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THE IMPACT OF ARTIFICIAL INTELEGENC, STRATEGY BUSINESS AND QUALITY PRODUCT TO ORGANIZATION BUSINESS

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Abstract

This study evaluates the relationship between organizational culture, business strategy, and organizational performance in companies in Jakarta, Indonesia, as the largest tourism industrial area in ASEAN. The study highlights that organizational culture that includes discipline, innovation, and a clear division of authority, as well as a business strategy that focuses on vision, mission, tactics, and marketing, has a significant influence on organizational performance, as measured through growth, customer satisfaction, and marketing effectiveness. Of the 384 respondents, the results showed that organizational culture and business strategy significantly influenced organizational performance, both individually and collectively. In addition, this study also analyzes the role of artificial intelligence (AI) and product quality on the performance of Micro, Small, and Medium Enterprises (MSMEs). Using SPSS for analysis, the results show that AI has an influence of 85%, product quality by 75%, and the combination of the two contributes 80% to the performance of MSMEs, with the remaining 20% influenced by other factors not analyzed in this study. These findings underscore that higher AI adoption and improved product quality significantly improve the performance of MSMEs, providing a positive projection for the growth of small businesses in the community. This research makes an important contribution to understanding how organizational culture, business strategy, and technology and product quality can be the main driving factors in improving the performance of organizations and MSMEs, especially in the tourism and small business sectors in Indonesia.

Keywords: Artificial Intelligence, Quality Product, Performance of Micro Business Units

1. Introduction

Artificial intelligence (AI) is the ability of a digital computer or controlled by a computer or robot to carry out its tasks, this is associated with intelligent beings that are often used in system development projects that are endowed with the characteristics of human intellectual processes, such as the ability to reason, find meaning, generalize or learn from past experiences, since the development of digital computers in the 1940s, it has been proven that computers can be programmed to perform complex tasks such as finding proof of mathematical theorems or playing chess proficiently, but despite advances in computer processing speed and human capacity in broader domains or in tasks that require a lot of knowledge every day and can even help in small-scale business processes such as home industries or small micro business units.

Figure 1. AI Generative in Global Industry

Table 1. Criteria for MSMEs PP Number 7 of 2021

| Classification | Business Capital Criteria | Annual Sales Result Criteria |
|----------------|---------------------------|------------------------------|
| Micro | Micro ≤ 1 Billion Rupiah | Rupiah ≤ 2 billion Rupiah |
| Small | 1-5 Billion Rupiah | 2–15 Billion Rupiah |
| Medium | 5–10 Billion Rupiah | 15–50 Billion Rupiah |

Micro, Small and Medium Enterprises (MSMEs) are one of the factors for the sustainability of a country's economic development. MSMEs have a major impact on Gross Domestic Product (GDP) and reducing unemployment. MSMEs represent a framework of entrepreneurial initiative and free entrepreneurship, important elements that determine a competitive economy (Cicea et al., 2019).

Despite the large role of MSMEs in the sustainability of a country's economy, the fulfillment of basic needs is still questionable. The matter of basic needs is also related to the missing middle phenomenon found in the structure of Indonesian MSMEs, namely micro businesses that are the most dominant compared to small and medium businesses. The fulfillment of these basic needs can make micro businesses move up a class to become sustainable small businesses to become home industries.

These basic needs when met result in increased performance of MSMEs. This study is useful for entrepreneurs in their efforts to find the most appropriate way to improve organizational performance in the context of limited resource needs (Cicea et al., 2019)

2. Theoretical Background

According to Zulfikar Hardiansyah in kompas.com, the benefits of Artificial Intelligence in everyday life are quite helpful, especially for the development of small businesses, including: increasing productivity where AI has the ability to do tasks to increase user productivity, minimize work errors, the benefits of AI can also automate work in data collection, data entry, email responses, software testing and others, so that

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it is more time efficient, AI is also useful for conducting analysis in understanding and extracting relevant data and making it easier to make decisions.

Quoted from Forbes AI can help in collecting and summarizing useful information quickly, with that capability AI can be used to facilitate decision making, AI can also save time and resources to do tasks by understanding data and automating work, so that it is completed faster, AI can also process text according to commands entered by users such as ChatGPT, AI can also process images automatically and provide recommendations analyzing correlations between data and recognizing patterns so as to provide recommendations to its users.

According to Irzan, the use of AI technology by MSME businesses can provide various benefits and advantages, ranging from marketing benefits to increasing productivity and business efficiency which has an impact on revenue. Irzan shared his opinion regarding the benefits of using AI technology in MSME businesses. "AI can help MSMEs in terms of marketing by beautifying sales images, creating attractive product captions or descriptions, and even creating visual marketing assets using Generative AI tools. AI can also help MSMEs in increasing business productivity and efficiency, which of course can have an impact on increasing revenue and profit." Irzan explained.

In addition, AI can help MSMEs improve their operational efficiency and business productivity. "According to McKinsey research, the use of Generative AI tools can increase the productivity of a division in an organization by 35-55%," Irzan added.

By utilizing AI for work automation, the time and resources available can be allocated to other more strategic activities. In addition to what has been mentioned, AI technology can also help business people in making the right business decisions and planning better business strategies.

3. Methods

This type of research is quantitative. Primary data is used in this study. The collection was carried out by distributing online questionnaires to all respondents who agreed to provide information. A 5-point Likert scale was used as a research method. In sampling, this study used the convenience sampling method, namely information was collected from members of the population who were easy and could provide the information (Sekaran and Bougie, 2013: 248). A sample of 374 respondents was selected because it was considered to represent the population being studied. MSMEs in provinces in Indonesia that meet the criteria for business capital or annual sales results according to PP Number 7 of 2021 were selected as samples in this study. Of the 374 respondents, 96 were selected as research sampling using Lameshow's theory.

3.1 Respondent Characteristics

The results of data processing revealed that the majority of respondents in this study have a type of business operating in the culinary sector with a total of 150 respondents and a percentage of 38.5%. The age of the respondents' businesses is dominated by less than 5 years with a total of 118 respondents and a percentage of 31.6%. The number of workers in the respondents' businesses is dominated by more than 15 people with a total of 137 respondents and a percentage of 36.6%. The respondents' business capital is dominated by less than or equal to 1 billion rupiah or is classified as a micro business in accordance with PP Number 7 of 2021 with a total of 227 respondents and a percentage of 60.7%. The respondents' annual sales are dominated by less than or equal to 2 billion rupiah or is classified as a micro business in accordance with PP Number 7 of 2021 with a total of 197 respondents and a percentage of 52.7%.

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3.2 Research scheme

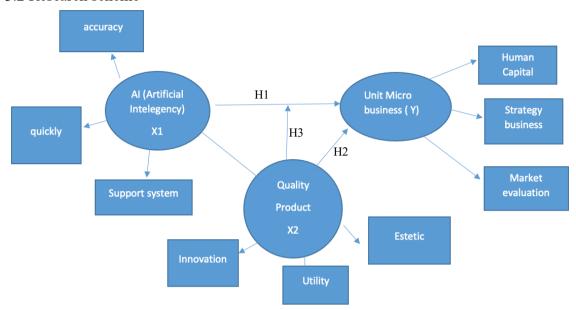


Figure 2. Conceptual Framework

3.3 Hiphothesis

- 1) Is there any influence between artificial intelligence and the development of micro business units in Indonesia?
- 2) Is there any influence between artificial intelligence and the performance of micro business units in Indonesia?
- 3) Is there any influence between artificial intelligence and the development and performance of micro business units in Indonesia?

4. Results and Discussion

Based on the calculation results of SPSS version 25, the calculation results are as follows:

Table 2. Artificial Intelligence (X1)

| Dimension | Items | Correlation | Sig. | Information | Alpha Cronbach | Information |
|--------------|-------|-------------|-------|-------------|-------------------|-------------|
| | X1.1 | ,918** | 0,000 | Valid | | |
| A 221172 211 | X1.2 | ,806** | 0,000 | Valid | ,912 | Reliable |
| Accuracy | X1.3 | ,905** | 0,000 | Valid | ,912 | Kenable |
| | X1.4 | ,942** | 0,000 | Valid | | |
| | X2.1 | ,745** | 0,000 | Valid | | |
| | X2.2 | ,748** | 0,000 | Valid | | Reliable |
| Quickly | X2.3 | ,780** | 0,000 | Valid | ,758 | Kenable |
| | X2.4 | ,772** | 0,000 | Valid | | |
| | X3.1 | ,798** | 0.000 | Valid | | |
| Support | X3.2 | ,805** | 0,000 | Valid | 775 | Reliable |
| System | X3.3 | ,801** | 0,000 | Valid | ,775 | Renaule |
| | X3.4 | ,689** | 0,000 | Valid | | |

Source: Research Results 2022

Table 3. Quality product (X2)

| Dimension | Items | Correlation | Sig. | Information | Alpha Cronbach | Information |
|-------------|-------|-------------|-------|-------------|-------------------|-------------|
| | X1.1 | ,918** | 0,000 | Valid | | |
| Innovation | X1.2 | ,806** | 0,000 | Valid | ,912 | Reliable |
| Illiovation | X1.3 | ,905** | 0,000 | Valid | ,912 | |
| | X1.4 | ,942** | 0,000 | Valid | | |
| | X2.1 | ,745** | 0,000 | Valid | | Reliable |
| T 14:1:4 | X2.2 | ,748** | 0,000 | Valid | | |
| Utility | X2.3 | ,780** | 0,000 | Valid | ,758 | |
| | X2.4 | ,772** | 0,000 | Valid | | |
| Esthetic | X3.1 | ,798** | 0.000 | Valid | | |
| | X3.2 | ,805** | 0,000 | Valid | 775 | D 1: 11 |
| | X3.3 | ,801** | 0,000 | Valid | ,775 | Reliable |
| | X3.4 | ,689** | 0,000 | Valid | | |

Source: Research Results 2022

Table 4. Performance Unit Micro business

| Variable | Indicator | Indicator | Loading | Ave | Sqrt Ave |
|------------|-------------------|-------------|---------|---------|----------|
| | | X1.1 | 0,732 | 0.751 | 0.966602 |
| | Dissiplins | X1.2 | 0,756 | 0,751 | 0,866603 |
| | Discipline | X1.3 | 0,755 | | |
| | | X1.4 | 0,761 | | |
| Human | | X2.1 | 0,752 | 0.7515 | 0.066901 |
| Capital | Innovations | X2.2 | 0,750 | 0,7515 | 0,866891 |
| | Illiovations | X2.3 | 0,743 | | |
| | | X2.4 | 0,761 | | |
| | | X3.1 | 0,762 | | |
| | Clear division | X3.2 | 0,810 | 0,75325 | 0,8679 |
| | of authority | X3.3 | 0,721 | 0,73323 | 0,8679 |
| | | X3.4 | 0,720 | | |
| | Visions & mission | Z1.1 | 0,805 | 0,78975 | 0,888679 |
| | | Z1.2 | 0,793 | 0,78973 | 0,000079 |
| | | Z1.3 | 0,756 | | |
| | | Z1.4 | 0,805 | | |
| | | Z2.1 | 0,756 | | |
| Strategy | Strategy & | Z2.2 | 0,782 | 0,7845 | 0,88572 |
| Business | tactics | Z2.3 | 0,766 | 0,7643 | 0,88372 |
| | | Z2.4 | 0,834 | | |
| | | Z3.1 | 0,804 | | |
| | Marketing | Z3.2 | 0,746 | 0,71225 | 0,843949 |
| | Marketing | Z3.3 | 0,748 | 0,71223 | 0,843343 |
| | | Z3.4 | 0,551 | | |
| | | Y1.1 | 0,817 | | |
| Market | Growth | Y1.2 | 0,825 | 0,754 | 0,868332 |
| Evaluation | Growth | Y1.3 | 0,698 | 0,734 | 0,000332 |
| | | Y1.4 | 0,676 | | |

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| | Y2.1 | 0,747 | 0.75025 | 0.970776 |
|--------------|------|-------|---------|----------|
| Customer | Y2.2 | 0,799 | 0,75825 | 0,870776 |
| satisfaction | Y2.3 | 0,768 | | |
| | Y2.4 | 0,719 | | |
| | Y3.1 | 0,706 | | |
| Market share | Y3.2 | 0,788 | 0,72725 | 0,85279 |
| Market share | Y3.3 | 0,767 | 0,72723 | 0,83279 |
| | Y3.4 | 0,648 | | |

Source: Research Results 2022.

Analysis regression of artificial intelligence and quality product variable to performance unit micro business

Table 5. Model Summary

| Туре | R | R Square | Adjusted R Square | Std. An error in the Estimate | | | |
|---------------------------------------|-------|----------|----------------------|-------------------------------|--|--|--|
| 1 | ,399a | ,159 | ,157 | 4,514 | | | |
| a. Predictors: (Constant), innovation | | | | | | | |

Table 6. ANOVA

| | Type | Sum of Squares | Df | Mean Square | F | Sig. | |
|--|-------------------|-----------------|-----|-------------|--------|-------|--|
| | Regression | 1532,747 | 1 | 1532,747 | 75,219 | ,000B | |
| 1 | Residual | 8110,093 | 398 | 20,377 | | | |
| | Total | 9642,840 | 399 | | | | |
| a. Dependent Variable: performance unit micro business | | | | | | | |
| b.] | Predictors: (Cons | tant), accuracy | | | | | |

Table 7. Coefficients

| Туре | | Unstandardized Coefficients | | Standardized Coefficients T | | Sig. | |
|------|--|--------------------------------|------------|-----------------------------|--------|------|--|
| | | В | Std. Error | Beta | | | |
| 1 | (Constant) | 19,750 | 1,971 | | 10,022 | ,000 | |
| | Support system | ,443 | ,051 | ,399 | 8,673 | ,000 | |
| a.] | a. Dependent Variable: performance unit micro business | | | | | | |

Table 8. Contribution of artificial inelegancy and quality product for the performance unit micro business

| Variable | Direct Effect | Indirect Effect | Total Effect |
|------------------------------------|---------------|-----------------|--------------|
| Artificial Intelligence → | 0.850 | | 0,850 |
| Performance Unit Micro Business | | | |
| Quality Product → Performance Unit | 0, 750 | - | 0,750 |
| Micro Business | | | |
| Artificial Intelligence & Quality | 0,800 | - | 0,800 |
| Product → Performance Micro | | | |
| Business | | | |

Artificial Intelligence 0.80 Quality Product

O,85

Performance Unit Micro Business

Figure 3. Artificial Intelligence and Quality Product for The Increase Performance Unit Micro Business

Based on the results of the study above, we can draw the following discussion;

- 1) The influence between artificial intelligence and the performance of community micro business units has an effect of around 0.85 or 85%, which means it has a strong influence. It can be said that the higher the level of use of artificial intelligence, the more it will affect the performance of micro business organizations.
- 2) The influence between the variable product quality and the performance of micro business units has an effect of 0.75 or 75%, which means it has a fairly strong influence, where the better the quality of the product, the better the performance of the micro business unit.
- 3) The influence between artificial intelligence and product quality on the performance of micro business units has a value of 0.80, which means 80%, which means it has a fairly large influence, where the use of artificial intelligence and making good quality products is expected to improve the performance of micro business units.

5. Conclusion

With this research, it is hoped that the artificial intelligence system can be better known by the public and can increase the business activities of this community's micro units so that they can increase their income. Although there are still many shortcomings in the research, it is hoped that it can increase scientific insight to be able to work better and provide great benefits for the wider community. From these findings, it can be concluded that leveraging artificial intelligence while maintaining high product quality is a strategic approach for micro business units to remain competitive and achieve sustainable success. Future research may explore additional factors that can further strengthen micro business performance, such as market trends, customer behavior, and digital transformation strategies.

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