Increasing the Export Performance of Indonesian MSMEs' Leading Products in the Global Market in Supporting the Economy in 2023

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Abstract: This research activity aims to assist home-based businesses in an effort to improve their product marketability in the global market by improving several important things, including: improving raw materials, building distribution channels, managing sales networks, building their own brands for their products, improving the shape and quality of packaging, with good labeling so that the product can be accepted and able to compete abroad in a wider market. Through this study, researchers conducted interviews, and used research instruments to measure 73 business owners. The goal is that it hampers the process of increasing the export of its products to foreign markets, it turns out that with the results of the interviews it can be seen that there are 12 main variables or factors that must be mastered and/or improved. So that home-based business products can have better performance as desired by overseas buyers or consumers. The testing approach in data processing uses the Tau Kendall W Test combined with the Categorical Test, so that the estimation process can be carried out properly. Through the test approach model and interviews that have been conducted on 73 business actors, it can be seen that the 12 variables or factors stated in this research are the main keywords through improving input, process and product improvement outputs. Product changes can help change the buyer's perception that the products they buy are completely safe and comply with safety, health and material requirements, including parts of environmentally friendly materials.

Keywords: Tau-Kendall test, Categorical test, home business product, export product.

INTRODUCTION

The rapid development of business lately has made the growth of home-based businesses or home-based food industries, resulting in the growth of home-scale businesses becoming increasingly rapid everywhere. This phenomenon has been seen since the Covid 19 pandemic in early 2020. Many workers lost their jobs and the worsening economic conditions due to government regulations, i.e social distancing, made business conditions dim and many business owners closed. But behind that, many new businesses have sprung up, initially because each individual wants to survive. In fact, the outbreak of the pandemic has made many people desperate to run a business and most of these businesses are offered online. Until now the Covid 19 pandemic has been running for more than two years, making people have been trained to run businesses online. Running a business through online sales has finally become widespread everywhere, because that is the only thing that can be adopted when the situation is still not recovering and is still affected by the pandemic. The profits obtained are quite promising, so that the percentage of home business growth is increasing sharply, the condition of online sales is supported by the existence of social media, marketplaces, and so on. Of course, this makes it easier for business activities, especially those that use online sales, even lately more and more people are shopping for culinary products, supported by the presence of GoFood.
On the other hand, the presence of a pandemic has made most residents creative, because the supporting facilities to facilitate business activities are quite adequate, since the presence of OVO, Dana, GoPay, ShoopePay and so on makes the sales transaction process easier and smoother.

If viewed from the internal side of business activities, although technological developments are quite advanced and adequate, business owners need to pay attention to several things related to the management and development of their business. Especially the type of business whose products are related to production process activities.

**Literature Review**

An important aspect that is a concern so that the product can be accepted by consumers and customers and one day wants to upgrade to micro and small businesses is distribution channel, it means that the procurement of goods to consumers is guaranteed to run smoothly. Some important components that must be able to support, be implemented, have benefits as a driver, strength in opening market opportunities and security in several destination countries include:

1. **Build a good distribution channel to support the sales process.** Whatever the distribution channel, it must be managed and built properly. Distribution is a sales infrastructure whose function is directly related to procurement and sales activities. The better the distribution channel, it means that the procurement of goods to consumers is guaranteed to run smoothly.

2. **Manage the service network.** For businesses that rely on online sales, the ease of payment processes, prompt delivery to consumers, and product quality assurance as desired by consumers must receive special attention for business owners so that business owners get a good reputation from consumers and customers. Considering the present, 100% of sales turnover, 40% of which is supported by online sales.

3. **Must build own brand, for product brand or trademark through trademark rights management.** Businesses that are run under their own brand are far more reputable for running a long-term business and have better legality in the eyes of consumers, than products or trades without using a brand at all. A brand is a good promotion and marketing tool compared to other factors, and a brand is a product or trade identity that is legally guaranteed to exist. Nowadays, the process of managing trade or product legality tends to be easy because it is purely using online methods.

4. **Creating a sales network among business actors to avoid unfair competition.** At first it seemed difficult, but with the help of technology in the field of communication, the process became easy. The positive impact of the sales network is that fellow business actors can work together and not kill each other. Even business actors can exchange products or commodities between regions to support and assist the sales activities of each business owner.

5. **Quality of packaging, initially many home-based businesses run their business with the packaging as it is, as the business develops and the product is increasingly recognized, it is necessary to change the packaging to a better form, so that product quality, product content, product image will be better in the eyes of consumers.** And in changing the packaging, it must be taken into account to use environmentally friendly packaging or at least it can be recycled easily. The use of good packaging is also useful to avoid contamination of the contents, so that the product content can be guaranteed better and not harm consumers.

6. **Product labels, to create a market for future products, the use of labels can be the main support.** The label contains some important information for consumers as useful information for them to consider buying or not the product they choose. Important information for consumers contained on the label includes the identity of the owner and the location of the business, nutritional content, expiration date, content of raw materials and their accompaniments, location of repurchase location, name of distributor and so on. So it can be avoided the existence of expired products but
still circulating in the market. If this happens, it is clearly very detrimental to consumers and endangers their health.

7. Ownership of product certification. Product circulation in Indonesia so that it can be sold in the market freely and can be distributed, a product must have legal legality, forms of legality include P-IRT code certificates (home industry products), BPOM certification, and even Halal-MUI certification. Whatever the reason, a product that is widely circulated to consumers must have legal guarantees that the product is fit for consumption and safe for the health of consumers. For this reason, it is important for business owners or production actors to complete their products with a certification code. So it can be avoided the existence of expired products but still circulating in the market.

8. Many home-based businesses are getting better with their management processes, and in the end they are promoted to micro and small businesses and are even able to penetrate export markets to neighboring countries. If the eight things above have been well-maintained in the business development process, then when the product becomes a superior product, automatically when they try to penetrate the export market, they are ready to compete well and exist. With a change in a good direction, it is not difficult for a product with an inherent brand and identity to enter online markets such as the marketplace which is now increasingly being used as an alternative place for shopping by most residents, especially during the pandemic. Even though the economy is sluggish, sales activities are guaranteed to run smoothly. Only quality products are able to create a market, gain consumer trust and continue to exist in the eyes of consumers and customers. Products that are not able to compete eventually slowly disappear in the market because consumers find it difficult to accept, because these products are considered not of guaranteed quality and are considered inferior to competitors or other brands.

For home-based businesses whose products want to go global, the eight aspects above are very important to be developed in stages so that the product can turn into a superior product and be nominated for export-worthy products. In order for a product, especially home industry products to be accepted in the international market, several important steps must be carried out on an ongoing basis by business owners. This step must be taken so that the products produced are in accordance with the specifications demanded by foreign markets. Some of the aspects below must be fulfilled properly, planned in a focused manner, carried out with full concentration, and applied continuously by the owner, in the management process, and in the process of improving the product, among others as follows:

1. Adoption of Technology, as revealed by Pumza (2019), through a research proves that the creation of a reliable business, a product that has selling value and is of interest to the market, as well as a good attraction in the eyes of consumers, in the business management process, the owner must be able to use or adapt to relevant technological developments in the business field. So that the overall management process becomes more efficient and profitable. Considering that now everything is electronic, all applications are both web-based and mobile-based. With the adoption of better technology, it will contribute to the speed and accuracy of the business management process, unless the form of business is to maintain traditional values, it is certainly difficult to change into a modern one. The development of technology is difficult to contain, business owners can only adopt it, so that the owner's skills, production processes, communication and product improvement are not left behind by other business owners.

2. Digitization, in another study such as that conducted by Nuseir (2018) through his research results, he said that the process of managing a business is like planting trees, there is a continuous process and should not be ignored. The important processes in question are digitization in the field of transactions or payment models, ordering materials, disseminating information in marketing and promotional activities, all of which can be integrated into a web display and supported by the latest communication tools, all of which make it easier for business owners and consumers to interact
smoothly and well. The digitization process is able to provide outputs to consumers and business management processes in a better, faster and more accurate direction. This is what is needed in the process of developing a business today.

3. Product Innovation, the third aspect that is considered important in managing a business is the power to innovate. The explanation of this is based on research conducted by Anggraini, Marnis, and Samsir in 2014, business activities without innovation are impossible, because product lines must continue to grow in the long term. Innovation means that there are new products that appear, which are the outcome of the integration of other aspects, supported by the value of motivation and the process of adopting technology that increases the knowledge and insight of business owners. Product innovation also means that business owners are trying to improve customer satisfaction and the services that follow. With innovation, business activities are increasingly able to be sustainable.

4. System Development, there is one interesting thing from the research conducted by Hairuddin, Noor, and Kassim, through a study in 2012 they expressed an opinion from the research results that companies must be willing to invest some of their funds when the business is running well, for example building a web that creative, have a business network, create a business group, manage brand rights, and other certifications. Because all forms of investment cannot be measured in money but have an extraordinary contribution to business management.

Creativity, the fifth aspect, an aspect that business owners and employees cannot ignore. According to research conducted by Darwanto in 2013, business owners and employees must have the same mission in developing business activities. Creativity can arise if business owners master information sources, update information, good communication networks, understand the environment and changes, always understand consumer and market desires, understand technological developments. Have a high curiosity and sensitive to changes in consumer tastes.

5. Quality of Business Management, based on research conducted by Nowakowska, Kowalczyk, & Wojtaszek, in 2018, a superior product can be created if in all aspects of the company’s internal or business activities it has developed well and business activities run efficiently. This condition can be achieved if the business is well established, and everything is well integrated with each other. One individual to another supports each other and contributes their thinking skills to improve business management changes in a more advanced direction. Many world-class businesses, initially from small companies, but because they are managed well, eventually develop in a good direction.

6. Motivation, in other studies such as that conducted by Sidharta, & Suryadana, 2019 and also research conducted by Hamdan in 2019 expressed an opinion from the results of his research that whatever the condition of a business really depends on the owner's desire to develop or remain mediocre. So that changes in the motivation of owners and managers become the main lifeline for changing business conditions, in the direction of progress or vice versa. Motivation is a shadow, a change of thinking, something that is imagined to be achieved. With motivation, the mindset and behavior will change according to what is desired. So that the change in the way of thinking, the change in behavior, the source is that the mind finally turns into motivation. Without a change in the value of motivation, there will be no change at all.

7. Business Network, the eighth aspect is the importance of the network, according to research conducted by Chukwujioke in 2018, and also research by Gronum, Verreyenne, and Kastelle, in 2012 they proved that the network is a means that functions to connect one interest and purpose with other interests in an integrated manner in achieving a condition or benefit. Through the network, whatever the business owner wants will be easier because of the connectedness of the business owner with the outside world or the environment at large, the network also connotes the fluency of important information needed for an activity or in an effort to achieve certain goals in the
business management environment. Through the network, all forms of consideration and decisions can be carried out more perfectly because of the collection of more complete information. Of course, this condition is very supportive of the business development process.

8. Financial Management, a researcher named Lussak et al in 2019, conducted a research in 2019 and in that study, generally companies or businesses that are able to develop well are all businesses that are able to manage their financial strength well. Each expenditure of funds must have clear benefits, the results of a similar study were also stated by Utomo, & Kaujan in 2019 also conducted a study, the results of which stated that finance in business activities is the main driving force for financing all processes and activities in the future. Future in broader accounting principles, business financing matters must be strictly separated from all personal interests so that financial management is always in sound condition.

9. Business Development, the tenth aspect which is also important and the continuation of long-term business activities as revealed from the research results of McAdam et al 2014, then the results of research by Grabowski, & Stawasz, 2017, and based on the results of research that has been applied by Marhamat, Tadayoni, & Zali, in 2019, the three research results said that the level of progress in business management was marked by a development. Business development can take the form of product development, service development, and business location development. The more advanced a business is marked by the addition of new places of business in various different locations. This shows the company or business being run has made progress. The development of businesses in various locations means that their products can be well received by consumers, and their customers continue to grow. If you want to take a concrete example, there are minimarkets like Indomart and Alfamart in Indonesia, the numbers continue to grow, indicating that their presence is well received by the community and their presence is considered important and useful. Their presence in Indonesia is so dominant that almost every inch of land in residential areas, villages and even villages can be present properly. Business development demonstrates internal strengths in line with external demands.

10. Supply Chain, research conducted by Theyel (2013) through the results of his research said that one important thing that has a strong contribution to the development of business activities is the supply chain. The supply chain in a simple sense means that if they move backwards they have suppliers of goods or materials that meet the specifications of business needs. With continuous assurance of suppliers, business activities can still be carried out in the long term. While the supply chain in the future is the establishment of good partners with consumers so that various products produced by companies or businesses can always be accepted and continue to be sold or favored by consumers. Furthermore, it is said that quality products and have added value are always welcomed by the market. The market or the consumer simply rejects the problem product and has no fix solution. Take a look at the example of a traditional drink, that is milk made from soy, which used to be underestimated and packaged in a very traditional way, but now thanks to a modern packaging model, this type of drink is famous and popular all over the world. The supply chain in a business is like a spider's web, one web cannot be broken, if it happens it will disrupt the whole system in business activities. The scarcity of supply of raw materials and the unavailability of alternative raw materials, capable of killing and stopping business activities and the loss of products in the market, are finally forgotten by consumers. Distribution network, delivery, if disturbed then the impact will be felt for the internal business because the product cannot be distributed properly, as a result the product becomes scarce and makes consumers disappointed.

11. Competitive Advantage, the results of research by Qosasi et al (2019), show that a business can survive, survive and develop in the future if it has strengths in all fields which is carried out in an evolutionary and careful manner. Excellence is created because of one of the factors, among others, superior in product, superior in service, superior in technology, superior in process efficiency, excellence in the delivery process and various things that are in accordance with the
demand or desired by consumers. An ideal condition that is difficult to achieve, but due to management and changes that focus on consumers, something that is difficult can have the impact of creating a specific advantage that other companies may find difficult to match. This condition can be realized if the work culture and corporate culture or culture in running a business are managed and strictly regulated through a work process that never breaks and always looks for solutions to make improvements. Competitive advantage can be in the form of how to improve a product and its types of services without being matched by other parties in the long term. In order for product improvement to be successful, all matters related to the refinement process are addressed from time to time.

METHODOLOGY

In this research activity, the subject is home-based business actors whose products have successfully penetrated the export market to several neighboring countries. The total sample is 73 business owners with various types of goods, that is food, beverages, handicrafts, and herbal medicines. So that these 73 business owners were selected as research samples based on predetermined criteria. This study includes business owners as respondents in four leading cities on the island of Java, that is: Bandung, Yogyakarta, Semarang, and Surabaya. Four cities have home-based business owners who are the most successful in exporting their products overseas as their market expansion. Business owners are individuals who have repeatedly participated in seminars and training activities, so they are all members of the WhatsApp group. So that business owners who are members of this WhatsApp group become the most ideal data collection subject. The data collection process uses the Google Form application which is shared using the WhatsApp group. The data collection process lasted for two weeks. The four response scales are 1=very important, 2=important, 3=less important, and 4=not important.

As discussed in the research review section above in the literature review, the research variables used in the data collection process using Google Form are twelve variables consisting of Technology Adoption, Digitization, Product Innovation, System Development, Creativity, Business Management Quality, Motivation, Business Network, Financial Management, Business Development, Supply Chain, and Competitive Advantage. Most of the variables come from the results of other researchers’ research.

As the basis for making conclusions and decisions, data processing and analysis tools use two methods at once. The first is the Tau-Kendall analysis method, which aims to determine the level of normality of the data with a normal distribution or not. The second method of analysis is to test whether there are differences in performance in export activities carried out by home business owners, so the second method used is the Categorical test. (Sugiyono, 2015).

RESULTS AND DISCUSSION

Exporter Profile

Based on the results of data collection for two weeks on 73 business owners in four cities in Java and on average they have been exporting their products for three years. This evidence is sufficient to be used as proof of the ability of business owners when they explore and look for opportunities to export their products, and at the same time successfully export products to foreign markets with the aim of certain countries that are considered to have appropriate demand and purchasing power for the products of home-based business actors. shown in detail in table 1 below. In increasing the opportunity and export value of home business or micro business products in Indonesia, besides having to pay attention to several regulatory provisions that apply in Indonesia, business actors must also be able to understand and comply with the conditions required in export destination countries. This is intended so
that when products or commodities from Indonesia enter the market of the destination country, they are no longer subject to or violate all forms of regulations that apply there, so that Indonesian products or commodities are safe and can be accepted by foreign markets.

**Table 1.** Number of exporters of home-based business products and types of products in four cities located in Java

<table>
<thead>
<tr>
<th>No.</th>
<th>City Name</th>
<th>Number of Business Owners</th>
<th>Types of Products</th>
<th>Export Destination</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Bandung</td>
<td>21</td>
<td>Yogurt, Banana Chips, Shredded Cob, Fried Sambal, Muslim Dress.</td>
<td>Hong Kong, China, Egypt, Japan</td>
</tr>
<tr>
<td>2.</td>
<td>Yogyakarta</td>
<td>16</td>
<td>Coconut Sugar, Nutmeg Powder, Sweet Clove Flower, Vanilla Fruit, Swallow’s Nest</td>
<td>China, Singapore, Japan, Laos, United States</td>
</tr>
<tr>
<td>3.</td>
<td>Semarang</td>
<td>10</td>
<td>Batik, Convection, Leather Shoes/Bags, Processed Products</td>
<td>Taiwan, Jordan, France, South Korea</td>
</tr>
<tr>
<td>4.</td>
<td>Surabaya</td>
<td>26</td>
<td>Shrimp, Processed Food, Coffee, Tea, Jewelry, Furniture</td>
<td>Hong Kong, China, Egypt, Japan, Taiwan, Jordan</td>
</tr>
</tbody>
</table>

*Source: Data Processed, December 2022.*

Table 1 above shows the variety of products exported to several countries and these products are the leading commodities of the four cities. The success of home-based business products in penetrating the export market is due to the existence of a national export service center and export development agency, which is located in all major cities in Indonesia. Through this institution, business actors get useful information related to the opportunities for the products they want to export. The activity they get is a process of mentoring and consulting to find out the standards that must be met by business owners, so that their products can be accepted in export destination countries. The services that can be obtained by business actors regarding the destination of export countries are in the form of one stop service in the form of study of export opportunities, utilization of free trade agreements, assistance in product standardization, promotional services, export implementation procedures, and consultation on all forms of problems encountered. Through this activity, business owners will be greatly assisted in efforts to expand overseas markets through product export activities. Each business actor in the four cities each has different strengths and advantages in each of their products. However, regardless of the shape and type of their products, of course, each export destination country has different needs or requests according to the needs of their country. Sometimes you two countries or several countries exchange their commodities, this has to be done because each country has different commodities as a measure of strength in international trade.

**Description of Respondents’ Answers**

This research is a research using qualitative data approach. Actually qualitative data cannot be measured because it does not have a unit of measurement that can be used to represent the calculation process. However, because the analysis process requires numerical data, an appropriate unit of measurement must be made. Because the data collection tool uses a questionnaire or google form, the results of calculating the data unit are considered to be the most representative of the data collection process (Sugiyono, 2015). The process of collecting data in this study is to identify, measure, and process respondents’ perceptions in an effort to provide an assessment of the questionnaire used. Perceptions measured using a questionnaire are a reflection of the answers to research variables that have a close relationship with the process of export activities. Business actors in Indonesia, according
to the results of the interviews the research team obtained, generally still need some improvement in facilities built or provided by the government. It is the duty of the central government and regional governments to always be able to provide various needs to be able to support export activities of products and commodities produced by business actors in Indonesia. Why do they have such a perception, because other countries that are Indonesia’s competitors overseas are always trying hard to improve quality, taste, and all other conditions according to overseas market demand. This is a long-term task of the Indonesian government which must help the strength and competitiveness of Indonesia's local products to slowly improve their capabilities and quality according to the needs of these foreign markets.

Figure 1 below shows the large percentage of needs and expectations of Indonesian business actors for improvement in elements that must be improved by the government in an effort to encourage progress and development of business actors in producing export-competitive commodities.

![Figure 1. Accumulation of respondents' answers in four cities on research variables in measuring export performance](source.png)

**Source:** Data Processed, November 2022

The results of the accumulation of respondents' answers as shown in Figure 1 above, obtained the three highest answers in percentage terms which indicate the key to success for business actors so that their products are able to enter the international market or are suitable for export. The variables considered important by respondents in four cities, that is 89.6% are Business Network, then 87.8% are Product Innovation, then 85.4% are Technology Adoption. While the lowest answer is Competitive Advantage, only 49.3%. According to them, Competitive Advantage is not an activity that can be created by anyone but is an outcome that arises from the implementation or activities of the previous eleven variables. Although the answers of 73 respondents varied as shown in Figure 1, in general the answers tended to be dominant on certain variables. This means that the experience of business actors so far has been successful in carrying out export activities because it is dominated by the three variables described above. These three variables play a very dominant role, while other variables act as complements or supporters in the effort of the product's ability to penetrate the export market.

**Tau-Kendall\(\tau\) Test Report**
Can the answers of the respondents above in figure 1 be used as a reference that the ability of home-based business products to penetrate the export market is only based on these three variables? The provisional answer as a conjecture can indeed be justified, but for further verification of its veracity waiting for the results of the Categorical test. The dominance of the variables chosen by the respondents will be verified based on the results of the Categorical test. Furthermore, the truth can be determined or answered after seeing the results of the Categorical test. While the results of the Tau-Kendall test are only to know or see, the respondents’ answers to the twelve variables used are in accordance with the normal curve or not. If the results are in accordance with the normal curve, the results of the Categorical test can be used as the basis for decision making, that is the ability of business actors in the four cities to have the same performance or not in the field of export sales of their products.

The results of the Tau-Kendall test can be seen in the table below. Through the display of the results of the analysis, we can explain about several cities that we have used as research samples, especially regarding the mean rank values that appear. For the cities of Yogyakarta and Semarang, they have an almost identical mean rank of 2.72, meaning that these two cities have strong export-worthy commodity yields and are likely to be in demand in their export destination countries or cities. Meanwhile, two other cities, such as Bandung and Surabaya, are slightly underperformed regarding the ability of their commodity opportunities to respond to market interest and demand.

Table 2. Average respondents' answers in four cities to research variables

<table>
<thead>
<tr>
<th>City Name</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bandung</td>
<td>2.44</td>
</tr>
<tr>
<td>Yogyakarta</td>
<td>2.72</td>
</tr>
<tr>
<td>Semarang</td>
<td>2.72</td>
</tr>
<tr>
<td>Surabaya</td>
<td>2.11</td>
</tr>
</tbody>
</table>

Tabel 3. Tau-Kendall İİ Test Result

<table>
<thead>
<tr>
<th>Test Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>Kendall's W&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chi-square</td>
</tr>
<tr>
<td>df</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
</tr>
</tbody>
</table>

<sup>a</sup>. Kendall’s Coefficient of Concordance

To be able to read the results of the Tau-Kendall test above in table 3. Then decision making is based on the following hypothesis: (Sugiyono, 2015):

1. **H₀**: If the error rate value is above 5%, then the respondent's answer data on 12 variables is considered to have an abnormal distribution, so that the next test process cannot be continued using the Categorical test.
2. **Hₐ**: If the error rate value is below 5%, then the respondent's answer data on 12 variables is considered to have a normal distribution, so that the next test process can be continued using the Categorical test.

Decision rule: because the value of the error rate (Asymp. Sig) in table 3 above is 0.036 (3.6%) < 0.05 (5%) it was decided to accept Hₐ and reject H₀, which means that the respondents’ answer data on 12 research variables in the questionnaire is considered to have a normal distribution, so that the next test process can be continued using the Categorical test. In other words, the answers given by respondents to the 12 research variables in four cities were generally normally distributed. So that the
12 research variables are considered equally important by respondents in measuring the export performance of home-based business products. It can be further explained that the application of 12 research variables that is Technology Adoption, Digitization, Product Innovation, System Development, Creativity, Quality of Business Management, Motivation, Business Network, Financial Management, Business Development, Supply Chain, and Competitive Advantage cannot be carried out separately because is an integration and this integration leads to the competitive advantage of the exported product. The emergence of competitive advantage or product competitiveness is a manifestation of the application of the 11 previous research variables. So that competitive advantage cannot be created in any way, it can only be applied through if the export product business actor has properly implemented the other 11 variables that is Technology Adoption, Digitalization, Product Innovation, System Development, Creativity, Business Management Quality, Motivation, Business Network, Management Finance, Business Development, Supply Chain. If the 11 research variables are able to be applied properly by business actors, some or almost all of the products owned by business actors have been able to enter the export market. Because there are actually 73 business owners in the four cities on the island of Java, many of their products have been well received in foreign markets as mentioned in table 1 above. To be clear, the average answer of 73 business people in four cities in Java can be seen in the following picture. The eleven point indicators that have been described in this research methodology will certainly provide different strengths for each city that is used as a research sample, their value and strength can be seen in the four quadrants that appear in the Categorical test results on the following page. Through the appearance of these quadrants and their elaboration, we can make a decision or picture of how the opportunities and performance of micro business activities are in each city.

Figure 2. Percentage of answers on average 73 respondents to 12 research variables

Source: Data Processed, November 2022

Based on Figure 2 above, it shows an overview of the perceptions of 73 business owners who have responded or assessed 12 research variables on average in four cities in Java via google form. Each group of respondents' answers above have different connotations from each other from the answer scale used in the questionnaire. 73.52% of respondents gave very important answers to 12 research variables, which means that it shows a condition for them, that is that they have successfully exported 100% of their products abroad and their export activities are almost without problems. Meanwhile, the other 22.19% stated that it was important, meaning that most of their products were successful in export activities, but there were still a few that were not 100% successful and there were still obstacles. There are some respondents who said the 12 research variables were less important,
the percentage value was 3.21%, which means that overall, their export activities have not produced the results they expected, it could be because their export activities have not been as successful as other business actors and the value of their exports, get is not 100% satisfying, although some of their products have been well received by the market. And lastly, a small number of respondents (1.08%) stated that the 12 research variables were not important in their product export activities. This is understandable because only a small part of the products they export abroad can be accepted by foreign markets, and most of the others are still in the exploration stage or are still in the stage of looking for opportunities. So that the 12 research variables above they have not felt the benefits or have not run perfectly. However, export activities are like a hierarchy of activities, carried out gradually, so the results cannot be felt immediately. This is exactly like discussing the product life cycle, the initial introduction to consumers, the level of consumer appreciation is still small, and this activity costs a lot of promotion. But over time when the product has begun to be accepted by consumers, slowly the sales figures have crept up.

Categorical Test Report

After carrying out the Tau-Kendall test above, and the results are significant, then the following step, the respondent's answer data is then tested using the Categorical test with the following results as shown in the image below. The results of the Categorical test are very simple, but when explained in detail they are full of meaning. On the other hand, the results of this test provide a clearer picture of the position of several cities in the quadrants that have been formed, where each quadrant has a special meaning regarding the strengths of each city in terms of their export activities. Think of the four quadrants that appear as four islands or four opportunities regarding the strength of the selling value or the quantity of demand for each city's commodity. The more it moves to the left (the direction of movement is counterclockwise), the more visible the amount of commodities produced in these cities is regarding the economic strength that can be achieved in the export destination countries. Quadrants that do not contain city names mean that export opportunities in destination countries do not exist or originate from the four cities sampled.

![Figure 3. Categorical test quadranization results on export performance conditions entrepreneurs in four cities in Java](image)

Through Figure 3 above, it can be explained that the Categorical test results shown in Figure 3 above is counterclockwise. Quadrant 1 is in the upper right position, indicating products that excel in export activities. Shifting to the left is the 2nd quadrant, it means that in this 2nd quadrant the product is still considered superior but the market share of the product is not as big as the product in the 1st
quadrant. And so on, for the 3rd quadrant and 4th quadrant. It appears that four cities are in the same quadrant position or their position is gathered in one quadrant, this means that 73 business actors in four cities in Java have the same strength, advantage or performance in exporting their products. So that in four cities in Java, that is Bandung, Yogyakarta, Semarang and finally Surabaya, business actors have the same ability to export their products, so they can be considered to have the same performance, even though their products are different in each of these cities. The competitive advantage of the four cities in Java as seen in quadrant 1 is supported by variables including technology adoption (variable 1), then supported by product innovation (variable 3), then also supported by business networks (variable 8). In conclusion, because business actors in four cities are in one quadrant position, it can be concluded that they all have advantages in their activities and product management in the fields of technology adoption, product innovation, and good business networks. With these three research variables, their products are successful in export activities and are able to be accepted in foreign markets as shown in table 1 which has been discussed above. While other research variables that appear in quadrant 1 are considered as supporting variables or supporting the success of export activities, that is the process of implementing digitization of business activities (2nd variable), then system development, especially business management information systems (4th variable), and the last is good financial management (variable 9). While the research variables in other quadrants are considered not important or have no role? These variables are considered as trigger variables as shown in quadrant 3 and quadrant 4 in Figure 3 above. The items or indicators listed in the Categorical test results quadrant above are an absolute necessity that can be enjoyed by business actors so that they are able to improve their operational business activities and are able to improve their managerial strength when they have to face global competition when products or commodities are foreign or destination market.

CONCLUSION

After discussing and elaborating the results of the Tau-Kendall test and the Categorical test, it was then concluded that through testing activities using the Tau-Kendall test, the data used in research activities were the answers from 73 business actors in Java who had exported their products abroad, the result is that the data has a normal distribution, so that the next test process in the form of a categorical test can be carried out using the normally distributed data. The data can be normally distributed, reflecting that respondents in answering each other's questionnaires have almost the same perception or understanding of the 12 research variables that have been presented in the process of filling out the questionnaire. The results of the second test using the Categorical method reflect the results of the four cities in Java, that is Bandung, Yogyakarta, Semarang, and Surabaya which are in the 1st quadrant, meaning that 73 respondents in the four cities are considered to have the same export performance. They are considered to have the same export performance because they are considered able to apply 12 research variables well in managing their business so that they are able to create superior products in export activities. In the next step, the level of success or success of these 73 export players in Java in penetrating the export market can be used as a good business management model for other home-based business actors in other regions that have not been able to penetrate the export market so far. Although in Indonesia there is already a special institution that focuses on assisting home-based business actors in an effort to explore export opportunities for their products.

To help business actors, especially in Indonesia, who have not been able to penetrate the export market, a network is needed between them so that they can communicate more easily. The future impact that can be felt is the creation of mutual assistance between them in providing important information related to the products they produce.
Acknowledgments: The author would like to thank all stakeholders, and those who have helped, during the data collection process, the analysis process, so that this research activity can be completed properly.

Conflicts of Interest: There is no conflict of interest in the writing of this article, either between fellow authors or with outside parties as research partners or other parties who contribute.

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