ANALYSIS OF ATM SERVICE QUALITY ON CUSTOMER RETENTION: CASE STUDY OF MSME ATM USERS IN EAST PRIANGAN

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INTRODUCTION

In the competitive business era, Micro, Small, and Medium Enterprises (MSMEs) have the potential to grow and survive sustainably in the national economy(Sofyan, 2017). Customer retention among Micro, Small, and Medium Enterprises (MSMEs) is crucial in ensuring business sustainability and success(Sipahutar et al., 2023). To increase customer satisfaction, companies need to provide added value that can meet or exceed customer expectations(Hartono, 2017). One is by providing good quality services such as ATM services(Nigatu et al., 2023). By understanding and improving the quality of ATM services, MSMEs can increase customer retention, strengthening business relationships in an ever-evolving economic environment(Othman et al., 2021).

Aspects of customer retention, some common challenges involve repeat purchase issues, increasing usage intensity, narrating positive experiences, and willingness to pay high prices(Buttle & Maklan, 2019). Repeat purchases measure how often customers return after the first transaction, while usage intensity signals the benefits of a product or service(Mudfarikah & Dwijayanti, 2022). Positive testimonials and stories of good experiences contribute to brand image and customer loyalty(Aldo & Day, 2017). The willingness to pay a high price reflects the value customers place on a product or service(Yulia Sari et al., 2020). Understanding and overcoming these challenges can strengthen customer retention strategies and encourage long-term loyalty.

Research data (Rahman, 2022) shows that around 85.6% of MSMEs still rely on cash financial transactions, indicating a need for more adoption of digital financial services such as ATMs. This could indicate that MSMEs may be less familiar with digital financial services or that the quality of existing ATM services has yet to entice them to switch from cash transactions. Financial service providers can see this data as an opportunity to increase education about digital financial services, improve the quality of ATM services,
and adjust features and fees to make them more attractive to MSMEs, thereby increasing customer adoption and retention.

In theory, this research uses the variable ATM service quality. This electronic device allows customers to deposit, withdraw, and transfer money, pay bills, and carry out other financial transactions without the help of a branch representative or teller. (Aslam et al., 2019) ATM service quality has various indicators: reliability, comfort, security, convenience, and fulfillment. (Narteh, 2013) The Customer Retention variable, as a form of loyalty, is reflected in customer loyalty to the company, which can be measured through consumer purchasing behavior. The high frequency of purchasing a product is an indicator that shows the level of customer retention. (Novianti et al., 2013) Customer retention indicators include repeat purchases, increased intensity of use, telling positive things, and willingness to pay high prices. (Buttle & Maklan, 2019)

A study by (Leonov et al., 2020) highlights the importance of efficient ATM cash flow management in developing the Russian economy, focusing on analytical models to optimize costs. However, the drawback lies in the need for more details and concrete results from the developed analytical model. (Takenova & Guleva, 2023) It analyzed the ATM network service point placement method, finding results that can be used to develop specific ATM networks, although it is recommended to involve a cost approach method. Research by (Nigatu et al., 2023) found that ATM service quality, especially reliability, contributed positively to customer satisfaction. (Othman et al., 2021) This study highlights the positive impact of after-sales service on service value and customer retention in clothing brands in China, although it has geographic and sector coverage limitations. (Brunner & Wolfartsberger, 2020) Emphasizes the implementation of Industry 4.0 and the potential influence of Virtual Reality (VR) on business models, focusing on innovation as a strategic key. (Salamah et al., 2022) It was identified that M-Comm service quality significantly impacts customer satisfaction and intention to return to use the site. Continuous evaluation and adjustment of strategies based on customer feedback is the key to maintaining customer satisfaction and loyalty.

The urgency of current research, illustrated by the results of previous research, emphasizes the need for an in-depth understanding of the evolution of dynamics in ATM cash flow management, placement of ATM network service points, service quality, and customer retention strategies. This condition is increasingly urgent considering technological developments and changes in consumer behavior that continue to develop. Similarities between previous and current research involve a general focus on management efficiency, service quality, and customer retention strategies in banking services and technology. However, differences arise in research methods, specific variables studied, and different geographic or sectoral contexts. Current research is more likely to adapt to the latest technological advances, while previous research may have focused more on traditional aspects, such as the reliability of ATM services. Therefore, the current research has the potential to provide more relevant and up-to-date insights regarding banking service management and customer satisfaction.

RESEARCH METHODS

This research method uses the required information collected through questionnaires. Descriptive and explanatory survey methods to describe profiles, characteristics, relevant aspects, and variables related to humans or organizations and industries (Sekaran & Bougie, 2013) so that researchers get something essential and actual about the phenomenon of MSME ATM users in East Priangan. The development method used is cross-sectional, also known as one snapshot research, involving data collection at a certain point.

The research subjects were Culinary MSMEs who used ATMs in Tasikmalaya. The object of this research is two variables: ATM service quality (X) and customer retention (Y). Primary data sources are collected through filling out questionnaires (Umar, 2010). In this case, the primary data source is MSMEs who use ATMs in East Priangan. The population of this research is MSMEs who use ATMs in East Priangan—the sampling technique using random sampling. The data collection technique used was a questionnaire, and 166 data were collected from respondents (Sekaran & Bougie, 2013). According to (Hair Jr et al., 2023), this data has determined the minimum sample using PLS SEMVersion 3—analysis techniques using descriptive and quantitative analysis. Descriptive analysis provides an overview of the data collected through the distribution of variable items, which is then presented descriptively in a frequency table. A verification analysis was performed with SmartPLS software because this method is suitable for developing theory and testing predictive relationships between constructs. Evaluation with PLS is based on making predictions and has non-parametric characteristics. This method is most suitable for the research objectives, as shown by the following steps.
The stages in Figure 3 above will be implemented so as to obtain results that can be analyzed for discussion and research findings.

RESULTS AND DISCUSSION

RESULTS

Profile of Respondent Characteristics

The demographic profile of respondents in this study focused on two variables, namely gender, age and turnover. Information regarding the characteristics of respondents can be found in the following summary table.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Respondent</th>
<th>Frequencies</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Man</td>
<td>47</td>
<td>28%</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
<td>119</td>
<td>72%</td>
</tr>
<tr>
<td>Age</td>
<td>20-25 years</td>
<td>43</td>
<td>26%</td>
</tr>
<tr>
<td></td>
<td>26-35 years old</td>
<td>69</td>
<td>42%</td>
</tr>
<tr>
<td></td>
<td>36-45 years old</td>
<td>54</td>
<td>33%</td>
</tr>
<tr>
<td>Turnover/month</td>
<td>&lt;Rp. 10 Million</td>
<td>21</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>10 Million - 50 Million</td>
<td>18</td>
<td>11%</td>
</tr>
<tr>
<td></td>
<td>51 Million – 100 Million</td>
<td>52</td>
<td>31%</td>
</tr>
<tr>
<td></td>
<td>&gt;100 Million</td>
<td>77</td>
<td>46%</td>
</tr>
</tbody>
</table>

Source: Researcher

Referring to the respondent characteristics table, it can be seen that the majority of Culinary MSMEs in Tasikmalaya are dominated by women. This indicates the possibility that women are more likely to be interested in MSME activities. This information also shows that the respondent has been involved in the MSME business for a long time. The majority of ATM users are perpetrators who have large turnovers.

Statistical Analysis with PLS SEM

The PLS model evaluation procedure consists of two main stages. The first stage includes the implementation of measurement model analysis to verify and evaluate the reliability of each item individually. The second stage involves validating the structural model by using data to test the consistency of the causal relationships described in the model. Below, the model output results generated through the use of the PLS approach are presented.
Measurement Model Analysis

Evaluation of the measurement model begins by first looking at the outer loading which is determined by the above criteria \( > 0.70 \) (Hair Jr et al., 2023) or above \( > 0.60 \) (Chin, 1998). The results of the model measurement analysis in this study produced an outer loading above \( > 0.70 \) after removing Y1.3 and Y2.3. Secondly, analyzing composite reliability with criteria above \( > 0.70 \). Third, determine convergent validity by analyzing Cronbach's alpha above \( > 0.70 \). Fourth, analyze the root of AVE above \( > 0.50 \) and fifth, analyze discriminant validity (cross loading, Fornell Lacker and HTMT).

The results of this research, Cronbach's alpha values ranged from 0.758-0.940, composite reliability values ranged from 0.860-0.949, while AVE values ranged from 0.651-0.830. Thus, all these values confirm the reliability of the measurements. In addition, the factor loading value is higher than 0.70, ranging from 0.701 to 0.922, which confirms the reliability of the indicator. Thus, all reported validity and reliability values confirm the reliability of the measurements. Table 4.2 illustrates that the research construct passed the convergent validity test.

Measurement of Discriminant Validity

Discriminant validity was proven using Fornell and Larcker's (1981) condition \( (AVE \geq 0.5) \), with the square root of AVE exceeding the correlation between latent variables. The results are summarized, which indicates that all latent variables have an AVE of more than 0.50, and the square root of the AVE is greater than the correlation between the latent variables, indicating that the research measurements have an adequate level of discriminant validity.

Structural model analysis

Structural model evaluation is concerned with testing hypotheses of influence between variables. The structural model evaluation examination was carried out in three stages, namely first checking for multicollinearity with the Inner VIF measure (Sarstedt et al., 2019). Second, test the hypothesis between variables by looking at the t-statistic or p-value.

1) Multicollinearity

Inner VIF was carried out to analyze whether there was multicollinearity. So that the data collected is not biased. The estimated results of the inner VIF value below \(< 5\) indicate that there is no multicollinearity between the variables. These results confirm that the parameter estimates in SEM PLS are unbiased.

2) Results Hypothesis

Based on the results of hypothesis testing, it is known that:

1. Hypothesis The first was rejected. Namely, there was no significant influence between reliability on customer retention and path coefficient (0.215) and V value (0.139 < 0.05).
2. The second hypothesis is rejected. Namely, there is no significant influence between convenience on customer retention reports and path coefficient (0.215) and V value (0.057 < 0.05).
3. The third hypothesis is accepted, namely that there is a significant influence between security on customer retention and path coefficient (0.481) and V value (0.000 < 0.05).
4. The fourth hypothesis is accepted, namely that there is a significant influence between convenience on customer retention and path coefficient (0.235) and V value (0.000 < 0.05).
5. The fifth hypothesis was rejected. There is no significant influence between fulfillment on customer retention and path coefficient (0.689) and V value (0.087 < 0.05).
DISCUSSION

1. Reliability and Customer Retention

Results of testing the relationship between reliability (which includes transaction processes, MSME business support services, and stable access during daily transactions) and customer retention (which is measured through repeat purchases, increased intensity of use, telling positive things, and willingness to pay high prices) in MSME business, has been rejected. For ATM service users among MSMEs, reliability does not contribute to customer retention (Handoko & Ronny, 2021).

Some MSME players must still rely on ATM services to support their businesses. This is because some people do not feel the need, and based on the small turnover, it becomes even busier and ineffective when using ATM services. Rapidly changing market dynamics, especially in the digital era, can influence customer behavior in ways that are difficult to predict (Shabrina, 2019). Therefore, further attention is needed to the external context and environmental factors that may moderate the relationship between reliability and customer retention. Although the results of this study do not support the first hypothesis, they provide a foundation for future research to investigate further specific aspects of customer reliability and retention in MSMEs.

Several factors may be the cause of results that conflict with expectations. First, there may be a mismatch between customers’ perceived reliability and the actual performance of the measured aspects. Although maximum efforts have been made to ensure the validity and reliability of research instruments, customer perceptions of reliability may be influenced by subjective factors. In addition, other variables that need to be identified or included in the research model can also contribute to the discrepancy between expectations and research findings.

2. Customer Convenience and Retention

The research results show rejection of the second hypothesis, namely states that there is no significant influence between the comfort variables (comfort when providing services, MSME business support services, the existence and functionality of ATMs that increase the level of comfort) on customer retention (repeat purchases, increased intensity of use, telling positive things, and willingness to pay the price tall).

Comfort is a subjective experience that can vary from individual to individual. Individual factors such as personal preferences, tolerance for risk, and different expectations can influence the value of the convenience level of ATM services and functionality. This variability can make it difficult to identify consistent patterns or trends regarding customer retention. Traditional MSMEs who live in areas and require long journeys prefer not to use ATMs because of the inconvenience.

Other factors may also cause the rejection of the second hypothesis. It is possible that factors, such as brand trust, need to be systematically observed and may influence the relationship between customer convenience and retention (Baisyir, 2021). Even though ATM services are considered a convenience factor, lack of clarity or dissatisfaction with ATM functionality makes MSMEs less comfortable using ATMs. ATM functionality is considered not to meet expectations.

MSME business support services have yet to significantly impact customer comfort because, in reality, there are still many MSME players who rarely use ATMs (Syukri & Sunrawali, 2022). The added value of user experience and services has yet to be visible and is yet to be widely used, especially for actors whose business turnover is still low (Beik, 2016).

3. Customer Security and Retention

The results of the research show that the third hypothesis is accepted, namely that there is a significant influence between security (security of making transactions, concerns when using an ATM, presence, and information, and security of MSME business funds) on customer retention (repeat purchases, increased intensity of use, telling positive things, and willingness to pay high prices), can be explained by several factors.

Firstly, increasing customer trust, research results show that security in transactions is the main factor that increases customer trust in the quality of ATM services (Sugiyono, 2020). Transaction security creates an environment that can provide a sense of security. As this trust increases, customers tend to be more inclined to make repeat purchases and increase usage intensity.

Second, reducing customer concerns, such as when using an ATM through optimizing security systems or providing clear information, can positively influence customer loyalty. Third, the perception of information security and the existence of MSME businesses provide certainty for customers regarding the privacy and security of personal data. Apart from that, the security of MSME business funds is a significant determinant in forming customer trust in ATMs. Customers who believe that business funds are safe tend to be more loyal, provide positive testimonials, and are willing to pay high prices. Fourth, psychological and emotional effects on security, both in transactions and the existence of business funds, can create psychological and emotional effects on customers (Suryani & Koranti, 2022). Customers’ sense of security
and confidence in using ATM services can trigger a desire to share positive experiences, such as telling positive things and being more willing to pay a high price for the security provided. (Tugiso, 2016).

This research reflects that security is not only a technical factor but also has significant implications for customers' psychological and emotional aspects. Therefore, a business strategy that focuses on improving security is an effective measure to increase customer retention in MSMEs.

4. Convenience and Customer Retention

The results of the research indicate the acceptance of the fourth hypothesis, which states that there is a significant influence between the convenience variable (easy and effective carrying out financial activities, concerns when using an ATM, availability, and information, and security of MSME business funds) on customer retention (repeat purchases, increased intensity of use, telling positive things, and willingness to pay a high price). The research results show that the fourth hypothesis is accepted because it is easy and practical to carry out financial activities. The ease of financial activities in MSMEs can form customers' positive perceptions of the user experience. If customers feel that the financial process runs efficiently and effectively, they will be more satisfied and continue using the service.

Ease of transaction processing, application navigation, and access to financial information can minimize user friction, increasing customer retention (Mudfarikah & Dwijayanti, 2022). Customers who experience this convenience may be more motivated to make repeat purchases and increase usage intensity.

Both existence and information, existence and information that are easily accessible and transparent, can increase customer trust in ATMs. Customers who feel they can access information quickly and clearly about services, products, and transaction security will be likelier to continue using the service (Robin & Evyanto, 2023). Trust gained through good presence and information can form the basis of customer retention, as customers will feel more confident and satisfied with their usage experience.

Based on the results of this research, ease of carrying out financial activities, handling concerns when using ATMs, good availability and information, and security of MSME business funds all play an essential role in shaping customer retention in MSMEs. Customer Fulfillment and Retention

The results of the research, the fifth hypothesis states that there is no significant influence between the fulfillment variables (not meeting needs when providing services, services not specifically supporting MSME businesses, expectations not meeting MSME businesses) on customer retention (repeat purchases, increasing intensity of use, telling things positive regard, and willingness to pay a high price). For MSMEs, ATM services do not meet their needs; one of the research findings is that they need to meet their needs when providing the service so it does not impact customer retention. This may be because meeting customer needs is not considered a critical factor in continuing to use MSME services because turnover is negligible.

Non-specific business support services are only one of the factors influencing customer retention (Saputra, 2020). Customers may prioritize other aspects like transaction security or MSME business sustainability. Customers focus more on features and services that directly support business needs and goals and pay less attention to general or indirect services related to business development (Agustina, 2017). The results of this research reject the fifth hypothesis, which provides essential insights into understanding the factors that genuinely influence customer retention in MSMEs. This indicates that meeting needs, service specificity for MSME businesses, and unmet expectations may differ from customers' primary focus in maintaining service use.

CONCLUSION

Based on the discussion, it is concluded that security and convenience contribute positively to customer retention. Then reliability, convenience, and fulfillment do not contribute positively to customer retention. Security and convenience are greatly influenced by the business turnover of MSME players on customer retention. Large turnover provides more significant opportunities for using ATM services.

There is a need for more profound education on the importance of using ATM services, especially for MSMEs with small and medium turnover. It is essential to develop further research to improve and deepen understanding of the correlation between reliability, convenience, and fulfillment of customer retention in other contexts.

The implications relate to developing a marketing strategy based on designing more effective marketing campaigns, strengthening security and convenience points, and targeting more significant market segments with high turnover.

REFERENCES


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