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Consumer Perceptions of Sustainable Use of Digital Wallets: A Monitoring Study of Users in the DANA Application

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Abstract: This study aims to analyze the level of consumer satisfaction with the DANA application as a digital wallet service provider, using five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. This study is a quantitative study conducted through a survey method, using a non-probability sampling technique. Data were collected using questionnaires and data triangulation through interviews. Data analysis includes the calculation of the arithmetic mean, SERVQUAL analysis, and importance performance analysis. The survey was conducted on 91 people who are active users of the DANA Application digital wallet. The results of the study showed that the performance of the DANA application in serving consumers was considered good with an average total score of 4.09. Meanwhile, consumer expectations of service quality are in the very high category, with an average score of 4.7. The total average difference (GAP) of -0.61 indicates that DANA's service quality is perceived as quite ordinary by consumers. In addition, the average total performance-importance value of 87% shows that the level of consumer satisfaction with service quality based on the five quality dimensions is not optimal.

Keywords: Consumer Perceptions, Sustainable Use, Digital Wallets, DANA.

INTRODUCTION

The current global landscape is witnessing an unprecedented acceleration of technological advancement. At this point, individuals are increasingly integrating a variety of technologies into their daily activities. This transformative shift can be attributed to the advent of the Fourth Industrial Revolution, where all sectors are undergoing significant transformations, most notably marked by the proliferation of Internet connectivity. Internet accessibility, which has become increasingly accessible to a large segment of the population, has undoubtedly facilitated communication without constraints related to temporal or spatial dimensions. This convenience goes beyond mere communication, to include enhanced capabilities for online transactions. Today, there is a growing array of innovations in the financial services sector, commonly referred to as financial technology (fintech). As a result, a multitude of complementary financial services, such as digital payment systems, have emerged, designed to promote a seamless transactional experience for users at any time and in any location. With the advent of digital payment solutions, financial transactions have become

more efficient, expedient, and secure; furthermore, these platforms often present various attractive incentives, including discounts for purchases made online or offline using these digital payment methods. In the Indonesian context, there are a large number of online-based applications that facilitate payment transactions for individuals in both digital and physical environments, including but not limited to Go-Pay, OVO, DANA, Link Aja, and ShopeePay, among others. The following data comes from katadata.co.id, based on an investigation conducted by DailySocial regarding digital wallets that are mostly used by Indonesian citizens in 2023:1.

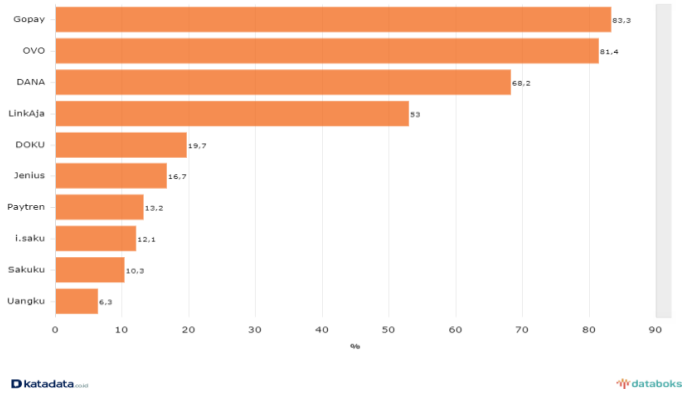


Figure 1. Digital Wallet Data

From the data on digital wallet users above in 2019, it shows that Go-Pay is ranked first with a percentage of users of 83.3%, followed by OVO with a percentage of 81.4%, DANA 68.2%, Link Aja 53% and other applications.

In a survey conducted by DailySocial.id, the most common reason respondents use digital wallets is because respondents trust digital wallet products by 81.6%, then 72.2% of respondents feel they need a digital wallet, while 72.9% consider it useful. In addition, 66.2% of respondents considered this digital wallet easy to use, and 32.8% of respondents felt that using a digital wallet could save time.

In 2024, the results of research conducted by DailySocial showed an increase in the percentage of digital wallet users.

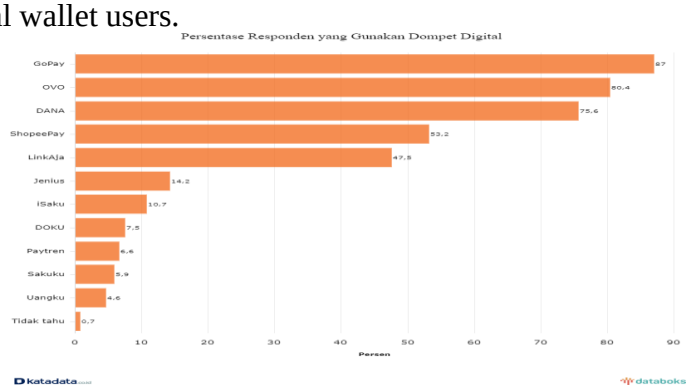


Figure 2. Percentage of Respondents Using Digital Wallets

Go-Pay still ranks first as the largest digital wallet user with a percentage of 87%, followed by OVO with a percentage of 80.4%, DANA with 75.6% and ShopeePay which entered, replacing LinkAja's position in the previous year with a percentage of 53.2%. Deputy Director of the Institute for Development of Economics and Finance (INDEF) Eko Listiyano said in Kompas.Com that large companies entering the e-wallet business world see that there is a huge opportunity to grow in the future. However, even though the e-wallet business has such great future prospects, Eko, Deputy of INDEF, considered it too risky because the business must be supported by capital that is also quite strong. Because of the many sweeteners

offered on the e-wallet platform such as discounts, promos or cashbacks that require extra capital to survive (Safitri, 2021).

DANA is a platform in the electronic wallet category that has obtained a permit from Bank Indonesia, with permit number 20/1370/DSSK/Srt/B which was approved on August 28, 2018 (Bank Indonesia, 2021). DANA is a start-up enterprise established in Indonesia, created by young Indonesian developers. The principal investor is PT Elang Sejahtera Mandiri (EMTEK), which collaborates with Ant Financial, the proprietor of Alipay (Grideon, 2021). Consequently, the DANA application is a platform developed by the youth of Indonesia. DANA is an application designed to supplant the traditional wallet with a digital wallet that is portable and convenient, eliminating the need for physical currency. Its application is not limited to online transactions; it may also be utilized for offline transactions, particularly at establishments that have partnered with DANA. DANA partners with merchants, ranging from MSMEs to established enterprises, as stated by Vince Iswara, CEO and Co-Founder of DANA Indonesia. DANA reported that 200,000 MSMEs had already used DANA Bisnis for digital transactions via QRIS (Mayasari, 2021). However, in practice, the use of physical money is still needed, especially when there are urgent needs or other things that require physical money. In addition, the use of digital wallets is also highly dependent on electricity and internet networks. If the device runs out of power or the electricity goes out and there is no internet network when making a payment transaction, the payment transaction cannot be processed (Goenawan, 2021). Reported from Liputan6.com, the number of DANA users in the third quarter of 2021 grew by 43%. This is inseparable from the growth of DANA users in the 25-34 year age group (32% of the number of DANA users) and also in the age group over 35 years (34% of the number of DANA users) (Agustinus, 2021). The evolution of DANA as a digital wallet is inherently linked to the services offered by the firm to its consumers. Service quality is crucial for enhancing competitiveness among digital wallets. Consumers will discern whether the services offered align with their expectations. This is due to the fact that consumer expectations continually evolve based on their conditions or circumstances. Consequently, the service quality must be aligned with consumer expectations. Consumers will evaluate a company's service quality by comparing it to that of similar platforms. The sustainability of the use of digital wallets, especially the DANA application, is influenced by the convenience, benefits, and security factors felt by users. Based on the results of a survey conducted by

Daily Social in 2020, the use of digital wallets in Indonesia has increased rapidly, with 72.2% of respondents feeling the need to have a digital wallet and 72.9% feeling that digital wallets are useful. The DANA application, which facilitates digital transactions with various practical features, has proven to be able to meet consumer needs for transaction efficiency. However, to ensure the sustainability of its use, DANA must continue to provide a satisfying experience, especially in terms of security and convenience. The sustainability of DANA's use also depends on the application's adaptation to new technological trends and consumer needs, such as integration with other financial services and compliance with increasingly stringent regulations. If DANA continues to innovate and strengthen these aspects, then its use will most likely continue.

METHODS

This study uses a quantitative approach to analyze consumer perceptions of the sustainability of the use of the DANA digital wallet application. The population in this study were the people of Samarinda city with a special category of active DANA application users in Indonesia, who have used the application for at least the last six months. A research sample of 91 respondents was selected using the probability sampling technique with the proportionate random sampling method, so that each user group has an equal chance of being selected according to their population proportion. The number of samples was calculated using the

Slovin formula with a 5% error rate. The sample includes users from various age groups, namely 30 people aged 18–25 years (32.97%), 40 people aged 26–35 years (43.96%), and 21 people aged 36–55 years (23.08%). This technique ensures that the research sample fairly represents the population of DANA application users. Data collection was carried out by distributing questionnaires to respondents. The questionnaire was distributed online through an online survey platform, as well as directly to respondents in several specific locations. The questionnaire was designed in three main parts. The first section contains respondent profile information, such as name, gender, age, and main activity (student, worker, or self-employed). The second section is the instructions for filling out the questionnaire to guide respondents in understanding how to answer the statements given. The third section contains research statements designed to measure the perception of sustainability of the use of the DANA application based on research variables. Each statement in the questionnaire uses a 5-point Likert scale, where 1 indicates "Strongly Disagree" and 5 indicates "Strongly Agree." The data collected from the questionnaire were analyzed quantitatively to determine the frequency distribution, average, and relationship between research variables. The analysis process was carried out using statistical software to produce accurate and in-depth interpretations.

This method is designed to provide a clear picture of the perception of DANA digital wallet application users regarding the sustainability of their use, especially in the context of their economic and social activities. This study is expected to contribute to understanding the factors that influence loyalty and sustainability of digital wallet application use in Indonesia.

Table 2. Likert Scale

Category	Positive Scores	Negative Scores
Strongly Agree	5	1
Agree	4	2
Neutral	3	3
Disagree	2	4
Strongly Disagree	1	5

In this study, servqual measurements were used, used to measure service quality, which means evaluating services with a set of predetermined standards, in its measurement, looking at the comparison or difference between expectations and performance of service quality (Budiyanto, 2021), which is explained in Table 3.

Table 3. Servqual Assessment Criteria

Interval	Assessment criteria
(-4,00) – (-2,40)	Very bad
(-2,41) – (-0,80)	Poor
(-0,81) – 0,80	Current
0,81 – 2,40	Good
2,41 – 4,00	Very good

Source: Angga Rahmat Dianto, (2014: 230)

RESULTS AND DISCUSSION

According to Ingang Perwangsa Nuralam, consumer satisfaction is an evaluation of a product or service's attributes or distinctive features that yield a degree of customer gratification concerning the fulfillment of their consuming needs (Ingang, 2017). Then according to Kotler and Keller in Sudaryono, consumer satisfaction is a consumer's feeling, either in the form of pleasure or displeasure that arises from comparing a product's performance with the product

expected by the consumer (Sudaryono, 2014). This study aims to measure the level of consumer satisfaction using the Importance Performance Analysis (IPA) technique by first analyzing the average value and GAP between performance and consumer expectations. Measurements are made based on 5 dimensions of service quality, including the dimensions of direct evidence (tangibles), reliability, responsiveness, assurance, and empathy. The following are the results of the discussion of the level of consumer satisfaction in the Importance Performance Analysis (IPA) technique based on 5 dimensions of service quality:

Dimension of Direct Evidence (Tangibles)

Based on the results of the study, the dimension of direct evidence (tangibles) obtained an average performance value smaller than the consumer's expectation value, namely the average performance value of 4.03 and the average consumer expectation value of 4.49. Thus, there is a difference or GAP value of -0.42. This means that the performance value is in the good criteria and consumer expectations are in the very high criteria with service quality that is in the moderate criteria. This value indicates that the quality of DANA digital wallet service is considered moderate or ordinary by users. The average value of the total importance performance in the dimension of direct evidence (tangibles) is 89.7%. This shows that the quality provided by DANA has not met user expectations. Because, the importance performance value is less than 100%.

This is supported by the results of interviews conducted by researchers, namely that most of the informants felt comfortable and considered the visualization of the DANA application display or user interface to be ordinary. This includes the design of the display, color, shape of the available icons/features. DANA has a blue and white display color as a characteristic of DANA coloring which is considered neutral, but there are several sources who are uncomfortable because the coloring is not soft enough. The shape of the icons or features available on the DANA application has a display that is easy for users to understand and has tools that are not much different from other similar applications. Looking at the facilities available, DANA provides a variety of service facilities that can be used by users. So, it makes it easier for users to carry out various transactions ranging from payment transactions, purchasing credit, quotas, access to Peduli Lindungi available on the DANA application, purchasing movie tickets and many other facilities. However, users still feel that DANA needs to consider expanding cooperation with several e-commerce and also several modes of transportation such as Transjakara, Commuter Line to provide payment methods through DANA.

Reliability Dimension

Based on the results of the study, the reliability dimension obtained an average performance value that was smaller than the consumer's expectation value, namely an average performance value of 4.23 and an average consumer expectation value of 4.76. Thus, there is a difference or GAP value of -0.53. This means that the performance value is in the very good criteria and consumer expectations are in the very high criteria with service quality that is in the medium criteria. This value indicates that the quality of DANA digital wallet service is considered moderate or ordinary by users. The average value of total importance performance in the reliability dimension is 88.84%. This shows that the quality provided by DANA has not met user expectations. Because, the importance performance value is less than 100%.

This is supported by the results of interviews conducted by researchers, namely the DANA application is easy to use by anyone from various groups ranging from teenagers who are 17 years old to parents. Because, the DANA application has a comfortable appearance to use with fast service access with a fast transaction process. As stated by the resource person, users can send money/transfer to various bank accounts or to fellow DANA users in seconds.

In addition, DANA also provides services in accordance with the information provided to the public, such as the ease of making payments online or offline at several merchants/business store sellers who have collaborated with DANA. However, there are several points that must also be explained by DANA in the information provided regarding free admin fees when making transfers to bank accounts. Users will get free transfers with a minimum nominal of IDR 50,000. This transfer limitation is objectionable for some sources or users because in the early years of DANA's release, the transfer admin fee was free without a minimum balance that had to be transferred. Users hope that DANA will continue to maintain this free admin fee because this is an important driver in transaction services at DANA

Responsiveness Dimension

Based on the results of the study, the responsiveness dimension obtained an average performance value that was smaller than the consumer's expectation value, namely an average performance value of 4.03 and an average consumer expectation value of 4.7. Thus, there is a difference or GAP value of -0.67. This means that the performance value is in the good criteria and consumer expectations are in the very high criteria with service quality that is in the moderate criteria. This value indicates that the quality of DANA digital wallet service is considered moderate or ordinary by users. The average value of total importance performance in the responsiveness dimension is 85.7%. This shows that the quality provided by DANA has not met user expectations. Because, the importance performance value is less than 100%.

Assurance Dimension

Based on the results of the study, the assurance dimension obtained an average performance value that was smaller than the consumer's expectation value, namely an average performance value of 4.03 and an average consumer expectation value of 4.82. Thus, there is a difference or GAP value of -0.79. This means that the performance value is in the good criteria and consumer expectations are in the very high criteria with service quality that is in the medium criteria. This value indicates that the quality of DANA digital wallet service is considered moderate or ordinary by users. The average value of the total importance performance in the assurance dimension is 83.57%. This shows that the quality provided by DANA has not met user expectations. Because, the importance performance value is less than 100%.

This is supported by the results of the interview that users rarely feel any system errors in making transactions. However, it was also found in several cases, there were system errors in DANA, namely being constrained in making transactions, balances that did not return until several days after the transaction. However, for transaction constraints felt by the source usually occur at midnight or very rarely during working hours. The next disruption is like the application exiting itself when being used then when entering, asked to log in again by entering the PIN number.

Empathy Dimension

Based on the research results, the empathy dimension obtained an average performance value that was smaller than the consumer's expectation value, namely an average performance value of 4.14 and an average consumer expectation value of 4.74. Thus, there is a difference or GAP value of -0.6. This means that the performance value is in the good criteria and consumer expectations are in the very high criteria with service quality in the medium criteria. This value indicates that the quality of DANA digital wallet service is considered moderate or ordinary by users. The average value of total importance performance in the empathy dimension is 87.35%. This shows that the quality provided by DANA has not met user expectations. Because, the importance performance value is less than 100%.

This is supported by interviews that have been conducted that users consider that promotions are important for DANA to carry out as one of DANA's added values and attract other people to use DANA. However, this is adjusted to each user's condition or user priority in using the DANA application. DANA can provide attractive promotions to its users gradually and routinely.

So, it can be concluded that from all aspects, an average total performance value of 4.09 is obtained for each attribute in all dimensions in the interval 3.41 - 4.20, which means it is in the good category. The consumer expectation value obtained an average value of 4.7 for each attribute in all dimensions, in the interval 4.21 - 5.00, which means it is in the very high category. The average total GAP value of -0.61 for each attribute in all dimensions is in the interval (-0.81) - 0.80, which means it is in the moderate category. The average total importance performance value is 87%. The importance performance value ≤ 100% means it is in the unsatisfactory category.

This aligns with the customer satisfaction hypothesis established by Kotler and Keller in Sudaryono's book, which defines consumer satisfaction as the emotional response, either positive or negative, resulting from the comparison between a product and the consumer's expectations. If the anticipated product or service does not align with reality, the consumer will experience dissatisfaction. If the product or service meets or exceeds consumer expectations

CONCLUSION

Based on the results of the research data that has been collected, processed and analyzed, it can be concluded that overall the level of consumer satisfaction is not yet satisfactory because the performance of the DANA application service is in the good criteria with very high consumer expectations. However, regarding the quality of DANA application service by consumers, it is considered moderate or ordinary. Thus, this is considered not yet able to provide satisfaction to consumers.

Sustainability of Digital Wallet Use: DANA Application

Based on the results of the study, the sustainability of the use of the DANA application by consumers, including active users of the DANA digital wallet, is influenced by the level of satisfaction that is still not optimal. The data shows that although the performance of the DANA application is considered good with an average score of 4.09, consumer expectations of the service are in the very high category with an average score of 4.7. The total average difference (GAP) of -0.61 reflects dissatisfaction, because the application performance has not fully met consumer expectations.

The level of consumer satisfaction with the quality of DANA services based on five dimensions of quality (tangibles, reliability, responsiveness, assurance, and empathy) only reached 87%, which indicates that there is still room for improvement. This can affect the sustainability of application usage, as consumers tend to look for alternatives if their needs and expectations are not consistently met.

To ensure the sustainability of DANA application usage by consumers, especially the public, it is necessary to improve aspects of service quality that are considered less than optimal. DANA must focus on meeting consumer expectations by providing services that exceed the "so-so" standard. Steps such as increasing responsiveness, strengthening security features, and providing a more personalized user experience can help reduce the gap between performance and expectations. Thus, consumer loyalty can be increased, so that the sustainability of DANA application usage can be maintained.

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