ANALYSIS OF KEY FACTORS FOR THE GROWTH OF 99% USAHAKU MSMEs USING PRINCIPAL COMPONENT ANALYSIS

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Abstract

The growth of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia plays a crucial role in supporting national economic development. Nevertheless, between 2017 and 2023, the progress of MSMEs has experienced fluctuations, even among those that are officially registered and supported by the 99% Usahaku platform. These inconsistencies are primarily due to ongoing challenges, particularly limited access to funding and technology. Given the definition and unique characteristics of MSMEs, this study seeks to examine whether there is a correlation between specific key factors and the growth of MSMEs listed on the 99% Usahaku platform. Furthermore, the research aims to identify which of these factors most significantly influence their growth. To achieve this, the study utilizes primary data collected via questionnaires distributed to 390 MSMEs, determined through the Slovin formula. The responses are analyzed using the SPSS statistical software, with Principal Component Analysis (PCA) serving as the primary method of analysis.The results, indicated by a KMO Measure of Sampling Adequacy (MSA) value of 0.586 (greater than 0.50) and a significant Bartlett's Test of Sphericity (p-value < 0.05), suggest a meaningful correlation between the identified key factors and the growth of MSMEs on the 99% Usahaku platform, thus supporting the alternative hypothesis (H1). The analysis identifies thirteen key factors contributing to MSME growth on the platform: labor ecosystem, MSME ecosystem, competitive capacity, market operational ability, skilled human capital, business ecosystem, business information systems, digital adoption, organizational structure, market orientation, financial management, marketing competence, and operational support.

Keywords: MSME, Key Factors, 99% Usahaku, Principal Component Analysis

INTRODUCTION

The core essence of MSMEs lies in the entrepreneurial capacity to drive innovation and create differentiation in the business world, along with mental resilience in assessing and managing various business risks. Entrepreneurs are expected to possess sharp intuition in identifying and capitalizing on business opportunities, as well as the ability to effectively organize various resources. In Indonesia, MSMEs act as independent drivers of the people's economy, separate from large corporations. They play a vital role in driving economic activity by creating employment opportunities, diversifying productive economic activities, and providing access to financing ultimately emerging as an undeniable economic force. With over 66 million business actors and contributing 61% to the country's Gross Domestic Product (GDP) which reflects the total value of goods and services and indicates the nation's economic condition the MSME sector has become the backbone of the national economy. However, MSMEs continue to face challenges such as finited access to capital and technology. The government must continue its efforts to create a more conducive business environment so that MSMEs can grow more rapidly and contribute more significantly to public welfare (Medianti, 2024). A clearer picture of MSME growth in Indonesia today can be seen in the following graph.

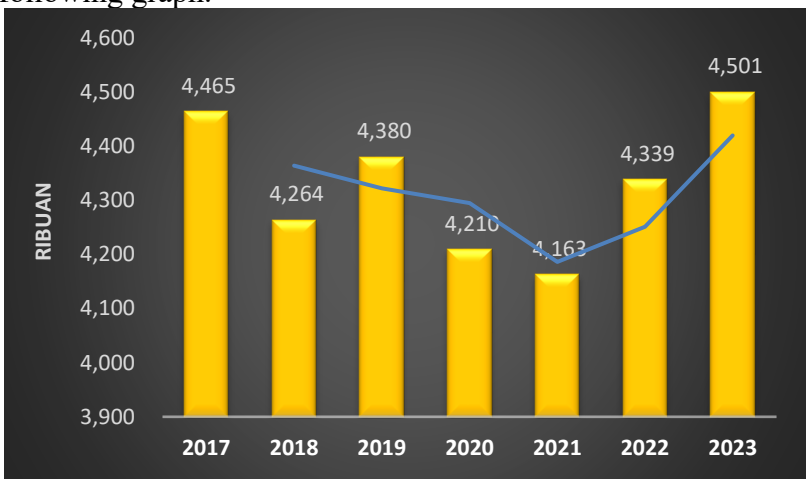

Figure 1.
Growth of MSMEs in Indonesia (2017–2023)
Source: BPS (2024)

Based on Figure 1, it is shown that in 2017, the number of MSMEs in Indonesia was 4,465 thousand. In 2018, the number decreased to 4,264 thousand, then increased to 4,380 thousand in 2019. In 2020, the number declined again to 4,210 thousand, followed by a more significant drop in 2021 to 4,163 thousand. However, in 2022, the number rose to 4,339 thousand, and finally in 2023, it increased again to 4,501 thousand. This indicates that the number of MSMEs in Indonesia has experienced both increases and decreases over time in other words, it has been fluctuating. A strong push toward digitalization has become a key catalyst for the growth and development of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia. In efforts to enhance competitiveness, MSME actors have increasingly adopted digital technologies in various aspects of their businesses (Medianti, 2024). This is reflected in the growing use of e-commerce platforms such as Shopee, which has recorded a significant surge in orders from MSMEs. The shift in consumer behavior toward online shopping has

opened up broad market opportunities for MSMEs to reach more and more diverse consumers (Supriyanto, 2024). Moreover, it has been reported that 25.5 million MSMEs in Indonesia have gone digital, as evidenced by 32 million merchants registered as users of QRIS (Quick Response Code Indonesian Standard), the national standard for QR code payments, of which 32% are MSME actors (Ayudiana, 2024).

The rapid growth of MSMEs in Indonesia now reaching 66 million business actors has been further accelerated by the adoption of digital technology. E-commerce and online marketplaces have become key channels for MSMEs to market their products. Government initiatives such as Gernas BBI (*National Movement Proud of Indonesian Products*), a national program initiated by the Coordinating Ministry for Economic Affairs of Indonesia to promote MSME digitalization and growth, have successfully connected more than 14 million MSMEs to broader markets. Nonetheless, many MSMEs still face challenges in transitioning to digital platforms, such as a lack of digital literacy (Lingga, 2021).

Figure 2
Logo of 99% Usahaku
Source: 99% Usahaku (2024)

99% Usahaku is a multifunctional platform developed by PT Telekomunikasi Selular Indonesia (Telkomsel) to support micro, small, and medium enterprises (MSMEs) in meeting their online business needs. 99% Usahaku is an integral part of the growing digital ecosystem supporting MSMEs in Indonesia. More than just a marketplace, it serves as an information and resource hub, integrating essential services to help MSMEs grow sustainably. It also acts as a connector between MSMEs and key stakeholders such as suppliers, distributors, and financial institutions (Medianti, 2024). The platform has proven effective in boosting MSME growth by offering integrated services like marketplace access, bookkeeping tools, and funding opportunities. These features not only simplify business management but also expand market reach. Since its launch, the platform has seen a significant increase in transactions, reflecting strong interest and trust from MSMEs. Additionally, it has successfully connected thousands of MSMEs to supply chains, improving operational efficiency. As of 2024, 99% Usahaku has 88,000 registered MSME users, with around 14,000 active users on the platform (99% Usahaku, 2024).

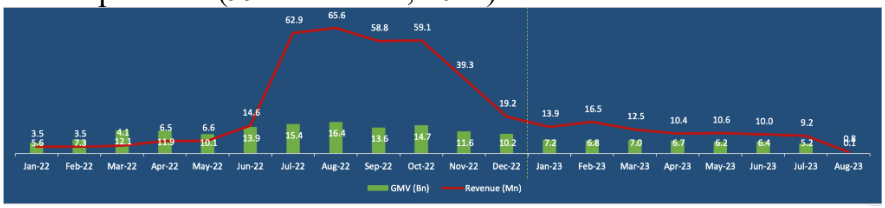

Figure 3
Performance of 99% Usahaku (Jan 2022 – Aug 2023)
Source: Internal Company Data (2024)

Based on Figure 3 above, the Gross Merchandise Value (GMV) which refers to the total value of goods and services sold via the platform before operational costs of 99% Usahaku remained relatively stable. However, the value began to decline from December 2022 through August 2023. Similarly, the revenue of 99% Usahaku decreased from IDR 19.2 million in December 2022 to just IDR 0.8 million by August 2023. As one of the pioneers in Indonesia's digital MSME ecosystem, 99% Usahaku has faced several challenges in recent months. The decline in GMV and revenue from December 2022 to August 2023 suggests underlying issues such as shifting consumer behavior and increasing market competition. However, the platform has not remained passive it continues to implement various initiatives to improve its performance. In-depth analysis also points to a broader global trend of slowing e-commerce growth as a contributing factor. To address these challenges, 99% Usahaku must adopt more aggressive innovations, such as expanding market reach and offering additional products and services. These steps are expected to help the platform return to sustainable growth and provide greater value to MSMEs (Ongbali et al., 2024). 99% Usahaku serves as a comprehensive platform supporting MSMEs in Indonesia through its three main features: *Pemodalku* (My Capital), *Pemasokku* (My Supplier), and *Solusiku* (My Solution). Each feature is designed to meet the specific needs of MSMEs in funding, supply, and digital solutions key elements for business sustainability and growth.

Pemodalku: In this feature, 99% Usahaku acts as a capital outlet that helps MSMEs gain access to financing. The platform provides a direct channel to partnered financial institutions to facilitate MSMEs in obtaining the capital they need. In this way, registered MSMEs can more easily secure funds to support their business expansion, reducing the financial challenges often faced by small business owners (99% Usahaku Report, 2024). For more explaine, the performance of this feature can be seen in the following picture.

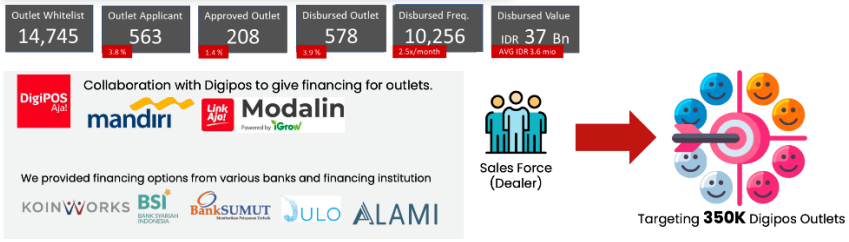

Figure 4
Performance of the Pemodalku Feature of 99% Usahaku
Source: Internal Company Data (2024)

Figure 4 shows that although 99% Usahaku's Pemodalku feature is designed to facilitate MSMEs' access to financing, its target achievement remains suboptimal. Out of 14,745 registered outlets, only 578 received funding totaling 37 billion IDR, about 3.9% of the target. Internally, 99% Usahaku has partnered with major platforms like DigiPos, Bank Mandiri, and iGrow to expand financing access, but MSME participation in Pemodalku is still below expectations. This gap between service availability and utilization requires further study to identify barriers faced by MSMEs in accessing financing. Additionally, 99% Usahaku offers the Pemasokku feature, which connects MSMEs with suppliers, making restocking easier and strengthening supply chains. This helps MSMEs maintain product availability and smooth business operations. More details are shown in the following figure.

Figure 5
Performance of the Pemasokku Feature of 99% Usahaku
Source: Internal Company Data (2024)

The Pemasokku feature of 99% Usahaku has demonstrated solid performance by establishing strategic partnerships to support MSME operations, especially in procurement and distribution. However, only 130 MSMEs out of 4,000 active users are currently connected with suppliers through this feature. Key partnerships include:

1. JNE for national and local delivery services, facilitating product distribution across regions.
2. Integrated payments via Virtual Accounts from major banks like BNI, BCA, Mandiri, and CIMB.
3. Flexible shipping options through owned couriers and local delivery.
4. E-Wallet payments via LinkAja, GoPay, and Dana.
5. Credit card payments supported by MasterCard, Visa, and PayLater via Indodana.

For specific product categories such as phones, accessories, and FMCGs, Pemasokku achieves profit margins of 1-3%. This variety of payment and logistics options strengthens MSMEs' inventory management and supply chains, creating a more efficient and competitive ecosystem. Additionally, 99% Usahaku's final feature, Solusiku, offers digital connectivity solutions for MSMEs to facilitate their digital transformation. Through Solusiku, MSMEs access business management and digital marketing technologies to boost operational efficiency and expand market reach. Performance data for Solusiku is shown in the next figure. The Pemasokku feature serves as a vital link between MSMEs and their suppliers, enhancing procurement and distribution efficiency through a network of trusted partners and multiple payment options. Despite its strong foundation, user adoption remains limited, indicating potential areas for growth and outreach. Complementing this, Solusiku empowers MSMEs to embrace digital tools, helping them modernize their operations and compete in today's digital economy.

REVIEW OF LITERATURE

Related Theories in the Study

Before proceeding to analysis, research must be grounded in existing theories that support its foundation. The study titled *"Analysis of Key Growth Factors of 99% Usahaku MSMEs Using Principal Component Analysis"* is based on theoretical frameworks and

definitions from various experts, focusing on two main topics: entrepreneurship and MSMEs growth factors.

Entrepreneurship

According to Drucker (2024), entrepreneurship is the capacity to generate unique innovations and creative ideas to open business opportunities. Hisrich et al. (2024) describe it as activities involving full dedication and risk-taking financial, mental, and social with rewards including material gain and personal satisfaction. Martínez-Peláez et al. (2024) view it as innovation and creativity in value creation, while Madzík & Jakub (2024) emphasize creativity in problem-solving and opportunity recognition. Chalmers et al. (2020) see entrepreneurship as innovation that transforms economic systems. Maria et al. (2024) describe it as value creation through optimal resource use, and Soehari (2024) highlights creativity as the foundation for success. Synthesizing these perspectives, entrepreneurship is a multi-dimensional concept in business development, measured not only by profit but also by its positive contributions to societal welfare.

Definition of MSMEs

Several definitions describe MSMEs clearly. According to Tambunan (2024), MSMEs are independent business entities managed individually or organizationally across various economic sectors, with limitations on capital, human resources, and market scope. Hafsah (2024) defines MSMEs as community-based economic activities with limited operational scale, mostly in small business sectors requiring regulatory protection to ensure business continuity amid competition. Sunariani (2024) states MSMEs are vital economic instruments providing productive activities, alternative funding channels, and significant labor absorption. Kristiyanti (2024) defines MSMEs as independent units run by individuals or entities, unaffiliated with large corporations. Harms & Mario (2024) highlight asset limits, while Calderon-Monge & Domingo (2024) and Kallmuenzer et al. (2024) point to their small scale and simple structure. Zhao et al. (2024) describe MSMEs as economic activities producing commercial products. In summary, MSMEs are independent business entities, managed individually or institutionally, characterized by specific parameters of capital, human resources, and business reach.

Factors Influencing MSME Growth

Based on various sources, MSME growth is influenced by several key factors. Sunariani (2024) identifies five fundamental aspects: availability of capital, use of digital technology, human resource quality, market penetration ability, and supportive government policies. Tambunan (2024) highlights two main dimensions: internal factors such as entrepreneurial capabilities, workforce quality, and innovation, and external factors like financial access, infrastructure, and regulatory frameworks. Kristiyanti (2024) emphasizes three pillars financial capital, human capital, and social capital as essential for MSME development. Prasetyo (2024) points to four strategic elements: business management skills, resource accessibility, technology implementation, and networking capabilities. Additionally, Erawati et al. (2024) stress financial and technological resources and market reach, Fitriya et al. (2024) highlight the combination of internal capabilities and external support, while Fatimah et al. (2024) focus on the integration of management skills and policy support as growth factors.

Principal Component Analysis

According to Hair et al. (2023), PCA is a dimensionality reduction method aimed at simplifying the structure of multivariate data by transforming the original correlated variables into a new set of uncorrelated variables while retaining as much of the original data variation as possible.

Conceptual Framework

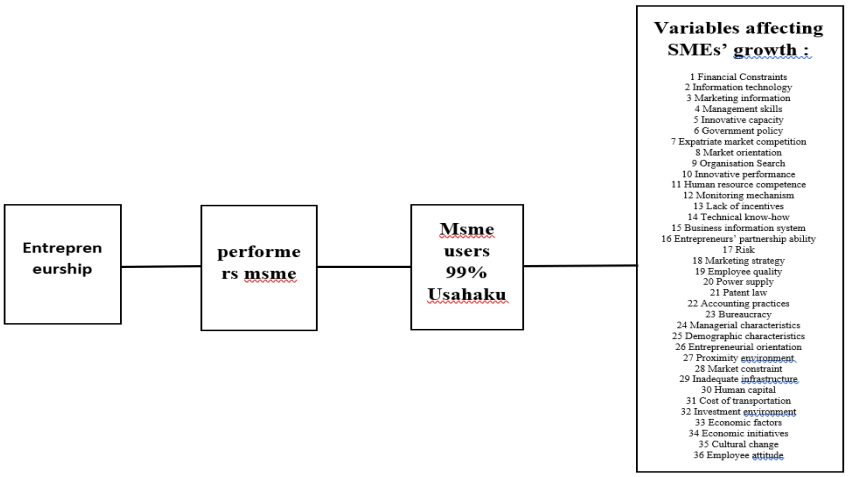

Figure 5
Conceptual Framework
Source: Ongbali, et al. (2024)

Hypothesis

In this study, there is a hypothesis underlying the decision-making based on the research results, namely H1: "There is a correlation between each key factor and the growth of MSMEs registered on the 99% Usahaku platform." If the research results support this hypothesis, further factor analysis will be conducted using the Principal Component Analysis data analysis technique.

RESEARCH METHOD

Type of Research

The type of research conducted in this study is categorized based on research characteristics, as shown in Table 1 below.

Table 1.
Research Characteristics

Research Characteristic	Type of Research
Based on Method	Quantitative
Based on the Objective	Explanatory
Based on the Type of Investigation	Descriptive
Based on Researchers' Involvement	Non-Intervention
Based on the Unit of Analysis	Individual
Based on Time Dimension	Cross-Sectional

Source: Processed Data (2024)

Based on Table 3.1, this study employs a quantitative research method, which focuses on measurable phenomena known as variables and typically uses statistical or other quantification techniques (Sujarweni, 2024). It also includes descriptive research. In terms of its objective, the study is explanatory, aiming to explain variables involved in an ongoing issue (Sudaryono, 2024). From the investigation type, it is classified as descriptive research, which involves studying current facts within a population, such as attitudes or opinions towards individuals, organizations, or procedures (Sudaryono, 2024). Regarding researcher involvement, the study is non-interventional, meaning the researcher does not act as a respondent or interfere with the data collection process (Sugiyono, 2024). Based on the unit of analysis, it is categorized as individual research, where the focus is on individual respondents representing each object of study (Sujarweni, 2024). Finally, the study is cross-sectional, conducted at a specific point in time, depending on the duration of the observed phenomenon (Sujarweni, 2024).

Data Collection Tool

This study utilizes an online questionnaire as the primary data collection tool, distributed through social media channels, particularly Instagram and WhatsApp. Each respondent is allowed to complete the questionnaire only once.

Measurement Scale

A Likert scale is used to measure attitudes, opinions, and perceptions of individuals or groups toward social phenomena. According to Sugiyono (2024) and Sujarweni (2024), variables are broken down into indicators, which then serve as the basis for formulating statements or questions in the instrument. Responses are quantified based on levels of agreement or disagreement, and a respondent's score is determined by summing up their responses to each item. The Likert scale format used in this study is illustrated below.

Table 2
Measurement Scale

No	Response Option	Score
1	Strongly Agree	4
2	Agree	3
3	Disagree	2
4	Strongly Disagree	1

Source: Sugiyono (2024)

Operational Definition of Variables

According to Sugiyono (2024), a variable is anything that is defined by the researcher to be studied in order to provide information about the subject being researched, enabling the researcher to draw conclusions. The operational definition of variables is the process of breaking down the variables involved in the research problem into smaller, more manageable parts to facilitate the collection of the necessary data.

Population

According to Alamanda et al. (2016), the population refers to all subjects or objects that are the target of the research, possessing specific characteristics determined by the researcher for study and conclusion. This study considers a total of 14,475 MSMEs registered as whitelist MSMEs in the 99% Usahaku application.

Sample

Sugiyono (2024) explains that both the number and characteristics of the population are included in the sample. According to Ghaffar & Indrawati (2024), a sample is a portion or representative of the population that shares similar characteristics and is selected using specific methods to serve as a representation of the entire population. This study applies probability sampling, which provides equal chances for each element or member of the population to be selected as a sample. However, a simple random sampling method is used to determine the number of respondents (sample). Sugiyono (2024), simple random sampling involves selecting a number of elements randomly, giving each one an equal opportunity to be chosen. According to Indrawati, et al (2022) anonymity is ensured to obtain voluntary participation of respondents. The Slovin formula is used to calculate the minimum sample size, as follows:

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

Explanation:

n = sample size.

N = population size.

e = 5%, a constant margin of error tolerated due to possible inaccuracies in sample decision making.

The calculation to determine the minimum sample size for this study is as follows:

$$= \frac{14,475}{1 + 14,475\ (0.05)^2}$$

$$n = \frac{14,475}{37.1875}$$

$$n = 389.2437 \sim 390$$

Based on the calculation using the Slovin formula, the result is 389.2437. To simplify further calculations, this number is rounded up to 390. Therefore, the minimum sample size to be studied in this research is 390 respondents.

Data Collection and Data Sources

This study uses quantitative data. According to Sugiyono (2024), quantitative data is qualitative data that has been quantified. The research utilizes both primary and secondary data sources. Respondents complete a questionnaire in three parts: first, a screening question to validate if the MSME is registered and active on the 99% Usahaku app; second, demographic information; and third, questions related to the research variables. The collected data is then processed using Microsoft Excel and SPSS. Primary data, as defined by Sudaryono (2024), is data collected directly by the researcher, here obtained from questionnaires distributed to users of the 99% Usahaku app whose MSMEs are on the whitelist, via WhatsApp and Instagram. Secondary data, according to Sujarweni (2024), consists of data collected by others and includes books, journals, websites, online news, previous research, and other relevant sources.

Validity Test

Validity, according to Sudaryono (2024), indicates how well a measurement tool can measure what it intends to measure. Therefore, it can be concluded that a higher validity value shows that the research is more accurate or measures what it is supposed to measure. Sujarweni (2024) states that the criteria for validity testing consist of several points, such as:

1. If the calculated r-value (r hitung) is negative, the question item is invalid.
2. If the calculated r-value is positive but less than the table r-value (r-table), the question item is invalid.
3. If the calculated r-value is positive and greater than the table r-value, the question item is valid.

In this study, the number of respondents taken for the validity test was 30, with a significance level of 5%, resulting in a table r-value of 0.361.

Table 3.
Validity Test Results

No.	r count	r table	Description
1	0.928	0.361	Valid
2	0.940	0.361	Valid
3	0.849	0.361	Valid
4	0.837	0.361	Valid
5	0.806	0.361	Valid
6	0.832	0.361	Valid
7	0.773	0.361	Valid
8	0.868	0.361	Valid
9	0.928	0.361	Valid
10	0.864	0.361	Valid
11	0.848	0.361	Valid
12	0.854	0.361	Valid
13	0.868	0.361	Valid
14	0.854	0.361	Valid
15	0.832	0.361	Valid
16	0.837	0.361	Valid
17	0.759	0.361	Valid
18	0.837	0.361	Valid
19	0.861	0.361	Valid
20	0.848	0.361	Valid
21	0.760	0.361	Valid
22	0.940	0.361	Valid
23	0.928	0.361	Valid
24	0.940	0.361	Valid
25	0.849	0.361	Valid
26	0.837	0.361	Valid
27	0.806	0.361	Valid

No.	r count	r table	Description
28	0.928	0.361	Valid
29	0.940	0.361	Valid
30	0.849	0.361	Valid
31	0.837	0.361	Valid
32	0.837	0.361	Valid
33	0.806	0.361	Valid
34	0.849	0.361	Valid
35	0.837	0.361	Valid
36	0.837	0.361	Valid

Source: processed data (2024)

Based on Table 3.4, all questionnaire items have r-values equal to or greater than the r-table value, indicating that all items are valid.

Reliability Test

Reliability, according to Sudaryono (2024), refers to the level of trustworthiness, consistency, or stability of a measurement's results. Sujarweni (2024) states that a tool is considered reliable if its alpha value is positive and greater than 0.6. Additionally, the researcher used the Kuder-Richardson (KR-20) method to determine the reliability of preference variables because the data is dichotomous. After calculating reliability, the strength of the relationship can be assessed using the criteria from Sujarweni (2019), which are:

1. < 0.20 : very small relationship and can be ignored.
2. 0.20 - < 0.40 : small (weak) relationship.
3. 0.40 - < 0.70 : moderate relationship.
4. 0.70 - < 0.90 : strong relationship.
5. 0.90 - < 1.00 : very strong relationship.
6. 1.00 : perfect relationship.

Table 4.
Reliability Test Results

Variable	Alpha	Indicator	Description
X	0.640	0.6	Reliable

Based on Table 4, it shows that all variables have a positive alpha value greater than 0.6, so it can be concluded that all variables are reliable.

RESULTS AND DISCUSSION

Respondent Characteristics

The respondents in this study are users of the 99%Usahaku app who have accessible accounts and are registered as MSMEs on the 99%Usahaku whitelist. Data was collected online through a questionnaire using Google Forms, distributed via Telkomsel's email

platform within the business unit managing 99%Usahaku. Respondents first answered a screening question about whether they have a 99%Usahaku account registered on the whitelist. Those who answered "Yes" proceeded to questions about key factors influencing MSME growth on the platform; those who answered "No" submitted the form without continuing. To analyze the impact of growth factors for MSMEs on 99%Usahaku, questionnaires were distributed to 390 respondents.

Respondent Characteristics by Gender

The gender distribution of respondents is presented in Figure 4.1 below.

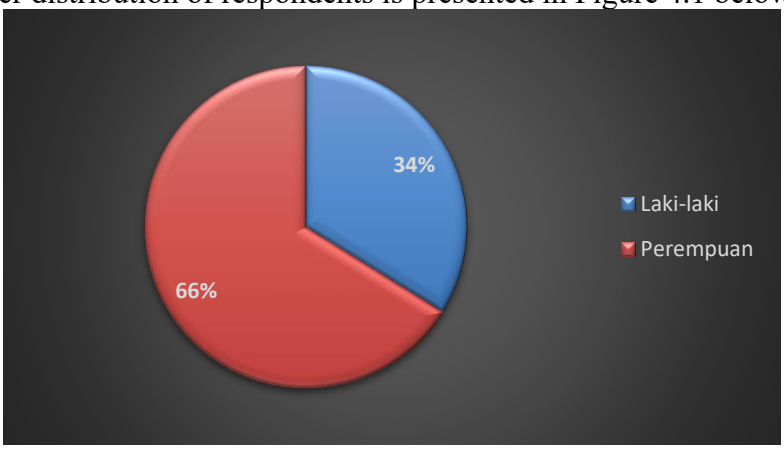

Figure 6.
Respondent Characteristics Based on Gender
Source: Processed Data (2025)

Based on Figure 6, it can be seen that the majority of respondents are female, accounting for 66%, while male respondents make up 34%. This indicates that the respondents in this study are predominantly female owners of MSMEs on the 99%Usahaku platform.

Respondent Characteristics Based on Age

Based on the research results, the characteristics of respondents by age can be seen in Figure 7 below.

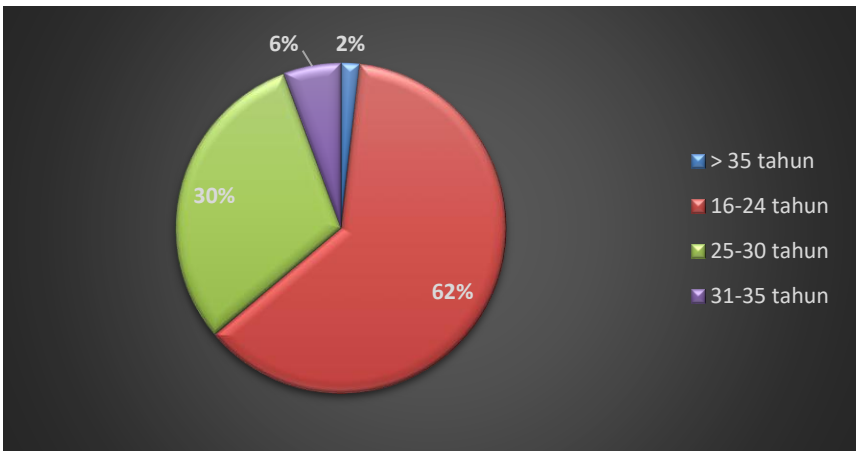

Figure 7.
Respondent Characteristics Based on Age
Source: Processed data (2025)

Based on Figure 7, it can be seen that the majority of respondents are aged 16-24 years, accounting for 62%, followed by respondents aged 25-30 years at 30%, respondents aged 31-35 years at 6%, and those over 35 years old at 2%. This indicates that the respondents in this study are dominated by owners of UMKM on the 99% Usahaku platform who are between 16 and 24 years old.

Discussion

The study of 390 respondents shows that the majority are female owners of MSMEs on the 99% Usahaku platform, aged 16-24, married, with a D4/S1 education level, working as entrepreneurs, mainly in the trade sector, and earning annual MSME income between 300 million to 2.5 billion IDR. This aligns with Ongbali et al. (2024), who found that married women, whether professionals or not, tend to engage in entrepreneurship. However, it contrasts with Omrani et al. (2024), who reported that MSMEs adopting technology are mostly owned by males with a bachelor's degree. The study also confirms that conditions for PCA analysis are met using KMO and Bartlett's Test, Anti-Image Matrix, and Communalities. The total variance explained shows 13 factors with eigenvalues greater than 1, derived from 36 components analyzed. Each factor's eigenvalue exceeds 1, explaining between 3.2% and 10% of the variance. Further correlation analysis will be conducted using the component matrix, and detailed results from the rotated component matrix will be provided.

Based on the PCA results, the variable "financial constraints" has the highest correlation (0.860) with factor 11, so it belongs to factor 11. "Information technology" correlates highest (0.911) with factor 8, thus belongs to factor 8. "Marketing information" correlates highest (0.908) with factor 6, so it is grouped in factor 6.

"Management skills" correlate most (0.517) with factor 3, and "innovation capacity" correlates negatively (-0.906) with the same factor, both included in factor 3. "Government policy" correlates negatively (-0.694) with factor 1, and "expatriate market competition" correlates strongly (0.892) with factor 1, both in factor 1.

"Market orientation" shows the highest correlation (0.949) with factor 10, "organizational search" (0.948) with factor 9, "innovation performance" (0.898) with factor 5, and "human resource competence" negatively (-0.584) with factor 5, thus grouped accordingly.

"Monitoring mechanisms" correlate highest (0.880) with factor 2, while "lack of incentives" correlates negatively (-0.615) with factor 2. "Technical knowledge" correlates highest (0.886) with factor 4, and "business information systems" (0.913) with factor 7.

"Entrepreneurial partnership ability" correlates (0.554) with factor 12, "risk" negatively (-0.635) with factor 12, and "marketing strategy" positively (0.665) with factor 12.

"Employee quality" correlates (0.453) with factor 13, "electricity supply" negatively (-0.685) with factor 13, "patent law" positively (0.696) with factor 13, and "accounting practices" (0.884) with factor 11.

"Bureaucracy" correlates (0.908) with factor 8, "managerial characteristics" (0.902) with factor 6, and "demographic characteristics" negatively (-0.531) with factor 6.

"Entrepreneurial orientation" correlates negatively (-0.903) with factor 3, and "proximity environment" positively (0.694) with factor 3.

"Market constraints" correlate (0.512) with factor 4, "inadequate infrastructure" (0.517) with factor 8, "human capital" (0.579) with factor 9, and "transportation costs" (0.502) with

factor 3. In summary, each variable is grouped according to the factor with which it has the strongest correlation.

The variable "investment environment" has the highest correlation (0.416) with factor 6, so it belongs to factor 6. The "economic factor" correlates negatively (-0.456) with factor 6, also placing it in factor 6. "Economic initiative" correlates highest (0.387) with factor 2, thus belongs to factor 2. "Cultural change" correlates (0.549) with factor 6, and "employee attitude" correlates (0.398) with factor 1, placing them in factors 6 and 1, respectively.

CONCLUSION

Based on the research findings and discussions presented in the previous chapters, this study titled “Analysis of Key Growth Factors for 99% Usahaku MSMEs Using Principal Component Analysis” concludes that there are thirteen key growth factors for 99% Usahaku MSMEs. These factors include the labor ecosystem, MSME ecosystem, competitive capabilities of MSMEs, market operation capacity, competitive human resource capital, MSME business ecosystem, business information systems, digital adoption by MSMEs, MSME organization, market orientation, financial management, marketing capabilities, and operational support.

Based on these conclusions, several recommendations are proposed to enhance the performance of MSMEs registered on the 99% Usahaku platform as a growth strategy.

1. Practical recommendations include providing education and strategies focused on the workforce ecosystem within each MSME, such as employee training to improve skill sets, continuous supervision of employee performance, government policy literacy demonstrations, and increased incentives for high-performing employees. These efforts aim to help employees compete with professionals working in larger companies. Additionally, regular innovation is encouraged to update or expand MSME products and services. The 99% Usahaku platform could support this by organizing national or international competitions to promote innovation and technology adoption among registered MSMEs.
2. Theoretical recommendations suggest that future research using similar methods should build on the factors identified in this study to refine and perfect the findings. It is also recommended that similar studies be conducted periodically with updated and more innovative results to continuously support the development of products and services, thereby improving the future performance of 99% Usahaku MSMEs.

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