The Effect of E-Service Quality on Customer Satisfaction of the Welma Application at PT Bank Central Asia, TBK

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		ABSTRACT
Keywords:	E-service	This study aims to examine the influence of electronic
quality;	customer	service quality (e-service quality) on customer satisfaction
satisfaction; welma.		with the Welma application at PT Bank Central Asia, Tbk.
		The method used is a survey using a questionnaire
		distributed to customers of the Welma application. The data
		analysis technique used is multiple linear regression
		analysis. The sample of this study is 400 respondents of
		Welma application customers who were selected by
		convenience sampling. The results of the study show that
		there is a positive and significant influence of electronic
		service quality on customer satisfaction with the Welma
		application. The implication of the results of this study is the
		importance of PT Bank Central Asia, Tbk to continue to
		improve the quality of electronic services to increase
		customer satisfaction of the Welma application so that it can
		retain and attract more customers.
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Introduction

The use of technology plays a very important role in improving the quality of services offered by businesses. Among the innovations that have driven the information revolution is the internet, which is often considered the third major revolution after the agricultural and industrial revolutions.

The arrival and adoption of the internet in the industry have eliminated the constraints of distance, time, and communication that have made the world truly a small village. (Tarigan, 2017). With the development of technology that is increasingly advanced and developing, communication is becoming more effective and efficient. Many people are competing to create tools that can facilitate all activities carried out and overcome problems with communication, hence the creation of the Internet (Mirati, Purwaningrum, & Masjono, 2024).

In the ever-evolving digital era, information technology has changed the way financial services are delivered and accessed. Electronic banking (e-banking) is one of the significant innovations that allows customers to access various banking services through digital applications or platforms. PT Bank Central Asia, Tbk (BCA), as one of

the largest banks in Indonesia, has adapted to this development through the development of the WELMA application, a platform designed to make it easier for customers to manage their investments and insurance.

Welma is a mobile application that can be downloaded from the official website of PT Bank Central Asia Tbk (BCA) as well as the official application/software distribution media appointed by BCA owned by the mobile operating system located on the mobile phone of Welma Users to facilitate transaction needs and/or information regarding investment and insurance. Welma is a feature to invest and buy insurance products anytime and anywhere. Welma is here to facilitate investment in Mutual Funds, Primary Market Bonds, and Secondary Market Bonds through the myBCA application. Welma is an application that was just launched on October 8, 2021, and must compete with companies that provide similar products from both banking institutions and other financial institutions.

BCA's WELMA application offers various features that allow customers to make transactions and access financial information easily and quickly (Mirati et al., 2024). Electronic service quality (e-service quality) is a key factor in determining customer satisfaction with this application. E-service quality includes various aspects, such as reliability, security, speed of access, ease of use, and quality of information presented.

According to Kotler and Keller, satisfaction is a feeling of joy or disappointment that arises when a person compares expected performance such as a product or result against their expectations. If the product or performance does not meet expectations, customers will feel dissatisfied. If the product and performance meet expectations, customers will feel satisfied. (Marbun, Ali, & Dwikoco, 2022). If the product or performance exceeds expectations, the customer will feel very satisfied and happy. Satisfaction is also an evaluation of the characteristics or privileges of a product or service, or the product itself, which provides a level of pleasure for consumers related to the fulfillment of their consumption needs.

Consumer satisfaction also depends on the quality of service provided from producers to consumers. (Marliyah, Ridwan, & Sari, 2021). How can manufacturers provide a pleasant and satisfying experience when buying a product so that it gives rise to good feedback for consumers? (Gultom, Yuliati, & Djohar, 2016)?

According to Laricha et al., E-service quality known as e-servqual is a new version of service quality (servqual) that was developed to evaluate a service provided on the Internet network. (Juhria, Meinitasari, Fauzi, & Yusuf, 2021). E-Service is an electronic service that includes business or actions carried out through information technology media. These services include various aspects such as e-tailing, customer support, and service provision. E-service quality refers to the ability of services to provide good performance and optimal service quality when serving consumers in shopping, purchasing, and delivering goods to customers through electronic platforms.

Customer satisfaction is an important element in maintaining customer loyalty and increasing the bank's competitiveness in an increasingly competitive banking industry. Therefore, this research is not only relevant for BCA but also for the banking industry as

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a whole in understanding the dynamics of digital services and how they can be optimized to provide more value to customers (Raynare & Trianasari, 2021).

However, in providing digital banking services, BCA needs to ensure that the quality of electronic services provided through the Welma application meets the expectations and needs of customers. This is because customer satisfaction is key to retaining customers and increasing their loyalty.

Several previous studies have revealed the relationship between electronic service quality and customer satisfaction in various industry contexts. (Khan, Arshad, & Munir, 2023). However, few have explored this relationship specifically in the context of digital banking applications in Indonesia, especially in the Welma BCA application. Therefore, this study aims to fill this knowledge gap by investigating the influence of e-service quality on customer satisfaction in the Welma BCA application. The results of this study are expected to provide valuable insights for BCA in designing more effective strategies to improve customer experience and strengthen its position in the increasingly competitive digital banking market. (Jalaludin, 2021).

Based on the business phenomenon that occurred, in running the Welma application launched by PT Bank Central Asia, Tbk (BCA), several problems may be faced by users and the bank itself. These issues can affect the customer experience and the quality of services provided. Some of these problems include system constraints, data security, inaccurate information, internet connection problems, etc., coupled with several competitors who have launched mobile applications for investment products.

Method

The data source used in this study is primary data, namely data collected by the researcher himself when conducting research with a questionnaire to all customers who are active users of the Welma application at PT Bank Central Asia, Tbk. In addition, this study also uses secondary data, namely data from within PT. Bank Central Asia, Tbk.

The population in this study is all customers who are active users of the Welma application at PT. Bank Central Asia, Tbk in 2023 with a total of 126,440 customers. This study uses the Slovin formula because in the sample draw, the number must be representative so that the research results can be generalized and the calculation does not require a table of sample numbers but can be done with a simple calculation formula. The Slovin formula for determining the sample is as follows:

$$\mathbf{n} = \frac{\mathbf{N}}{\mathbf{1} + \mathbf{N}(\mathbf{e})^2}$$

Information:

n: Sample size/ number of respondents

N: Population size

e: Tolerable sampling accuracy tolerance percentage; e = 0.1

In the Slovin formula there are the following provisions:

So, the range of samples that can be taken from the Slovin technique is between 10-20% of the study population. The total population in this study is 126,440 customers, so

the percentage of relaxation used is 10% and the calculation results can be rounded up to achieve suitability. So to find out the research sample, with the following calculations:

$$\mathbf{n} = \frac{126.440}{1 + 126.440(0.05)^2}$$

$$\mathbf{n} = \frac{126.440}{317.1} = 398,73$$

Based on calculations using the Slovin formula, the number of samples that became respondents in this study was 400 customers at PT Bank Central Asia, Tbk. This step was taken to facilitate data processing and produce better test results. Samples were taken using random sampling techniques, where researchers provided an equal opportunity for each member of the population (customers) to be selected as a random sample, regardless of strata in the population. The data collection method is carried out through the questionnaire method, which is a method of collecting data by providing a list of statements or questions (questionnaires) to respondents with a guide to answer choices. In this study, the results obtained from questionnaire answers using the Likert scale are ordinal data. For the data to be statistically analyzed, it must be converted into an Interval. The method used is the method of successive (MSI), which is a scaling method to raise the ordinal measurement scale to the interval measurement scale. (Burhannudin, Zainul, & Harlie, 2019).

Results and Discussion

This study collected responses from 400 users of the Welma application at PT Bank Central Asia Tbk (BCA). Demographic data showed the majority of respondents were between the ages of 25-35, representing 60% of the total participants. Most users have been using the Welma app for more than a year, with 75% accessing it at least once a week. These statistics provide insight into the level of respondents' experience with the app and how familiar they are with its functionality.

Interviews conducted with key users highlight the reliability and ease of access as the main strengths of the Welma app. However, they also mention slow load times and system crashes that occur during peak hours, which are considered significant weaknesses. Users expressed concerns about data security, but trust in BCA as a whole remained strong.

The constant value shows a positive value of 1.884. This shows that the level of customer satisfaction is assessed without the influence of e-service quality, with a variable value of customer satisfaction of 1,884. Meanwhile, the value of the regression coefficient of the e-service quality variable was 0.560 with a t_hitung value of 13.934, which stated that e-service quality had a positive influence on customer satisfaction. This shows that the better the quality of e-service provided, the higher the quality of e-service in the Welma application at PT Bank Central Asia, Tbk.

The results of this study show that in the Welma application indicator, the application opening speed (fast load time) has the lowest value of 3.95. It is suspected that the Welma application often takes a few seconds to open, depending on the internet

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connection of each user. Several respondents who are customers of PT Bank Central Asia, Tbk complained about application disruptions during working hours that hindered customer transactions.

Quality e-service is an extension of the site's ability to provide facilities for shopping, purchasing, and distribution activities effectively and efficiently. This internet-based service makes customers feel more efficient in making transactions in terms of time and cost. Similarly, the availability of information and smooth transactions are the choice of customers to transact through the availability of adequate system and internet network facilities as well as the guarantee of confidentiality of customer data (Ramadhana, 2019). Thus, the quality of e-service provided by the company will satisfy or not satisfy customers because the quality of the service provided by the company affects the level of customer satisfaction (Sangi, Tamengkel, & Mukuan, 2022).

The indicator of customer transaction habits information through the Welma application is maintained safely showing the highest score of 4.25. This shows that customers trust PT Bank Central Asia, Tbk in maintaining all customer data, both personal data and transaction data. Customers feel that the services provided are very good, and PT Bank Central Asia can maintain customer comfort by being able to keep customer data from being easily accessible.

The high satisfaction score for data security reflects BCA's commitment to safeguarding user information, which is an important aspect of maintaining customer trust in digital services. However, a relatively low score for access speed indicates areas that need significant improvement. Faster response times are essential for maintaining a smooth customer experience, especially for investment-related transactions that rely on real-time data.

Observations show that the quality of the internet connection and server load during peak hours contribute to slower application performance. These findings are in line with previous research on the quality of electronic services in digital banking, where infrastructure limitations are often cited as a bottleneck.

The results of this study are consistent with previous research, such as those conducted by Sangi et al. (2022), which found that electronic service quality is an important factor in customer satisfaction for banking applications. However, unlike previous studies that focused more on system reliability, this study emphasizes the role of data security as a major contributor to customer satisfaction.

For PT Bank Central Asia Tbk, these findings emphasize the importance of increasing server capacity and optimizing the technical performance of applications, especially during peak hours. Addressing these issues can further increase user satisfaction and loyalty, thereby contributing to the bank's competitiveness in the digital banking industry.

The research is limited to focusing on a single banking application, which may not reflect the broader spectrum of digital banking services. Future research may expand the scope by comparing multiple banking applications to provide a more comprehensive analysis of the quality of electronic services.

Conclusion

Based on the results of the research that has been conducted, it can be concluded that electronic service quality (e-service quality) has a positive and significant influence on customer satisfaction in the Welma application at PT Bank Central Asia Tbk. This shows that the better the quality of electronic services provided by the Welma application, the higher the level of satisfaction felt by its users.

This research emphasizes the importance of various aspects of electronic service quality, such as access speed, data security, ease of use, and reliability of the information provided in increasing customer satisfaction. Good service quality not only helps retain existing customers but also has the potential to attract new customers who want efficient and secure banking services. The implication of this study for PT Bank Central Asia Tbk is the need to continuously improve the quality of electronic services, especially in dealing with technical constraints such as application loading times and interruptions during operating hours. By continuously improving these aspects, the Welma app can provide a better user experience, which will ultimately increase customer loyalty and the bank's competitiveness in the increasingly competitive digital banking industry. Furthermore, the results of this study also contribute to the literature related to the quality of electronic services in the banking sector, especially in Indonesia, and provide insights for other banks looking to develop or improve their digital banking services.

Bibliography

- Burhannudin, Burhannudin, Zainul, Mohammad, & Harlie, Muhammad. (2019). Pengaruh disiplin kerja, lingkungan kerja, dan komitmen organisasional terhadap kinerja karyawan: Studi pada Rumah Sakit Islam Banjarmasin. *Jurnal Maksipreneur: Manajemen, Koperasi, Dan Entrepreneurship*, 8(2), 191–206.
- Gultom, Winarni Saftarya Timedina, Yuliati, Lilik Noor, & Djohar, Setiadi. (2016). Pengaruh service quality, product quality dan perceived value terhadap kepuasan dan loyalitas pelanggan industri kayu Perhutani. *Jurnal Manajemen & Agribisnis*, *13*(2), 109.
- Jalaludin, Jojo. (2021). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Konsumen Pada Pt Bina Sejahtera Bangun Persada Serang Banten. *AKADEMIK: Jurnal Mahasiswa Ekonomi & Bisnis*, 1(2), 40–48.
- Juhria, Aminatu, Meinitasari, Nurtika, Fauzi, Fadel Iqbal, & Yusuf, Abdul. (2021). Pengaruh e-service quality terhadap kepuasan pelanggan di aplikasi e-commerce shopee. *Jurnal Manajemen*, *13*(1), 55–62.
- Khan, Fahad Najeeb, Arshad, Muhammad Usman, & Munir, Muhammad. (2023). Impact of e-service quality on e-loyalty of online banking customers in Pakistan during the Covid-19 pandemic: mediating role of e-satisfaction. *Future Business Journal*,

The Effect of E-Service Quality on Customer Satisfaction of the Welma Application at PT Bank Central Asia, TBK

9(1), 23.

- Marbun, Maulina Br, Ali, Hapzi, & Dwikoco, Fransiskus. (2022). Pengaruh Promosi, Kualitas Pelayanan Dan Keputusan Pembelian Terhadap Pembelian Ulang (Literature Review Manajemen Pemasaran). *Jurnal Manajemen Pendidikan Dan Ilmu Sosial*, 3(2), 716–727.
- Marliyah, Marliyah, Ridwan, M., & Sari, Ayu Kartika. (2021). The Effect of E-Service Quality on Satisfaction and Its Impact on Customer Loyalty of Mobile Banking Users (Case Study of Bank Syariah Mandiri KCP Belawan). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(2), 2717–2729.
- Mirati, R. Elly, Purwaningrum, Endang, & Masjono, Ali. (2024). The Influence Of Financial Literacy And Financial Behavior On Welma-Mybca Mutual Fund Investment Decisions. *Ekonomi & Bisnis*, 23(1), 79–89.
- Raynare, Ridhorezky, & Trianasari, Nurvita. (2021). Pengaruh Dimensi E-service Quality Terhadap E-customer Satisfaction Serta Dampaknya Terhadap E-customer Loyalty Jd. id. *EProceedings of Management*, 8(6).
- Sangi, Intan M. A., Tamengkel, Lucky F., & Mukuan, Danny D. S. (2022). Pengaruh Kualitas Pelayanan Terhadap Kepuasan Nasabah PT. Bank Danamon Indonesia, Tbk. Cabang Ranotana. *Productivity*, *3*(2), 107–112.
- Tarigan, Magdalena Dela Rose. (2017). Pengaruh E-Service Quality Pengguna Internet Banking Terhadap Customer Satisfaction (Studi Pada Nasabah Bank Central Asia Di Kota Malang). Universitas Brawijaya.