



Analysis of User Satisfaction Level of BRI Mobile Application Using Mobile Service Quality with Customer Satisfaction Index (CSI) Method (Case study on Gen Z 1997-2012 in Makassar City)

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Abstrak: BRIImo saat ini menghadirkan berbagai layanan yang akan memudahkan penggunanya dalam melakukan transaksi perbankan. Permasalahan pada penelitian ini adalah sistem sering mengalami error dan berdasarkan review di Google Playstore banyak respon dari pengguna terhadap aplikasi tersebut. Karena masih terdapat beberapa keluhan dan penilaian yang kurang memuaskan, maka perlu dilakukan penelitian terhadap kepuasan pengguna untuk mengetahui seberapa tinggi kepuasan pengguna terhadap aplikasi BRIImo. Metode yang digunakan dalam penelitian ini menggunakan metode Customer Satisfaction Index (CSI) untuk mengukur persentase kepuasan pengguna aplikasi BRIImo. Penelitian ini akan menggunakan dimensi-dimensi yang terdapat pada kualitas layanan seluler yang telah dimodifikasi agar sesuai dengan objek yang diteliti dalam penelitian ini. Data yang digunakan untuk diolah dalam penelitian ini diperoleh dari hasil kuesioner yang berjumlah 15 pertanyaan. Jumlah responden pada penelitian ini adalah 96 orang responden. Setelah data dikumpulkan dari responden, data tersebut akan diuji validitas dan realibnya untuk mengetahui seberapa valid dan reliabel data tersebut yang nantinya akan diolah dengan metode CSI. Hasil penelitian ini terlihat pada perhitungan metode CSI diperoleh persentase kepuasan pengguna sebesar 83,59% dan dapat dinyatakan pelanggan merasa “Sangat Puas” terhadap kualitas layanan aplikasi BRIImo.

Kata kunci: Mobile Banking, BRIImo, CSI, Mobile Service Quality, Kepuasan Pengguna.

Abstract: BRIImo currently presents a variety of services that will facilitate its users in conducting banking transactions. The problem in this study is that the system often experiences errors and based on reviews on Google Playstore there are many responses from users to the application. Because there are still some complaints and unsatisfactory assessments, it is necessary to conduct research on user satisfaction to find out how high user satisfaction with the BRIImo application is. The method used in this study uses the Customer Satisfaction Index (CSI) method to measure the percentage of satisfaction of BRIImo application users. This study will use the dimensions contained in the quality of cellular services that have been modified to suit the object under study in this study. The data used to be processed in this study were obtained from the results of a questionnaire totaling 15 questions. The number of respondents in this study were 96 respondents. After the data is collected from the respondents, the data will be tested for validity and reliability to find out how valid and reliable the data will be processed by the CSI method. The results of this study can be seen in the calculation of the CSI method obtained a percentage of user satisfaction of 83.59% and it can be stated that customers feel “Very Satisfied” with the quality of service of the BRIImo application.

Keywords: Mobile Banking, BRIImo, CSI, Mobile Service Quality, User Satisfaction

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INTRODUCTION

The use of digital information technology is increasing in modern times due to its very rapid development. According to Venkatesh's quote. (Andini & Utamajaya, 2023) The number of system users in the company has skyrocketed. Building an information system requires careful planning so that it can be well integrated and function according to needs, even though digital information technology can allow its users to access information quickly, correctly, and openly. Creating an information system has many advantages, but it can also fail if implemented. The rapid advancement of information technology also helps banks in providing better services. In the context of banking, the millennial generation and Generation Z have become important market shares. They tend to prefer easy, efficient, and digital-based banking services. Banks are also competing to adapt their services to the preferences of this generation, including in terms of developing banking applications that meet their needs and desires.

(Mandiri et al., 2021) defines mobile banking as a service that allows users to use smartphones and the internet to perform various banking tasks, especially through downloadable applications. Automatic Teller Machines (ATMs) and this service are comparable, where customers can perform various transactions such as checking accounts, transferring funds between accounts, and paying routine monthly bills through their bank accounts. The use of mobile banking provides many benefits, especially in terms of time and energy efficiency, because transactions can be carried out without queuing and from anywhere as long as they are connected to the internet network. In addition to providing benefits for users, the presence of mobile banking also provides benefits for banks, such as reducing operational costs that arise due to the opening of branch offices. By providing easy-to-use features and strong security, banks can also attract new customers who need mobile banking services.

Bank Rakyat Indonesia (BRI) has launched the BRImo or BRI mobile application in 2019 as part of its mobile banking service. This application offers a variety of service features such as top up, billing, cardless cash deposits and withdrawals, qris payments and many other features. The option to make cash withdrawals only through the BRImo application on a smartphone and without an ATM card is one of its advantages. To make a cash withdrawal, first enter the appropriate amount into the BRImo program, then enter the password. After getting the cash withdrawal code, the user must enter it at the nearest BRI ATM. However, there are problems related to this application,

where errors often occur in the system. Application users provide various responses on the Google Playstore, with a rating of 4.6 out of 5 this application should have received a lot of praise but in reality it is different. Negative responses have been widely spread in the Brimo application review column since the application made its last update on January 22, 2024, users commented on the difficulty of using Brimo because there were several icons/menus on Brimo that changed/were different, including complaints related to difficulties when recording faces for 8 seconds and disappointment with the application, which reduced user interest in using it. Therefore, research on user satisfaction with the BRImo application service is needed to determine the extent of user satisfaction with this service. Customer satisfaction is considered an important priority for the sustainability of service companies, so it is necessary to improve the quality of service in meeting customer expectations.

Customer Satisfaction Index (CSI) is one of the tools that can be used to measure customer satisfaction among other approaches. By focusing on the importance of service quality, CSI is used to assess customer satisfaction with service performance results. This approach is effective because it produces information on desired features in addition to the satisfaction index. However, the weakness of the CSI method is its inability to determine priority attributes from various attributes measured, according to previous research, Customer Satisfaction Index (CSI) measures how satisfied customers are with various aspects of products and services to determine their overall level of satisfaction. The efficiency of the CSI method is its strength, but its inability to distinguish priority attributes from other attributes measured is one of its weaknesses.

LITERATURE REVIEW

Resource Advantage Theory of Competition

(Halik et al., 2023) in his research said that the theory of resource advantage is an evolution of two basic theories that he developed. First, his theory put forward by Conner is that organizations are expected to be able to explain the factors that limit them and the reasons for their existence. This perspective is based on resource-based theory which focuses on heterogeneous demand and mobile resources. Second, Alderson's theory of competitiveness for differential advantage. Hunt in (Halik et al., 2023) argues that resource advantage can explain important strategies in organizations, including resource-based strategies, competency-based strategies, industry-

based strategies, market-oriented strategies, brand equity strategies, market segmentation strategies, and relationship marketing strategies. Resources called resource advantages are available resources, both tangible and intangible, which are then produced effectively and efficiently to be offered to certain market segments. The structure and foundation of resource advantage lie in the organization's ability to innovate and differentiate through available resources.

Differentiation and innovation are applied to achieve optimal advantage, where the organization's advantage must be improved to learn to maintain its advantage and increase the value of its products (Halik & Halik, 2024). This advantage will provide a better position and a higher market for the organization in the competition. Resource advantage is the evolution of disequilibrium during the competitive process, where organizational innovation and learning come from its internal resources. Both organizations and customers have incomplete information, regarding which entrepreneurship, institutions, and government policies will affect economic performance. Resource advantage theory argues that the value of a resource to a company is seen from its potential to generate competitive differentiation and/or provide customer value that improves the performance of others. With the development of information technology as it is today, customers can now easily express their thoughts, opinions, and perceptions to others (Xliema, 2019). Online word-of-mouth is a form where internet users provide their opinions and assessments of various products or services. These reviews/opinions are available to many people via the Internet (Voramontri & Klieb, 2019). Information technology is a combination of computer technology consisting of hardware and software to process and also store information and communication technology to distribute information. (Chugh et al., 2016) states that awareness of sustainable Information and Communication Technology practices can help organizations adopt strategies to develop effective sustainable work practices and educate their employees. For small companies, it is important to provide reasonable training to educate their staff about sustainable Information and Communication Technology practices. So, to be able to create competitive advantage in this digital era, companies need to create awareness of the

importance of using information technology in future company operations (Londong, 2024).

Customer satisfaction

Consumer satisfaction according to (Kotler, 2018) is a feeling of satisfaction or dissatisfaction that a person has after considering his expectations against his assessment of the performance (results) of a product. In other words, customer satisfaction comes from evaluating how well a product or service meets customer expectations. Tjiptono on the other hand defines consumer satisfaction as a state in which customers present themselves after realizing that their expectations have been met or exceeded. Elements that Influence Client Satisfaction. There are various factors that can influence customer satisfaction, including:

- a. **Product Quality:** Customer satisfaction is largely determined by the quality of the goods or services provided. Customers will have a better experience with high-quality products or services, which will increase their chances of being satisfied.
- b. **Price** is something that buyers must pay in return for the goods they buy. If consumers are willing to pay the price, then it is clear that they must get something that must at least be equivalent to the value they spend. Philip Kotler (in M Bayu Adrio F 2022) stated that price is one of the elements of marketing that generates revenue, other elements generate costs. Price is an element of the marketing mix that is most adaptable; product characteristics, channels, and even promotions take more time. Price also communicates the desired value position of the company marketing its brand products. The price of a particular good (and/or service) is a level of assessment at which the good can be exchanged for something else, whatever its form (M Bayu Adrio F, 2022). In order for customers to be satisfied, the price must be competitive and commensurate with the value of the goods or services provided. If consumers believe that they are receiving value for the money they spend, they will be happy.
- c. **Service:** According to Kotler (2003:210), providing good service means responding quickly to customer needs, being willing to accommodate them, and delivering goods or goods in an efficient manner. Meanwhile, Fandy Tjiptono (Mandiri,

2020) claims that the definition of service quality emphasizes efforts to fulfill consumer needs and desires and the accuracy of delivery to be in line with consumer expectations. Thus, service quality includes aspects of speed, availability, fulfillment of needs, desires, and accuracy of delivery according to consumer expectations.

- d. Atmosphere. A comfortable and pleasant atmosphere at the point of sale or when using services can also increase customer satisfaction.
- e. Communication: Clear and open communication between the company and customers can build trust and increase customer satisfaction.
- f. Ease of access: Ease of access to obtain products or services, such as strategic locations, flexible opening hours, and easy purchasing processes, can also increase customer satisfaction.
- g. Handling complaints: The way a company handles customer complaints can also affect customer satisfaction. Customers will be satisfied if the company responds to their complaints quickly, politely, and provides satisfactory solutions.

The Importance of Customer Satisfaction

Customer satisfaction is very important for a company because:

- a. Increase customer loyalty: Satisfied customers tend to come back to buy products or services from the same company.
- b. Increase sales: Satisfied customers will recommend the company's products or services to others, thereby increasing sales.
- c. Increase profits: Satisfied customers will make a greater contribution to the company's profits.
- d. Strengthen the company's image: High customer satisfaction can improve the company's image and make it more competitive.

Customer Satisfaction Theories

There are several theories that explain customer satisfaction, including:

- a. (Kotler & Keller, 2009) define consumer satisfaction as a sentiment experienced by consumers, both positive and negative, when comparing a product with what they expect

from the product. Consumers will feel happy and satisfied if the product meets or exceeds their expectations. Meanwhile, customers will clearly not be happy using a product if after using it it does not meet expectations.

- b. (Londong et al., 2024) stated that the concept of consumer satisfaction is closely related to the buyer's mindset at the consumption or post-purchase stage. If consumers feel satisfied or dissatisfied with the product or products, an evaluation will be carried out on alternative methods either in the second period or after the product is consumed. When customers are satisfied, they tend to repeat their purchasing habits.
- c. According to (Jaya et al., 2023), the general attitude shown by customers towards products and services after their acquisition and use is known as consumer satisfaction. Customer satisfaction refers to the assessment of how well a choice is completed as a result of a particular purchasing decision and product usage experience.
- d. (Pagiling et al., 2024) define consumer satisfaction with consumer dissatisfaction. Where consumer satisfaction and dissatisfaction are consumer behavior towards a product and service as a result of consumer evaluation based on consumer experience after using the product. Consumers will feel satisfied when the service from the product provided is appropriate and pleasing. Conversely, if it is not in sync, it will cause dissatisfaction.

Customer Satisfaction Indeks (CSI)

Customer Satisfaction Index (CSI) is a key metric used to measure the extent to which customers are satisfied with an organization or a particular product. This method involves using a short questionnaire to generate a single number that reflects the level of customer satisfaction.

This method can be applied in the context of the BRI Mobile application by conducting a survey of BRI Mobile Application users in Makassar City, especially Generation Z. The results of this survey can provide valuable insights regarding the level of customer satisfaction and areas that need improvement. Thus, companies can use the CSI method to continuously monitor and improve their customer satisfaction.

The stages of CSI measurement are:

- a. Calculating Mean Importance Scores, which is the average of the importance level attributes.
- b. Calculating Mean Satisfaction Scores, which is the average of the satisfaction level attributes

Weighted Factor (WF) is used to measure the level of importance (expectation). This is done by changing the average importance value to a percentage of the overall average importance value for all qualities evaluated, resulting in a Weighted Factor of 100%. (Andini & Utamajaya, 2023).

$$\text{Formula: } WF = yi / \sum yi \times 100\%$$

Description:

WF = Weight Factor

Yi = average level of importance (expectation) for attribute i

$\sum yi$ = sum of average level of importance (expectation) for attribute i evaluation of Weighted Score

(WS) level, which is the product of Weighted Factor for each attribute and average level of performance (satisfaction) for each attribute.

$$\text{Formula: } WS = WS \times WFxi / 100\%$$

Description:

WS = Weight Score

Xi = average level of satisfaction (reality) for attribute i.

Calculating the **Weighted Total (WT)**, namely adding up the Weighted Total of all service quality attributes.

$$\text{Formula: } WT = \sum WF \times xi / 100\%$$

Description:

WT = Total Weight W

F = Weight Factor

xi = Satisfaction Level (reality) for attribute i.

By using the Satisfaction Index (SI), which is the Weighted Total divided by the highest scale used in this study and multiplied by 100, to determine the overall level of customer satisfaction.

$$\text{Formula: } SI = WTn \times 100\%$$

Description:

SI = Statisfaction Index

WT = Weight Total

n = maximum number of scales in the study.

Determining customer satisfaction criteria using scores obtained using the Customer Satisfaction Index method.

No	CSI Value (%)	Description
1	0 - 34	Very Dissatisfied
2	35 - 50	Less Satisfied
3	51 - 65	Quite Satisfied
4	66 - 80	Satisfied
5	81 - 100	Very Satisfied

Source: (Andini & Utamajaya, 2023)

Mobile Service Quality (MSQ)

Mobile Service Quality (MSQ) is the quality of service provided through mobile applications (Andini & Utamajaya, 2023). MSQ includes factors that influence mobile service quality and its impact on user satisfaction. Some factors that influence MSQ include technical quality, functional quality, price, mobile device, additional services, ease of use, and reliability. Research shows that MSQ has a significant impact on user satisfaction. Therefore, companies must pay attention to the factors that influence MSQ to improve user satisfaction and maintain their competitive advantage in the market. A case study on Generation Z in Makassar City can provide valuable insights related to the factors that influence MSQ and user satisfaction levels.

BRI Mobile Application

Customers can perform various banking activities on their mobile devices with the BRI Mobile application, including sending and receiving money, checking balances, paying bills, and making purchases. This application is also equipped with security features, such as digital tokens and fingerprints, to protect users' personal data and banking transactions. The BRI Mobile application is widely used by Generation Z in Makassar City. Several previous studies have been conducted related to the satisfaction of users of this application. One study showed that perceptions of benefits, perceptions of ease, and perceptions of security have a positive influence on user interest in using the BRI Mobile

application. However, many users expressed dissatisfaction with the slow and non-functioning application and its inability to perform certain desired functions, such as applying for a credit card, making payments at PLN, and buying credit. Therefore, to meet user needs and increase user happiness with the BRI Mobile application, business actors must conduct studies and provide new features and services.

Generation Z

According to (Lambe, 2024), Gen Z individuals were typically born between 1995 and 2010. However, the time span of Gen Z's birth can vary according to various experts. While (IDN Research Institute, 2024) state that Gen Z were born between 1995 and 2012.

METHODS

This study uses a quantitative method with a survey approach to analyze the level of satisfaction of BRIimo application users among Generation Z in Makassar City. The population in this study were individuals born between 1997 and 2012 who used BRIimo, with a sample size of 96 respondents selected using the Accidental Sampling technique (Singarimbun, M & Effendi, 2008). This technique allows researchers to take samples based on individuals who are met by chance but are relevant to the object of research. Data were collected by distributing questionnaires with a Likert scale (1-5) (Susilana, 2015), which included 15 questions related to user experience and satisfaction with the BRIimo application. This study was conducted in Makassar City in 2024 to gain insight into how BRIimo service quality affects user satisfaction. Data analysis was carried out through several stages, namely validity testing, reliability testing, and calculating the customer satisfaction index using the Customer Satisfaction Index (CSI) method. Validity test was conducted using Pearson Product Moment correlation method, where R-calculated value was compared with R-table to ensure the validity of the research instrument. Meanwhile, reliability test used Cronbach's Alpha, with a minimum value of 0.6 to state that the instrument used is reliable. Furthermore, CSI calculation was conducted by calculating Mean Importance Score (MIS) and Mean Satisfaction Score (MSS), and determining Weight Factor (WF) and Weighted Score (WS). The calculation result showed that BRIimo user satisfaction index reached 83.59%, which is included in the "Very Satisfied" category. Thus, this study provides an empirical

picture of BRIimo user satisfaction level and factors in application services that influence customer satisfaction.

RESULT AND DISCUSSION

This study analyzes the level of satisfaction of BRIimo application users among Generation Z in Makassar City using the Customer Satisfaction Index (CSI) method. The results of the analysis begin with the characteristics of respondents consisting of 96 individuals with a proportion of female gender of 67.7% and male of 33.36%. In terms of age, the majority of respondents are aged 20-23 years (59%), followed by the 24-27 age group (28%), while the youngest respondents (12-15 years) are only 1%. In terms of employment, the student group dominates with a percentage of 54%, followed by private employees (14%) and PNS/ASN/BUMN employees (6%). This data shows that the majority of BRIimo users who participated in this study came from the productive age group and students, which are the main segments of digital banking service users. The results of the validity and reliability tests show that all research variable indicators are valid and reliable. Validity test using Pearson Product Moment method shows that the R-count value of each indicator is greater than R-table (0.202), which means that all indicators in the questionnaire are suitable for further analysis. Reliability test using Cronbach's Alpha method shows results above 0.6 for all variables, indicating that the research instrument has a high level of consistency. CSI calculation produces a user satisfaction index of 83.59%, which is included in the "Very Satisfied" category. These results indicate that overall, BRIimo users in Makassar City are very satisfied with the quality of services provided by the application. Based on these results, the study concludes that BRIimo services have met user expectations in terms of efficiency, ease of transactions, security, and responsiveness of service. However, several aspects that get lower satisfaction scores still need to be considered to improve service quality in the future.

CONCLUSION

This study analyzed the satisfaction level of Generation Z users in Makassar toward the BRIimo mobile banking application using the *Customer Satisfaction Index* (CSI) method. The findings indicate that the overall user satisfaction level reached 83.59%, categorized as "Very

Satisfied." The results align with the research objective of evaluating service quality factors such as efficiency, fulfillment, privacy, contact, and responsiveness. The study confirms that BRImo has successfully met user expectations in terms of service performance, transaction ease, and security. However, while the majority of users expressed high satisfaction, some aspects, such as navigation and user experience during application updates, require further improvement. These findings support the hypothesis that service quality significantly influences user satisfaction, confirming the importance of continuous service enhancements to maintain customer trust and engagement.

Despite its contributions, this study has certain limitations. **First**, the sample size was limited to 96 respondents from a single city, which may restrict the generalizability of the findings to a broader population. **Second**, the study relied solely on self-reported survey data, which could introduce response bias. Future research should consider expanding the sample size, incorporating respondents from multiple regions, and using mixed-method approaches, such as qualitative interviews, to gain deeper insights into user perceptions. Additionally, further studies could explore the long-term impact of service quality improvements on user retention and financial behaviors in mobile banking.

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