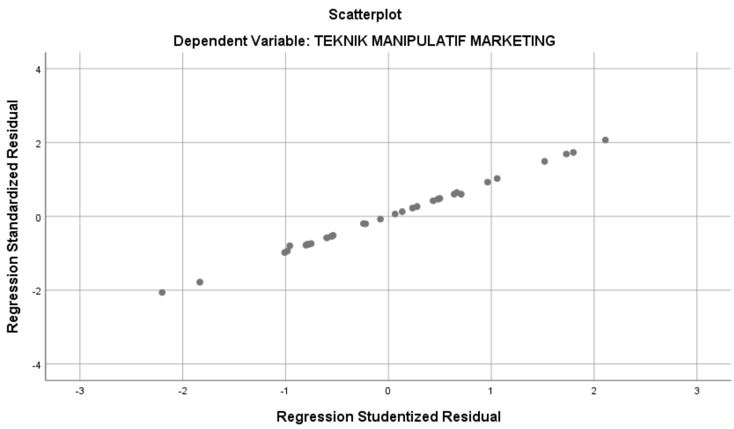

Figure 1. Image Diagram

In the picture above, it can be concluded that the dots have a pattern moving upwards following the direction of the variable, which means that the variables X1 and X2 have a positive effect on variable Y, which concludes that the classic assumption test means that the increasing variable X will increase variable Y.

f. Multi-linearity test

The multi-collinearity test is useful for testing whether a regression model has found a correlation between independent variables (Ghozali, 2018: 71).

Table 2. Multi-linearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2,087	3,097		,674	,505		
	Communicative Skills	,552	,189	,413	2,915	,007	,806	1,240
	Appearance	,499	,163	,432	3,051	,005	,806	1,240

a. Dependent variable : Marketing manipulative techniques

Based on the value of the table above that the tolerance value> 0.1 with the VIF value < 10, it is herewith concluded that there are no signs of multi-linearity in this variety.

g. Auto correlation Test

The autocorrelation test is needed to see if the linear regression model has a connection between the t-test confounder and the previous t-test confounder error. (Ghozali 2018 : 111).

Table 3. Auto Correlation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,717[a]	,514	,482	2,492

a. Predictors: (Constant), Appreance, Communicative skill

b. Dependent Variable: Marketing Manipulative Techniques

Approximately 2.492 with a dU value of 1.570, a dL value of 1.296, thus obtaining a value of 4 - dU = 2.430. Meanwhile, the value of 4 - dL = 2.704. From these calculations, the value of dU (2,430)> d (2,492) < (2,704) is obtained, which means that the multiple regression model in this study is free of autocorrelation because the value of d is between the value of dU and 4 - dL.

2. Hypotheses Test

a. The Simultaneous F Test

The f-test simultaneously tests whether the independent variable affects the dependent variable simultaneously (Ghozali, 2018).

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Table 4. F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	197,366	2	98,683	15,894	,000[b]
	Residual	186,270	30	6,209		
	Total	383,636	32			

a. Dependent Variable: Marketing Manipulative Techniques

b. Predictors: (Constant), Appearance, Communicative Skills

From the table above, it is found that the sig value is 0.000 <0.05 with the value of fcount (15.894) > ftabel (3.30), which means that the independent variables, namely communicative skills (X!) and appearance (X2) simultaneously have a positive and significant effect on manipulative marketing techniques at point coffee surabaya.

b. Partial T Test

used to test variable X to variable Y individually or each (Ghozali, 2018: 57).

Table 5. T Test

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	2,087	3,097		,674	,505
	Communicative Skill	,552	,189	,413	2,915	,007
	Appearance	,499	,163	,432	3,051	,005

a. Dependent Variable: Marketing Manipulative Techniques

The table above shows the sig value of the communicative skill variable (X1) with the t value (2.915) > t table (2.042) which means that Communicative skill (X1) has a significant effect on manipulative marketing techniques (Y) at point coffee surabaya. In the Appearance variable (X2) with a value of t count (3.051) > t table (2.042) which means that Appearance (X2) has a significant effect on manipulative marketing techniques (Y) at point coffee surabaya.

c. Linear Regression Testing

The regression test Equation uses a function, which is:

Y = a (const) + B1 X1 + B2 X2 + e

So, Y = 2.087 + 0.552X1 + 0.499X2 + e

We can conclude the following:

The default value is 2.087, if the value of communicative skills (X1) and appearance (X2) is 0% or unchanged, the value of purchasing decisions remains 2.087. Meanwhile, if the Communicative skill coefficient (X1) value of 0.552 increases by 1%, the value of manipulative marketing techniques (Y) will remain 0.552 if other variables do not change. And if the coefficient of Appearance (X2) is 0.499, for a 1% increase as well, it will increase the manipulative marketing technique (Y) by 0.499 if other variables do not change.

d. Determination Test

According to Ghozal (2018) determinacy test is carried out to find out whether type of regression model model is able to explain the variation in the dependent variables more thoroughly.

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Table 6. Determinacy Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,717[a]	,514	,482	2,492

a. Predictors: (Constant), Appearance, Communicative Skills

b. Dependent Variable: Marketing Manipulative Techniques

The above results obtained R2 value of 0.514 or 51.4% which means the ability to explain the variation of the dependent variable (manipulative marketing) of 51.4%, the remaining 48.6% is from other variables.

V. CONCLUSION

1. The Effect of Communicative Skills on Manipulative Marketing

The value obtained with t count (2.915) > t table (2.042) means that communicative skills (X1) have a significant effect on manipulative marketing (Y) at point coffee surabaya or H1 is accepted and H0 is rejected. Therefore, baristas must have communicative skills which have the aim of creating good relationships with customers, being able to solve problems that are often faced by customers, and providing comfort to customers. Communicative skills also have a good impact on each person because with this skill, it is able to give a positive impression when doing social interactions. this is why researchers say that having communicative skills will also lead to manipulative marketing because communicative skills have a great opportunity to get customers, and are able to dribble customers to buy goods offered, one of which is by doing a good promotion.

2. The Effect Of Appearance On Manipulative Marketing

Obtained a value with t count (2.051) > t table (2.042) meaning that appearance (X2) has a significant effect on manipulative marketing (Y) at point coffee surabaya or H1 is accepted and H0 is rejected. It can be concluded that appearance will attract customers because it is the first impression before making a sale and purchase transaction, this is why researchers say that having an attractive appearance will also lead to manipulative marketing because attractive appearance has a great opportunity to get attraction from customers, besides at work attractive appearance will also be widely accepted by all circles, especially when you first meet someone, before getting to know someone's character, it will certainly be seen in terms of appearance first as a determinant that the person brings positive or negative things, although not all attractive-looking people also have good character in public. The results of this study were carried out using original data, and made direct observations because the researcher had been part of the barista at point coffee surabaya, therefore the company owner should think about the feasibility of barista staff at point coffee in order to increase income income at point coffee, especially in Surabaya.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Analysis of the Financial Performance of the Kupang City Regional Government

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ABSTRACT

Purpose: The implementation of regional government is based on the principle of regional autonomy. The implementation of local government is also marked by the change in the system from centralization to decentralization which is directed at accelerating the realization of the welfare of the Indonesian people. Therefore, each region is required to be more independent in managing and managing its government affairs, including in managing regional finances. One of the vital cycles in regional financial management is reporting carried out at the end of each accounting period, in the form of local government financial reports (LKPD). LKPD can be used as a means of conducting performance analysis so that it can increase the role of financial reports themselves. Therefore, the author will conduct more in-depth research to determine the performance of the Kupang City Regional Government over the last 5 years.

Design/methodology/approach: This research uses a quantitative descriptive approach. The data collection method will be carried out with documentation. The data is a Budget Realization Report contained in the BPK Audit Results Report for 2018-2022.

Findings: The data is then analyzed using financial ratio analysis in the form of regional financial independence ratios, regional financial dependence ratios, degree of decentralization ratios, ratios of effectiveness of regional original income, ratios of regional financial efficiency, harmony ratios and growth ratios. The results of the study stated that the role of the central government was more dominant in financing the administration of the Kupang City regional government, the financial dependence of the local government on the center in the form of transfer income during the last 5 years was very high, the percentage of local original income was less when compared to the total income, the effectiveness of regional original income during the last 5 years have been quite effective. local governments need quite large funds and even increase yearly as long as they finance government operations, but capital expenditures are decreasing yearly. On the other hand, revenue growth from 2018 to 2022 tends to decrease, while the growth in operating expenditures and capital expenditures has fluctuated over the past 5 years. Therefore, the Regional Government of Kupang City is expected to maximize the revenue potential in the region. This is to reduce the dominance of the central government in financing the implementation of the Kupang City Regional Government.

Paper type: Research Paper

Keyword: *Local government, Kupang City, Ratio Analysis*

Received : October 6th

Revised : December 18th

Published : January 31th

I. INTRODUCTION

The implementation of regional government is based on the principle of regional autonomy. Law of the Republic of Indonesia Number 23 of 2014 states that regional autonomy is the right, authority and obligation of an autonomous region to regulate and manage its own government affairs and the interests of the local community within the system of the Unitary State of the Republic of Indonesia. The implementation of local government is also marked by a change in the system from centralization to decentralization which is directed at accelerating the realization of the welfare of the Indonesian people. The law also states that decentralization is the transfer of governmental affairs by the central government to autonomous regions based on the principle of autonomy.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Therefore, each region is required to be more independent in managing and managing its government affairs, including in managing regional finances.

Regional financial management is all activities which include planning, budgeting, implementation, administration, reporting, accountability and supervision of regional finances. Regional financial management is carried out in an orderly, efficient, economical, effective, transparent and responsible manner by paying attention to the sense of justice, propriety, benefits for the community, and complying with the provisions of laws and regulations (Government Regulation of the Republic of Indonesia Number 12 of 2019).

One of the vital cycles in regional financial management is reporting carried out at the end of each accounting period, in the form of local government financial reports (LKPD). LKPD at least includes budget realization reports, reports on changes in excess budget balances, balance sheets, operational reports, cash flow reports, changes in equity reports, and notes on financial statements. The 2021 Government Accounting Standards of the Republic of Indonesia state that financial reports are prepared to provide relevant information regarding financial position and all transactions carried out by a reporting entity during one reporting period, primarily used to determine the value of economic resources used to carry out government operations, assess financial condition, evaluate the effectiveness and efficiency of a reporting entity, and help determine compliance with laws and regulations. On the other hand, financial reports are also used as a means of conducting performance analysis so as to enhance the role of the financial statements themselves.

Analysis of the performance of financial reports is an activity carried out to interpret financial report figures in order to determine financial performance. Based on the data presented in the APBD Realization Report, an analysis of financial ratios can be carried out including, the ratio of regional financial independence, the ratio of regional financial dependence, the ratio of the degree of decentralization, the ratio of the effectiveness of regional original income, the harmony ratio and the growth ratio (Mahmudi, 2016). Therefore users of financial reports will more easily understand the financial performance of local government.

Based on the method of analysis of the financial reports of the Regional Government of Sleman Regency for 2016-2020 it can be stated that in general the financial performance of the Regional Government of Sleman Regency is quite good, effective and efficient (Siswanto & Maylani, 2022). Semarang City's financial performance still has obstacles in managing regional finances (Kurniawati, 2022). Based on the results of ratio calculations, the financial performance of the Regional Government of Sumatra Island tends to increase and fluctuate (Abdullah & Mardatillah, 2017). What about Kupang City, is its financial performance the same as other regional governments or is it much different? Kupang City is the capital of East Nusa Tenggara Province which is divided into 6 sub-districts and 51 sub-districts. In reality, the Budget Realization Report does not yet describe regional financial performance. Therefore, a more in-depth analysis is needed to determine the financial performance of the Kupang City Regional Government.

In the end, it is hoped that the results of this research can serve as a guide in making decisions for the Kupang City Regional Government in the future. On the other hand, this research can be used as a reference for further research related to regional financial performance analysis.

II. METHODS

This research uses a quantitative descriptive approach. The data processed is in the form of a Budget Realization Report contained in the 2018-2022 BPK Audit Results Report. The data is then analyzed using financial ratio analysis. Analysis is the process of systematically searching and compiling data obtained from interviews, field notes and documentation, by organizing data into categories, describing it into units, synthesizing it, arranging it into patterns, choosing what is important and what is important. will be studied, and make conclusions so that they are easily understood by oneself and others (Sugiyono, 2013). This analysis includes analysis of regional financial independence ratios, regional financial dependency ratios, decentralization degree ratios, regional original income effectiveness ratios, harmony ratios and growth ratios.

III. RESULTS AND DISCUSSION

A. Regional Financial Independence Ratio (RKKD)

The results of calculating the regional financial independence ratio are in table 6.1. The table shows that the ratio of regional financial independence in Kupang City fluctuates and even tends to increase. In 2018 the regional financial independence ratio was 17.91%, in 2019 it rose to 19.77%, in 2020 it fell slightly to 18.67%, in 2021 it rose to 19.07%, and in 2022 it further rose to 22.69 %. Regional financial independence for the last 5 years is

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

below 25%. These results illustrate an instructive relationship pattern, meaning that the role of the central government is more dominant in financing the implementation of the Kupang City Regional Government.

Tahun	Total PAD	Pendapatan (transfer)	Rasio (%)	Keterangan
2018	171,490,709,097	957,520,348,772	17.91%	Instruktif
2019	185,051,575,343	936,049,930,114	19.77%	Instruktif
2020	167,530,108,045	897,168,016,772	18.67%	Instruktif
2021	166,266,172,886	871,871,184,415	19.07%	Instruktif
2022	186,122,187,494	820,114,453,556	22.69%	Instruktif
Rata-rata			19.62%	Instruktif

Figure 1- Regional Financial Independence Ratio and Relationship Patterns

B. Regional Financial Dependency Ratio

Tahun	Pendapatan Transfer	Total Pendapatan	Rasio (%)	Kriteria
2018	957,520,348,772	1,169,535,197,601	81.87%	Sangat Tinggi
2019	936,049,930,114	1,164,514,406,238	80.38%	Sangat Tinggi
2020	897,168,016,772	1,128,428,149,265	79.51%	Sangat Tinggi
2021	871,871,184,415	1,081,199,704,148	80.64%	Sangat Tinggi
2022	820,114,453,556	1,066,614,346,569	76.89%	Sangat Tinggi
Rata-rata			79.86%	Sangat Tinggi

Figure 2- Regional Financial Dependency Ratio

The results of calculating the regional financial dependency ratio are in table 6.2. The calculation table shows that the regional financial dependency ratio of Kupang City in 2018 was 81.87, in 2019 it was 80.38%, in 2020 it was 79.51%, in 2021 it was 80.64%, and in 2022 it was 76.89%. These results illustrate that the Kupang City Government's dependence on the center in the form of transfer income over the last 5 years has been very high.

C. Decentralized Degree Ratio

The results of calculating the degree of decentralization ratio are in table 6.3. The calculation table shows that the degree of decentralization of Kupang City in 2018 was 14.66%, 2019 was 15.89%, 2020 was 14.85%, in 2021 was 15.38%, and 2022 was 17.45%. . This calculation illustrates that for the last 5 years the percentage of local revenue for the City of Kupang has been less when compared to the total revenue.

Tahun	Total PAD	Total Pendapatan	Rasio (%)	Kriteria
2018	171,490,709,097	1,169,535,197,601	14.66%	Kurang
2019	185,051,575,343	1,164,514,406,238	15.89%	Kurang
2020	167,530,108,045	1,128,428,149,265	14.85%	Kurang
2021	166,266,172,886	1,081,199,704,148	15.38%	Kurang
2022	186,122,187,494	1,066,614,346,569	17.45%	Kurang
Rata-rata			15.65%	Kurang

Figure 3- Decentralization degree ratio

D. Regional Own Revenue Effectiveness Ratio

The results of calculating the effectiveness of regional original revenues are in table 6.4

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Tahun	Total PAD	Target PAD	Rasio (%)	Kriteria
2018	171,490,709,097	177,648,571,543	96.53%	Cukup
2019	185,051,575,343	195,336,408,043	94.73%	Cukup
2020	167,530,108,045	163,030,592,170	102.76%	Sangat Efektif
2021	166,266,172,886	190,782,982,758	87.15%	Kurang
2022	186,122,187,494	197,560,982,755	94.21%	Cukup
Rata-rata			95.08%	Cukup

Figure 4- Effectiveness of Regional Original Revenue

The calculation table shows that the effectiveness of Kupang City's own-source revenue has fluctuated over the last 5 years. In 2018 the effectiveness ratio was 96.53% with sufficient criteria, in 2019 it was 94.73% with sufficient criteria, in 2020 it was 102.76% very effective, in 2021 it was 87.15% with less criteria, and in 2022 it was 94 .21% with sufficient criteria. The calculation table also shows that the effectiveness of local original revenues for the last 5 years with an average ratio of 95.08% with sufficient criteria. Therefore, the effectiveness of the Kupang City government's local revenue for the last 5 years has been quite effective.

E. Compatibility Ratio

1. Operations Expenditure

The results of calculating the operational expenditure harmony ratio for Kupang City are shown in table 6.5. The calculation table shows that the ratio of operating expenditure to regional expenditure in Kupang City over the last 5 years has increased every year. In 2018 it was 75.07%, in 2019 it increased to 78.94%, in 2020 it increased by 80.36%, in 2021 it also increased to 81.49%, and the peak in 2022 rose to 86 .69%. These calculations illustrate that the Kupang City regional government requires quite large funds for government operations.

Tahun	Belanja Operasi	Belanja Daerah	Rasio (%)
2018	876,510,848,949	1,167,614,842,067	75.07%
2019	922,688,920,523	1,168,795,353,637	78.94%
2020	913,409,582,038	1,136,643,267,010	80.36%
2021	896,520,484,058	1,100,199,348,375	81.49%
2022	904,606,329,834	1,043,492,271,157	86.69%

Figure 5- Harmony of Operational Expenditures

2. Capital Expenditures

The results of calculating the capital expenditure suitability ratio are shown in table 6.6. The calculation table shows that the capital expenditure ratio percentage in the last 5 years has decreased. In 2018 the capital expenditure ratio was 24.93%, in 2019 it fell to 21.06%, in 2020 it was 19.31%, in 2021 it decreased to 13.31%, and in 2022 it was 13.04%.

Tahun	Belanja Modal	Belanja Daerah	Rasio (%)
2018	291,103,993,118	1,167,614,842,067	24.93%
2019	246,106,433,114	1,168,795,353,637	21.06%
2020	219,502,147,472	1,136,643,267,010	19.31%
2021	146,418,623,804	1,100,199,348,375	13.31%
2022	136,100,324,224	1,043,492,271,157	13.04%

Figure 6- Harmony of Capital Expenditures

ISSN : 2597-4785 (ONLINE)
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F. Growth Ratio

1. Income

The results of calculating the income growth ratio are shown in table 6.7. The calculation table shows that the ratio of revenue growth for the City of Kupang over the last 5 years has fluctuated and even tended to be minus from year to year. In 2018 the revenue growth ratio was 1.16%, in 2019 it decreased to -0.43%, in 2020 it was -3.10%, in 2021 it decreased to -4.19%, while in 2022 it experienced a slight increase but it is still in minus condition of -1.35%. This ratio illustrates that income growth from 2018 to 2022 tends to decline.

Tahun	Thn t	Thn 1	Th t- Th 1	Rasio (%)
2018	1,169,535,197,601	1,156,105,794,119	13,429,403,482	1.16%
2019	1,164,514,406,238	1,169,535,197,601	(5,020,791,363)	-0.43%
2020	1,128,428,149,265	1,164,514,406,238	(36,086,256,973)	-3.10%
2021	1,081,199,704,148	1,128,428,149,265	(47,228,445,117)	-4.19%
2022	1,066,614,346,569	1,081,199,704,148	(14,585,357,579)	-1.35%

Figure 7- Revenue Growth Ratio

G. Operational spending

The results of calculating the income growth ratio are shown in table 6.8. The calculation table shows that the growth ratio of Kupang City's operating expenditure over the last 5 years has fluctuated from year to year. In 2018 the operating expenditure growth ratio was 4.22%, in 2019 it increased to 5.27%, in 2020 it decreased to -1.01%, in 2021 it further decreased to -1.85%, while in 2022 it experienced a slight increase but amounting to 0.90%. This ratio illustrates that the growth in operational costs of the Kupang City regional government has fluctuated over the last 5 years.

Tahun	Thn t	Thn 1	Th t- Th 1	Rasio (%)
2018	876,510,848,949	841,041,801,732	35,469,047,217	4.22%
2019	922,688,920,523	876,510,848,949	46,178,071,574	5.27%
2020	913,409,582,038	922,688,920,523	(9,279,338,485)	-1.01%
2021	896,520,484,058	913,409,582,038	(16,889,097,980)	-1.85%
2022	904,606,329,834	896,520,484,058	8,085,845,776	0.90%

Figure 8- Operating Expenditure Growth Ratio

H. Capital Expenditures

The results of calculating the income growth ratio are shown in table 6.9. The calculation table shows that the growth ratio of the capital expenditure of the Regional Government of the City of Kupang over the last 5 years has fluctuated from year to year. In 2018 the growth ratio for capital expenditure in the City of Kupang was -4.96%, in 2019 it fell to -15.46%, in 2020 it has increased even though it tends to be minus to -10.81%, in 2021 it has decreased to -33, 30%, while in 2022 there will be quite a large increase although it still tends to be minus at -7.05%. This ratio illustrates that the local government of Kupang City has fluctuated the cost of capital over the last 5 years.

Tahun	Thn t	Thn 1	Th t- Th 1	Rasio (%)
2018	291,103,993,118	306,295,066,371	(15,191,073,253)	-4.96%
2019	246,106,433,114	291,103,993,118	(44,997,560,004)	-15.46%
2020	219,502,147,472	246,106,433,114	(26,604,285,642)	-10.81%
2021	146,418,623,804	219,502,147,472	(73,083,523,668)	-33.30%
2022	136,100,324,224	146,418,623,804	(10,318,299,580)	-7.05%

Figure 9- Capital Expenditure Growth Ratio

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

V. CONCLUSION

The regional financial independence of the Municipal Government during 2018-2022 Kupang illustrates a pattern of instructive relationships. This illustrates that the role of the central government is more dominant in financing the implementation of the Regional Government of Kupang City. The financial dependence of the Regional Government of Kupang City on the center in the form of transfer income over the last 5 years has been very high. The percentage of regional original income is less when compared to the total revenue. On the other hand, the effectiveness of regional original revenues for the Regional Government of the City of Kupang over the last 5 years has been quite effective. In carrying out operational activities the Regional Government of Kupang City requires quite large funds and even increases every year during 2028-2022. In terms of financing, the Kupang City Regional Government's capital expenditure has decreased every year for the last 5 years. Kupang City Regional Government income growth from 2018 to 2022 tends to decline. The growth of operating expenditures and capital expenditures has fluctuated over the last 5 years. Therefore, the Regional Government of Kupang City is expected to maximize the revenue potential that exists in the region. This is to reduce the dominance of the central government in financing the implementation of the Kupang City Regional Government.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Analysis of the Relationship of the Role of Organizational Support, Work Engagement on the Success of the Mh02 Driving Monitoring System in Coal Mining

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ABSTRACT

Purpose: This research proposes to examine the role of organizational support, work engagement between and MH02 technology in coal mining

Design/methodology/approach: The quantitative research technique is referred to as the research method. The target of this research is PT. Pamapersada Nusantara, and the research sample, which consists of 279 respondents, refers to the structural equational modelling model

Findings: The findings demonstrated that the respondents believed that each and every hypothesis had been confirmed.

Research limitations/implications: This study only focused on analyzing the relationship between the role of organizational support and work engagement which is linked to the successful implementation of the MH02 driving monitoring system technology in coal mining. Other factors, such as performance expectancy, effort expectancy, social influence, facilitating conditions, are not explored in depth. It is important for future research to investigate these additional factors and their potential impact on job performance at Pamapersada Nusantara. Despite these limitations, this research contributes to the understanding of factors influencing work performance in the mining industry and provides insights for practitioners to develop effective interventions to improve work performance among employees.

Practical implications: The managerial implications of this research are that companies can increase job satisfaction and work engagement, improve employee performance, achieve their goals, and gain competitive advantage. To support this, PAMA management facilitates the implementation of MH02 technology at the site BRCB (Berau coal site Binungan). This technology is really needed so that incidents and fatigue symptoms can be reduced and detected earlier, so that with reduced incidents the company's performance will increase.

Originality/value: This report originates from research conducted inside a single mining business

Paper type: Research paper

Keyword: Organizational support, Work engagement, Driving monitoring system, User satisfaction, Net benefit

Received : October 6th
Revised : December 18th
Published : January 31th

I. INTRODUCTION

In the implementation of a system, if the organization provides support to employees for their tasks, the employees will enjoy their work and improve performance through the use of the new system. In addition, when employees feel the same connection with their job or workplace. In mining activities, operators have the potential for high levels of fatigue because production activities are carried out 24 hours and are divided into 2 shifts. In anticipation of accidents caused by fatigue, PT Pamapersada Nusantara is currently developing technology in the unit cabin that can detect indications of operator fatigue when operating the unit. The technology in question is

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

DMS/MH02 (Driving Monitoring System / Mata Hati 2). Basically, engaged employees do better because they feel more connected to the company as a whole. This journal proposes an integrated model to measure and validate the success factors of user involvement in information system development DMS/MH02.

A. Problem Statement

The development of technology and information systems has become widespread and is considered important in all fields. Information systems have developed rapidly and have diverse applications. Meanwhile Al Moghrabi (2002) calls this system one of the most successful means of facing the challenges of the times because it is all integrated activities aimed at obtaining information and knowledge through technological means for managers to make different location decisions. However, despite the technological advances of a system, it is still necessary to evaluate perceived use, user satisfaction and net benefit. Therefore, attention is paid to the users of information systems, and organizations must proceed in parallel lines when developing and implementing appropriate information. And attention to information technology users (Msallam, A. A. et al., 2019).

The company will continue to improve its image with its customers and increase satisfaction with services and prices by improving the quality of its services and increasing the efficiency of employee performance, one of which is by improving integrated information/technology systems. This system is the pillar of procedure development. Employee performance and increase in functional abilities, and influence the behavior of individuals and work groups to create performance results that are consistent with the company's corporate goals, and provide workers with the ability to achieve the tasks and obligations assigned to them and develop their ability to assume additional responsibilities to achieve a high level job satisfaction, adapting to the work environment, and thus being able to explore the elements of human performance in terms of efficiency and productivity, which are reflected in having an impact on overall organizational effectiveness (Msallam, A. A. Et al., 2019).

In implementing a system, if the organization provides sufficient support to employees for their tasks, employees will enjoy their work more and improve their performance through the use of the new system (Lee, D.H. Et al, 2010). According to Abusamhadhana G.A.O., et al. (2019) user work engagement combines user participation and user involvement factors. It shows the behavior and psychological activities of the users involved during the development of an information system. Several previous studies claim that these two factors contribute positively to the success of information systems. However, in general there is still no understanding in the literature regarding the measurement and validation of the influence of these two factors.

Work engagement occurs when employees feel a shared connection with their work or workplace. Basically, engaged employees perform better because they feel more connected to the company as a whole. Companies have begun investing in various types of benefits in an effort to engage their employees. However, employee involvement is often forgotten when there is a system development project within the company, such as when implementing the DMS/MH02 system.

Organizational Support and Work Engagement are vital factors in the implementation of DMS/MH02, because basically we need to develop strategies to ensure that employees are informed about the implementation of the system, how the changes affect their jobs specifically, and the expectations of the organization.

In this journal, we propose an integrated model to measure and validate success factors for user involvement in information system development DMS/MH02.

C. Literature Review

1. Fatique

Fatigue is a symptom that often appears in various activities and especially in jobs that rely on the physical condition of workers. The Centers for Disease Control and Prevention in the United States (CDC, 2015) estimates that one in three adults does not get enough sleep, labeling fatigue a public health problem.
In an investigative study of hauling truck accidents from 2010-2014 in open-pits in Kalimantan, it was found that there were several contributing factors, namely lack of visibility, road conditions, operator behavior, operational conditions and weather conditions (Sudiyanto et al., 2018). Fatigue is a combination of several symptoms that can reduce work performance, such as lack of attention, slow response times, errors in decision making, poor performance in jobs that require skills and an increase in a person's chances of falling asleep (Energy Institute, 2014).

2. Driving Monitoring System Mata Hati 02 (DMS MH02)

According to research by Kong et al (2015), there is a lot of research that focuses on imaging and computer vision data processing by using detectors for the condition of the eyes when they are closed or vice versa (eye blinking detection) and identifying the condition of a person when driving a device when it is not yawning or vice versa (mouth detection) according to research by Gu&Ji (2004) using a fatigue detector by identifying facial movements of the driver.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

There are several causes of signs of fatigue in workers (Talebi et al., 2021), and this has a negative effect on endurance and safe operations for operators in mining. Percentage of Eye Closure (PERCLOS) is a common practice. However, the activities and conditions at home or in the work area also greatly influence the physical endurance of heavy dump truck operators. The PERCLOS system does not assess and include this aspect in the fatigue algorithm aspects that appear. Due to the limitations of the PERCLOS system, it would be interesting if it were also studied using activity or workload factors as well as environmental conditions.

Existing literature argues that the usability of an information/technology system can be measured by the extent to which an individual uses, with some frequency, nature and duration, the entire spectrum of features provided by the system (Aldholay et al., 2018). In the journal Tam and Oliveira (2017) also argue that continuous use of the information system or technology provided provides high quality information, supported by a technical and functional structure that is easy to use and reliable and has a reasonable level of customer/user service and support. , usually leads to increased user satisfaction (User Satisfaction).

3. Organizational support

Robbin & Judge in Waileruny (2014) researched that each worker thinks that their company will fully support when rewards are given fairly, workers should have the right to have an opinion when in discussions to make a decision, and superiors will be considered very supportive. Caesens, et al (2017) said that the things that are useful from organizational support are:

1. Support from the organization/company, able to facilitate both visible and invisible needs of workers and a mutually beneficial relationship can be obtained from workers who are sensitive and care about the company achieving its vision and mission. With support from the organization/company, the aim is for workers to always be active and show their best in terms of skills, quality as well as loyalty to the company which will benefit both parties.
2. Support from the organization/company will be received by workers so that it can foster a spirit of ownership of the company. It could be said that with a positive attitude from workers, a mutually beneficial relationship will arise for the existence of the worker's role. So that it has an impact on the moral equality of workers towards the company.

4. Work Engagement

In the literature (Molino, M. et al, 2020), a positive relationship between work engagement and performance outcomes has been found, such as in-role and extra-role performance, team performance, customer loyalty, service quality and care. Thus, work engagement is widely considered as a benefit to the organization. As for direct implications, we investigate user acceptance and among its antecedents we consider two user personal characteristics (resilience and goal orientation) and organizational resources (opportunities for information and training); Both personal and job resources have been considered in previous research investigating the determinants of work engagement.

D. Review Hypothesis

1. Relationship between organizational support and work engagement and use

A study (AL-Moasher and Al-Khasabah, 2006) shows that the effect of the role of the organization (Organizational Support) in the implementation of system management information in the banking sector. In this study, it was found that there was a statistically significant effect of technical and organizational variables in the Management Information System application. This study led to the need to involve employees and users in the planning process for developing the information/technology system.

H1: The influence that Organizational Support has on work engagement is positive and significant

H2: The influence provided by Organizational Support on DMS/MH02 use is positive and significant

2. Relationship between work engagement and user satisfaction

According to the DeLone and McLean Information System Success Model, user satisfaction is an outcome variable that is affected by system quality, information quality, and service quality(Delone and Mclean,2003). Work engagement, which is a psychological state reflecting an employee's level of involvement, enthusiasm, and commitment to their work, is not explicitly included in the mode (Delone and Mclean,2002). However, it is possible that work engagement indirectly affects user satisfaction through its impact on service quality[2]. Highly engaged employees may be more likely to provide high-quality service to users, which could lead to higher levels of user satisfaction (Delone and Mclean,2002).

H3: The influence that work engagement has on user satisfaction is positive and significant

3. Relationship between use and user satisfaction and net benefit

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

In the journal Tam and Oliveira (2017) also argue that continuous use of the information system or technology provided provides high quality information, supported by a technical and functional structure that is easy to use and reliable and has a reasonable level of customer/user service and support. , usually leads to increased user satisfaction (User Satisfaction). Apart from that, according to Balaban et al. (2013), the same positive relationship tends to emerge between the continued use of IS provided by students and the benefits (Net Benefit) attached to its users.

H4: DMS/MH02 Use has a positive influence on DMS/MH02 User Satisfaction

H5: Positive influence is given by DMS/MH02 Use to DMS/MH02 Net Benefit

4. Relationship between user satisfaction and net benefit

According to Delone and Mclean (2004) and Baraka et al. (2013), the existence of a good level of user satisfaction with something provided by IST will have an impact on the emergence of benefits related to the use of the technology in question, hence the interpretation that when the user is satisfied with the information system or technology, the level of individual success is triggered.

H6: DMS/MH02 user satisfaction has a positive effect on DMS/MH02 net benefit

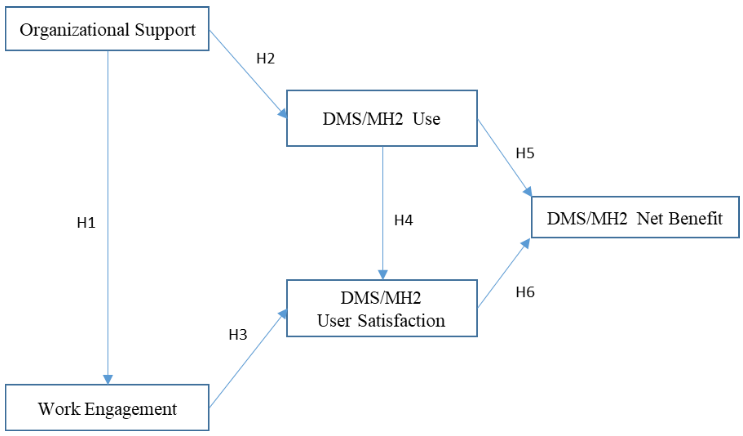

Figure 1. Theoretical Framework

II. METHODS

In this research, it is typical to relate validity to the quantitative descriptive type because with the existing subjective method measurement questionnaire, we will test its validity compared to the objective method. There is research from Chandra and Madiono (2017), Handoyo and Setiawan (2017) supporting the theory from Anitha J (2014), namely "Determinants of employee engagement and their impact on employee performance" saying that Employee Engagement has a good impact and provides something meaningful to quality of work of workers. Robinson et al. (2008) said that the quality of employee performance is dominant which causes good employee engagement and employees who have a good attachment to the corporation and boost performance so that it has an effect on the continuity of the corporation (Ramadhan & Sembiring, Indonesian Management Journal, Vol. 14 - no. 1 April 2014). There are several studies that have been studied which show that there is a close correlation between employee loyalty towards work and their place of work, which leads to performance and profits for the company (Choo et al, 2013). With this explanation, it is closely related to the quality of work provided by workers to their company. So research experts agree that work engagement has a big impact on the quality of workers' work. Therefore, workers have attachment and loyalty to their company, this really helps the company to carry out its company goals.

Robbin & Judge (2008) and Waileruny (2014) researched that each worker thinks that their company will fully support when rewards are given fairly, workers should have the right to have an opinion when in discussions to make a decision, and superiors will be considered very supportive.

To test the research hypothesis empirically, researchers collected data through questionnaires. The research population was employees in the production department and coal mine hauling site department of BRCB-Pama Persada Nusantara. The target population to be selected is the position of operator and head of section 2 of the department.

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Determining the number of samples taken can be determined using the Slovin formula, the Slovin formula is a formula or formula for calculating the number of samples that are not known with certainty. Slovin is used in survey research where the sample size is usually very large, so a formula is needed to get a small sample but can represent the entire population. Solvin's formula, Umar (1997), To determine the number of respondents filling out the questionnaire and to determine the amount in measuring waste generation and composition, researchers use a confidence level value of 75%, so the error rate is 5%. So that researchers can determine the minimum sample limit that meets the 5% sample error requirement to be included.

By using the formula above, researchers can find out the amount minimum sample for measurement, with a total population (N) = 660, the sample size (n) = 249 is obtained. Actually, we took a sample of 279.

The data collection method used in this research is by using a questionnaire instrument, which is a set of questions to obtain information from respondents. On this research questionnaire sheet there are two types of statements, questions: (1) statements related to variable measurement; (2) questions related to respondent data. Questionnaires are made from structured statements/questions and provide answers in the form of a scale with answers adapted to the statements/questions to be made. It is easier for respondents to answer and avoid bias. The scale measurement used is Likert where each statement has an answer of 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree) to 5 (strongly agree).

In this research we used statistical analysis of the Smart PLS program (version 3.2.9) for Reability, Validity, Convergent Validity, Internal consistency reliability analysis. To test the hypothesis using the Smart PLS program (version 3.2.9).

III. RESULTS AND DISCUSSION

The following is an analysis of the description and respondents :

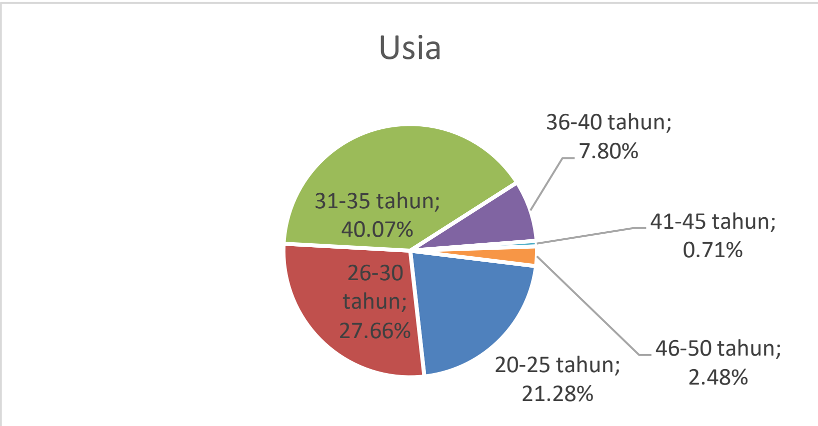

Figure 2. Respomdemt Age

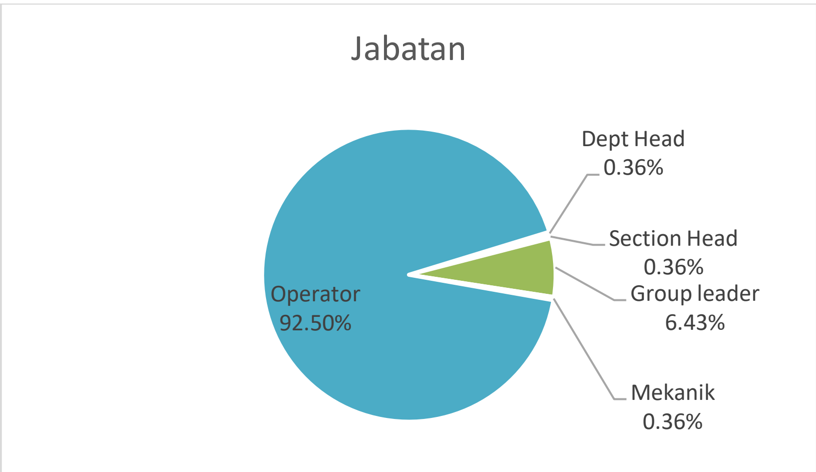

Figure 3. Respondent's Position

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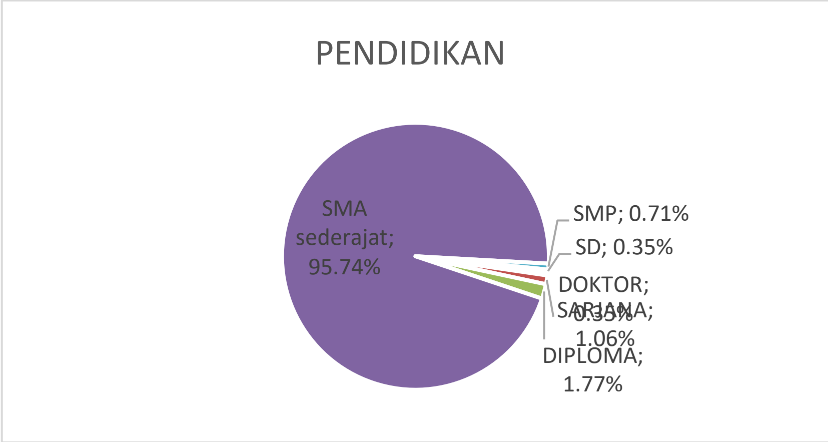

Figure 4. Respondent's Education

Reliability and validity checks are also carried out using Smart PLS (version 3.2.9). To test reliability, you must check the Reability indicator and Outer loading is the correlation value between the latent variable and its indicator, according to Hulland (1999) who said that a good outer loading value is 0.70 or more. According to Gaston (2013), if the outer loading value is > 0.7, more than 50% of the information from the indicator has been successfully absorbed by the latent variable. From the processed data in Figure 24, the outer loading table contains several values less than 0.7, namely:

4. Work engagement with P3 whose outer loading value is 0.659
5. Organizational support with v11 whose outer loading value is 0.68
6. Organizational support with v12 whose outer loading value is 0.641

This means that it shows that it has not been able to absorb the indicator values, because this research includes exploratory research which has a definition of research that aims to explore and deepen knowledge and look for new ideas to formulate problems in more detail and then decide to carry out new research, according to Hulland (1999) so for exploratory research the outer loading value is above 0.4 so that the 3 items with an average outer loading value of 0.6 still have data reliability.

To test reliability, internal consistency reliability is also checked and the following is the composite reliability display:

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
dms/mh02 use	0.913	0.913	0.945	0.851
dms/mh02 user satisfaction	0.965	0.965	0.973	0.876
net benefit	0.972	0.972	0.978	0.899
organizational support	0.941	0.945	0.949	0.589
work engangement_	0.927	0.936	0.942	0.701

Figure 5. Table of Construct Reliability and Validity

A good composite reliability value is 0.7 or more and if exploratory research a good value is 0.6 or more (Bagozzi and Y, 1998) and from the analysis in Figure 25 of the Construct Reliability and Validity table then all items get a value above 0.7 with an average average at 0.9. So that after checking the reliability of the indicators and the reliability of internal consistency, it can be said that the data processed has fulfilled the elements of reliability.

1. Validity Test

As for the validity test which will be analyzed using Smart PLS using convergent validity and discriminant validity, for convergent validity itself from the construct reliability and validity table you can see the "AVE" value, according to Bagozzi and YI (1988) a good "AVE" value is 0.5 or more and from the existing data processing it can be seen that the AVE values all exceed 0.5 and are said to be valid. And an ideal discriminant validity test

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

was also carried out using "AVE" data and correlation latent variable data. According to Fornell and Larcker (1981), recommend that the "square root" of the AVE of each latent variable should be greater than the correlation between the latent variables.

	dms/mh02 use	dms/mh02 user satisfaction	net benefit	organizational support	work engangement_
dms/mh02 use	0.923				
dms/mh02 user satisfaction	0.828	0.936			
net benefit	0.911	0.873	0.948		
organizational support	0.397	0.416	0.451	0.768	
work engangement_	0.496	0.503	0.555	0.718	0.837

Figure 6. Table of Discriminant Validity

From reading the discriminant validity table it can be concluded as follows:

1. The root value of AVE dms/mh02 use is 0.923 higher than the correlation with dms mh02 user satisfaction, netbenefit, organizational support, work engagement.
2. The root value of AVE dms mh02 user satisfaction is higher than the correlation of netbenefit, organizational support, dms/mho2 use, work engagement.
3. The root value of AVE net benefit is higher than the correlation of organizational support, dms/mho2 use, dms mh02 user satisfaction, work engagement.
4. The root value of AVE organizational support is higher than the correlation of net benefit, dms/mho2 use, dms mh02 user satisfaction, work engagement.
5. The root value of AVE work engagement is higher than organizational support, net benefit, dms/mho2 use, dms mh02 user satisfaction.

From the results of this research it can be concluded that all discriminant validity at the variable level is acceptable because each variable has a larger AVE root compared to the correlation of other variables. This shows that the construct shares higher variance with the measurement items that measure it compared to items on other variables.

hypothesis testing is carried out based on the results of inner model testing (structural model) which includes r-square output, parameter coefficients and t-statistics. to see whether a hypothesis can be accepted or rejected, include paying attention to the significance values between constructs, t-statistics and p-values. this research hypothesis testing was carried out with the help of smartpls (partial least square) 3.0 software. these values can be seen from the bootstrapping results. the rules of thumb used in this research are t-statistics > 1.96 with a significance level of p-value of 0.05 (5%) and the beta coefficient is positive. the value of testing this research hypothesis and for the results of this research model can be illustrated

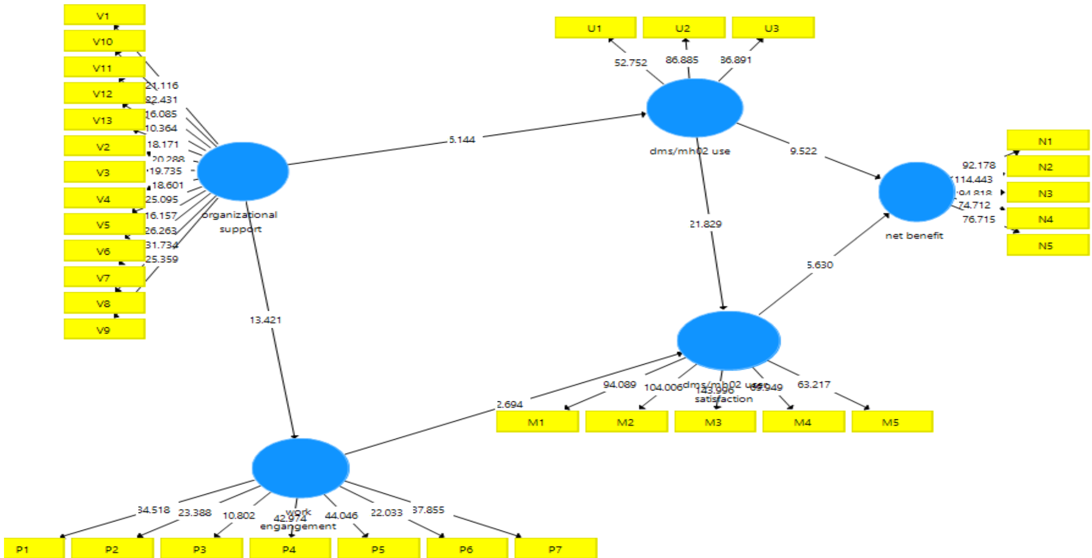

Figure 7. Research Model Result

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(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
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IV. CONCLUSION

	Original S	Sample M	Standard	T Statistics (|O/STDEV|)	P Values
dms/mh02 use -> dms/mh02 user satisfaction	0.767	0.769	0.035	21.829	0.000
dms/mh02 use -> net benefit	0.599	0.594	0.063	9.522	0.000
dms/mh02 user satisfaction -> net benefit	0.377	0.382	0.067	5.630	0.000
organizational support -> dms/mh02 use	0.397	0.405	0.065	6.144	0.000
organizational support -> work engangement_	0.718	0.724	0.053	13.421	0.000
work engangement_ -> dms/mh02 user satisfaction	0.123	0.125	0.046	2.694	0.007

Figure 8. Table of Path Coefficients

In Table 3, it reflects the path coefficient which is the result of direct effect testing so that it can be concluded as follows:

1. The results of the analysis show that the beta coefficient value of the moderate effect of Organizational support on the Work Engagement relationship is 0.718 and the t-statistic is 13.421 p value 0.000 so that the first hypothesis is accepted, this proves that Organizational support is proven to have a positive influence on Work Engagement
2. The results of the analysis show that the beta coefficient value of the moderate effect of Organizational support on the relationship between MH02 use is 0.397 and the t-statistic is 6.144 p value 0.000 so that the second hypothesis is accepted, this proves that Organizational support is proven to have a positive influence on DMS/MH02 use
3. The results of the analysis show that the beta coefficient value of the moderate effect of work engagement on the DMS/MH02 user satisfaction relationship is 0.123 and the t-statistic is 2.694 p value 0.007 so that the third hypothesis is accepted, this proves that work engagement is proven to have a positive influence on DMS/MH02 user satisfaction
4. The results of the analysis show that the beta coefficient value of the moderate effect of DMS/MH02 Use on the DMS/MH02 user satisfaction relationship is 0.767 and the t-statistic is 21.829 p value 0.000 so that the fourth hypothesis is accepted, this proves that DMS/MH02 use is proven to have a positive influence on DMS/ MH02 user satisfaction
5. The results of the analysis show that the beta coefficient value of the moderate effect of DMS/MH02 Use on the DMS/MH02 net benefit relationship is 0.599 and the t-statistic is 9.522 p value 0.000 so that the fifth hypothesis is accepted, this proves that DMS/MH02 use is proven to have a positive influence on DMS/ MH02 net benefits
6. The results of the analysis show that the beta coefficient value of the moderate effect of DMS/MH02 User satisfaction on the DMS/MH02 net benefit relationship is 0.377 and the t-statistic is 5.630 p value 0.000 so that the sixth hypothesis is accepted, this proves that DMS/MH02 user satisfaction is proven to have a positive influence on DMS/MH02 net benefits.

Analysis of hypothesis 1 for organizational support is proven to have a positive influence on work engagement. This is in accordance with research by Najeemdeen (2018), concluding that the organizational culture obtained and the organizational support obtained influence work engagement between workers. Companies must continue to observe and survey other factors that could have an influence on the totality of work. To know the problems and needs of employees, it is very important for management to have a close relationship with them so that they will feel supported by the organization. Perceived organizational support will increase employee motivation and their willingness to involve themselves in any work.

Analysis of hypothesis 2 for organizational support is proven to have a positive influence on DMS/MH02 use. This is in line with research from Al-Moasher and Al-Khasabah (2006) which shows the role of organizations (organizational support) in implementing Management Information Systems in the banking sector . In this study, it was found that there was a statistically significant effect of technical and organizational variables in the Management Information System application. This study led to the need to involve employees and users in the planning process for developing the information/technology system.

Analysis of hypothesis 3 for work engagement is proven to have a positive influence on DMS/MH02 user satisfaction, in accordance with studies which state that there is a close correlation between work loyalty and the company which leads to company performance and profits (Choo et al. 2013). With this explanation, it is closely related to the quality of work provided by workers to their company. So research experts agree that work engagement has a big impact on the quality of workers' work in implementing a system.

ISSN : 2597-4785 (ONLINE)
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Analysis of hypothesis 4 DMS/MH02 use is proven to have a positive influence on DMS/MH02 user satisfaction. User satisfaction with a particular information system/technology can be interpreted in the positive emotions shown by individuals when interacting with it (Cenfetelli et al., 2008). When discussing the acceptance and use of IST, one can see a proven relationship between the degree of satisfaction with a particular technology and the user's intention to not only intend to use it (Park and Kim, 2014), but also intend to continue using it (Hsiao et al., 2016).

Analysis of hypothesis 5 DMS/MH02 use is proven to have a positive influence on DMS/MH02 net benefit, in accordance with the opinion of Balaban et al. (2013) the same positive relationship tends to emerge between the continued use of IS provided by students and the benefits (Net Benefit) attached to its users.

Analysis of hypothesis 6 DMS/MH02 user satisfaction is proven to have a positive influence on DMS/MH02 net benefit, confirming the opinion of Delone and McLean (2004) and Baraka et al. (2013), the existence of a good level of user satisfaction with something provided by IST will have an impact on the emergence of benefits related to the use of the technology in question, hence the interpretation that when the user is satisfied with the information system or technology, the level of individual success is triggered.

V. CONCLUSION

From the results of the research that has been carried out, it turns out that DMS/MH02 for user satisfaction, net benefit, use from user perceptions expressed agreement regarding usability, satisfaction and usefulness for the average value of usability (DMS/MH02 use) at 3.6 while for usefulness (net benefit) with an average of 4 and for user satisfaction it has the lowest average value, namely 3.27.

For the role of organizational support in the implementation of DMS/MH02, it is proven to have a positive influence on DMS/MH02 use, this is in accordance with the study (Al-Moasher and Al-Khasabah, 2006) showing that the effect of the role of the organization (organizational support) in the implementation of system management information in banking sector. The study found that there was a statistically significant effect of technical and organizational variables in management information system applications. This study led to the need to involve employees and users in the planning process for developing the information/technology system. Then, if you look at the actual results in the field, it shows that if there is no support from PAMA management, of course the many benefits of DMS/MH02 will not be felt, because the results displayed from DMS/MH02 require fast follow-up to prevent fatigue incidents. For the research we are currently conducting at the PAMA-BRCB site, support from PAMA management at the site itself is very large because here the role of PT customers. Berau Coal also monitors daily and weekly progress which will be evaluated at safety improvement meetings and LK3 between customers and all contractors working at PT. Berau Coal regarding the speed of follow-up response and evaluation of DMS/MH02 findings.

Meanwhile, the role of work engagement on DMS/MH02 user satisfaction proves that work engagement is proven to have a positive influence on DMS/MH02 user satisfaction, but it has the lowest level of significance compared to the other tested items, if you look at the close correlation between work loyalty and the company so that leading to company performance and profits (Choo et al, 2013). With this explanation, it is closely related to the quality of work provided by workers to their company. So research experts agree that work engagement has a big impact on the quality of workers' work in implementing a system. Meanwhile, the actual results in the field that occurred from the results of interviews conducted by many operators were not satisfied with the implementation of DMS/MH02 because there were many findings that did not match the facts in the field, for example the operator's findings that yawning and closed eyes were not able to be captured properly. maximum by DMS/MH02.

By looking at the research results which show that the satisfaction value for DMS/MH02 (DMS/MH02 user satisfaction) is only 3.27 on average compared to net benefit and DMS/MH02 use, it turns out that it is in line with the relationship between work engagement and DMS/MH02 user satisfaction. also has a low value compared to other relationships, this clearly shows that there is a problem with the quality of DMS/MH02, this was also confirmed during an interview with the IT team at BRCB, that DMS/MH02 still needs a lot of improvements in terms of infrastructure so that it can improve the quality of DMS/MH02. Therefore, it is necessary to continue with deeper studies for further research regarding DMS/MH02 quality.

ACKNOWLEDGMENTS

We would like to express our sincere gratitude to all those who have contributed to completing this research. First and foremost, we would like to thank the management of PT. Pamapersada Nusantara for allowing us to

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

conduct this study in their company. We are also grateful to all the employees who participated in this research and generously shared their time, insights, and experiences. We extend our thanks to the research supervisor, who provided us with valuable guidance and feedback throughout the research process. Additionally, we appreciate the support and resources provided by the research institution. Finally, we thank our families and friends for their love, encouragement, and support throughout the research journey.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Impact of Government Spending and Foreign Investment on Exports, Imports, and Economic Growth in Indonesia

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ABSTRACT

Purpose: Economic integration have an impact on increasing trade volume and production output in various countries. Likewise, the ease of capital mobility between countries, makes investment not only rely on capital derived from domestics, but can come from foreign direct investment.

Design/methodology/approach: This study used time series data during the 1980-2019. The analysis model used is multiple linear regression using, by first testing classical assumptions so that the regression results are Unbias.

Findings: The results showed that foreign investment, government spending, and economic openness can significantly increase export, import, and economic growth. Furthermore, the rupiah exchange rate, which is depreciating against the US dollar, can increase export growth and reduce Indonesia's import growth. Meanwhile, higher inflation can cause a significant decline in export and import growth, but an insignificant decline for Indonesia's economic growth.

Keywords: Foreign Investment, Government Spending, Economic Openness, International Trade, and Economic Growth

Received : October 6th

Revised : December 18th

Published : January 31th

I. INTRODUCTION

Trade openness can have both positive impacts on the economy depending on the readiness of each country to face trade liberalization (Chirathivat, 2002). Itakura (2014) and Minniti (2010) explain that liberalization and improved connectivity and reduction of trade barriers have a positive impact on improving economic well-being. In addition to trade openness, government spending is also a determining factor in increasing economic growth. This condition is explained by Chani et.al. (2011) who explained that increasing government spending can increase the smooth export of trade products. Meanwhile, research conducted by Mwakanemela (2014); Nguyen (2014); Majeed and Eatzaz (2006); Tabassum et al. (2012); Tomar & Tomar (2014); Uysal O. and Abdulakadir (2018); Tarawalie & Conteh (2021), suggests that rising FDI may increase export growth, but in the opposite direction to Bhavan's research (2016); Yee et al. (2016), reinforcing the opinion that rising FDI could provide a meaningful increase for Indonesia's export growth. With the increasing inflow of foreign investment in Indonesia, production has increased, including export-oriented products.

This research is interesting to do. In addition, research on issues, trade openness, government spending and foreign investment is still very little done. The main objective of this study is to analyze the role of foreign investment, government spending, and trade openness for the Indonesian economy.

A. Literature Review

Some views related to factors that can affect exports and imports include Dornbusch, S. et al (2011), who state that net exports will increase if it happens the depreciation of the real exchange rate. Conversely, when the exchange rate appreciates foreign currencies, exports become more expensive, so exports tend to decrease and imports of goods increase.

Samuelson & William (2010) explained that if the price of foreign products increases or domestic currency depreciates against foreign currencies, so the volume and value of exports tend to increase. Kearl, J.R. et al (1989) states that if the world prices are higher than domestic prices on the same commodity, will encourage domestic companies sell some output abroad (Export). McConnell, C. et al (2012) showed that domestic inflation can cause the value of exports decrease and imports increase.

Furthermore, the trade balance deficit can be explained through the AD-US curves. Lipsey and Cristal (2011) explain, the expansion of fiscal policy on floating exchange rates with perfect capital mobility will shift the AD-US curve to the right, so demand will increase and import will increase. The result is that trade balance will deficit. Exchange rate appreciation resulted in domestic prices being more expensive than foreign goods causing net exports to decline. In the long run at the state of a full balance income level, permanent real exchange rate appreciation will lead to a trade balance deficit. Colander (2020) explains that, the effect of fiscal policy on the trade balance basically works through the effect of revenue, where the expansion of fiscal policy can increase revenue. If there is an increase in income, it will cause imports to increase. Another factor that can affect a country's exports and imports are the government policy in international trade (Mankiw et al, 2008).

II. METHODS

Research on the Effect of Third Funds, Financing to Deposit Ratio and Return On Assets on Financing at Bank Muamalat KCP Probolinggo uses quantitative methods with a descriptive approach. Using quantitative methods because the data required is in the form of numbers in financial reports, the numbers in question are the amount of financing, Third Party Funds (DPK), Financing to deposit ratio (FDR) and Return on Assets (ROA). Meanwhile, the descriptive method is a statistical method which has the task of collecting, managing and analyzing data and then presenting it in a good form.

The population in this this research is required 20 data from the 2018 - 2022 quarterly financial reports. The data collection technique in this research was that the researcher carried out indirect observations by collecting data from the annual financial reports of Bank Muamlat KCP Probolinggo from 2018-2022. The sampling method used in this research is Saturated Sampling. Saturated sampling is a sample selection technique when all population data is sampled. The reason for using the saturated sampling technique is because the population size is relatively small, namely less than 30.

Then the researcher analyzed the financial reports using 3 independent variables, namely, Third Party Funds (DPK) as X^1, Financing to Deposit Ratio (FDR) as X^2, Return On Assets (ROA) as -The methods used are the classical assumption test, simple and multiple linear regression analysis, and hypothesis testing.

III. RESULTS AND DISCUSSION

The research model uses multiple linear regression, namely Two Stage Least Square (TSLS) using the help of Eviews software. In looking for the influence of trade openness, government spending and FDI variables on exports, imports, and GDP growth; exchange rate, inflation, and net export control variables are used.

A. Data

The data sources used in the study were time series data from 2000-2019, which were published from various sources: the Central Statistics Agency (BPS), Bank Indonesia (BI), and International Financial Statistics (IFS).

B. Research Method

In estimating the model, data will be regressed by each variable to Indonesia's exports, imports and economic growth rate. Based on this, 3 (three) models of equations as follows:

$$LX\ t = \alpha\ 0 + \alpha\ 1EXC\ t + \alpha 2CPI\ t + \alpha\ 3LFDI\ t + \alpha\ 4LGE\ t + \alpha\ 5OPN\ t + \varepsilon\ t \quad (1)$$

$$LM\ t = \beta\ 0 + \beta\ 1EXC\ t + \beta\ 2CPI\ t + \beta 3LFDIt + \beta\ 4LGE\ t + \beta\ 5OPN\ t + u\ t \quad (2)$$

$$LGDP\ t = \gamma\ 0 + \gamma\ 1NEX\ t + \gamma\ 2CPI\ t + \gamma\ 3LFDI\ t + \gamma\ 4LGE\ t + \gamma 5OPN\ t + \nu\ t \quad (3)$$

Where:

LX	=	Logaitma Export of goods (million/thousand dollars), showing growth
LM	=	Logarithm of Imports of goods (million/thousand dollars), showing growth
LGDP	=	Logarithm of Gross Domestic Product, showing growth

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

EXC = Exchange rate (rupiah/dollar)
NEX = Net Export (X – M)
CPI = Consumer Price Index (Inflation)
LFDI = Logarithm of Foreign Direct Investment, showing growth
LGE = Government of Expenditure Logarithm, showing growth
OPN = Trade Openness, (X + M)/GDP
$\alpha 0$; $\beta 0$; $\gamma 0$ = Constant
λ, β, γ = Coefficient of Regression
εt ; ut ; νt = Error

In equation (3), namely the LGDP economic growth model, the exchange rate control variables (EXC) that appear in equations (1) and (2) are replaced with net exports (NEX) because NEX variables directly affect LGDP than EXC variables.

C. Discussion

The development of exports and imports of Indonesian goods during the year 1980-2019, almost every year has increased, where the export of Indonesian goods almost every year exceeds the amount of imports of goods (Table 4.1).

Tahun	X	%	M	%	GDP	Tahun	X	%	M	%	GDP
1980	21,909		10,834		84,791	2000	65,403	27.63	43,595	30.83	176,142
1981	22,260	1.60	13,272	22.50	107,633	2001	57,361	-12.30	37,534	-13.90	171,350
1982	22,293	0.15	16,859	27.03	110,498	2002	59,166	3.15	38,340	2.15	208,836
1983	21,152	-5.12	16,859	0.00	99,866	2003	64,108	8.35	42,196	10.06	249,968
1984	21,902	3.55	13,882	-17.66	102,490	2004	70,767	10.39	54,877	30.05	273,461
1985	18,590	-15.12	10,262	-26.08	102,171	2005	86,966	22.89	75,725	37.99	304,372
1986	14,805	-20.36	10,718	4.44	93,657	2006	103,527	19.04	80,650	6.50	388,168
1987	17,135	15.74	12,891	20.27	88,824	2007	118,013	13.99	93,101	15.44	460,193
1988	19,465	13.60	13,249	2.78	103,865	2008	139,606	18.30	127,538	36.99	543,254
1989	22,160	13.85	16,444	24.12	118,684	2009	119,646	-14.30	93,786	-26.46	574,505
1990	25,674	15.86	21,768	32.38	133,858	2010	158,074	32.12	135,323	44.29	755,094
1991	29,543	15.07	26,013	19.50	149,934	2011	203,497	28.74	177,436	31.12	892,969
1992	33,088	12.00	27,311	4.99	162,740	2012	190,032	-6.62	191,691	8.03	917,870
1993	36,825	11.29	28,328	3.72	184,839	2013	182,552	-3.94	186,629	-2.64	912,524
1994	40,053	8.77	31,989	12.92	206,932	2014	176,293	-3.43	178,179	-4.53	890,815
1995	45,417	13.39	40,630	27.01	236,456	2015	150,366	-14.71	142,695	-19.91	860,854
1996	49,814	9.68	42,929	5.66	265,981	2016	144,490	-3.91	135,653	-4.94	931,877
1997	56,297	13.01	51,304	19.51	252,386	2017	168,811	16.83	156,976	15.72	1,015,619
1998	50,369	-10.53	35,280	-31.23	111,654	2018	180,215	6.76	188,712	20.22	1,041,772
1999	51,244	1.74	33,321	-5.55	164,151	2019	167,683	-6.95	171,276	-9.24	1,042,240
Rata-rata Pertumbuhan								5.17		7.70	

Figure 1. Development of Export and Import of Goods and Gross Domestic Product Indonesia in Million US, During the Years 1980-2019

Source: UNCTAD, Note:The figure of 21,909 (X of 1980) reads 21,909,000 dollars

Furthermore, based on the results of data processing, the influence of exchange rates, inflation, foreign investment, and government spending on exports and imports of goods, as well as economic growth can be seen in Table 2.

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(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Table 1. Regression Results of Independent Variables Against Export, Import and Indonesia's Economic Growth Rate, During the Period 1980-2019

Independent Variables	*Dependent LX*		*Dependent LM*		*Dependent LGDP*	
	Coef	*Prob*	*Coet*	*Prob*	*Coef*	*Prob*
C	*-0.457474*	*0.4978*	*-2.689083*	*0.0097*	*2.963966*	*0.0003*
EXC	*6.11E-05*	*0.0027*	*6.19E-05*	*0.0324***	-	-
NEX	-	-	-	-	*3.17E-07*	*0.8662*
CPI	*-0.009573*	*0.0017*	*-0.012388*	*0.0051*	*-0.001270*	*0.5414*
LFDI	*0.111119*	*0.0057*	*0.235047*	*0.0002*	*0.783251*	*0.0000*
LGOE	*0.945231*	*0.0000*	*1.042927*	*0.0000*	*0.150065*	*0.0526**
OPN	*0.024419*	*0.0000*	*0.021917*	*0.0000*	*0.005546*	*0.0222***
R2	*0.990344*		*0.984268*		*0.990207*	
R2Adj	*0.988924*		*0.981954*		*0.988766*	
F	*697.4174*		*425.4276*		*687.5506*	
Prob	*0.000000*		*0.000000*		*0.000000*	

Source: Processing Results

1. Exchange Rate, Inflation, Foreign Investment, Government Spending, and Economic Openness for Indonesia's Export Growth

Mathematically the result of regression can be expressed in the following equation:

LX t = -0.4574 + 6.11E-05EXC t – 0.0095INF t + 0.1111LFDI t + 0.9452LGOE t + 0.0244OPN+ ε t (1)
(0.4978) (**0.0027**) (0.0017) (0.0057) (0.0000) (**0.0000**)
R 2 = 0.9903   R2adj = 0.9889   F = 697.4174   Prob = (**0.0000**)***

The EXC exchange rate in rupiah per dollar has a significant influence on export growth in Indonesia, where the depreciation of the rupiah exchange rate against the US dollar has caused an increase in export growth. This is because the depreciation of the domestic currency has made the price of domestic products relatively cheaper. This research is in line with Jiang (2014); Adhikary (2012); Tomar & Tomar (2014); Potelwa et al. (2016); These results are identical in direction but not significant as Wongpit (2011) research; Wang et al. (2020). However, the results of this study are in the opposite direction to the research of Tabassum et al. (2012); Wildan et al. (2021); and Tarawalie & Conteh (2021).

Inflation (INF) has a counter-directional and significant effect on the pace of exports, where if there is an increase in inflation, it causes a decrease in the pace of exports. This is because if the increase in domestic inflation causes the price of domestic products to be relatively more expensive than foreign prices. This research is in line with Tomar & Tomar (2014); Yee et al. (2016); Wang et al. (2020); Wildan et al. (2021). A research that is unidirectional but not significant for the pace of exports is the research of Tarawalie & Conteh (2021). The results of this study are contrary to the results of Nyeadi et al (2014), who concluded that inflation has a positive effect on exports, but not significantly.

Foreign Direct Investment (LFDI) provides a significant positive direction for increasing exports, where the increase in FDI can provide a significant increase for Indonesia's exports. With the increasing inflow of foreign investment in Indonesia, production has increased, including export-oriented products. This is in line with

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Mwakanemela's (2014) research; Tabassum et al. (2012); Tomar & Tomar (2014); Tarawalie & Conteh (2021), which states that increased FDI can increase the pace of exports; but in the opposite direction to Bhavan's research (2017); Yee et al. (2016), where the effect of FDI on exports is negative.

Government spending (LGOE) has a significant positive influence on the pace of exports, where the greater the government expenditure can lead to an increase in the pace of Indonesia's exports. This is because the increased government expenditure is partly used by capital expenditures, such as the provision of facilities and infrastructure to support trade, so as to help smooth exports of products in its international trade. This research is in the same direction as Chani et.al. (2011) but its effect is not significant in the research conducted by Adhikary (2012)

The economic openness can increase the pace of exports, an increasingly open economy can provide a wider market for the penetration of export products as well as wider country destinations for Indonesia. The results of this study are identical to those of Makhlouf et al (2015); Fang et al (2020). However, Adhikary's research (2012) shows insignificant results on the impact of economic openness on exports.

2. Exchange Rate, Inflation, Foreign Investment, Government Spending, and Economic Openness for Indonesia's Export Growth

Mathematically the results of regression in the Table can be expressed in the following equation:

LM t = –2.6890 – 6.19E-05EXC t – 0.0123INF t + 0.2350LFDI t + 1.0429LGOE t + 0.0219OPN t +u t ...... (2)

(0.0097) (0.0324) (0.0051) (0.0002)** (0.0000) **(0.0000)**

R 2 = 0.9842 R2 = 0.9819 F = 425.4276 Prob = (**0.0000)*****

The exchange rate in rupiah per dollar has a significant negative influence on imports, where in the event of depreciation of the Indonesian currency, it provides a decrease in the rate of imports. This is because imports of raw materials and capital goods are relatively increasingly expensive. This research is in line with Ibrahim, A. A. A., & Ahmed, E. M. (2017). The direction of the influence of the exchange rate on imports is identical i.e. negative signisfikan as done by Uzunoz & Akcay (2009); Nteegah, A., & Mansi, N. (2017). But the opposite is that it has a significant positive relationship in the research of Galebotswe, O., & Andrias, T. (2011); Ekanayake, N. (2016); Ibrahim, A. A. A., & Ahmed, E. M. (2017).

Inflation has a significant negative relationship with imports, where if domestic inflation increases, the amount of Indonesia's imports will decrease. Increasing inflation also causes an increase in industrial raw materials so that companies will suppress production and reduce import demand related to imported materials used in production said. These results are in line with the research of Çakmak et al (2016); Ekanayake, N. (2016) and Nteegah, A., & Mansi, N. (2017), but contrary to the research of Uzunoz & Akcay (2009); Malik & Chaudhary (2012) which shows a positive relationship between inflation and imports.

Foreign Direct Investment (LFDI) has a significant positive relationship with imports, where an increase in FDI can increase imports in Indonesia. This is because the influx of foreign investment will be accompanied by the required capital items that Indonesia does not fully own, so it is necessary to import capital goods from other countries. The results of this study are different from the research of Rijal et al (2000); Malik & Chaudhary (2012) which shows the impact of increasing FDI causes a decrease in imports.

Government spending has a significant positive relationship with imports, where an increase in government spending can increase imports in Indonesia. This is because government spending is partly used to purchase capital goods originating from abroad. This is in line with the research of Narayan, S., & Narayan, P. K. (2004). However, these results are opposite or different where they show a significant negative relationship such as research conducted by Galebotswe, O., & Andrias, T. (2011) and Budha, B. B. (2014).

Economic openness has a significant positive relationship with imports, where the more open the economy can increase imports in Indonesia. The economy is increasingly open, the demand for imports of consumer goods and goods for production needs is increasing. This is in accordance with the research of Nteegah, A ., & Mansi, N. (2017), namun contrary to the results of the research of Malik & Chaudhary (2012); Ekanayake, N. (2016), which shows a significant negative relationship between economic openness and imports.

3. Economic Openness, Government Spending and Foreign Investment for Economic Growth in Indonesia

Mathematically the result of regression can be expressed in the following equation:

LGDP t = 2.9639 + 2.17E-07NEX t – 0.0012INF t + 0.7832LFDI t + 0.1500LGOE t + 0.0055OPN t + ν t ... . (3)

(**0.0003**) *** (0.8662) (0.5414) (0.0000) (0.0526)* (**0.0222)****

R 2 = 0.9902 R2 = 0.9887 F = 687.5506 Prob = (**0.0000)*****

Net Export (X-M) has a positive unidirectional relationship but is not significant to economic growth, where net exports increase, it cannot significantly increase Indonesia's economic growth . This is because the increase

ISSN : 2597-4785 (ONLINE)
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in exports can be accompanied by an increase in imports, so that net exports cannot have a major impact on Indonesia's economic growth. This research is in line with that conducted by Mukit (2020), but in the opposite direction to Akapler & Shamadeen (2017) and Blavasciunaite et al. (2020), which shows a decline in economic growth with an increase in exports and imports.

The development of inflation that occurs has a unidirectional relationship but its effect is not significant on economic growth, where if inflation increases, it cannot significantly increase the pace of Indonesia's economic growth. This is due to the increase in inflation even though the price of output increases but is also followed by an increase in the price of inputs of production factors, so that the added value obtained is relatively low. The results of this unidirectional study are in accordance with the research of Bibi (2014), even having a significant influence on Jilenga et al (2016); Behera (2014).

Foreign Direct Investment (LFDI) has a positive and significant relationship with economic growth, where an increase in FDI can increase Indonesia's economic growth . This is because the influx of foreign investment can increase domestic output production, through the adoption and transfer of technology of foreign companies. This research is in the same direction as Moudatsou (2003); Koojaroenprasit (2012); Ullah, F., & Rauf, A. (2013); Hamoudi & Aimer (2017), unidirectional but not significant in the study of Jilenga et al (2016); Hobbs et al (2021). But contrary to the research of Mihaela et al. (2017).

Government spending has a significant positive relationship with the pace of economic growth, where an increase in government spending can increase domestic consumption. Increased government spending has caused aggregate demand to increase in the form of both routine spending and development spending. Results according to Nduka et al. (2013); Oladele et al. (2017); Kryeziu & Durguti (2019); Malefane (2020); in the same direction but not significant influence on the research of Uddin & Khanam (2017). However, it isnot significant in the research of Grubaugh (2015); Olubokun et al (2016).

Economic openness has a significant positive relationship with the pace of economic growth, where the more open the economy can increase the pace of economic growth in Indonesia. With economic openness, the market is getting wider which has an impact on increasing the economies of scale of export products that are greater for Indonesia. These results are identical to the research of Kryeziu & Durguti (2019); Moudatsou (2003); but not significant, but opposite but not significant influence on Al-Edary's research (2013); Nduka et al. (2013); Hasnul (2015); Grubaugh (2015); Rizavi (2010). Even the opposite influences are negative and significant are the studies conducted by Mehrara & Firouzjaee (2011); Aluthge et al (2021).

IV. CONCLUSION

The increase in exports for Indonesia is one way that can be done to offset the increase in imports, so that net exports continue to increase to be able to encourage sustainable economic growth. . Several important policies must be carried out for efforts to increase exports, in addition to increasing government spending, namely: attracting foreign investment in addition to controlling currency exchange rates against the dollar, as well as controlling the rate of inflation at reasonable limits.

Increased government spending is effective in improving facilities and infrastructure in order to encourage exports with the increasing openness of foreign trade and investment. Besides that, with the increasing opening of the economy, it can provide a wider market for the increase of Indonesian export products through an increasingly large production scale. Especially with the entry of foreign companies with more advanced technology, domestic companies can adopt and transfer technology in the development of their export products.

In Indonesia, in 2020 & 2021 government spending is prioritized for the quality of Human Resources, namely the transformation of health in the quality of education, the transformation of social protection to the acceleration of infrastructure. In addition, industrial revitalization, bureaucratic reform, and improvement of the green economy with the provision of various incentives. By consistently paying great attention to government spending, it is hoped that the Indonesian economy will continue to experience high growth. (ppid.bnpp.go.id)

Foreign Direct Investment (FDI) affects gross domestic product (GDP) growth, especially FDI which is directed towards export-oriented industries. Foreign capital brings not only money and machinery but also engineering skills. He opened up remote areas and worked on new, untapped sources.

In Indonesia, to facilitate FDI licensing, all ministries delegate the issuance of permits to the Investment Coordinating Board, One Stop Service. The Indonesian government simplified licensing to shorten the time. Through one-stop integrated service, time is very short. The FDI facilities provided by the government will attract foreign investors.

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ISSN : 2597-4750 (PRINTED)

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Effect of Production Cost and Operational Costs on Net Income in SMES Darsa Fruit Crips

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ABSTRACT

Purpose: This study aims to examine the effect of production costs and operational costs partially and simultaneously on net income in SMEs.

Design/methodology/approach: Production costs and operational costs as independent variables, while net income as the dependent variable. This study uses a quantitative approach. The research samples during 2018 - 2021. Data collection techniques are in the form of documentation and interviews. Data analysis used multiple linear regression, with SPSS statistics tools the t-test and f-test.

Research limitations/implications: The finding reveal that partially production costs have a significant positive effect on net income, and operating costs has a significant negative effect on Net incomes. while simultaneously production cost and operational cost have a significant effect on net income.

Practical implications: This study gives suggestion for SMEs should be able to manage Production Costs and control Operational Costs properly in order to generate maximum profits and avoid losses that can cause bankruptcy in SMEs businesses.

Originality/value: This research gives empirical evidence the relationship production costs and operational costs on Net Income for SMEs

Paper type: Research paper

Keyword: *Production Costs, Operating Costs, Net Income, Small Medium Enterprises*

Received : October 8th
Revised : December 20th
Published : January 31th

I. INTRODUCTION

The era of globalization is an era in which human beings are directly connected to one another as if there were no more partitions separating them, and territorial boundaries between countries became something that was barely visible anymore. The era of globalization has had a very significant impact on all areas of human life, starting from culture, politics, and the economy. In the economic field, for example, globalization has made barriers between countries almost non-existent, so that almost all companies in the world are directly competing with each other in fighting for their worldwide target market (Baihaqi, 2020). Even though this makes consumers quite profitable, because they can more easily find and choose products that suit their wants and needs with quite a lot of variants both from within and from abroad, on the other hand this makes these companies have to confront each other directly, with various strategies that they carry out. This of course makes the level of competition very tight, and makes companies that are fragile in their management will meet their end more quickly (Felicia & Gultom, 2018).

However, it is not an easy thing for every company to achieve high profits, because there are many factors that affect the profit level of a company in running its business (Jatiningrum et al, 2016; Murni & Dhiana, 2018). There are three factors that can affect company profits, namely costs, selling prices and sales or production volume

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

(Mulyadi, 2014: 513). These several factors, cost is one of the factors that greatly influences the level of profit that will be obtained by the company (Rostiyanti & Ferliyanti, 2019; Novia et al. 2020)

Costs in a company itself are divided into two main types, there are production costs and operational costs (Pipit, 2022). According to Riwayandi (2014), production costs (manufacturing costs) are costs related to the production function. Production costs consist of direct material costs, direct labor costs, and factory overhead costs. Meanwhile, according to Jumingan (2017: 32) Business or operational costs arise in connection with the sale or marketing of goods or services and the implementation of administrative and general functions of the company concerned (Lasrya, Chandra & Panjaitan, 2021). Both production costs and operational costs are both important factors that affect the size of the profit that will be obtained by a company. Both production costs and operational costs must be managed as well as possible so that the company can obtain maximum Net income. According to Kasmir (2011) Net income is profit that has been deducted by costs which are a burden on the company in a certain period including taxes (Novia et al., 2020). With this high Net income figure, it is hoped that it can support the sustainability of the SMEs business process in the long term, and is expected to have a positive impact on the SMEs itself, the environment around the SMES and for the development of the national economy in general.

In fact, SMEs has volatility in business performance. The condition SMEs DARSA Fruit Chips in East Lampung Regency also ups and downs in their business, especially when the Covid 19 pandemic arrived which hampered various kinds of community activities and made the country's economic condition decline, in addition to rising prices for cooking oil and raw materials. Fuel oil also contributed to high inflation which in turn contributed to the increase in the production and operational costs of SMEs (DARSA Fruit Chips) in East Lampung Regency, reaching 30% compared to before the pandemic and the increase in prices for various types of oil. For example, in purchasing raw materials for cooking oil, which previously only ranged from 10-11 thousand rupiahs, then increased to 14 thousand rupiahs, coupled with the sluggish economic conditions which caused a decline in sales figures of up to -59% overall in one year in 2020, when compared to 2019. The data of the business performance can be seen clearly from the annual report data for the 2018 - 2021 period as follows:

Table. 1. SMEs DARSA Fruit Chips of East Lampung Regency 2018 - 2021

No	*Year*	*Charge Type*		*Sale*	*Percent age (%)*	*Net Income*	*Percen tage (%)*
		Production	*Operational*				
1	*2018*	*RP.84.000.000*	*Rp.10.800.000*	*Rp.120.100.000*	*-*	*Rp.25.300.000*	*-*
2	*2019*	*RP.92.400.000*	*Rp.11.880.000*	*Rp.132.110.000*	*10%*	*Rp.27.830.000*	*10%*
3	*2020*	*Rp.40.108.000*	*Rp.6.075.210*	*Rp.68.024.100*	*-48,5%*	*Rp.9.578.600*	*-65,5%*
4	*2021*	*RP.78.540.000*	*Rp.10.098.000*	*Rp.100.105.500*	*47,1%*	*Rp.11.467.500*	*19,7%*

Source: SMES Documentation (DARSA Fruit Chips) East Lampung Regency Fiscal year 2018 –2021

Current year -Year before /base year x 100%
2019 = 132 million -120 million = 12 million/120 million x 100 % = 10%
2020 = 54 million- 132 million = -78 million/ 132 million x 100% = -56%
2021 = 100 million - 54 million = 46 million/54 million x 100% = 85%

Evidence from the table of the data on 2020 sales decreased by 48.5%. This shows that in 2020 SMESs DARSA Fruit Chips in East Lampung Regency are experiencing very serious problems which have caused a very significant decrease in sales. The following table shows monthly report data throughout 2020.

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Table.2 SMEs DARSA Fruit Chips of East Lampung Regency every month on year of 2020

No	Month	Charge Type		Sale	Percentage (%)	Net income	Percentage (%)
		Production	Operational				
1	January	Rp.7.705.000	Rp.990.010	Rp.12.090.700	-	Rp.2.400.700	-
2	February	Rp.7.700.000	Rp.990.000	Rp.12.300.500	1,7%	Rp.2.610.500	8,7%
3	March	Rp.6.700.000	Rp.1.170.000	Rp.10.050.900	-18,2%	Rp.360.900	-86,1%
4	April	Rp.6.703.000	Rp.995.000	Rp.8.760.500	-12,8%	Rp.120.000	-66,7%
5	May	Rp.1.400.000	Rp.280.000	Rp.3.100.000	-64,6%	Rp.520.000	333,3%
6	June	Rp.1.500.000	Rp.200.000	Rp.3.300.000	6,4%	Rp.600.000	15,3%
7	July	Rp.1.350.000	Rp.279.500	Rp.3.050.500	-7,5%	Rp.530.500	-11,5%
8	August	Rp.1.450.000	Rp.285.000	Rp.3.320.000	8,8%	Rp.685.000	29,1%
9	September	Rp.1.275.000	Rp.185.000	Rp.2.800.500	-15,6%	Rp.375.500	-45,1%
10	October	Rp.1.445.000	Rp.185.700	Rp.3.050.000	8,9%	Rp.420.000	11,8%
11	November	Rp.1.380.000	Rp.260.000	Rp.2.860.000	-6,2%	Rp.320.000	-23,8%
12	December	Rp.1.500.000	Rp.255.000	Rp.3.340.500	16,8%	Rp.635.500	98,5%
	Total	Rp.40.108.000	Rp.6.075.210	Rp.68.024.100		Rp.9.578.600	

Source: SMES Documentation (DARSA Fruit Chips) of East Lampung Regency for the 2020 fiscal year

According on the data of monthly report on 2020 above, shows that SMESs DARSA Fruit Chips) in Labuhan Ratu 4 Village, Labuhan Ratu District, East Lampung Regency experienced the most drastic decline in sales in May, namely by 64.6%, this condition occurred almost simultaneously with the early days of restrictions on community activities by the government at the start of the covid 19 pandemic.

This research takes the object of SMEs DARSA Fruit Chips in Labuhan Ratu District, East Lampung Regency because it is one of the SMEs that was affected by the covid 19 pandemic in its sales. This needs to give evidences related with there is an effect of high production costs and operational costs that cause the profits. Net income is an indicator of business success in a company, including for SMEs DARSA Fruit Chips in Labuhan Ratu District, East Lampung Regency. Based on the description above, this paper aims to examine more deeply the effect of production costs and operating costs on the company's Net income at SMEs DARSA Fruit Chips in East Lampung Regency.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Cost is the sacrifice of economic resources to obtain goods or services that are expected to provide benefits now or in the future (Garaika et al., 2020). Meanwhile, according to Mulyadi (2017), costs are sacrifices of economic resources, measured in units of money, that have occurred or are likely to occur for a particular purpose. Then according to Brigham dan Joel (2019).cost is cash or cash equivalent value sacrificed to obtain goods or services that are expected to provide current or future benefits for the organization.

According to Fathony and Wulandari (2020). production costs (manufacturing costs) are costs related to the production function. Production costs consist of direct material costs, direct labor costs, and factory overhead costs. According to Mulyadi (2015) Production costs are costs incurred to process raw materials into finished products that are ready for sale. Broadly speaking, production costs are divided into raw material costs, direct labor costs, and overhead costs. Meanwhile, according to Sutrisno (2012: 11) Production costs are costs incurred to process raw materials into finished products.

According to Mia Laswi Wardiyah (2017:13) Operational costs are costs that show the extent to which business management is efficient. Selling costs and administrative costs relate to the operations performed. Jumingan (2017:32) Business/Operational costs arise in connection with the sale or marketing of goods or services and the implementation of administrative and general functions of the company concerned. According to Sujarweni (2017:28) Operational Costs are costs that are used to get the main income. Simamora (2013:46) Net income that comes from transactions of income, expenses, gains and losses. Profit is generated from the difference between incoming resources (income and profits) and outgoing resources (expenses and losses) over a certain period of time. Meanwhile, according to V. Wiratna Sujarweni (2017: 197) states that Net income is the final figure of the profit and loss calculation where to look for operating profit plus other income minus other expenses.Based on the literature review and the results of previous research, the hypotheses in this study are as follows:

H1: There is an effect of Production Costs on Net Income SMEs DARSA Fruit Chips in East Lampung Regency.

H2: There is an effect of Operational Costs on Net Income in SMESs DARSA Fruit Chips in East Lampung Regency.

H3: There is an effect of Production Costs and Operational Costs on Net Income in SMEs DARSA Fruit Chips in East Lampung Regency.

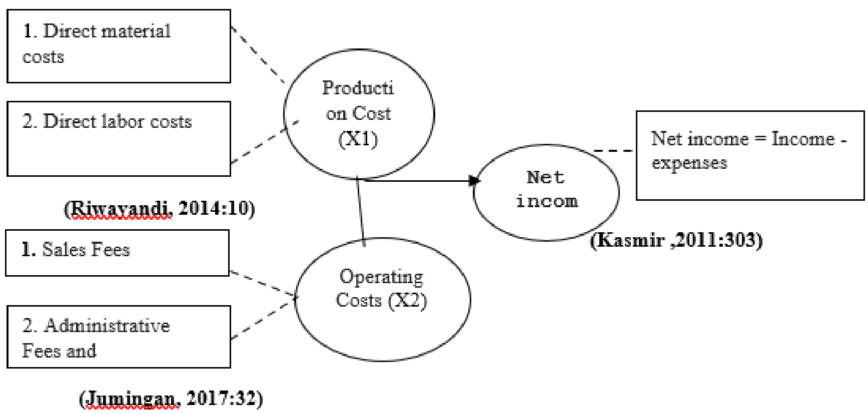
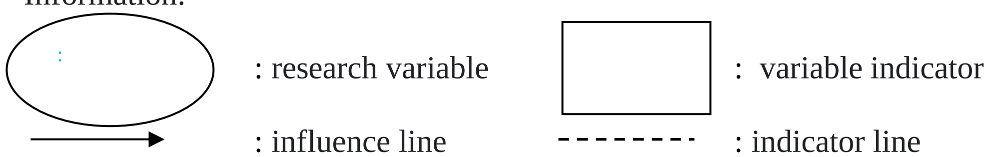


Figure 1. The Conceptual Framework

Information:



ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

II. METHODS

The type of research used in this research is associative research with a quantitative approach. The data in this research is quantitative data. The data sources in this study were obtained from monthly report data and annual data for the period 2018 - 2021 from SMEs DARSA Fruit Chips in East Lampung Regency. In the form of production cost data, operational costs and Net income data for the period 2018 - 2021. The population in this study is year-end report data for 2018 - 2021 from SMESs (DARSA Fruit Chips) in East Lampung Regency. The samples in this study are production costs, operational costs, Net income during 2018 - 2021 from SMESs (DARSA Fruit Chips) in East Lampung Regency.

This study consists of three variables, namely two independent variables and one dependent variable. The independent variables of this study are production costs (X1) and operating costs (X2), while the dependent variable of this study is net income (Y).

Variables and Definition Variables:

7. Variable (X1) ***Production costs,*** according to Fathony and Wulandari (2020). production costs (manufacturing costs) are costs related to the production function. Production costs consist of direct material costs and direct labor costs.
8. Variable (X2) ***Operational costs,*** according to Rostianti and Ferliyanti (2019). Operational costs are costs that are not related to the production process but only include marketing costs and administrative and general costs.
9. Variable (Y) is ***Net income,*** according to Novia et al (2020). Net income is profit that has been deducted by costs which are the company's burden in a certain period, including taxes.

The normality test in this study was carried out using the graphical method. If the results of the calculation of the significance value are more than 0.05, the data is said to be normally distributed. The homogeneity test with decision making is guided by the following provisions. If the sig significance value is <0.05, it means that the data does not have a homogeneous variance (not the same) and if the sig significance value is > 0.05, it means that the data has a homogeneous variance.The multiple linear regression equation according to Sugiyono (2017) can be formulated as follows:

$Y = a + b1X1 + b2X2 + e$

Where:

Y' = Dependent Variable (predicted value) i.e. Net Income.

X1 = Independent Variable 1, namely production costs

X2 = Independent Variable 2 namely Operational Costs

a = Constant (value Y' if X1,X2...,Xn = 0)

b = Regression coefficient (increasing or decreasing value)

e = Standard error

III. RESULTS AND DISCUSSION

A. Data and Sample

The first data collection technique in this study is by means of documentation obtained from monthly and annual report data for the period 2018 - 2021 from SMES owners DARSA Fruit Chips in East Lampung Regency. The next data collection technique in this study was by direct interviewing the owners and employees of SMEs DARSA Fruit Chips in Labuhan Ratu 4 Village, Labuhan Ratu District, East Lampung Regency by coming directly and conducting interviews with the owners and employees of SMEs DARSA Fruit Chips in Labuhan Ratu 4 Village, Labuhan Ratu District, East Lampung Regency. The data test carried out in this study was based on data from the monthly SMEs reports (DARSA Fruit Chips) in East Lampung Regency throughout 2020 as follows:

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Table 3 Smes Darsa Fruit Chips Of East Lampung Regency Every Month For The 2020 Financial Year

No	Month	Charge Type		Sale	Percentage (%)	Net Income	Percentage (%)
		Production	Operational				
1	January	Rp.7.705.000	Rp.990.010	Rp.12.090.700	-	Rp.2.400.700	-
2	February	Rp.7.700.000	Rp.990.000	Rp.12.300.500	1,7%	Rp.2.610.500	8,7%
3	March	Rp.6.700.000	Rp.1.170.000	Rp.10.050.900	-18,2%	Rp.360.900	-86,1%
4	April	Rp.6.703.000	Rp.995.000	Rp.8.760.500	-12,8%	Rp.120.000	-66,7%
5	May	Rp.1.400.000	Rp.280.000	Rp.3.100.000	-64,6%	Rp.520.000	333,3 %
6	June	Rp.1.500.000	Rp.200.000	Rp.3.300.000	6,4%	Rp.600.000	15,3%
7	July	Rp.1.350.000	Rp.279.500	Rp.3.050.500	-7,5%	Rp.530.500	-11,5%
8	August	Rp.1.450.000	Rp.285.000	Rp.3.320.000	8,8%	Rp.685.000	29,1%
9	September	Rp.1.275.000	Rp.185.000	Rp.2.800.500	-15,6%	Rp.375.500	-45,1%
10	October	Rp.1.445.000	Rp.185.700	Rp.3.050.000	8,9%	Rp.420.000	11,8%
11	November	Rp.1.380.000	Rp.260.000	Rp.2.860.000	-6,2%	Rp.320.000	-23,8%
12	December	Rp.1.500.000	Rp.255.000	Rp.3.340.500	16,8%	Rp.635.500	98,5%
	Total	Rp.40.108.000	Rp.6.075.210	Rp.68.024.100		Rp.9.578.600	

Source: SMES Documentation (DARSA Fruit Chips) of East Lampung Regency for the 2020 fiscal year

B. Classic Assumption Test

The normality test is carried out to determine the distribution of data in the variables that will be used in the study. The data in the study are said to have a normal distribution, that is, if the sig value > 0.05. the data was tested using the one-sample Kolmogorov-Smirnov Test. The results of the data normality test can be seen in the table below:

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Table.4. Kolmogorov Smirnov Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		12
Normal Parametersa,b	Mean	,0000000
	Std. Deviation	436673,81688468
Most Extreme Differences	Absolute	,208
	Positive	,132
	Negative	-,208
Kolmogorov-Smirnov Z		,720
Asymp. Sig. (2-tailed)		,677

a. Test distribution is Normal.
b. Calculated from data.

Based on Table 5 above, it shows that the Kolmogorov-Smirnov (Test Statistic) Z value is 0.720 and Asymp. Sig (2-tailed) which is equal to 0.677 is greater than 0.05. So it can be said that the regression model has a normal distribution or meets the assumption of normality.

Table.5 The Result of Homogeneity Test

Levene Statistic	df1	df2	Sig.
40,655	2	33	,000

Source: SPSS data processing Version 21.0 (2023)

Based on the data in the homogeneity test table above, it can be seen that the sig value is 0.000 <0.05, so it can be said that the data tested is not homogeneous. But because this homogeneity test is not a mandatory requirement in the regression test so that the data analysis test can be continued to the next stage. This study uses multiple linear regression tests (multiple linear regression) because it has more than one independent variable, namely variables X1 and X2.

C. The Result of Hypotheses Test

The results of multiple linear regression tests in this study using the SPSS version 21.0 application are as follows:

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Table.6 The Result of Hypotheses Test

Coefficients[a]

Model		*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
	(Constant)	*530149,189*	*239151,876*		*2,217*	*,054*
1	*PR*	*,917*	*,234*	*3,233*	*3,927*	*,003*
	OP	*-5,527*	*1,693*	*-2,688*	*-3,265*	*,010*

a. Dependent Variable: PROFIT
Source: SPSS data processing Version 21.0 (2023)

The multiple linear regression equation that is formed is:
Y = a + b1X1 + b2X2
Y = 5.189 + 0.917X1+ e + -5.527X2+ e

Based on the regression equation obtained from the coefficients table above, it can be explained that the influence of Production Costs (X1) and Operating Costs (X2) on Net Income (Y). For more details are as follows:

10. The constant (a) of 5.189 states that if the independent variables of Production Costs (X1) and Operational Costs (X2) are considered constant (Zero), then Net income (Y) is 5.189.
11. The regression coefficient of Production Costs (X1) of 0.917 indicates that for each additional Production Cost of one unit, it will be followed by an increase in Net income of 0.917. These results are positive, meaning that there is a positive relationship between Production Costs and Net income, ie where the higher the Production Cost, the higher the Net income obtained.
12. The regression coefficient of Operational Costs (X2) is -5.527 indicating that for each additional Operational Cost of one unit, it will be followed by a decrease in Net Income of -5.527. These results are negative, meaning that there is a negative relationship between Operational Costs and net income, ie where the higher the Operating Costs, the lower the Net income earned.

It can be seen in table 6 above that the t count for the Production Cost variable is 3.927 with a sig value of 0.003 while the t count for the Operational Cost variable is -3.265 with a sig value of 0.010. So that from the results of SPSS Version 21.0 data processing above it can be explained as follows:

According the result of hypothesis test (H1), statistics value, t count = 3.927, t table = 2.13185. The hypothesis is accepted if tcount > t table. Based on the table above, it can be seen that tcount> ttable and has a significance value of 0.003 <0.05, then the hypothesis is accepted. This means that the Production Cost variable (X1) has a significant positive effect on Net Income (Y) in SMEs DARSA Fruit Chips in East Lampung Regency. The result of examine the hypothesis (H2), the effect of operational costs (X2) on net income. Based on statistics result, the value of t count = -3.265 and t table = 2.13185. The hypothesis is accepted if t count > t table. Based on the table above, it can be seen that t count < t table and has a significance value of 0.010 <0.05, then the hypothesis is rejected. This means that the variable Operating Costs (X2) has a significant negative effect on Net Income (Y), which means that the higher the level of Operating Costs of a product, the higher the level of decline in Net income earned by SMEs. Because more and more Operational Costs are incurred, it will have a negative effect on the level of income so that there is a decrease in profits for these SMESs. The results of the F test can be seen in the following table:

ISSN : 2597-4785 (ONLINE)
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Table.7 The Result of Simultan Test

ANOVA[a]

	Model	Sum of Squares	df	Mean Square	F	Sig.
	Regression	5184112890787,665	2	2592056445393,833	11,122	0,004b
1	Residual	2097524245879,003	9	233058249542,111		
	Total	7281637136666,668	11			

a. Dependent Variable: PROFIT
b. Predictors: (Constant), OP, PR
Source: Results of SPSS data processing Version 21.0 (2023)

Based on the table 7 above, the result of hypothesis test (H3) that can be seen that the f count is 11.122 with a significant value of 0.004b. Based on this information means that Ha is accepted, because F count > F table or Significant < 0.05. According the result of statistics shows that a significant value of 0.004, it can be said that p value <0.05. This give the result that the the research conducted are in accordance with the testing criteria. Thus, it can be concluded that the hypothesis is accepted, meaning that in this study simultaneously (simultaneous) has a significant effect between Production Costs (X1) and Operational Costs (X2) on Net Income (Y) in SMEs DARSA Fruit Chips Lampung Regency East.

IV. CONCLUSION

This research aims to examine the effect of effect of Production Costs and Operational Costs on Net income in SMEs DARSA Fruit Chips East Lampung Regency. Based on the result of hypothesis test it can be concluded that Production Costs have a significant positive effect on net income in SMEs, while Costs Operational has a significant negative effect on net income in SMEs DARSA Fruit Chips in East Lampung Regency. In order to then Production Costs and Operational Costs have a significant simultaneous effect on Net income in SMEs DARSA Fruit Chips in East Lampung Regency. The results of this study contain implications so that in the future the SMEs DARSA Fruit Chips pay more attention to and improve Production Cost Control in order to increase Net income and also pay more attention to and improve Operational Cost Control in order to prevent losses and increase Net income significantly. Even this research has been attempted and carried out in accordance with scientific procedures, however, it still has limitations, including the factors that affect Net income in this study consist of only two variables, Production Costs and Operational Costs, while there are many other factors that affect Net income. besides that there are limitations to research using bookkeeping samples, namely sometimes the results of sales and expenses between periods/years of accounting experience significant differences.

Based on the conclusions above, there are several suggestions that the researcher wants to convey, including, SMEs should be able to manage Production Costs and control Operational Costs properly in order to generate maximum profits and avoid losses that can cause bankruptcy in SMEs businesses. In addition, this research is expected to be an additional source of knowledge and information about financial accounting regarding production costs, operational costs and Net income as well as input and additional references for readers and it is also hoped that in future research it can develop research with other types of variables and look for factors anything that can affect net income besides the variables involved in this study and also using different industrial sectors as well as a longer period span and more samples so that it is expected to obtain better results and more benefits for all parties involved.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

Effect of Third Party Funding, Financing to *Deposit Ratio* and Return on Asset for Financing at Bank Muamalat KCP Probolinggo

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ABSTRACT

Purpose: The purpose of this research is to determine the influence of third party funds, financing deposit ratio and return on assets on financing in the 2018 period. - 2022 at Bank Muamalat KCP Probolinggo KCP.

Design/methodology/approach: The type of research used in this study is a quantitative method with a descriptive approach. The sample in this study is the Quarterly financial reports for 2018 to 2022 as many as 20. The data in this study is secondary data. Observation collection method by collecting data on the Annual Financial Report of Bank Muamalat KCP Probolinggo in 2018 - 2022.

Findings: Banks provide community services and public financial intermediaries. Therefore, banks must always be in the midst of society so that the flow of money from people who have excess can be accommodated and distributed to people who are lacking. One of the bank distribution products is financing provided by one party to another party to support a planned business project, either carried out individually or by an institution. The formulation of the problem in this study is whether there is an influence of third party funds, financing deposit ratio and return on assets on financing for the 2018 to 2022 period.

Originality/results: The results of the study show that partially DPK have a significant positive effect and FDR have a Significant negative effect on financing at Bank Muamalat KCP Probolinggo for the 2018-2022 period. Meanwhile, ROA has no significant effect on financing at Bank Muamalat KCP Probolinggo for the 2018-2022 period. Meanwhile, DPK, FDR and ROA simultaneously have a positive effect on financing at Bank Muamalat KCP Probolinggo for the 2018-2022 period. DPK, FDR and ROA contributed 34.1% to financing, the remaining 65.9% was influenced by other variables outside those studied.

Keywords: *Third Party Funds, Financing Deposit Ratio, Return On assets, Financing*

Received : October 10th
Revised : December 20th
Published : January 31th

I. INTRODUCTION

As defined in article 1 of Law no. 10 of 1998, the Bank's main activity is collecting and distributing funds to the community. Fundraising is done by looking for other sources of funding, and one of the most important sources of bank funding comes from the community. An increase in the amount of funds collected from the public will show the level of public trust in the bank. From various sources of funds that the bank has managed to collect, the bank actively and effectively reallocates these funds to the community. The progress of a bank can be a benchmark for a country's progress, the greater the task of the banks that control that country, meaning that the existence of the financial world is really needed by public authorities and society.

Profitability is the level of a bank's ability to increase profits. The level of profitability can be measured by Return on Assets (ROA), which is a ratio that measures management's ability to manage assets to generate profits. Funding or expenditure, namely, financing carried out to support the proposed investment either by yourself or by someone else, namely. Financing is defined as financing provided to customers by financial institutions such as Bank Muamalat.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

PT. Bank Muamalat Indonesia (BMI) as the bank that first implemented Indonesian sharia principles and became one of the universal sharia banks in Indonesia, has a main agenda to become an alternative to current financial solutions. With the main task as collecting and distributing funds. Financing funds sourced from sharia principles.

However, the development of Bank Muamalat's financing over the past 5 years has experienced a decline, in 2018 financing worth IDR. 33,566 (Millions of Rupiah), much larger than the financing in 2022, which is worth IDR. 18,821 (Millions of Rupiah). The decrease in financing was also followed by a decrease in TPF, FDR and ROA which can be seen in the table below:

Table 1. Composition of DPK, FDR ROA and Financing at Bank Muamalat Indonesia Year2018-2022

Year	*DPK (in million rupiah)*	*FDR(%)*	*ROA (%)*	*Financing(in millions rupiah)*
2018	*45,305*	*73.15*	*0.08*	*33,566*
2019	*40,357*	*73.51*	*0.05*	*29,867*
2020	*41,425*	*69.84*	*0.03*	*29,077*
2021	*46,871*	*38.33*	*0.02*	*18,041*
2022	*46,143*	*40.63*	*0.09*	*18,821*

Source:www.bankmuamalat.co.id Data is processed

How much financing is successfully distributed by Bank Muamalat is influenced by several factors, both internal and external factors, the internal factors in question are TPF, FDR and ROA. In previous research compiled by Eris Munandar, it was revealed in his research that there are several variables that influence the size of financing disbursed by banks, the variables in question are DPK, LDR and ROA, the variables used in this research are internal bank factors that influence the size. financing disbursed by banks.

According to several studies, it was found that the influence of third parties was able to influence the existence of NPF, FDR and BOPO on Profitability (ROA) at PT Bank Muamalat in Indonesia.

According to Ami Nullah Maris Tanjung, M. Guffar Harahap, Aswin Fahmi, M. Fahmi, M. Radiansyah 9 (2023) entitled "The Influence of Total Assets and Third Party Funds on Financing at Bank Muamalat Indonesia from 2018 to 2022" this research shows that there is a significant relationship between total assets and third party funds on simultaneous financing.

Research conducted by Affan Syu'aidi (2017), "Analysis of the Influence of Third Party Funds and Profit Sharing Levels on Financing at PT. Bank Muamalat Indonesia, Tbk Medan Branch". This research shows that Third Party Funds and Profit Sharing Levels partially have a positive effect on financing at Bank Muamalat.

Studyothers carried out by Adzil Arsyi Sabana, Abdul Wahid Mongkito, Siti Msriati (2022), "Analysis of the Effect of NPF, FDR and BOPO on Profitability (ROA) at PT Bank Muamalat Indonesia Tbk (2011-2020). The method used is the quantitative method using the path analysis model. The results show that the variables FDR, NPF do not have a significant effect on ROA, while BOPO has a positive and significant effect on ROA.

Another research conducted by Muthi'ah Afifah Fauziah, Nana Diana (2023), "The Influence of Operational Costs on Operational Income, Non-Performing Financing and Financing to deposit Ratio on Return On Assets". The method used is the Quantitative method using a descriptive and verification approach, the results show that BOPO has a negative effect on ROA, and NPF, FDR has a positive and significant effect on ROA.

The sophistication of sharia banking services today is of course accompanied by the increasing vulnerability of muamalah banks and their customers to becoming targets of modern banking crime by taking advantage of technological advances. Another research conducted by Rahman, M.A. Other research conducted by Bella Adni, Rafidah, Novi Mubyarto, (2022), "Factors that Influence Mudharabah Financing at Bank Muamalat Indonesia".

Where the method used is a quantitative method with a descriptive approach, while the simultaneous results of DPK, ROA, CAR, NPF and total assets simultaneously influence Mudharabah financing.

Based on the research above, we want to study or analyze the influence of third parties using the financing to deposit ratio and return on assets on financing at Bank Muamalat KCP Probolinggo. In order to find out whether partially DPK and FDR have a significant positive effect on financing at Bank Muamalat KCP Probolinggo for the 2018-2022 period.

II. METHODS

Research on the Effect of Third Funds, Financing to Deposit Ratio and Return On Assets on Financing at Bank Muamalat KCP Probolinggo uses quantitative methods with a descriptive approach. Using quantitative methods because the data required is in the form of numbers in financial reports, the numbers in question are the amount of financing, Third Party Funds (DPK), Financing to deposit ratio (FDR) and Return on Assets (ROA). Meanwhile, the descriptive method is a statistical method which has the task of collecting, managing and analyzing data and then presenting it in a good form.

The population in this this research is required 20 data from the 2018 - 2022 quarterly financial reports. The data collection technique in this research was that the researcher carried out indirect observations by collecting data from the annual financial reports of Bank Muamlat KCP Probolinggo from 2018-2022. The sampling method used in this research is Saturated Sampling. Saturated sampling is a sample selection technique when all population data is sampled. The reason for using the saturated sampling technique is because the population size is relatively small, namely less than 30.

Then the researcher analyzed the financial reports using 3 independent variables, namely, Third Party Funds (DPK) as X^1, Financing to Deposit Ratio (FDR) as X^2, Return On Assets (ROA) as -The methods used are the classical assumption test, simple and multiple linear regression analysis, and hypothesis testing.

III. RESULTS AND DISCUSSION

A. The Influence of Third Party Funds on Financing

Based on test resultst shows that DPK has a positive and significant effect on financing. This is stated from the test results, namely that T DPK has a calculated t of 3.303 > 2.110 with a significance value of 0.004 < 0.05, so it can be concluded that the size of the DPK can influence financing. These results are in accordance with previous research (Affan Syu'aidi, 2017; Husnul Khotimah. 2016; Nur Aini, 2021; Ferial Nurbaya, 2013)

B. The Influence of FDR on Financing

Based on the results of the t test, it shows that FDR has a negative and significant effect on financing. This is stated from the test results, namely that DPK has a calculated t value of -(5.651) > 2.110 with a significance value of 0.000 < 0.05, so it can be concluded that the increase in FDR is not accompanied by an increase. on financing. These results are in accordance with previous research (Hamdanil Arifin, 2022)

C. The Effect of ROA on Financing

Based on the results of the t test, it shows that ROA has no effect on financing. This is stated from the test results, namely that ROA has a t value of (1.334) < 2.110 with a significance value of 0.201 > 0.05, so it can be concluded that the size of ROA cannot influence financing. These results are in accordance with previous research (Zaharatul Jannah, 2022)

D. The simultaneous influence of TPF, FDR and ROA on financing

Based on the F test results, it shows an f table value of 3,239 with a calculated F of 49.071, a calculated F value of 49.071 > 3,239 F table. Meanwhile, the significance value is 0.000, which means the return value is <0.05, so it can be concluded that Ha is accepted, which means the independent variables (DPK, FDR, ROA) simultaneously have a positive effect on the dependent variable (Financing) at Bank Muamalat KCP Problinggo.

The Adjusted R Aquare value of 0.341 shows that the DPK, FDR and ROA variables can simultaneously influence the dependent variable by 34.1%. And 65.9% was influenced by other variables not examined in this research.

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

IV. CONCLUSION

Analysis and discussion can be concluded that DPK, FDR, and ROA on financing at Bank Muamalat KCP Probolinggo for the 2018-2022 period. In Chapter IV, namely:

13. DPK has a significant positive effect onBank Muamalat KCP Probolinggo financing for the 2018-2022 period
14. FDR has a significant negative effect to Bank Muamalat KCP Probolinggo financing for the 2018-2022 period
15. ROA has no effect on Bank Muamalat KCP Probolinggo's financing for the 2018-2022 period
16. Simultaneously the variables DPK, FDR, and ROA have a significant positive effect on the financing of Bank Muamalat KCP Probolinggo for the 2018-2022 period

Therefore, there are two positive and significant variables on the financing of Bank Muamlat KCP Probolinggo for the 2018-2022 period, namely the DPK and FDR variables, while the ROA variable has no significant effect on financing. Meanwhile, simultaneously DPK, FDR and ROA have a significant positive effect on the financing of Bank Muamalat KCP Probolinggo for the 2018-2022 period. DPK, FDR and ROA contributed 34.1% to financing, the remaining 65.9% was influenced by variables other than those studied.

ACKNOWLEDGMENTS

Thank God to Allah SWT, and thank my parents who have always supported me in my career journey, and thank you also to the leadership of Zainul Hasan Genggong Islamic University and to PKD who have given me the opportunity to be in it to gain knowledge and continue my career path, opportunities This is none other than for the sake of educating the nation's children.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Effect of Price, Variation Product and Service Quality on Buying Decision at Market Place Shopee

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ABSTRACT

Purpose: This research aims to determine the influence of price, product variety and service quality on purchasing decisions at the Shopee market place at the As-Sya'roniyyah Islamic boarding school.

Design/methodology/approach: This research method uses a quantitative approach. The population in this study was an unlimited number of students at the As-Sya'roniyyah Islamic boarding school. The sampling technique used Purposive Sampling Technique, with the criteria being that respondents had made purchases at the Shopee market place, at least twice, were at least 15 years old, male or female. Data collection techniques through distributing questionnaires to respondents who meet the criteria. The data analysis method used is Multiple Linear Analysis with SPSS (Statistical Product and Service Solution) version 25.

Findings: This research proves that the more and higher the product variety and service quality, the more purchasing decisions will increase, while price is not able to increase purchasing decisions.

Research limitations/implications: There are many more variables that influence purchasing decisions that were not examined in this research. This research focuses on one object and the results of this research cannot be generalized to other objects that are not the same.

Practical implications: Improving knowledge in making a strategy or decision in reaching potential consumers and retaining consumers in purchasing products in this research object

Originality/ value: This research focuses on the shopee market place object at the As-Sya'roniyyah Islamic boarding school with the variables price, product variety and service quality which are the variables that influence consumer purchasing decisions at that object.

Keywords: *Price, Product Variation, Quality Service, Buying Decision*

Received : October 3th

Revised : Desember 18th

Published : January 31th

I. INTRODUCTION

In the era of development technology and information in the world especially internet experience enhancement Which very rapidly. Phenomenon Which happens moment This that is trend use gadgets and activity in this world virtual like shop in a manner on line. His height amount user Internet, has interesting various business business with provide or make shop on line as part from e-commerce. Strategy determination price in business e-commerce become Wrong One matter important Which should be considered by employers. Apart from price, product variety is the development of a product to create various choices (Indrasari, 2019). Basically, consumers will be interested in a product because of the many variations provided by the seller on the product (Yassine, 2019). service quality is also good consideration Which can influence decision purchase. Service can be said to be good or quality if the service provided by a company can satisfy consumers. If the consumer is satisfied with services provided, it is possible that consumers will be loyal against the company.

According to research conducted by Janah (2017) stated that quality service influential significant to decision purchase online shop goddess Headscarf Surabaya A purchasing decision is a consumer's action in choosing something product with all developer Which There is. According to Kotler and Keller (2009) state that characteristics buyer and process taking decision will lead to purchasing decisions and increasingly fierce competition in online business. This research is important to examine because e-commerce players need to know

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

the factors that can influence such as price, product variety, and service quality to be able to continue to make online stores survive, grow and develop. This is utilized by e-commerce Shopee, which is mobile commerce and one of the leading online marketplaces in Indonesia (also known as an online store network).

Table 1 Data on purchases at Shopee

Year	*Number of people*	*(Number of unit items)*
2021	*340*	*634*
2022	*430*	*918*
2023	*394*	*898*

Source: as-sya'roniyyah Islamic boarding school, 2023

Based on Table 1. Purchases using the Shopee market place in 2021-2023 seem to have fluctuated. In 2020 the number of people who made purchases at the Shopee market place was 340 people. In 2022 the number of people who buy using the Shopee application will be 430 people, and in 2023 the number of people who will buy using the Shopee market place will be 394 people. Due to fluctuations in purchases using the Shopee online store, entrepreneurs have to look for the right strategy in running their business so that it can increase so that targets can be achieved. Based on the background above, the researcher took the title "the effect of price, product variety and service quality on purchasing decisions at the shopee market place (study at the as-sya'roniyyah Islamic boarding school)".

According to Kotler and Armstrong (2012) price is the amount of money paid, or the amount of value that consumers exchange in order to get the benefits of owning or using goods or services. Price is the amount of money that consumers have to pay to get a product. According to Kotler (2019), price is the amount of money charged for a particular product. According to Kotler and Armstrong (2018), price is the amount of money exchanged for a product or service. Product variation is the development of a product to create various choices (Indrasari, 2019). Basically, consumers will be interested in a product because of the many variations provided by the seller on the product. Many product variations make a product have diversity. The research of product configuration impact mainly focusses on meeting customer requirements (Custódio et al. 2018; Li et al. 2018; Meng et al. 2019; Zhao et al. 2020). According to Kotler (in Indrasari 2019) product assortment is a collection of all products and goods offered by certain sellers to buyers. Apart from that, Kotler (in Indrasari 2019) also stated that product diversity includes the completeness of the products and goods sold, the types of brands sold, variations in the sizes of goods sold, and the availability of goods sold. According to Tjiptono (2011) found that quality service is level condition Good or bad dish Which given seller in framework satisfying consumers by giving or conveying desires or requests beyond What Which expected consumer. Quality service (*service quality*) can know with method compare perception para consumer on service Which accepted order get with service. Which indeed consumer expect or want. If service Which accepted or perceived *service* is in accordance with what is expected, then the perceived quality of service is good and satisfying and if the service received exceeds expectations consumer, then quality highly perceived service Good and quality.

Related with Buying Decision in decision purchase, consumer often time faced on several alternative products available. There are many factors that influence consumers in make purchasing decisions. Factors is then processed become various alternatives Which become material consideration for consumer For Then chosen to be the most appropriate purchasing decision. Purchasing decisions as selection of two or more alternative choices. In other words, consumers want to do choice must determine choice from various alternatives Which There is. If there is no alternative choice then the action is taken without that choice No can said make decision (Schiffan & Kanuk, 2008). According to Armstrong & Gary (2018), the purchase decision is to buy the most preferred brand, with the appearance of purchase intention and purchase decision. According to Tjiptono (2019) purchasing decisions are a process in which consumers recognize the problem, seek information about a particular product or brand and evaluate how well each of these alternatives can solve the problem, which then leads to a purchase decision.

Previous research discussing the effect of price, product variety, and service quality on purchasing decisions has been carried out by various researchers, namely, Sudjatmika (2017); setyarko (2016) ; pitaloka (2015) ; setiowaty (2017). Proving that price, product variety and service quality simultaneously affect purchasing decisions. Based on the description of the previous research, the following models and hypotheses can be built.

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H1: *There is an effect of price on purchasing decisions*
H2: *There is an effect of product variation on purchasing decisions*
H3: *There is an effect of quality of service on purchasing decisions*
H4: *There is an effect of price, product variation, quality of service on purchasing decisions*

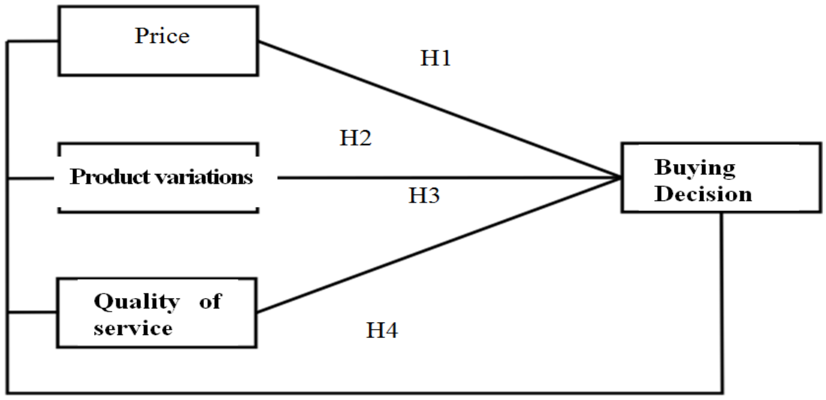

Figure 1. Framework Research

II. METHODS

This type of research is associative, according to Sugiyono (2012), an associative approach is an approach using two or more variables to determine the relationship or influence of one another. Quantitative research is research by obtaining data in the form of numbers or qualitative data. The data collection technique in this study is to use a survey. The data collection instrument used in this study was a questionnaire. This research discusses the influence of price, product variety and service quality on purchasing decisions at the Shopee market place, case study at the As-Sya'roniyyah Islamic boarding school.

The population is a generalization area consisting of objects/subjects that have certain qualities and characteristics determined by researchers to be studied and then drawn conclusions (Sugiyono, 2010). The population in this study were the as-sya'roniyyah Islamic boarding school students. The population of this study is not limited. The sample is part of the characteristics possessed by the population. If the population is large and it is impossible for the researcher to study everything in the population, for example due to limited funds, manpower and time, the researcher can use samples taken from that population (Sugiyono 2012).

On study This using the Sampling Technique *Saturated* that is that is determination sample with certain considerations. Certain considerations for the sample in this study are respondents who meet the following criteria: Respondents are Assya'roniyyah Islamic boarding school students. (2) Respondent has do purchase in a manner *on line* on shopee. (3) at least 15 years old. The researcher determined that the sample size was 100 respondents which considered that 100-150 respondents represented the existing population. Determining the sample size is based on the opinion of Gay and Diehl (2010) which states that the minimum sample size for a study is 100 respondents because the minimum number is close to perfect or the minimum sample limit. Therefore, the researchers set the size of the sample unit for this study to be 100 samples with the assumption that the 100 samples could represent the entire population.

Data collection techniques in this study can be done using a questionnaire, namely collecting data using a list of questions/questions that have been prepared in advance and given to respondents. Where respondents choose one of the answers that have been provided in the list of questions or statements regarding the indicators of the variables in this study.

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III. RESULTS AND DISCUSSION

Table 2. Demographic Characteristics of Respondents

Profile of respondents	*Amount*	*Percentage (%)*
(1)	*(2)*	*(3)*
Gender:		
Male	*42*	*42*
Female	*58*	*58*
Age:		
14-16	*16*	*16*
17-19	*26*	*26*
20-23	*31*	*31*
>24	*27*	*27*

Source : *processed primary data (2023)*

Based on Table 2, it can be seen that the classification of respondents aged between 14-16 years was 16 people (16%) . Respondents aged between 17-19 years were 26 people (26%), and those aged 20-23 years were 31 people , (31%) . Meanwhile, there were 27 people (27%) aged ≥ 24 years. It can be concluded that the highest number of respondents are aged 20-23 years and at least 14-16 years old .

Table 3. Instrument Validity Test Results

Variables	*Items*	*Corrected Question Item Total Correlation*	*r Table*	*validity*
price (X1)	*p 1*	*0.522*	*0.197*	*Valid*
	p 2	*0.540*	*0.197*	*Valid*
	p 3	*0.488*	*0.197*	*Valid*
	P 4	*0.642*	*0.197*	*Valid*
Product variation (X2)	*PV 1*	*0.492*	*0.197*	*Valid*
	PV 2	*0.661*	*0.197*	*Valid*
	PV 3	*0.453*	*0.197*	*Valid*

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	PV 4	*0.714*	*0.197*	*Valid*
Quality of service (X3)	*Qs 1*	*0.447*	*0.197*	*Valid*
	Qs 2	*0.632*	*0.197*	*Valid*
	Qs 3	*0.692*	*0.197*	*Valid*
	Qs 4	*0.692*	*0.197*	*Valid*
	Qs 5	*0.632*	*0.197*	*Valid*
Buying decision (Y)	*BD 1*	*0.755*	*0.197*	*Valid*
	Bd 2	*0.480*	*0.197*	*Valid*
	Bd 3	*0.772*	*0.197*	*Valid*

Data source: processed SPSS output (2023)

Table 4. Instrument Reliability Test Results

Variables	*Cronbach Alpha*	*Information*
Price (X1)	*0.197*	*reliable*
Product variations (X2)	*0.352*	*reliable*
Quality of service (X3)	*0.599*	*reliable*
Buying decision (Y)	*0.396*	*reliable*

Data source: processed SPSS output (2023)

Based on Table 4 it can be seen that each variable has a Cronbach Alpha > 0.60. Thus the variables (price, product variety, service quality, and purchasing decisions) can be said to be reliable.

A. Multiple Linear Regression Analysis

This analysis is used to measure quantity about price, product variety, and service quality. The analysis used was multiple linear regression with the help of SPSS version 2 5 with a confidence level used in multiple regression calculations of 95% or a significance level of 0.005 (α= 0.05) .

Table 5. Multiple Linear Regression Calculation Results

		Unstandardized Coefficients		*Standardized Coefficients*		
Model		*B*	*Std. Error*	*Beta*	*t*	*Sig.*
1	*(Constant)*	*1,247*	*.682*		*1,829*	*.071*

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ISSN : 2597-4750 (PRINTED)

x1	*,025*	*042*	*.028*	*0.607*	*.545*
x2	*,854*	*042*	*,977*	*20.158*	*,000*
x3	*.164*	*,025*	*,246*	*6.542*	*,000*

Based on Table 5 to determine the formulation of the multiple linear regression equation, the effect of price, product variety and service quality on purchasing decisions at the shopee market place. carried out regression coefficient analysis. The result is as follows. Regression constant: 1.247 Price variable constant (X1) : 0.025 Product variety constant variable (X2) : 0.854 Service quality variable constant (X3) : 0.164. Based on the results of the regression coefficient analysis, the formula for the multiple linear regression equation is: Y= 1.247+0.025(X1) + 0.854(X2) + 0.164(X3). This multiple linear regression equation can be interpreted as follows. The constant value means that if the values X1, X2, and X3 = 0 then the purchase decision at the Shopee market place is 1.247 units, assuming that price, product variety, and service quality are constant/fixed. The regression coefficient values of price, product variety, and service quality on purchasing decisions at the shopee market place are (X1) = 0.025, (X2) = 0.854, and (X3) = 0.164

B. Hypothesis Testing Results

To test the hypothesis partially, the t test is used, namely to partially test the independent variable on the dependent variable. The sample used was 100 people, so the test used the t test and the significance level (α) = 5% or 0.05, a T table of 1.985 was obtained. By testing criteria:

t table = t (a/2; n – k)
= t (0.05/2 ; 100 - 4)
= t (0.025;96) = 1.985

Table 6. Partial Hypothesis Test Results (t - test)

Coefficients a

Model		*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
1	*(Constant)*	*1,247*	*0.682*		*1,829*	*0.071*
	Price	*0.025*	*0.042*	*0.028*	*0.607*	*0.545*
	product variations	*0.854*	*0.042*	*0.977*	*20.158*	*0*
	service quality	*0.164*	*0.025*	*0.246*	*6,542*	*0*

a. Dependent Variables: y

Data source: processed SPSS output (2023)

Based on Table 4.12, the test can be explained using a partial test (t test) for each variable, namely:

1. The calculated t value for the price variable (X1) is 0.607 and the value for the 5% distribution is 1.9 85 so the calculated t is 0.607 < t table 1.9 85 and also a significant value of 0.545 greater than 0.05 (0.545 > 0.05). This means that price (X1) has no significant effect on purchasing decisions (Y).
2. The calculated t value for the product variation variable (X2) is 20.158 and the value in the 5% distribution is 1.985, so t count is 20.158 > t table 1.985 and also a significant value of 0.000 is greater than 0.05 (0.000 <0.05). This means that product variation (X 2) has a significant influence on purchasing decisions (Y).

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3. The t value for the service quality variable (X3) is 6.542 and the value at the 5% distribution is 1.985, so t count -6542 < t table 1.985 and also a significant value of 0.000 which is less than 0.05 (0.000 <0.05). This means that service quality (X 3) has a significant influence on purchasing decisions (Y).

C. Simultaneous Test (F Test)

The F test is carried out by comparing the calculated F value with the F table value. If the calculated F > F table then there is a simultaneous (together) influence and vice versa. The results of simultaneous regression calculations are obtained as follows:

F table = F(k-1;nk)
= F(4-1;100-4)
= F(3;96) = 2.70

Table 7 Results of Simultaneous Hypothesis Testing (f Test)

ANOVA[a]

Model		Sum of Squares	df	MeanSquare	F	Sig.
1	Regression	214,982	3	71,661	242,168	.000 b
	residual	28,408	96	,296		
	Total	243,390	99			

a. Dependent Variables: y
b. Predictors: (Constant), x3, x1, x2
Data source: processed SPSS output (2023)

Based on Table 7, it shows that the calculated F value is greater than the F table value, namely F count 242,168 > F table 270 and also a significant value of 0.000 less than 0.05 (0.000 <0.05). This means that the variable price (X1), product variety (X2) and service quality (X3) together (simultaneously) have a positive and significant effect on the purchase decision variable (Y).

D. Koefesien Determination (R^2)

Table 8 Determination Coefficient Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,940 a	.883	,880	.54398	1,678

a. Predictors: (Constant), x3, x1, x2
b. Dependent Variables: y
Data source: processed SPSS output (2023)

Based on Table 8 above, it is known that the R Square value is 0.883. This means that the influence of variables X1, X2, and X3 simultaneously on Y variable is 88.3% with the rest influenced by other variables not present in this study.

E. Discussions

This study attempts to obtain an overview, the effect of price, product variety, and service quality on purchasing decisions at the Shopee market place . The price variable has no effect on the purchase decision but

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

the product variation and service quality variables have an influence on the purchase decision . Proven by data analysis using predetermined research methods. From the test results, the following discussion was obtained:

1. Effect of price on purchasing decisions.

The results of the research that has been carried out by researchers can be concluded that the price variable (X1) is tested partially on purchasing decisions at the shopee market place to produce a calculated t value for the price variable (X1) of 0.607 and a value in the 5% distribution of 1,985, so t count 0.607 <t table 1.985 and also a significant value of 0.545 greater than 0.05 (0.545 > 0.05). This means that price (X1) has no significant effect on purchasing decisions (Y).

2. Effect of product variations on purchasing decisions

The results of the research that has been carried out by researchers can be concluded that the product variation variable (X 2) was tested partially on purchasing decisions at the shopee market place to produce a t calculated value for the product variation variable (X2) of 20.158 and a value in the 5% distribution of 1.985 then t count is 20.158 > t table 1.985 and also the significant value of 0.000 is greater than 0.05 (0.000 < 0.05). This means that product variations (X2) have a significant influence on purchasing decisions (Y).

3. The influence of service quality on purchasing decisions

The results of the research that has been carried out by researchers can be concluded that the variable service quality (X3) is tested partially on purchasing decisions at the shopee market place to produce a calculated t value for the service quality variable (X3) of 6.542 and a value in the 5% distribution of 1.985, so t count -6542 <t table 1.985 and also a significant value of 0.000 is less than 0.05 (0.000 <0.05). This means that service quality (X3) has a significant influence on purchasing decisions (Y).

4. Effect of price, product variety and service quality on purchasing decisions.

The results of the research that has been carried out by researchers can be concluded that the variable price, product variety and service quality are tested simultaneously on purchasing decisions at the shopee market place to produce a calculated F value that is greater than the F table value, namely F count 242 ,1 68 > F table 2.70 and also the significant value of 0.000 is smaller than 0.05 (0.000 < 0.05). This means that the variable price (X1) , product variety (X2) , and service quality (X3) together (simultaneously) have a positive and significant effect on the purchasing decision variable (Y). The results of this study support previous research that price, product variety, and service quality have a positive effect on purchasing decisions (sudjatmika 2017; setyarko 2016; pitaloka 2015; janah 2017).

IV. CONCLUSION

Based on the results and discussion, it can be concluded that product variation and service quality have a positive and significant effect on purchasing decisions, price has no significant effect on purchasing decisions, and price, product variety, and service quality simultaneously have a positive effect on purchasing decisions. For *marketplace place shopee* companies , it is necessary to pay attention to product variations and service quality because they greatly influence purchasing decisions made by consumers. In addition, what must be considered is the age of consumers based on the demographic results of research respondents who are dominated by consumers aged 20-23 years, and are female. Consumers aged 20-23 years and female gender have characteristics and behaviors that are different from other age ranges and male gender. Therefore, *market place* shop owners and other companies should pay more attention to the variety of products and the quality of service that is tailored to their needs. For future researchers, they can re-examine the variables of this study with other types of businesses. In addition, further research can add other variables which are factors that influence sales decisions.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

How Coffee Entrepreneurs in Kerinci Impact Local Economic Empowerment and Social Impact of Local Communities in terms of Financial Capital, Entrepreneurial Orientation, Government Policy and Entrepreneurial Ecosystem

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ABSTRACT

Purpose: In the Indonesian Kerinci region, this quantitative study explores the complex effects of coffee entrepreneurs on community well-being and local economic empowerment. This study examines the relationship between independent variables—financial capital, entrepreneurial orientation, government policy, and the entrepreneurial ecosystem—and their impact on dependent variables—entrepreneurial performance, economic empowerment, and community empowerment.

Design/methodology/approach: It is based on the Resource-Based View (RBV) theory. A survey of 180 coffee entrepreneurs was conducted, and Structural Equation Modeling with Partial Least Squares (SEM-PLS) was used to analyze the data.

Findings: The findings supported the importance of this link by showing that government policies, financial resources, entrepreneurial orientation, and the entrepreneurial ecosystem all have a beneficial impact on entrepreneurial performance, which in turn promotes community and local economic empowerment. Policy makers, coffee entrepreneurs, and industry stakeholders can benefit greatly from the findings, which highlight the significance of resource allocation, entrepreneurial qualities, and a conducive ecology in augmenting Kerinci's socio-economic advancement.

Keywords: *Local Economic, Community Empowerment, Financial Capital, Entrepreneurial Orientation, Government Policy, Entrepreneurial Ecosystem*

Received : October 3th
Revised : Desember 18th
Published : January 31th

I. INTRODUCTION

It is true that the industrial coffee sector is expanding and changing, helped along by creative thinking and technological breakthroughs. Using industrial waste as fertilizer in agriculture, especially coffee farming, is one of the major trends in the sector. According to a study, leftover organic compost from the textile sector can be utilized as fertilizer during the early stages of coffee plant growth as well as a substrate for coffee seedlings. Coffee plants developed satisfactorily in the treatments containing 8–16% organic compost, indicating the compost's potential as fertilizer (Neiva et al., 2019). Using agro-industrial byproducts in coffee processing is another trend. For example, dried coffee fermented residue has been utilized as a Monascus fermentation substrate because it has an antioxidant effect and is high in total phenols(Srianta et al., 2021).

The Fourth Industrial Revolution has brought about changes that the coffee sector is likewise adjusting to. An examination of the coffee industry's patterns over the non-contact era could provide light on the industry's advantages, disadvantages, opportunities, and threats in the current era (Yadava et al., 2022). Furthermore, in the era of business 4.0, the coffee business is seeing both possibilities and challenges. The manufacturers of smart factories, defined by advanced technology and relationships under the IoT (Internet of Things) and CRM (Customer Relation Management) concepts, are sought after by the new wave of Industry 4.0 (Simion & Avasilcai, 2020). The industrial cluster of micro and small-scale coffee businesses is still in the formation and initiative

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

phase (embryo) with regard to coffee production. The availability of raw materials, the expansion of market segments, the availability of credit for small and micro firms, the provision of supporting facilities, and the availability of labor are among the industry's opportunities and strengths (Aklimawati et al., 2015).

To further improve performance and delivery of premium coffee powders in the instant coffee industry, it is crucial to comprehend the characteristics of the compounds made utilizing various processes (Atuesta et al., 2016). Finally, a problem for upcoming trends is the way that roasting affects the aroma and flavor of coffee. Thus, a thorough comprehension of the roasting procedure is necessary (Velásquez & Banchón, 2023).

In addition to being a vital driver of the economic growth of the area, Kerinci's coffee business also has a significant impact on the quality of life for those who reside in coffee-growing regions (Stofya, 2023). Coffee entrepreneurs leave a lasting impression on the area as they make investments in their companies, adjust to changing consumer expectations, and engage with local communities (Kaido et al., 2021; Wahyuni et al., 2020). Thus, the purpose of this study is to identify the extensive effects of coffee entrepreneurship. For many years, the growth of coffee has played a significant role in Kerinci's cultural and economic environment. Situated in the verdant surroundings of Sumatra, Indonesia, Kerinci is well-known for its superior coffee beans, garnering global recognition and supporting a thriving coffee sector. In addition to providing jobs, the coffee industry in Kerinci has a major social and economic impact on the neighborhood as well as the lives of nearby business owners (Permadi et al., 2021; Syofya, 2022).

The goal of this study is to understand the complex effects that Kerinci's coffee entrepreneurs have on the local economy and the welfare of the communities that are impacted by the sector. The goal of this research is to provide a thorough understanding of how different factors, such as financial capital, entrepreneurial orientation, government policies, and the entrepreneurial ecosystem, interact to shape the fortunes of the coffee sector in Kerinci. Beyond just financial concerns, coffee businesses in Kerinci have a significant impact. It includes raising living conditions, providing employment opportunities, empowering local communities, and encouraging an entrepreneurial spirit among the populace (Lazuardi et al., 2021; Nguyen & Vo, 2021). The government's involvement is essential in determining the course of entrepreneurship in Kerinci since it actively shapes policies and offers assistance to the coffee sector.

In addition, the development and success of coffee firms is greatly influenced by the entrepreneurial ecosystem, which is defined by connections of collaboration, access to resources, and support systems. It is not just of academic importance to understand how these components interact and support local development, but it is also essential for development initiatives and policy formation (Lopez et al., 2021; Rusdianto et al., 2018; Sarkar et al., 2021).

The pressing need to fully comprehend how Kerinci's coffee entrepreneurs affect local economic empowerment and community welfare is what makes this research so urgent. Kerinci's coffee business, which is a vital source of income and culture, is at a crossroads. The coffee business is confronted with unparalleled potential and problems, so it is critical to investigate and quantify the complex impact of coffee entrepreneurship in the area. A large number of Kerinci locals depend heavily on the production of coffee for their livelihood. The region is susceptible to changes in the global economy and market dynamics. To reduce financial risks, it is therefore essential to comprehend the elements that affect local economic empowerment through coffee entrepreneurship.

Coffee businesses are seen as social development catalysts by the local populations in Kerinci. The prosperity of coffee operations affects employment, higher living standards, and the general well-being of the community (Sarkar et al., 2021). To find and take advantage of chances to enhance social impact, quick action is required. The development of the coffee business and its social ramifications can be aided or hindered by government policies and actions (Lopez et al., 2021). Policymakers can benefit from the study's findings by learning practical tactics to advance social welfare and economic empowerment in Kerinci.

The world market for coffee is changing quickly, and ethical and sustainable sources are becoming more and more crucial. For the region to remain competitive over the long run, it is essential to comprehend how local entrepreneurs in Kerinci adjust to these trends. Kerinci's coffee industry entrepreneurs require knowledge about how to make their companies sustainable. Making well-informed decisions for businesses can be aided by a quantitative examination of variables like financial capital and entrepreneurial orientation.

Because of these aspects, there is a pressing need for evidence-based insights that can advise local communities, government authorities, and stakeholders in the coffee industry. This research fills that gap. This study could lead to well-informed choices and policy modifications that would support social welfare, economic sustainability, and entrepreneurial resilience in Kerinci.

The relationship between financial capital, entrepreneurial orientation, government policies, and the entrepreneurial ecosystem in relation to local economic empowerment and social impact is not well studied in quantitative research (Febrian & Maulina, 2018; Fkun et al., 2023; Gah et al., 2020; Sussan & Acs, 2017; Taylor, 2011), despite the significant role that coffee entrepreneurs play in Kerinci's economy and society. In order to close this large knowledge gap, this study attempts to address the following important questions:

How much and to what extent do coffee entrepreneurs in Kerinci contribute to the social welfare and economic empowerment of their communities, and how do financial resources, entrepreneurial mindset, governmental regulations, and the entrepreneurial ecosystem all play a role in this?

A. Literature Review

1. Phenomenon and Grand Theory

Indonesia's Kerinci, in the center of Sumatra, has a long history of producing coffee, going all the way back to the Dutch colonial era. The local economy still depends heavily on coffee, and coffee entrepreneurs have had a significant impact on how the area has developed. Arabica coffee beans, highly valued for their distinct flavor, are the hallmark of Kerinci's coffee industry. Kerinci coffee is produced, processed, and marketed by local coffee entrepreneurs, most of whom run small, family-run firms. The Resource-Based View (RBV) Theory is consistent with this. According to the RBV hypothesis, a company's performance is based on its capacity to amass and make use of special, priceless, and non-replicable resources and competencies. According to this theory, businesses who have these resources can gain a stable competitive edge. in relation to Kerinci's coffee business venture (Barney, 1991). The RBV hypothesis can be used to evaluate how coffee entrepreneurs' financial resources—such as finance sources and infrastructure investments—might give them a competitive edge by raising output, improving product quality, and expanding their market presence. Greater financial resources may provide entrepreneurs with a competitive edge in expanding their companies and boosting the regional economy.

One could consider entrepreneurial orientation to be a special skill, given its hallmarks of creativity, risk-taking, and initiative. This theory can be utilized to comprehend how these entrepreneurial attributes can be leveraged by coffee entrepreneurs to obtain a competitive edge, which in turn affects the performance of entrepreneurs and the well-being of local communities (Alvarez & Barney, 2007). RBV theory can be used to evaluate how government assistance and legislation can be viewed as external resources that coffee business owners can use to strengthen their position in the market. Government initiatives like support programs and tax breaks can affect the resources available to coffee business owners, which in turn affects their productivity and social impact.

Coffee entrepreneurs can make use of specific resources such as collaborative networks and support services found in entrepreneurial ecosystems. This research can investigate the relationship between resource accessibility and entrepreneurial performance as well as local community empowerment by looking at the entrepreneurial ecosystem through the lens of RBV.

2. Financial Capital

One essential resource for coffee business owners in Kerinci is financial resources. Financial capital's essential elements—access to cash, infrastructure investment, and liquidity—have a direct bearing on the expansion and prosperity of coffee firms. Numerous research studies have emphasized the significance of finance accessibility for business owners. In the context of coffee entrepreneurship in poor nations like Kerinci, a lack of funding and credit options may prevent growth and innovation. Sufficient funds allow business owners to buy new machinery, make critical expenditures, and raise the caliber of their coffee goods (Morazzoni & Sy, 2022; Yusuff et al., 2018).

Reinvesting earnings in neighborhood infrastructure is a strategy that can benefit local communities and coffee business owners economically. According to (Berno, 2017; Hendrawan et al., 2023) research, the local coffee industry's overall quality and competitiveness are enhanced by entrepreneurs who invest in infrastructure, such as transportation and processing facilities. This, in turn, promotes community development and economic growth.

3. Entrepreneurial Orientation

A complex idea, entrepreneurial orientation encompasses traits like inventiveness, a willingness to take risks, and proactiveness. Together, these attributes have an impact on how coffee business owners in Kerinci behave and perform. Entrepreneurship in the coffee industry is heavily reliant on innovation for success. Innovative product creation, processing, and farming techniques can set coffee entrepreneurs apart and enable them to penetrate specialized markets. According to research by (Lazuardi et al., 2021; Nguyen & Vo, 2021; Parente-Laverde, 2020), creative coffee business owners have a greater chance of achieving better financial results, which supports economic empowerment.

Being willing to take measured chances is a crucial component of an entrepreneurial mindset. Coffee business owners are more likely to see growth and profitability if they are prepared to invest in technology, expand into new markets, and adjust to shifting consumer tastes. It has been demonstrated that this risk-taking tendency improves the financial performance of coffee companies (Šlogar & Andrijanić, 2023). Entrepreneurs that are proactive take an active role in both their local communities and industry. Their programs, which include

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

sustainable farming methods and community development projects, can raise the standard of living and general well-being of the local populace (Evers & Schulze-Böing, 2001; Santoso et al., 2020).

4. Government Policy

One important external component influencing the coffee entrepreneurial scene in Kerinci is government policy. Regulation, taxation, and assistance policies all have an impact on the prosperity of coffee companies as well as the way they empower the local economy and community. Investment and growth can be stimulated by government initiatives that offer tax breaks to coffee entrepreneurs. These incentives promote growth, cut operating costs, and eventually help the area become more economically empowered (Fkun et al., 2023; Gah et al., 2020).

Sustaining ethical standards, environmental sustainability, and quality standards in the coffee sector requires effective regulation. By guaranteeing ethical behavior and environmental accountability, these laws, if upheld and encouraged by the government, enhance the social impact of coffee entrepreneurship (Zulfikri, 2023).

Support initiatives from the government, like training, loan availability, and market facilitation, increase the ability and competitiveness of regional coffee business owners. According to (Nakabugo et al., 2022), these initiatives may promote community empowerment and entrepreneurial performance.

5. Entrepreneurship Ecosystem

Kerinci's entrepreneurship ecosystem consists of cooperative networks, market access, and support services. This ecosystem has a significant influence on the impact and level of success of local coffee entrepreneurs. The availability of support services, such as technical help, training, and market data, can enable coffee business owners to prosper. (Fkun et al., 2023) research highlights the value of support services in enhancing entrepreneurial performance by giving business owners the tools and information they require to be successful. For entrepreneurship to succeed and for economic emancipation, integration into local and international coffee markets is essential. Entrepreneurs can grow their reach, boost sales, and support the local economy with the aid of entrepreneurial ecosystems that provide market access (Audretsch & Belitski, 2021; Carvalho & Galina, 2015; Metcalf et al., 2021).

Knowledge sharing and resource pooling are promoted via collaborative networks that include coffee entrepreneurs, suppliers, processors, and marketing channels. These cooperative partnerships enhance the coffee industry's overall effect, boosting local communities' well-being and business owners' bottom lines(Acs et al., 2018; Sussan & Acs, 2017).

6. Entrepreneurial Performance

An essential dependent variable that captures the achievements and results of coffee businesses in Kerinci is entrepreneurial performance. The independent variables of financial capital, entrepreneurial orientation, government policy, and entrepreneurial ecosystem all have an impact on entrepreneurial performance. The financial performance of coffee firms is directly impacted by the availability of financial capital, including funding and infrastructure investment. According to (Rusdianto et al., 2018; Xinyue et al., 2022), financial capital and entrepreneurial success in the coffee business are positively correlated. Performance is directly correlated with entrepreneurial attitude, which is defined by inventiveness, a willingness to take risks, and proactiveness. Strong entrepreneurial approach increases the likelihood of greater profitability and growth for coffee entrepreneurs (Xinyue et al., 2022).

Enhancing entrepreneurial performance is possible through the support services and market accessibility offered by entrepreneurial ecosystems. Numerous studies have found that coffee entrepreneurs perform financially better when they are surrounded by a supportive ecosystem (Cao, 2022).

7. Economic Empowerment

One significant part of the influence of coffee businesses in Kerinci is economic empowerment. It is impacted by the entrepreneurial ecosystem, governmental regulations, and financial resources. The greater income and job opportunities that financial capital generates demonstrate how entrepreneurial performance drives economic empowerment. Infrastructure improvements made possible by financial resources support the economic growth of coffee-growing regions (Sakrawathi, 2020). Tax incentives, quality control, and assistance for coffee firms are examples of government policies that boost entrepreneurial performance. This, in turn, affects economic empowerment by attracting investment and advancing fair trade principles (Aaram & Shakespear, 2015; Febriansyah et al., 2020). By enhancing sales, enhancing market competitiveness, and stimulating the local economy, an entrepreneurial ecosystem that offers support services and eases market access enhances entrepreneurial performance and, consequently, its significance to economic empowerment (Febriansyah et al., 2020).

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

8. Community Empowerment

One significant result of coffee entrepreneurship in Kerinci is community empowerment, which is affected by financial resources, governmental regulations, and an entrepreneurial mindset. Financial capital enables investments in community development and local infrastructure projects, which enhance local inhabitants' quality of life and foster community empowerment (Berno, 2017; Hendrawan et al., 2023; Widjianingsih et al., 2022). By raising the standard of living and promoting fair practices, government assistance initiatives, laws, and policies all help to empower communities through raising locals' well-being and standard of living (Sulisno & Abdullah, 2019). By actively participating in community activities and sustainable farming techniques that enhance the quality of life for local communities, proactive and socially conscious coffee entrepreneurs contribute to community empowerment (Dawis & Cahyani, 2022; Nuryanto et al., 2022).

9. Research Gaps

Although a number of facets of coffee entrepreneurship in Kerinci have been studied in the literature, little research has been done on how to apply the Resource-Based View (RBV) theory to the analysis of coffee entrepreneurs. The application of this theoretical framework to coffee entrepreneurs in the region is restricted, as it is mostly utilized in economic and industrial contexts. This study can fill the following research gaps by utilizing RBV theory:

There aren't many thorough studies using the Resource-Based View (RBV) theory to explain how Kerinci coffee entrepreneurs use special resources (like money, a strong entrepreneurial mindset, government support, and an entrepreneurial ecosystem) to gain a competitive edge. This enhances entrepreneurial performance and promotes economic and community empowerment. This gap indicates that further research is necessary to determine how these resources interact dynamically and what effect they have on coffee business and local development in Kerinci.

This study presents a conceptual framework based on a review of the literature, which states that financial capital, entrepreneurial orientation, entrepreneurial ecosystem, and government policy all work together to influence the social impact and local economic empowerment of coffee business in Kerinci. This work aims to fill the gaps in the literature by analyzing the link between these elements and give a thorough quantitative analysis of this problem, as illustrated in Figure 1 below.

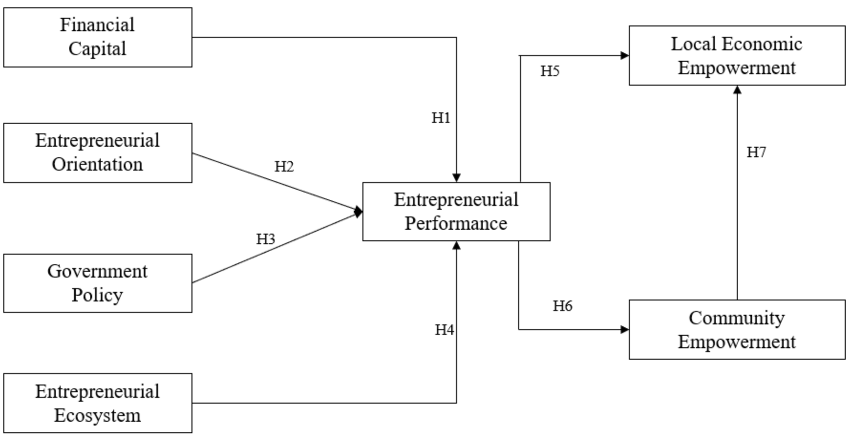

Figure 1. Conceptual and Hypotesis

II. METHODS

This study fits under the applied research category, which specifies the kinds of data and goal requirements. Consequently, surveys are employed as a means of data collecting in the quantitative research approach. This study's primary focus is on the role that coffee entrepreneurs have in the local economy of Kerinci Regency. First, documentation studies, literature reviews, and surveys (questionnaires) were used to gather the data for this study. Additionally, the Partial Least Squares technique with the Smart-PLS version 4 structural equation model was used to evaluate the data. Using the inductive method of literature review, the study's hypothesis was developed. In particular, using appropriate ways to promote the study of micro, small, and medium firms and entrepreneurship is made easier by the use of inductive and non-quantitative research methods (Dana & Dana, 2005).

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The study's population consists of coffee entrepreneurs in Kerinci Regency, Indonesia. A stratified random selection technique was employed to guarantee representation from various sectors and areas, given the varied makeup of coffee entrepreneurs. By comparing the total indicators between 5 and 10 times greater than the 5 collected for the study, the sample size for SEM-PLS research is determined using the statistical techniques that are currently accessible. Over the course of the study, which ran from August 12, 2023, to September 20, 2023, the author distributed the survey offline with the assistance of fifteen of her own students who served as enumerators. However, the enumerators received training to ensure that all participants' perspectives regarding the research objectives were balanced. 250 questionnaires were initially circulated; however, 180 of them were completed, while the remaining 70 had incomplete responses, all due to the author's diligent efforts.

Table 1. Respondent Demographics

Gender	*N (180)*	*Percentage*
Male	*120*	*67%*
Female	*60*	*33%*
Education	*N (180)*	*Percentage*
Bachelor's	*81*	*45%*
Master's	*65*	*36%*
Ph.D	*34*	*19%*
Business Experience	*N (180)*	*Percentage*
< 5 years	*48*	*26%*
6 – 10 years	*39*	*21%*
11 – 15 years	*40*	*22%*
16 – 20 years	*26*	*14%*
> 20 years	*27*	*17%*
Business Income	*N (180)*	*Percentage*
< 100 million	*74*	*41%*
100 million – 300 million	*44*	*24%*
300 million – 500 million	*39*	*21%*
> 500 million	*23*	*16%*

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The data displays the gender distribution of the polled individuals based on Table 1. Males made up 67% of the population, with females making up 33%. Men are overrepresented in many businesses, and this is reflected in the gender disparity in coffee entrepreneurship at Kerinci. Investigating the causes of this gender disparity and its possible effects on the coffee industry and nearby communities may make for fascinating study.

A bachelor's degree was held by the majority of respondents (45%) in terms of education. The following is the distribution of educational levels: 19% hold a Ph.D., and 36% have a Master's degree. These comparatively high educational requirements show that the coffee business owners in Kerinci have advanced degrees. This can suggest that they have a solid theoretical foundation to back up their company ventures, which could be advantageous for innovation and corporate strategy.

The respondents' range of business experience was not uniform. Two-thirds, or 26%, have worked in the coffee business for fewer than five years. 21% and 22%, respectively, had six to ten and eleven to fifteen years of experience. Furthermore, 14% and 17%, respectively, have 16 to 20 and more years of experience. The enormous range of competence in the coffee industry is demonstrated by this broad spectrum of experience levels. Investigating the potential effects of varying expertise levels on community involvement and corporate performance is crucial.

The bulk of firms make less than 100 million (local currency) annually in revenue. Just 16% of enterprises make more than 500 million, while 24% make between 300 million and 500 million, and 21% make between 300 million and 500 million. The financial diversity of Kerinci's coffee business owners is reflected in this income distribution. When evaluating these entrepreneurs' potential to boost the local economy and give communities more power, it is essential to comprehend their financial capability.

A. Data Analysis

Factor loading, correlation, multicollinearity assumptions, variable validity and reliability, and structural equation modeling for impact size were among the data analytic techniques used. Utilizing Smart-PLS 4, SmartPLS Gmbh, Oststeinbek, Germany, this inquiry was assessed. It is possible to put the measured questionnaire results into practice.

Based on the literature, this study examines financial capital, entrepreneurial attitude, government policy and the entrepreneurial environment, entrepreneurial performance, economic empowerment, and community empowerment (Berno, 2017; Caló et al., 2019; Febrian & Maulina, 2018; Mustaghfiri, 2020; Ognjanović & Slavković, 2022; Widjianingsih et al., 2022). These variables were included in the questionnaire used to collect data. Because their study focused on social enterprises in Indonesia, the researchers used a non-probabilistic random sampling technique to choose the study's sample. The researchers invited the owners of the coffee shops in Kerinci Regency to fill out the questionnaire after they granted permission for data gathering. Table 2 displays the questionnaire together with descriptive statistics of the respondents' answers.

Table 2. Research Questionnaire

Variabel	*Items*	*Mean*	*S.D*
Financial Capital	*1. I have access to sufficient financial resources to grow my coffee business*	*3.636*	*0.989*
	2. I assess the level of capital adequacy I have to manage my coffee business	*3.485*	*1.019*
	3. I feel the need to improve my access to financial capital to grow my business	*3.535*	*0.978*
Entrepreneurial Orientation	*1. I have a tendency to look for new opportunities in my coffee business*	*3.556*	*1.056*
	2. I feel I have the ability to take risks in managing my coffee business	*3.404*	*1.072*
	3. I assess my ability to create innovations in my coffee business	*3.313*	*1.019*

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Government Policy	*1. I feel local government policies support the development of coffee business in Kerinci*	*3.404*	*0.829*
	2. I feel that government policies ease the licensing and regulatory process in my coffee business	*3.313*	*1.063*
	3. I assess the impact of government policies on coffee business growth in this region	*3.404*	*1.021*
Entrepreneurial Ecosystem	*1. I feel connected to business networks and resources that support the development of my coffee business in Kerinci*	*3.636*	*1.004*
	2. I rate the support I receive from existing education or training institutions in the entrepreneurial ecosystem in this region	*3.475*	*0.989*
	3. I have adequate access to information and resources that can help me manage my coffee business.	*3.505*	*0.806*
	4. I feel that the entrepreneurial ecosystem in Kerinci facilitates collaboration between coffee business players	*3.782*	*1.028*
Entrepreneurial Performance	*1. I assess the financial performance of my coffee business over the past five years as having improved*	*3.717*	*1.058*
	2. I feel that my coffee business has succeeded in achieving the sales targets that have been set	*3.586*	*0.961*
	3. I feel that my coffee business has optimized the use of resources and managed operational costs well	*3.545*	*0.829*
	4. I assess the long-term sustainability of my coffee business	*3.636*	*0.888*
	5. I feel that my coffee business has successfully expanded its market share or customers.	*3.485*	*0.902*
Economic Empowement	*1. My coffee business has made a positive contribution to the local economy in Kerinci*	*3.505*	*1.019*
	2. I see the role of my coffee business in creating jobs and reducing the unemployment rate in the region.	*3.192*	*0.806*
	3. My coffee business has helped local coffee farmers increase their income	*3.717*	*1.058*
	4. I feel that my coffee business has provided economic opportunities to the surrounding community	*3.586*	*0.961*
	5. I feel that my coffee business has increased the purchasing power of the people around me.	*3.545*	*0.829*

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Community Empowerment	*1. My coffee business is involved in activities or programs that empower local communities in Kerinci*	*3.596*	*0.888*
	2. I feel that my coffee business has contributed to improving the quality of life of the surrounding community, such as their access to education and healthcare.	*3.404*	*0.902*
	3. My coffee business supports social initiatives and environmental hygiene activities in my community	*3.486*	*1.072*
	4. I involve the local community in my business decisions and social programs.	*3.574*	*1.072*
	5. My coffee business supports skills development and training for the surrounding community	*3.498*	*1.019*
	6. I feel my coffee business has strengthened social ties and cooperation in my community	*3.609*	*0.912*

Table 1 displays the measurement items, mean values, and standard deviations for the different variables in the model. In this work, random sampling was employed, and the recommendations of (Hair Jr, Matthews, et al., 2017) were adhered to: when employing the SEM-PLS approach for research, it is crucial to make sure that no data is missing and to multiply the number of indicators by five or ten times the total number of indicators. The questionnaire was distributed to 250 individuals, and 180 of them returned it, suggesting that it satisfies Hair's standards. The study has thirty indicators, therefore multiplying by five would yield a minimal sample size of 150. Tabular data for the model's chosen variables includes the measurement items, mean values, and standard deviations. Comparable patterns in data sets are typically produced by applying SEM techniques, as demonstrated by a number of prior research initiatives (J. F. J. Hair et al., 2017).

III. RESULTS AND DISCUSSION

A. Assessment Framework

This study evaluated the superiority and high quality of the measurement model using the PLS-SEM approach in order to validate the validity of the analysis procedure's output and the dependence of variables. This study aims to assess each item of the chosen variables for discriminant validity, concurrent validity, and reliability in order to test and support the proposed hypothesis statements, in accordance with prior arguments (J. F. Hair et al., 2019; Hair Jr, Babin, et al., 2017; Hair Jr, Matthews, et al., 2017; Sarstedt et al., 2017). The measurement model is a part of the research framework that looks at how measurements relate to study latent variables. A model that measures the correlation between the data (indicators) gathered from surveys and research studies and the structure or components supporting the hypothesis is presented by the structural equation modeling approach, or SEM. Confirmatory factor analysis (CFA) was employed in this study to evaluate the competency and effectiveness of the proposed measuring model. Recent studies suggest that factor loadings ought to have a minimum threshold value of 0.7 (J. F. Hair et al., 2019). According to other research, the model fit index's Standardized Root Mean Square Residual for Structural Equation Modeling (SRMR) of 0.076 falls within an acceptable range (J. F. J. Hair et al., 2017).

Table 3. Good Research Model

Varible	*Q2*	*R2*
Entrepreneurial Performance	*0.591*	*0.618*

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Local Economic Empowerment	*0.643*	*0.512*
Community Empowerment	*0.493*	*0.487*

Moreover, the study evaluated the predictive importance of the model (Q2), and the outcomes for the chosen variables demonstrated values greater than zero, confirming the predictive relevance of the model (J. F. Hair et al., 2019). the factors for entrepreneurial performance (Q2 = 0.591), community empowerment (Q2 = 0.493), and local economic empowerment (Q2 = 0.643). Similarly, because the resulting R2 value is 0.618, the R2 value explaining endogenous variables (financial capital, entrepreneurial orientation, government policy, and entrepreneurial ecosystem) to entrepreneurial performance is 61.8%, to local economic empowerment it is 51.2%, and to community empowerment it is 48.7%. These findings point to favorable outcomes (Chin, 1998).

B. Validity and reliability

The data collected for this study was successfully sorted and confirmed by the experts. The study filtered the feedback forms in order to evaluate validity and reliability even more. The study examined the HTMT (HeterotraitMonotrait) ratio, variance inflation factor (VIF), average variance extracted (AVE), Fornell and Larcker Criteria, and convergent and discriminant validity. To further gauge the dependability of the data, Cronbach alpha tests and composite reliability were employed. The reliabilities of the study's measurement scales fall within acceptable bounds. (J. F. J. Hair et al., 2017) have cited a dependability level of 0.7 in their literature.

Table 4. Validity and reliability

Items	*FCF*	*EOT*	*GPC*	*ESE*	*EEP*	*EEM*	*ECM*	*Outer VIF*
FCF.1	*0.829*							*2.662*
FCF.2	*0.879*							*2.522*
FCF.3	*0.874*							*2.060*
EOT.1		*0.820*						*1.666*
EOT.2		*0.901*						*2.298*
EOT.3		*0.873*						*2.100*
GPC.1			*0.845*					*1.257*
GPC.2			*0.848*					*2.382*
GPC.3			*0.869*					*1.839*
ECE.1				*0.938*				*2.661*
ECE.2				*0.859*				*2.403*
ECE.3				*0.780*				*2.106*
ECE.4				*0.863*				*1.772*

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EEP.1					*0.805*			*2.671*
EEP.2					*0.754*			*1.642*
EEP.3					*0.869*			*1.711*
EEP.4					*0.857*			*2.217*
EEP.5					*0.796*			*2.036*
EEM.1						*0.861*		*1.808*
EEM.2						*0.786*		*2.744*
EEM.3						*0.760*		*2.503*
EEM.4						*0.865*		*1.974*
EEM.5						*0.744*		*1.566*
ECM.1							*0.848*	*2.341*
ECM.2							*0.840*	*2.194*
ECM.3							*0.783*	*1.596*
ECM.4							*0.738*	*1.937*
ECM.5							*0.784*	*2.102*
ECM.6							*0.764*	*2.321*
Cronbach's alpha	*0.882*	*0.863*	*0.883*	*0.875*	*0.832*	*0.825*	*0.815*	
Composite Reliability	*0.911*	*0.902*	*0.920*	*0.909*	*0.899*	*0.896*	*0.890*	
AVE	*0.630*	*0.648*	*0.743*	*0.668*	*0.749*	*0.741*	*0.729*	

According to the results of the current study, every item dependability value in table 4 above is greater than the threshold limit. According to the results, the levels of internal consistency of financial capital, entrepreneurial orientation, government policy, entrepreneurial ecosystem, entrepreneurial performance, local economic empowerment, and community empowerment are all suitable, with a value of 0.80. Based on existing literature, an appropriate AVE value ought to exceed 50%. The model is deemed satisfactory because the AVE result is greater than the predetermined threshold value of 0.5, which establishes the minimum value for measurement scale acceptance (J. F. J. Hair et al., 2017). The VIF statistics outside the measurement model were likewise below the threshold value of 5, according to (J. F. J. Hair et al., 2017), producing satisfactory results. The VIF results do not show any serious difficulties related to multicollinearity. The results for every item are therefore satisfactory. The item factor loadings, dependability, AVE, and outer VIF are shown in Table 4.

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The internal VIF values were evaluated in this study in order to address the multicollinearity issue. Our analysis has thereby demonstrated the issue of multicollinearity among the chosen variables.

Table 5. Discriminant Validity

Variable	*Entrepreneurial Performance*	*Local Economic Empowerment*	*Community Empowerment*
Financial Capital	*2.421*		
Entrepreneurial Orientation	*1.532*		
Government Policy	*2.235*		
Ecosystem Entrepreneurial	*2.029*		
Entrepreneurial Performance		*2.091*	*1.574*
Community Empowerment		*1.974*	

Satisfactorily, the internal VIF value provides a strong explanation of the link between the research variables. According to this, it doesn't matter if the variables are multicollinear. Hence, the variables in the model that represent financial capital, entrepreneurial orientation, government policy, the entrepreneurial ecosystem, entrepreneurial performance, and the empowerment of the local economy and community have sufficient convergent validity in this research. Table 5 displays the values that the internal VIF produced.

C. Hypothesis Test

The hypothesis is deemed significant when the 95% confidence level t-statistic value is higher than the t-statistic (>1.96). Software called SmartPLS bootstrap was utilized to produce the results seen here. Table 6 displays the constructs' hypothesis analysis as well as their means, t-values, p-values, beta values, and standard deviations. As a result, the conclusion was made using a p-value of 0.05.

Table 6: Hypothesis Tets Results

Hypotesis	*T-statistic*	*p-Values*	*Results*
Financial Capital -> Entrepreneurial Performance	*4.658*	*0.000*	*Accepted*
Entreoreneurial Orientation -> Entrepreneurial Performance	*5.088*	*0.000*	*Accepted*
Government Policy -> Entrepreneurial Performance	*5.805*	*0.003*	*Accepted*
Ecosystem Entrepreneurial -> Entrepreneurial Performance	*2.643*	*0.001*	*Accepted*
Entrepreneurial Performance -> Local Economic Empowerment	*7.943*	*0.000*	*Accepted*
Entrepreneurial Performance -> Community Empowerment	*11.834*	*0.002*	*Accepted*

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Community Empowerment -> Local Economic Empowerment	*9.528*	*0.000*	*Accepted*

This investigation involved the proposal of seven hypotheses, all of which have t-values over 1.96, indicating their reliability (Table 6). H1 is approved. Financial capital and entrepreneurial performance have a strong positive association, as seen by the statistically significant t-statistic and very low p-value ($p < 0.001$). Higher levels of entrepreneurial success, such as firm development and profitability, are typically attained by coffee entrepreneurs with more access to financial resources. This result emphasizes how crucial financial capital is to coffee enterprises in Kerinci. Next, H2 gets approved. A positive correlation between entrepreneurial performance and orientation is indicated by the very low p-value ($p < 0.001$) and the statistically significant t-statistic. Coffee business owners that possess qualities like initiative, risk-taking, and inventiveness typically succeed better. The aforementioned results underscore the significance of cultivating entrepreneurial attributes in order to augment the prosperity of coffee enterprises in Kerinci.

Moreover, H3 demonstrates that this idea is accepted. There is a positive correlation between government policies and entrepreneurial performance, as indicated by the low p-value ($p < 0.01$) and statistically significant t-statistic. Government initiatives that encourage investment and expansion in the coffee sector include assistance programs and tax breaks. These findings highlight how successful policies are in assisting Kerinci's coffee entrepreneurs. H4 is also acknowledged. There is a favorable correlation between entrepreneurial performance and the entrepreneurial ecosystem, as indicated by the low p-value ($p < 0.01$) and statistically significant t-statistic. The performance of coffee entrepreneurs is enhanced by a supportive ecosystem, which includes market access and support services. The importance of supportive services and cooperative networks in fostering entrepreneurship is shown by this study.

In our attempt to examine H5, we found that there is a positive correlation between entrepreneurial performance and local economic empowerment, which is supported by the statistically significant t-statistic value and extremely low p value ($p < 0.001$). Therefore, H5 is accepted. Greater regional economic empowerment is linked to higher entrepreneurial performance. These findings demonstrate how prosperous coffee companies support the local Kerinci economy.

Seeing as to why H6 is accepted There is a favorable correlation between community empowerment and entrepreneurial performance, as indicated by the low p-value ($p < 0.01$) and statistically significant t-statistic value. Entrepreneurs in the coffee industry that achieve success are more inclined to support empowerment and community development. This research emphasizes how successful coffee businesses have a wider social influence.

H7 is approved. There is a strong positive correlation between local economic empowerment and community empowerment, as seen by the statistically significant t-statistic and the extremely low p-value ($p < 0.001$). Initiatives promoting coffee entrepreneurship benefit communities and enhance local economic growth as a whole. The relationship between community and economic well-being is shown by these findings.

The study's findings, taken together, demonstrate that financial capital, entrepreneurial orientation, government policies, the entrepreneurial ecosystem, entrepreneurial performance, and local economic and community empowerment all have a positive correlation. H1 through H7 are acknowledged in the findings because they offer compelling evidence of the important contribution that coffee businesses make to the social and economic advancement of Kerinci, Indonesia.

D. Discussion

The study's findings complement and expand upon earlier research on local development and entrepreneurship, especially as it relates to the coffee sector. Our findings support earlier research by showing a positive correlation between financial capital and entrepreneurial performance, which highlights the importance of financial capital in entrepreneurship (Daat et al., 2021; Febrian & Maulina, 2018; Mansour et al., 2018; Yao & Meng, 2022). The significance of financial resources for coffee entrepreneurs in Kerinci is highlighted by this relationship.

Additionally, research emphasizing the value of entrepreneurial qualities in enhancing business outcomes is consistent with the beneficial influence of entrepreneurial orientation on entrepreneurial success (Abdullahi et al., 2017; Chen et al., 2007; Ferreira et al., 2020; Goyal & Mishra, 2023). Our results support the notion that innovativeness, risk-taking, and proactiveness are qualities that help coffee entrepreneurs operate better.

This study adds to the body of knowledge regarding the effects of government policies on economic development. Our findings support the positive effects of government policies on entrepreneurial performance, which in turn contributes to economic empowerment. Government policies, such as tax incentives and support

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programs, have been identified as catalysts for economic empowerment (Bobek et al., 2022; Han et al., 2013; Saikia & Deka, 2017).

Additionally, this study is consistent with previous research that emphasizes the beneficial role that entrepreneurial ecosystems have in promoting community development and entrepreneurial success (Acs et al., 2018; Bărbulescu et al., 2021; Islam, 2020; Sussan & Acs, 2017). These results highlight the value of a positive ecology in the coffee industry for improving community empowerment and entrepreneurial performance.

RBV theory offers a theoretical framework through which to view our results. RBV holds that a company's distinctive and valued resources and competencies are how it gains a competitive edge (Barney, 1991). The RBV framework in our study aids in the explanation of the associations that we saw. According to the RBV, which emphasizes the importance of tangible resources, there is a positive correlation between financial capital and entrepreneurial performance (Supriandi, 2022; Zamora, 2012). In this instance, financial capital functions as a useful tool that promotes investment and growth, giving businesses a competitive edge.

Within the scope of the RBV, entrepreneurial orientation might be considered a unique capability. Our research provides evidence for this by demonstrating the special skills and favorable effects that coffee entrepreneurs with a strong entrepreneurial attitude possess. Within the framework of the Resource-Based View, Government policies are considered external resources that enhance a firm's competitive advantage (Lehner, 2011). The importance of outside resources on the profitability of coffee businesses is demonstrated by our study's finding that government policies and entrepreneurial performance are positively correlated.

The assets and skills available to coffee business owners are embodied in the entrepreneurial environment. The correlation that exists between an ecosystem and entrepreneurial performance is positive, indicating that entrepreneurs can leverage ecosystem resources and competencies to gain a competitive edge.

The field situation in Kerinci, where coffee entrepreneurship is a significant factor in local growth, would be affected practically by the study's conclusions. Tables of data indicate that coffee entrepreneurs can have a major impact on community welfare and economic empowerment if they have access to funding, entrepreneurial skills, and a supportive governmental environment.

The data describes actual situations where coffee entrepreneurs support the local economy in Kerinci, a region well-known for producing coffee, by investing in infrastructure, hiring people, and taking part in community development initiatives. The study's findings highlight how crucial it is to keep encouraging coffee entrepreneurs and to develop laws that make it easier for them to obtain funding and other resources and relevan to research by (Syofya, 2022).

Furthermore, the results of the study highlight the necessity of capacity-building programs to promote an entrepreneurial mindset, motivate coffee business owners to be creative, take calculated risks, and actively participate in community development activities. The good effects of coffee entrepreneurship in the area may be amplified by these measures.

E. Implication

1. Theory Implications

The Resource-Based View (RBV) philosophy of strategic management is significantly impacted by the study's conclusions. According to RBV, a firm's success and competitive advantage are dependent on its special and valued assets. This study reaffirms the fundamental RBV principles in the context of coffee entrepreneurship in Kerinci. According to the RBV, there is a positive correlation between financial capital, entrepreneurial attitude, government policy, and the entrepreneurial ecosystem and entrepreneurial performance. This shows that these resources help create a competitive edge. The relevance of resource heterogeneity in the RBV framework is highlighted by this research, which also expands the application of RBV to community development and coffee entrepreneurship.

Additionally, this study adds to the body of knowledge regarding how entrepreneurship affects society. This study looks at how entrepreneurial efforts and resources impact local communities, whereas RBV usually focuses on economic outcomes. Recognizing the contribution of coffee businesses to community empowerment is one of the theory's implications in this situation. This study adds to the theoretical foundation of social entrepreneurship by demonstrating how, in line with social entrepreneurship theory, entrepreneurial acts can benefit the development of local communities. These results improve our understanding of the role of resources in producing beneficial social outcomes by confirming that resources like financial capital and ecosystem support are critical in boosting the social impact of entrepreneurship.

Practical Implications

The study's conclusions offer helpful recommendations for many parties, including:

1. Legislators: They ought to enact laws encouraging coffee business owners. This entails offering tax breaks, making financing more accessible, and offering initiatives to develop capability. These actions can promote social welfare and economic progress.

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ISSN : 2597-4750 (PRINTED)

2. Coffee business owners: Through mentoring and training, they should concentrate on fostering entrepreneurial inclinations like creativity and risk-taking. Additionally, obtaining funding from grants, loans, and investments is crucial for the growth and profitability of a business.
3. Local community: By working together, communities can assist coffee entrepreneurs and raise living conditions, create jobs, and develop infrastructure. Additionally, in order to strengthen their sense of social empowerment, coffee entrepreneurs ought to get involved in community development initiatives.

F. Limitations

Despite the fact that this study offers insightful information, it is crucial to acknowledge its limitations:
1. The research is predicated on cross-sectional data that was gathered at a particular moment in time. Consequently, the study fails to incorporate possible long-term dynamic changes and interactions.
2. The information in the data comes from survey respondents' self-reports. The accuracy of the results may be impacted by response bias introduced by this method.
3. With 180 coffee businesses, the sample size is somewhat tiny. The results may not apply to all coffee entrepreneurs in the Kerinci region, despite the fact that they offer insightful information.

This research focuses exclusively on the coffee entrepreneurial environment in Kerinci, Indonesia. It's possible that the conclusions won't apply directly to different areas or businesses.

IV. CONCLUSION

In summary, the research indicates that coffee entrepreneurs in Kerinci play a significant role in promoting community welfare and local economic empowerment. According to the study's findings, financial resources, an entrepreneurial mindset, governmental regulations, and the entrepreneurial ecosystem all have a big impact on how well entrepreneurs do, which in turn helps communities and local economies flourish.

These observations are consistent with the Resource-Based View (RBV) hypothesis, which highlights the significance of distinct resources and competencies in attaining a competitive edge. This study adds to the body of literature by emphasizing resource heterogeneity among entrepreneurs and expanding the use of RBV to the realm of coffee entrepreneurship.

Since Kerinci is still a significant coffee-producing location, this study offers a basis for sensible policy development and decision-making, which will eventually promote the industry's sustainable growth and the welfare of the surrounding community. This study adds to our understanding of the dynamic relationship between coffee entrepreneurship and socio-economic growth in a particular regional setting, despite its limitations.

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:: IJEBD ::
(International Journal of Entrepreneurship and Business Development)
Volume 07 Number 01 January 2024

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

The Influence of Leadership, Motivation, Organizational Culture, Lecturer Competence on Lecturer Performance with Lecturer Discipline as Intervening

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ABSTRACT

Purpose: (1) Analyze the influence of leadership, motivation, organizational culture, lecturer competence on lecturer discipline (2) Analyze the influence of leadership, motivation, organizational culture, lecturer competence, lecturer discipline on lecturer performance.

Design/methodology/approach: This study uses a quantitative approach by distributing questionnaires by sampling. The research data were analyzed using multiple regression.

Findings: The results showed that (1) leadership correlated significantly very low with lecturer performance of 31.9% (2) lecturer motivation correlated significantly very strongly with lecturer performance of 80.2% (3) organizational culture correlated significantly very strongly with lecturer performance of 78.3% (4) lecturer competence correlated significantly strong with lecturer performance of 56.3%.

Practical Implications: This research includes several things, including the lack of optimal discipline and performance of lecturers in carrying out the tridharma of higher education.

Originality/value: The research is original

Type of paper: research paper

Keywords: *Leadership, Motivation, Organizational Culture, Lecturer Competence*

Received : October 3th
Revised : Desember 18th
Published : January 31th

I. INTRODUCTION

In Indonesia, Regulation Number 12 of 2012 concerning Higher Education has been stated. In article 62 of Law Number 12 of 2012 concerning Higher Education, it has an autonomous right to manage / regulate freely and responsibly for its organization to reflect the center of implementation of the Tri Dharma (Ministry of Law and Human Rights, 2012). The strategy in improving higher education is certainly inseparable from improving the quality of its main resources, namely lecturers. Ownership of resources with capabilities that will improve education. A lecturer is an educative staff at universities with his education and expertise appointed by university organizers with his main task being teaching as the main task. Lecturers have duties and responsibilities in the fields of education and teaching, research and community service. Lecturers greatly determine the quality of education and graduates born by the university, in general, the quality of universities will determine the lecturers to be of high quality.

A. Lecturer Performance

Lecturer performance is a determining tool for the success of a university. Law Number 14 of 2005 concerning Teachers and Lecturers and Government Regulation of the Republic of Indonesia Number 37 of 2009, About Lecturers, it is stated that Lecturers are Professional Educators and Scientists with the main task of

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

transforming, developing and disseminating science, technology and art through education, research and community service (Regulation, 2009). Lecturer performance is the level of achievement of results or implementation of the duties of a lecturer in carrying out his duties and responsibilities as academic functional personnel in a study program (Nadeak, 2020).

B. Lecturer Discipline

According to (Kurniawan et al., 2018) work discipline is a person's behavior in accordance with existing work procedure regulations. (Ivalaina Astarina et al., (2019: 140)) argues that discipline is a person's awareness and willingness to obey all company regulations and applicable social norms. Lecturer discipline affects the performance of lecturers, because discipline is a mental attitude that is reflected in the behavior of individuals, groups of lecturers in the form of compliance or compliance with regulations, ethics and others.

C. Leadership

Leadership as a behavior is proposed by (Taruno, 2012) namely: that leadership involves a set of processes of influence between people. The process is aimed at motivating subordinates, creating a vision of the future, and developing strategies to achieve goals. In developing the ability to lead, a person must be able to be a figure who can be a good example for others and this requires practice and experience. According to researcher Yazid Habib Maula found that leadership has no effect on discipline, leadership has a positive and significant influence on discipline (Maula, 2021). The trait approach seeks to understand leadership based on the belief that good leaders have "innate characteristics" from birth, both regarding physical and personality traits. (Stogdill in Smyth, 1989; Watkins, 1992; and Dunford, 1995) in (Wibowo, 2011) Mentioning the physical and personality characteristics of the leader includes, among others: age, appearance, fluency of speech, intelligence, energetic, dominant, confident, extroverted, having an achievement drive, related to effective leadership.

D. Motivation

Motivation can be defined as the internal state of individuals who bear power, excitement and dynamics as well as behavior that is directly directed (Shofwa, 2013). Spiritual needs are pure needs whose fulfillment depends on the perfection and maturity of the individual human being. *(*Shofwa, 2013) said that spiritual motivation can improve employee performance. Frederick Herzberg in (Andriani & Widiawati, 2017) put forward a theory of motivation based on the theory of two factors, namely hygiene factors and motivators. He divided Maslow's needs into two parts, namely low-level needs (physical, security and social) and high-level needs (prestige and self-actualization) and argued that the best way to motivate individuals is to fulfill their high-level needs. According to Hezberg, factors such as policies, company administration, and adequate salary in a job will reassure employees. If these factors are inadequate then people will not be satisfied (Firmansyah, 2018).

E. Organizational culture

Organizational culture according to (Gultom, 2015) is a system of shared meaning held by members that differentiates it from other organizations. Organizational culture is a variety of values that envelop the typical patterns of thinking, ideas and behavior held and carried out by human resources in an organization to achieve its goals. As stated by (Muis et al., 2018) that organizational culture is the result of the process of merging the cultural styles and behavior of each individual that were previously brought into a new norm and philosophy, which has the energy and pride of the group in facing things and goals certain. According to (Andayani & Soehari, 2019) organizational culture can also be said to be habits that are repeated over and over again and become values and lifestyles by a group of individuals in the organization which are followed by subsequent individuals. This means that culture can be intentionally or unintentionally held and passed down from generation to generation within an organization. Organizational culture is a system of values, beliefs, assumptions or norms that apply, are agreed upon and followed by every member of the organization as a guide for behavior and problem solving within the organization. Mardianti & Tatasari (2021:159) define innovation as the ability to implement creative ideas for opportunities and problems that exist to enrich people's lives.

F. Lecturer Competence

Lecturers are required to have competence in order to be competitive with other lecturers. To carry out strategic functions, roles and positions, professional lecturers are needed. Lecturer competency determines the quality of implementing the tridharma of higher education. According to (Hidayati, 2015) explains that competence is the ability to fulfill complex requests successfully or carry out complex activities or tasks and includes knowledge, skills, abilities, traits and behavior that enable a person to carry out tasks in a particular function or job. According to (D. W. Hidayat, (2016:106)) competence is a combination of knowledge, skills, values and attitudes which are reflected in habits of thinking and acting. Competency according to (Wahyuni, 2019) is the skills, expertise and attitudes that exist in a person in carrying out obligations in accordance with the

ISSN : 2597-4785 (ONLINE)
ISSN : 2597-4750 (PRINTED)

specified performance. According to (Wibowo, 2016), it is explained that competence is the ability, skills, knowledge and enthusiasm for working to carry out work according to the workload for which one is responsible.

II. METHODS

The population in this research are private university lecturers who are active in teaching. The sampling technique used in this research was by filling out a questionnaire. This research uses a quantitative approach with sampling using random sampling techniques to determine the influence of leadership, motivation, organizational culture, lecturer competence on lecturer performance with the mediation of lecturer discipline. Then a descriptive analysis was carried out on the data to obtain clarity in accordance with the objectives of this research.

This regression analysis was carried out between the leadership variable (X1) on lecturer discipline (Z), the motivation variable (X2) on lecturer discipline (Z), the organizational culture variable (X3) on lecturer discipline (Z), the lecturer competency variable (X4) on discipline lecturer (Z), leadership variable (X1) on lecturer performance (Y), motivation variable (X2) on lecturer performance (Y), organizational culture variable (X3) on lecturer performance (Y), lecturer competency variable (X4) on performance lecturer (Y), lecturer discipline variable (Z) on lecturer performance (Y).

Simultaneous testing means testing multiple correlations significantly. In this research, the multiple regression analysis is the variables leadership (X1), motivation (X2), organizational culture (X3), lecturer competence (X4) on lecturer discipline (Z) and the variables leadership (X1), motivation (X2), organizational culture (X3), lecturer competency (X4), lecturer discipline (Z) on lecturer performance (Y). The path analysis model is presented in Figure 1 below.

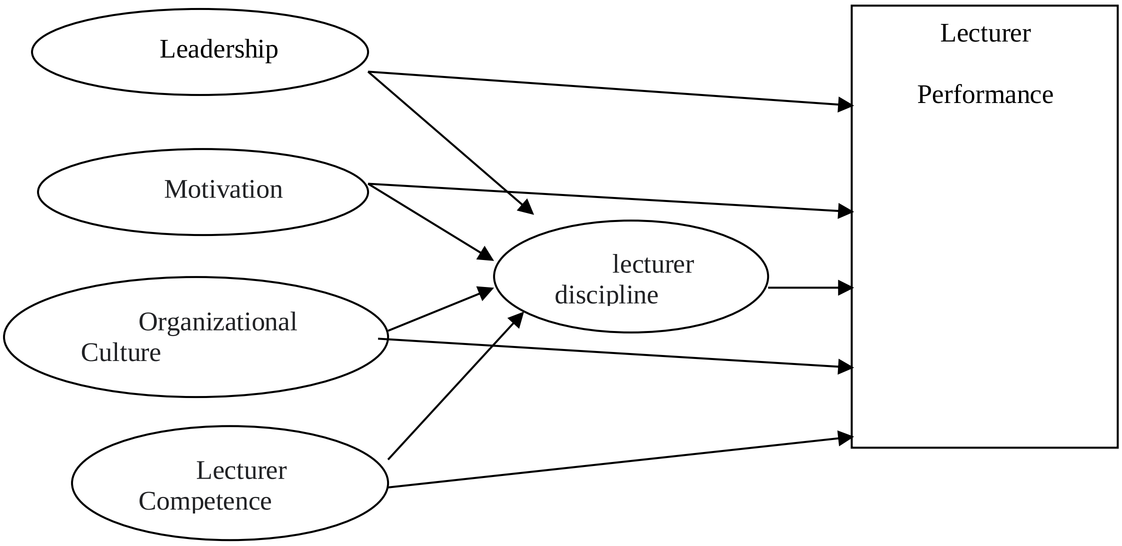

Figure 1. Conceptual Framework

III. RESULTS AND DISCUSSION

This research is about the influence of leadership, motivation, organizational culture, lecturer competence on lecturer performance with lecturer discipline as an intervening. Statistical data is carried out to produce accurate and significant data analysis. Below in table 1 is the path analysis test.

A. Model Analysis Test

Table 1. Model Analysis Test

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Test Assumptions	*Criteria*	*Model*	*Mark*	*Decision*
Normality	*Sign (Kolmogorov Smirnov)*	*Model 1*	*.200*	*Normally distributed*
		Model 2	*.097*	
Multikolinieritas	*Tolerance*	*Model 1*	*X1 = .785*	*There are no symptoms of multicollinearity*
			X2 = .311	
			X3 = .363	
			X4 = .590	
		Model 2	*X1 = .843*	
			X2 = .285	
			X3 = .335	
			X4 = .606	
			Z = .185	
	VIF	*Model 1*	*X1 = 1.274*	
			X2 = 3.220	
			X3 = 2.756	
			X4 = 1.645	

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Test Assumptions	*Criteria*	*Model*	*Mark*	*Decision*
		Model 2	*X1 = 1.187* *X2 = 3.508* *X3 = 2.982* *X4 = 1.649* *Z = 5.409*	
Heteroskedastisitas	*Sign (Glejser)*	*Model 1*	*X1 = .523* *X2 = .836* *X3 = .730* *X4 = .871*	*There are no symptoms of heteroscedasticity*
		Model 2	*X1 = .383* *X2 = .768* *X3 = .207* *X4 = .393* *Z = .286*	

The results of the model analysis test in table 1 above show that the normality test in model 1 and model 2 resulted in the data being declared normally distributed. For the multicollinearity test results for model 1 and model 2, it can be seen that Tolenrance (TOL) and Value Inflation Factor (VIF) produce values with no symptoms of multicollinearity. For the heteroscedasticity test results for model 1 and model 2, it can be seen that there are no symptoms of heteroscedasticity. In this case, it shows that the model analysis test above is fulfilled.

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ISSN : 2597-4750 (PRINTED)

B. Regression and Analysis Model 1

Table 2. Model 1 Test Results

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
(X1,X2,X3.X4 toward Z)	*.904*	*,817*	*.804*	*1.79779*

The results of regression analysis for model 1 in table 2 show that the R square value is 0.817 (81.7%), this can be explained that the independent variables which include leadership, motivation, organizational culture, lecturer competence are simultaneously able to explain variations in lecturer discipline by 81.7%. while the remaining 18.3% are factors not considered in model 1.

Table 3. Regression Test Coefficients model 1

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig*
	β	*Std Error*	*Beta*		
(Constant)	*1.127*	*2.491*		*.453*	*.653*
Leadership	*-.032*	*.032*	*- .045*	*-.978*	*.330*
Motivation	*.173*	*.050*	*.253*	*3.458*	*.001*
Organizational Culture	*.128*	*.042*	*.207*	*3.067*	*.003*
Lecturer Competence	*.130*	*.062*	*.112*	*2.105*	*.038*

From table 2 above, it can be explained that the leadership variable (X1) has a significant value of 0.330 > 0.05, so it can be concluded that leadership has no significant effect on lecturer discipline (Z). While the variables motivation (X2), organizational culture (X3), and lecturer competency (X4) have a significant value of <0.05, then the variables motivation (X2), organizational culture (X3), and lecturer competency (X4) can be said to be the third This variable has a significant influence on lecturer discipline. The multiple linear regression equation is as follows:

$$Y = 1.127 – 0,032\ X1 + 0,173\ X2 + 0,128\ X3 + 0,130\ X4$$

The regression equation shows that leadership has a negative effect on lecturer discipline by (-0.032), motivation has a positive and significant effect on lecturer discipline by 0.173, organizational culture has a positive

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and significant effect on lecturer discipline by 0.128 and lecturer competence has a positive and significant effect on lecturer discipline by 0.130.

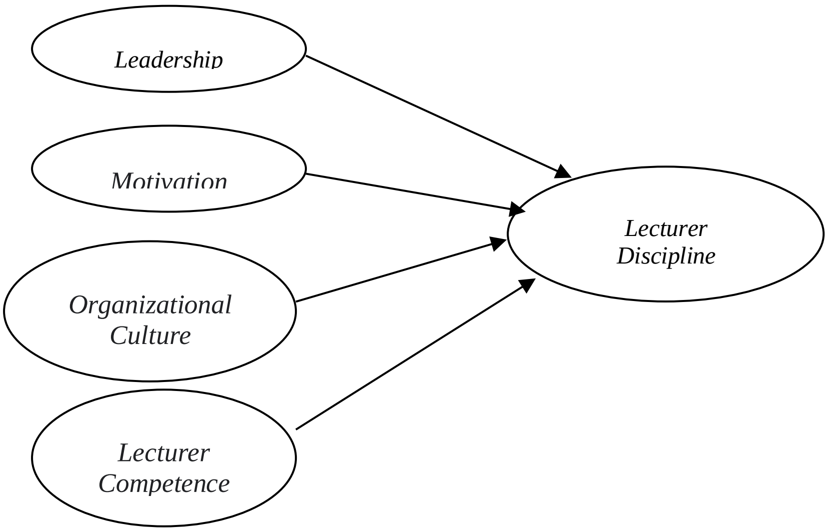

Figure 2. Conceptual Framework of Model 1

C. Regression and Analysis Model 2

Table 4. Model 2 test results

Model	*R*	*R Square*	*Adjusted R Square*	*Std. Error of the Estimate*
(X1,X2,X3.X4 Against Y)	*.968*	*,936*	*.931*	*1.35417*

The results of model 2 regression analysis in table 4 show that the R square value is 0.968 (96.8%), this can be explained that the independent variables which include leadership, motivation, organizational culture, lecturer competence are simultaneously able to explain variations in lecturer discipline of 96.8 % while the remaining 3.2% are factors not considered in model 2

Table 5. Regression Test Coefficients model 2

Model	*Unstandardized Coefficients*		*Standardized Coefficients*	*t*	*Sig*
	β	*Std Error*	*Beta*		
(Constant)	*4.198*	*2.024*		*2.074*	*.040*
Leadership	*.017*	*.035*	*.012*	*.468*	*.641*
Motivation	*.087*	*.040*	*.100*	*2.199*	*.030*

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ISSN : 2597-4750 (PRINTED)

Organizational Culture	*.074*	*.033*	*.-095*	*2.267*	*.025*
Lecturer Competence	*.110*	*.046*	*.074*	*2.393*	*.018*

From table 5 above, it can be explained that the leadership variable (X1) has a significant value of 0.641 > 0.05, so it can be concluded that leadership has no significant effect on lecturer discipline (Z). While the variables motivation (X2), organizational culture (X3), and lecturer competency (X4) have a significant value of <0.05, then the variables motivation (X2), organizational culture (X3), and lecturer competency (X4) can be said to be the third This variable has a significant influence on lecturer discipline. The multiple linear regression equation is as follows:

Y = 4.198 + 0,017 X1 + 0,087 X2 + 0,074 X3 + 0,110 X4

The regression equation shows that leadership does not have a positive effect on lecturer discipline by 0.017, motivation has a positive and significant effect on lecturer discipline by 0.087, organizational culture has a positive and significant effect on lecturer discipline by 0.074 and lecturer competence has a positive and significant effect on lecturer discipline by 0.110.

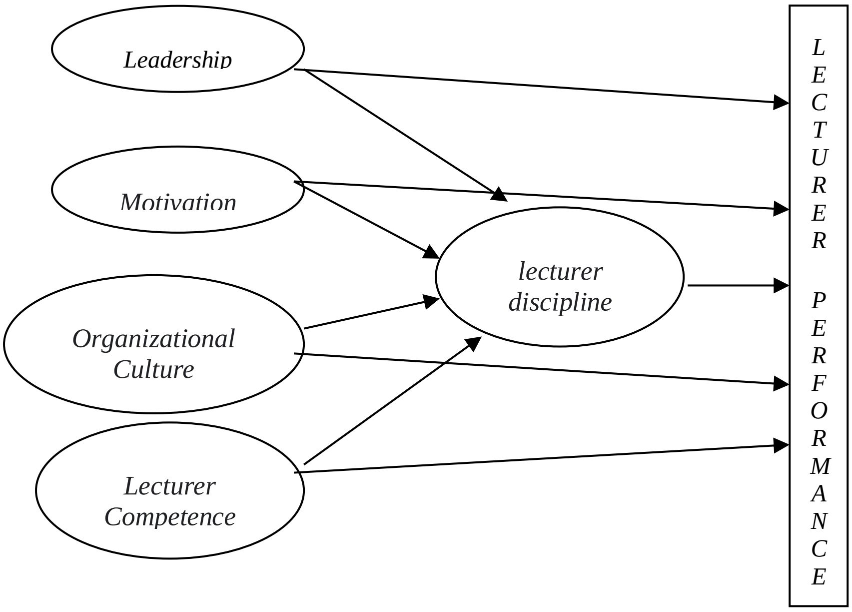

Figure 2. Conceptual Framework of Model 2

D. Multiple Linear Regression Results

Table 6. Anova Model 1 test results

Model	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Regression	*1.187.798*	*8*	*145.975*	*42.778*	*.000*
Residual	*375.312*	*110*	*3.412*		

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Total	*1.543.180*	*118*

In the F test in table 6 above, the sig value (P-Value) for model 1 is 0.000 < 0.05, which means that together the variables are leadership (X1), motivation (X2), organizational culture (X3), and Lecturer competence (X4) simultaneously influences lecturer discipline (Z).

Table 7. Anova Model 1 test results

Model	*Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*
Regression	*2.941.277*	*9*	*326.809*	*178.215*	*.000*
Residual	*199.883*	*109*	*1,834*		
Total	*3.141.160*	*118*			

Based on the F test in table 7 above, the sig value (P-Value) for model 2 is 0.000 < 0.05, which means that together the variables are leadership (X1), motivation (X2), organizational culture (X3), and Lecturer competence (X4) simultaneously influences lecturer performance (Y).

Table 8. Intervening test (Sobel)

Variabel	*Uji Sobel*		
	Sobel Test	*Prob (0,05)*	*Z hitung*
Leadership	*-0,957*	*0,338*	*0,957159*
Motivation	*2,390*	*0,016*	*2,390244*
Organizational Culture	*2,240*	*0,025*	*2,161592*
Lecturer Competence	*1,770*	*0,076*	*1,718889*

From table 8 above, it can be analyzed the influence of variables X1, So this shows that lecturer discipline is unable to mediate the relationship between leadership and lecturer performance. The Sobel test for motivation is 2.390, the probability value is 0.016 <0.05 and the calculated Z value is 2.390244, indicating that lecturer discipline is able to mediate the relationship between the influence of motivation on lecturer performance. The Sobel test for organizational culture is 2.240, the probability value is 0.025 < 0.05 and the calculated Z value is

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2.161592, indicating that lecturer discipline is able to mediate the relationship between the influence of organizational culture on lecturer performance. The Sobel test for lecturer competency is 1.770, with a probability value of 0.076 < 0.05 and a calculated Z value of 1.718889, indicating that lecturer discipline is able to mediate the relationship between the influence of lecturer competency on lecturer performance.

This research was conducted by identifying several factors that explain why leadership influences lecturer discipline. In the hypothesis about leadership according to (Panie et al., 2023) leadership partially influences the motivation of lecturers at the Bekasi City Polytechnic campus. In this research, there is an estimated negative value analysis on the leadership variable, which means that the higher the leadership, the more impact it will have on decreasing lecturers' discipline at work. Based on this analysis, it is necessary to be careful that implementing leadership that is too dictatorial will actually have an impact on reducing lecturer discipline. This is in accordance with research from (Zehir et al., 2012), namely leadership with the research title The effect of leadership and supervisory commitment to organizational performance. This research states that the leadership variable has a significant effect on the motivation of lecturers who work in companies.

The following research was also carried out by identifying several factors that explain why motivation influences lecturer discipline. In this analysis, lecturer motivation is very much needed in terms of education and teaching, research and community service. With high lecturer motivation, it will have a positive impact on students and with high lecturer discipline it can also provide added value for lecturers. In increasing student participation and interest in learning, as well as influencing their achievement results (Nurrahmaniah, 2019; Nurmala, Tripalupi, Suharsono & Ganesha, 2014). According to (Meithiana, 2017), lecturers who feel satisfied with their work tend to have high intrinsic motivation in providing meaningful and relevant teaching to students. This can trigger students' interest in learning, increase their involvement in the learning process and ultimately improve learning achievement. Victor Vroom's theory (Husniyawati & Wulandari, 2016) suggests Expectancy Theory which states that individual motivation to achieve high performance depends on three factors, including: hope, instrumentality and valence. According to Fahyuni & Istikomah (2016), lecturers in their context have hopes related to their belief that the work they do will get the desired results. Instrumentality is related to the belief that good performance will get desired rewards such as recognition, promotion and salary increases (Kadarisman, 2012). Valence according to (Husniyawati & Wulandari, 2016) is the personal value given to the reward.

In this research, we identified several factors that explain why organizational culture influences lecturer discipline. In the analysis of organizational culture, it is a behavior or action that can have an impact on the level of lecturer discipline. Organizational culture is a pattern of beliefs and expectations held by members of an organization. Organizational culture can influence a lecturer's attitude in educational & teaching activities, research and community service. Based on the results of the analysis, it shows that the higher the lecturer's perception of understanding organizational culture, the higher the lecturer's discipline. In the research hypothesis (Panie et al., 2023), it is proven that organizational culture partially influences the motivation of lecturers at the Polytechnic campus in Bekasi City. This is also supported by the results of research by Lok & Crawford (2004) which states that there is an influence of organizational culture and leadership style on job satisfaction and organizational commitment. This is also in line with Rongga's (2001) research that organizational culture can increase employee job satisfaction.

Next, identify several factors that explain why lecturer competence influences lecturer discipline. From the analysis in this research, it was found that the better the lecturer's competence towards the organization, the better the lecturer's level of discipline, conversely, if the lecturer's competence decreases, the lecturer's level of discipline will also decrease. The research results of Firdaus & Rama (2016) concluded that there is an influence between competence and employee work discipline at PT. National Pension Savings Bank (BTPN) Pekanbaru branch. Apart from that, this research is also similar to that carried out by Ahya (2016) who obtained the results that competence has a significant influence on teacher discipline at Raudlatul Hasaniyah Probilinggo.

Several factors in this research were carried out by identifying and explaining why leadership influences lecturer performance. From the analysis, it was found that leadership had no significant effect on lecturer performance. The more effective the leadership, the lower the lecturer's performance, and vice versa, the less effective the leadership, the higher the lecturer's performance. The results of this research are strengthened by research results according to (Maula, 2021) that leadership style has no effect on performance. Likewise, research results (Brahmasari & Suprayetno, 2008), (Syahputra, 2022), and (Sukmawati et al., 2020) state that leadership style does not have a significant effect on performance, this is because the leadership does not appreciate the opinions of the members. and make decisions without considering members' opinions.

This research was conducted by identifying several factors that explain why motivation influences lecturer performance. The research results have found a positive relationship between motivation and lecturer performance, where lecturers who have a high level of motivation will show better performance. Lecturers who are satisfied with their work are more likely to provide greater attention and support to their students (Kessi, 2019). This can increase student motivation and participation in the teaching and learning process, which in time will influence student academic achievement. Zairotun's (2019) opinion is that individual motivation to achieve high

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results depends on their beliefs about the relationship between work effort, performance and desired results. Nanda, Ambiyar, Wakhinuddin, Giatman, Muskhir & Setiawan (2022) strengthen the results of this research where lecturers who have high work motivation believe that the effort they put into teaching will result in good performance and contribute to student mathematics learning achievement.

Next, identify several factors that explain why organizational culture influences lecturer performance. The results of the analysis in this research show that organizational culture has a positive and significant effect on lecturer performance. In this case, it is in accordance with research (Panie et al., 2023) which states that organizational culture influences the performance of lecturers on campuses in the city of Bekasi, Indonesia. Researcher Yuniar (2017) believes that motivation can mediate the relationship between organizational culture and lecturer performance.

This research was conducted by identifying several factors that explain why lecturer competence influences lecturer performance. Competence is a result that is expected from an individual in an activity carried out. If the lecturer's competence is better, the lecturer's performance will be better, and vice versa, if the lecturer's competence is worse, the lecturer's performance will be worse. The results of this study are in accordance with several studies by Nasri et al. (2017) shows that competency simultaneously affects the performance of State Civil Apparatus in Binamu District, Jeneponto Regency. Research by Harudi et al. (2016) found that competency had a positive and significant impact on the performance of employees of the General Section of the Soppeng Regency Regional Secretariat.

IV. CONCLUSION

Based on the research results, it can be concluded that the results of the leadership analysis do not have a significant effect and have a negative relationship on lecturer discipline. This means that the hypothesis which states that leadership variables have a significant effect on lecturer discipline is not supported by empirical data and is rejected. The higher the level of leadership, the higher the level of lecturer discipline in the learning process. In contrast to the results of motivation analysis, organizational culture and lecturer competence have a positive and significant effect on lecturer discipline. The results of the leadership analysis did not have a significant effect on lecturer performance because they were not supported by empirical data and were rejected. For the results of the motivation analysis, organizational culture and lecturer competence have a positive and significant effect on lecturer performance. The results of calculating the intervening variable showed that the lecturer discipline variable as a mediator was unable to mediate the relationship between the influence of leadership on lecturer performance, while the discipline variable as an intervening variable was able to mediate the relationship between the influence of motivation, organizational culture and lecturer competence on lecturer performance.

ACKNOWLEDGMENTS

Thank you to the respondents, in this case, lecturers at East Java Private Universities who have taken the time to fill out my research questionnaire. I would like to express my thanks to University 45 Surabaya and Dr. University. Soetomo who has made this research useful for me and for the readers.

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