



Analysis of Customer Behavior Using Cash Deposit Machine and BSI Smart in Langsa City

Achmad Ridwan¹, Mastura², Nurjanah³

achmadridwan602@gmail.com¹,

mastura@iainlangsa.ac.id², nurjannah@iainlangsa.ac.id³

^{1,2,3}**Institut Agama Islam Negeri Langsa**

ABSTRACT

The aim of this research is to analyze customer behavior and what factors influence customer behavior in using the Cash Deposit Machine (CDM) and BSI Smart in Langsa City. The research method used is descriptive qualitative to explore the behavior of Bank Syariah Indonesia customers with Cash Deposit Machine (CDM) and BSI Smart services in Langsa City. With the participation of 10 informants using the Snowball Sampling technique, primary data was obtained through interviews, supported by secondary data from journal literature. Data collection uses observation, interviews and documentation. The research results show that the behavior of Sharia Bank customers in Langsa City towards the use of Cash Deposit Machines (CDM) and BSI Smart shows adaptation to modern technology in financial activities. A total of 6 customers prefer CDM because of its speed, practicality, privacy and security. CDM user customers appreciate easy access to daily transactions.

Keywords: Customer Behavior, Cash Deposit Machine, BSI Smart

INTRODUCTION

Digital transformation in the banking industry continues to grow in line with increasing customer needs for ease and efficiency of services. The advancement of digital technology has become a trend where the use of computers, laptops, digital clocks, mobile phones, the internet, and social media is becoming more and more common. The current digital era has become integrated with people's daily lives because it offers convenience, convenience, and efficiency, so many people are interested in adapting to it, including in the banking sector (Tartila, 2022).

Islamic banking is required to continue to innovate by providing services that make it easier for customers to transact. Technological advancements have resulted in significant changes in the way Islamic banks introduce their products and services. The digitalization process allows Islamic banks to provide services that are more efficient, safe, and easily accessible to the public. Technology-based products such as mobile banking, internet banking, and Islamic e-wallets are now the main foundation in modern banking strategies (Islamiah et al., 2024).

Bank Syariah Indonesia (BSI) as one of the largest Islamic financial institutions in Indonesia, also follows technological changes by continuing to offer digital banking access services. One of these innovations is the implementation of *the Cash Deposit Machine* (CDM) and BSI Smart agent service.

A *Cash Deposit Machine* (CDM) is a machine that allows users to make cash transactions, such as withdrawing and depositing money directly (Islah & Ramadani, 2023). Meanwhile, BSI Smart Service is a type of banking service also known as Bank



(BSI) Office Financial Services (Laku Pandai). The main purpose of the Laku Pandai service is to provide convenience in getting banking or financial services can now be accessed without the need to come to a physical bank office, but through cooperation with other parties, such as agents supported by information technology. BSI Smart Agent acts as BSI's representative in serving customer transactions and is entitled to receive commission (ujrah) from BSI based on the amount agreed in the contract (et al., 2024).

Cash Deposit Machine is a machine that allows customers to make cash deposits independently without having to go through a teller at a branch office, thereby shortening transaction time and increasing efficiency. This service can be accessed at any time, including outside bank operating hours. BSI Smart, on the other hand, is a form of BSI's cooperation with business partners outside the branch office, such as agents or partner outlets that allow customers to make various transactions such as payments, withdrawals, and fund transfers without having to come to the branch office (Asiva Noor Rachmayani, 2015).

Nowadays, the use of CDM and BSI Smart is increasingly in demand by the public because it allows transactions outside of bank operating hours, especially teller services. The efficiency of CDM and BSI smart increases customer satisfaction in making various transactions. In regions with high cash circulation, CDM helps reduce queues at banks and improve *over-the-counter* services by automating cash handling tasks (Tanaka et al., 2014).

In Langsa City, the existence of CDM and BSI Smart is an option for customers who want to transact efficiently without having to visit bank offices during peak hours. However, customer behavior in utilizing this service still needs to be further analyzed. Several factors such as technology understanding, customer habits, convenience, and security are the main considerations in determining whether customers prefer to use CDM, BSI Smart, or continue to transact conventionally at branch offices.

Based on initial observations, it was found that customer behavior in using *Cash Deposit Machine* (CDM) was due to several considerations, such as not having to queue at the teller, customers get more optimal service at a more affordable cost. In fact, most customers are satisfied through this service, so that the expectations of every customer who deposits cash can be faster. However, in reality, there are obstacles in the deposit machine, namely there is still a queue due to the limitations of the *Cash Deposit Machine* (CDM) service, so that the deposit time is not completed quickly (DA, 2017). The CDM and BSI Smart service also allow customers to deposit cash at any time, reducing the need to visit the bank during business hours (Roy et al., 2015).

Several previous studies have examined consumer behavior, such as analysis of consumer behavior in the purchase of vegetable products in the Bekasi city market (Dasipah, 2010), Analysis of Bank CIMB Niaga Makassar customer behavior towards the QRIS Non-Cash payment system (Ramadhan et al., 2023). Counter teller services versus self-service teller machines and cash deposit machines: XYZ depositor preference (Asiva Noor Rachmayani, 2015). Analysis of customer behavior in choosing an Islamic bank in Mandailing Natal district (Zein, 2018). Consumer behavior analysis and banking credit card security (Hendarsyah, 2020). However,



there has been no research that discusses customer behavior in using CDM and BSI Smart.

Based on the description above, this study aims to analyze the behavior of Islamic bank customers in using *Cash Deposit Machine* and *BSI Smart* in Langsa City and also to find out the factors that affect customer behavior in using *Cash Deposit Machine* (CDM) and *BSI Smart* in Langsa City. The results of this research will provide insight for BSI in improving the quality of its digital services in Langsa City, especially in increasing customer comfort and satisfaction and expanding the use of digital services in the community.

LITERATURE REVIEW

Behaviour

Behavior refers to the activities or activities carried out by organisms (living things). This behavior is formed from various experiences and interactions of humans with their environment. More specifically, behavior can be defined as an inner state that includes views, thoughts, and attitudes, which reflect various physical and non-physical aspects.

Meanwhile, customer behavior includes actions taken by individuals, groups, or organizations related to the decision-making process to acquire and use economic goods or services, which can be influenced by environmental factors. The focus of customer behavior is how an individual makes a purchase decision by utilizing the resources he has, such as time, money, and effort, to exchange for goods to be consumed. (Di et al., 2023).

Factors that affect consumer or customer behavior, namely:

1. Cultural Factors
2. Social Factors
3. Personal Factors
4. Psychological Factors (Minat et al., 2024)

Decision

Decision-making is a process of assessing and selecting the various options available based on certain interests to determine the most profitable option.

In the context of purchase, consumers go through a series of processes before and after making a transaction. The process includes: problem recognition, information search, evaluation of various alternatives, decision to buy, and behavior after the purchase is made. (Zahrotun Nidiyah & Nur Aisyah, 2022).

CASH DEPOSIT MACHINE

Cash Deposit Machine (CDM) is a self-service terminal that allows customers to make deposits and payment transactions in cash. The machine allows customers to credit cash to a specific account in *real-time* within a 24x7 working window. Although some banks are unable to provide 24x7 working windows because- Self-Service Technology (SST) is considered to be more effective and innovative in meeting customer needs. This system has replaced human tellers with automatic teller machines. CDM is a non-personal service delivery mechanism and one of the newest



self-service products, allowing bank customers to easily make bank deposits without wasting their precious time in queues (DA, 2017).

BSI SMART

BSI SMART is an Officeless Financial Service in the Framework of Inclusive Finance that provides financial services or others carried out not with a permanent office but in collaboration with agents supported by information technology facilities.

BSI Smart Agent is a Laku Pandai Service (Officeless Financial Services in the Context of Inclusive Finance) from Bank BSI is an effort to provide banking services and/or other financial services without using the office network directly, but through cooperation with other parties and supported by information technology. BSI SMART products are currently intended for BSI Customers, both individuals and non-individuals who have businesses or belong to the micro segment (Aziz & Rizaldi, 2024).

METHODS

This type of research is field research, which is direct observation of the object to be studied to obtain relevant data. This study uses a descriptive qualitative approach. The location in this study was carried out in the area around Langsa City, Aceh Province. The time of this research is 2024.

In determining the informant, the researcher used the Snowball Sampling technique. With purposive sampling with the criteria being Sharia Bank customers who have made cash deposits through CDM and BSI Smart, it can be used as a data source. Data collection will be carried out through various media, including: literature studies from academic journals, reports and publication materials from credible sources, data and field observations, interviews (in-depth interviews) by recording each interview result.

The understanding in the previous data collection that shows the diversity of data sources and theories collected, in fulfilling the validity of the data, this research uses a triangulation strategy. Triangulation of methods, Triangulation of data sources, Triangulation of theories.

In terms of data analysis, stages such as data reduction, data *display*, and verification (data classification) are carried out.

RESULT AND DISCUSSION

Behavior of Islamic Bank Customers in Using Cash Deposit Machine and BSI Smart in Langsa City

Based on the results of the study, it was found that 6 out of 10 respondents use Cash Deposit Machine (CDM) because they consider it faster and more practical, more privacy-maintained, safe and complete CDM access to conduct daily financial transactions. They find this service very practical, especially for depositing cash outside of bank operating hours. Meanwhile, 4 customers chose BSI Smart services because of their flexibility in conducting transactions in various locations without being tied to a specific CDM machine. Then there are also customers who still feel hesitant to use CDM and BSI Smart because they are worried about technical or security errors.



This behavior reflects the customer's adaptation to modern technology in supporting financial activities, where the preference for using CDM or BSI Smart is based on practical factors such as speed, efficiency, and availability of services in various places. Customers tend to choose CDM and BSI Smart for convenience and efficiency in conducting financial transactions. The frequency of use usually varies, from customers who use it regularly for each transaction to customers who use it according to urgent needs. Behavior towards ease of use greatly influences the decision to use the product with customers appreciating the ease of the transaction process and the availability of services in various locations. Transaction security is a major concern, and customers tend to prefer services that they believe are safe and reliable. In addition, the level of customer satisfaction is influenced by the responsiveness of customer service to complaints or inputs related to the use of CDM and BSI Smart. Customers' understanding of the available technology features also influences how they use them in various contexts of everyday customer transactions.

Factors that affect Customers in using Cash Deposit Machine and BSI Smart.

Based on the results of the study, it is shown that the factors that affect customers in using Cash Deposit Machine (CDM) and BSI Smart are that cultural, social, personal, and psychological factors play an important role in determining customer behavior towards the use of CDM. A culture that prioritizes security and privacy, as well as the perception of technology as a symbol of progress, drives the use of CDM. Meanwhile, social factors are less influential, with customers preferring CDM based on personal comfort and flexibility. The decision to use CDM is also influenced by personal factors such as time flexibility and ease of access. Psychological factors such as a sense of security, emotional calm, and a sense of independence in managing finances also contribute to a customer's choice of CDM.

The results of this study are in line with Euis Dasipah research which researched the analysis of consumer behavior in purchasing vegetable products in the Bekasi city market, it was found that the factors that affect behavior are cultural factors, social factors, personal factors, and psychological factors (Dasipah, 2010; Wijaya, 2013) Other research found that factors that affect consumer behavior in only two factors are personal factors and social factors (Wijaya, 2013). The findings of this study have several limitations, namely in terms of data collection and limitations in the samples taken to be used as respondents.

CONCLUSION

The behavior of Bank Syariah customers in using Cash Deposit Machine (CDM) and BSI Smart in Langsa City shows a pattern of adaptation to modern technology in customer financial activities. The majority of customers choose to use CDM because it is considered faster, more practical, maintains privacy, and provides a sense of security. Customers also appreciate easy access to conduct daily financial transactions through CDM. On the other hand, customers who choose BSI Smart because of its flexibility that allows transactions to be carried out in various locations without being tied to a specific CDM machine. This behavior reflects customer preferences for the convenience and availability of services in various places.

Meanwhile, the factors that affect customer behavior in using Cash Deposit Machine (CDM) and BSI Smart in Langsa City include culture, personal factors, social factors



from surrounding groups, and psychological factors.

REFERENCES

- Asiva Noor Rachmayani. (2015). *No 主観的健康感を中心とした在宅高齢者における健康関連指標に関する共分散構造分析*Title. 6.
- Aziz, A., & Rizaldi, M. (2024). Faktor-Faktor Yang Mempengaruhi Keputusan Usaha Mikro Kecil Menengah Dalam Bermitra Menjadi Agen Bsi Smart Factors Influencing Micro Small Medium Enterprise Decisions in Partnering To Become Bsi Smart Agent. *Jurnal Perbankan Syariah*, 10(1), 59.
- DA, G. N. (2017). *Sri Lankan Journal of Banking and Finance*. 01, 10–25.
https://www.researchgate.net/profile/D-A-Gayan-Nayanajith/publication/349944639_Analysis_Of_The_Impact_Of_Innovation_Characteristics_Perceived_Ease_Of_Use_On_Adoption_Of_E-Banking_Among_The_Students_Of_University_Of_Kelaniya/links/60484e964585154e8c8ad31e
- Dasipah, euis; haris budiyono. (2010). Analisis Perilaku Konsumen Dalam Pembelian Produk Sayuran Di Pasar Modern Kota Bekasi Oleh : Euis Dasipah, Haris Budiyono, Meilan Julaeli. *Jurnal Administrasi Bisnis (JAB)*, 1(2), 24–37.
- Di, P., Pegadaian, P. T., & Layanan, M. (2023). *Analisis Perilaku Nasabah Terhadap Sistem Baru*. 2(3).
- Hendarsyah, D. (2020). Analisis Perilaku Konsumen Dan Keamanan Kartu Kredit Perbankan. *JPS (Jurnal Perbankan Syariah)*, 1(1), 85–96.
<https://doi.org/10.46367/jps.v1i1.204>
- Islah, N., & Ramadani, M. (2023). Optimization of Cash Deposit Machine Use at Bank Central Asia (Optimalisasi Penggunaan Cash Deposit Machine Di Bank Central Asia). *Jurnal Keuangan Dan Perbankan (KEBAN)*, 02(2), 30–40.
- Islamiah, I. N., Nurnasrina, Salman, N. F. B., & Huda, N. (2024). Transformasi Digital Pada Perbankan Syariah Indonesia: Produk IT Dan Jenis Transaksi. *Sharing: Journal Of Islamic Economics, Management, and Business*, 3(1), 91–104.
- Minat, P., Dan, K., Masyarakat, K., Rusdiana, D., Dewanto, I. J., Pd, M., & Riyanto, S. (2024). *Jurnal Ekonomi , Bisnis*. 3(1), 274–279.
- Ramadhan, W., Daga, R., & Samad, A. (2023). Analisis Perilaku Nasabah Bank CIMB Niaga Makassar Terhadap Sistem Pembayaran Non Tunai QRIS. *Jurnal Sains Manajemen Nitro*, 2(2), 255–267.
<https://doi.org/10.56858/jsmn.v2i2.172>
- Roy, P., Pagariya Darshan, P., & Mary, G. I. (2015). Embedded System for Cash Deposit in ATM. *ICIIECS 2015 - 2015 IEEE International Conference on Innovations in Information, Embedded and Communication Systems*.
<https://doi.org/10.1109/ICIIECS.2015.7192886>
- Tanaka, K., Ogata, H., Kawaguchi, R., & Uozumi, A. (2014). Global deployment of cash management solution with core role for banknote-recycling ATMs. *Hitachi Review*, 63(6), 364–368. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84907577226&partnerID=40&md5=0f34b8a6132990e3700bdebce08b4ab2>
- Tartila, M. (2022). Strategi Industri Perbankan Syariah dalam Menghadapi Era



Digital. *Jurnal Ilmiah Ekonomi Islam*, 8(3), 3310.

<https://doi.org/10.29040/jiei.v8i3.6408>

Wahyudin, N., Rakib, M., & Jufri, M. (2024). Retail Business Development Using BSI Smart Agent Electronics: A Strategy for Increasing Sales Volume in Minimarket Businesses. *International Journal of Current Science Research and Review*, 07(01), 197–204. <https://doi.org/10.47191/ijcsrr/v7-i1-20>

Wijaya, R. (2013). Calyptra: Jurnal Ilmiah Mahasiswa Universitas Surabaya Vol.7 No.2. *Calyptra*, 2(2), 1–12.

Zahrotun Nadiyah, S., & Nur Aisyah, E. (2022). Analisis Perilaku Nasabah Dalam Melakukan Pembiayaan Pada Koperasi Syariah Murni Amanah Sejahtera Kota Malang. *Jurnal Tabarru': Islamic Banking and Finance*, 5(2), 398–411.

[https://doi.org/10.25299/jtb.2022.vol5\(2\).10872](https://doi.org/10.25299/jtb.2022.vol5(2).10872)

Zein, A. S. (2018). Analisis Perilaku Nasabah Dalam Memilih Bank Syariah Di Kabupaten Mandailing Natal. *At-Tijaroh: Jurnal Ilmu Manajemen Dan Bisnis Islam*, 4(2), 222. <https://doi.org/10.24952/tijaroh.v4i2.1100>