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The Influence of Barcode Scanning Payment System on Customer Satisfaction in Buying and Selling Transactions in Indonesia and India

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ABSTRACT

In this era of digitalization, everything has changed, especially in the payment system. The payment system most often used in businesses involves barcode scanning, and this trend is skyrocketing. This research aims to test and analyze the effect of barcode scanning payment systems on customer satisfaction in Indonesia and India, focusing on systems such as QRIS in Indonesia and BharatQR and UPI QR in India. This study is quantitative research. Data was collected by distributing questionnaires to 50 respondents in India and 57 respondents in Indonesia, totaling 107 respondents. The independent variables are ease of use, trust, efficiency, usefulness, and safety, while customer satisfaction is the dependent variable. The data was analyzed using SPSS. The results exhibit that efficiency and security significantly impact customer satisfaction, while ease of use, trust, and usefulness do not affect customer satisfaction. These findings enrich the theory of customer satisfaction and provide valuable suggestions for financial regulators.

Keywords: Customer Satisfaction; Ease of Use; Efficiency; Safety; Trust; Usefulness

INTRODUCTION

Currently, many businesses, including MSMEs, have begun to implement payment digitization. Various types of payment digitization exist, including digital wallets, internet banking, mobile banking, and barcode scanning. Among these, barcode scanning is increasingly being adopted in Indonesia and India. This payment system is very easy and practical, accessible through mobile banking or digital wallets. QR codes have been implemented by merchants as a cashless payment system based on cloud servers, which require internet connectivity for use (Nada et al., 2021).

One example of barcode scanning payment is QRIS, used in Indonesia. According to Devica and Widodo (2023), the Quick Response Code Indonesian Standard, also called QRIS, is a combination of different QR types from various payment system service providers that use QR codes. QRIS is a standardized payment system using QR codes to facilitate easier, faster, and safer transactions. QRIS has been in use since August 2019 and has seen an increase in adoption year after year. The use of QRIS itself has a significant influence on MSMEs, so if there is an increase related to QRIS variables such as customer satisfaction, it will also affect the progress of MSMEs in Indonesia (Hutagalung et al., 2021). Additionally, barcode scanning payment systems are also present in India under the names BharatQR and UPI QR. BharatQR is a digital payment system developed by NPCI, Mastercard, and Visa. UPI QR, which stands for Unified Payments Interface, is another barcode scanning payment tool used in India. BharatQR and UPI QR were established before QRIS in Indonesia, with BharatQR having been in operation in India since 2016.

The use of barcode scanning payment systems such as QRIS, BharatQR, and UPI QR has increased year after year. According to Rachman (2023), from January to October 2023, the total transaction volume of QRIS amounted to 1.59 billion transactions, with a nominal value of IDR 24.97 trillion. Similarly, the Times of India (2022) reported that BharatQR usage in 2022 was 4.86 million transactions, and UPI QR usage reached 216.43 million transactions in the same year. This information suggests that the increasing use of barcode scanning payment systems is closely related to customer satisfaction, which explains the growing trend in their use.

Customer satisfaction can be assessed by several indicators. In several previous studies, various indicators and variables have been used to determine customer satisfaction. Research by Juniwati (2015), Maula & Sunarjo (2023), and Rachmacandrani et al. (2023) used perceived ease of use as one of the indicators. Juniwati (2015) and Sumadi & Soliha (2015) used trust indicators to determine customer satisfaction. Mustika (2022) and Widya & Elisabet (2022) used efficiency indicators as determinants of customer satisfaction. Kenyta (2022) used indicators such as ease of use, usefulness, and trust as determinants of customer satisfaction.

The simplicity of the system ensures that consumers can swiftly and effortlessly complete transactions. This streamlined experience enhances consumer satisfaction by eliminating the need for prolonged learning periods (Juniwati, 2015; Maula & Sunarjo, 2023). Furthermore, an intuitive system is accessible to a diverse demographic, including those who may be less technologically inclined. This fosters inclusivity and enables a broader range of individuals to utilize the service.

In the context of financial transactions, trust is of paramount importance (Kenyta, 2022). Therefore, it is essential that consumers are reassured that their personal and financial information is secure when utilizing the barcode scanning payment system. Establishing

high levels of trust in the system will encourage more individuals to switch to this payment method. Trust also hinges on the reputation of the service provider; a provider known for trustworthiness will be more readily accepted by consumers, thereby increasing adoption and satisfaction rates.

Additionally, the efficiency of a payment system is a key factor in reducing the time taken to complete a transaction for both the consumer and the merchant. A fast and efficient process increases satisfaction as consumers can complete their purchases more quickly. An efficient system also reduces the likelihood of errors in transactions, which can be a source of frustration for consumers (Widya & Elisabet, 2022).

System usability is determined by the extent to which it aligns with consumer needs. An online payment system that provides useful features, such as transaction reports, integration with other services, and ease of use in various situations, will be preferred. Usability also encompasses flexibility in diverse contexts, such as utilization in different types of establishments or services, and the capacity to conduct transactions in various currencies or payment methods.

Moreover, Edeh et al. (2021) argued that feeling safe and secure in transactions is of paramount importance. Barcode scanning payment systems must guarantee the protection of consumer data from threats such as identity theft and fraud. A secure payment system must adhere to pertinent regulations and security standards in the country, providing consumers with additional assurance of legal protection.

Customer satisfaction will be the focus of this research, utilizing several variables to assess their impact. Previous studies have shown that factors such as safety play a crucial role in influencing customer satisfaction. According to Juniwati (2015), trust has a positive effect on customer satisfaction, while perceived ease of use has a negative effect. Conversely, research by Anjali & Suresh (2019), Maula & Sunarjo (2023), and Rachmacandrani et al. (2023) found that perceived ease of use has a positive effect on customer satisfaction. Furthermore, Sumadi and Soliha (2015) concluded that trust has no influence on customer satisfaction.

Mustika (2022) stated that efficiency affects customer satisfaction, whereas Widya and Elisabet (2022) concluded that efficiency has no effect. Kenyta (2022) found that perceived ease of use and perceived usefulness have no significant effect on customer satisfaction, but perceived trust in security does influence satisfaction. Additionally, research by Nadinta & Kusumawati (2023) and Olivia & Marchyta (2022) indicated that usefulness has a significant indirect effect on customer satisfaction. Edeh et al. (2021) highlighted that safety is a significant determinant of consumer satisfaction with digital payments. Kee et al. (2022) noted that user-friendliness is a key factor in consumers' decisions to use digital payments.

Research on customer satisfaction with payment systems has been extensive and ongoing. This study differs from previous research by addressing the inconsistencies found in past studies' results. Specifically, this research will examine whether the variables of ease of use, trust, efficiency, usefulness, and safety affect customer satisfaction with barcode scanning payment systems in Indonesia and India. Given the limited research on barcode scanning payment systems in these countries, this study aims to provide novel insights.

LITERATURE REVIEW

Customer Satisfaction

Customer satisfaction can be defined as the pleasure or disappointment that arises in an individual when the performance results of a product are compared to their expectations. If the performance results do not meet expectations, consumers will feel dissatisfied (Kotler & Keller, 2015). A system can be considered successful based on the feedback given by customers. This feedback reflects the customer's experience with the system, including aspects such as comfort, ease of use, and time efficiency. If customers experience more pleasure and benefits than disappointment and problems when using the system, then it can be said that they are satisfied. This satisfaction is a key indicator of the system's success.

Customer satisfaction has a significant impact on the success of an implemented system. Satisfied customers tend to leave positive reviews, recommend the system to others, and become loyal users. Conversely, dissatisfied customers may spread negative reviews, which can damage the system's reputation and reduce its adoption rate among new users. Therefore, regularly listening to and analyzing customer feedback is crucial to ensure the system remains relevant and meets user needs. If customer satisfaction is high, the system can be deemed successful as well. This level of satisfaction can be measured through various methods, such as satisfaction surveys, review analysis, and social media monitoring. Additionally, it is important to respond to customer feedback promptly and effectively, demonstrating that their input is valued and used for continuous improvement. Thus, a successful system not only functions well technically but also creates a positive and satisfying user experience, ultimately supporting its growth and sustainability in a competitive market.

Ease of Use

Perceived ease of use is described as an individual's belief that using technology is clear, requires minimal effort, and is easy to operate (Erwinsyah et al., 2023). This perceived convenience can also serve as a reference for assessing the success of the barcode scanning payment system. The ease of using the payment system is a key factor affecting customer satisfaction. When customers find the payment system easy to use, the transaction process becomes faster, more efficient, and less prone to errors. This sense of ease, from intuitive interfaces to straightforward processes, largely determines the level of customer satisfaction. If customers feel comfortable and encounter no difficulties using a barcode scanning payment system, they are more likely to continue using the service in the future. High customer satisfaction is an important component and indicator of the overall value of the payment system. Therefore, ensuring that barcode scanning payment systems are user-friendly is crucial for achieving and maintaining high levels of customer satisfaction, which in turn supports the long-term success of the payment system. Hence, the first hypothesis can be formulated as follows.

H1: Ease of use affects customer satisfaction.

Trust

Trust is explained as a positive expectation that stems from perceptions of the ability, good deeds, and integrity of online banks (Berraies et al., 2017). It can also be interpreted as expectations in online risk situations where customers' susceptibility to exploitation is minimized (Corritore et al., 2003). Trust is a crucial component in online payments, such as those using barcode scanning payment systems. Users should feel confident and

comfortable knowing that their data and transactions are secure. To build this trust, the system must demonstrate high reliability and security. Users will feel at ease and confident if a system reliably assists them in their daily transactions without concerns about the security of their personal and financial information. Additionally, stable and efficient system performance is very important. If the system manages traffic well and handles transaction volumes smoothly without interruptions, customer satisfaction will increase. This satisfaction derives not only from the convenience of use but also from the sense of security provided, leading to a stronger overall satisfaction with the service. Based on this explanation, the following hypothesis was formulated.

H2: Trust affects customer satisfaction.

Efficient

Efficiency is synonymous with performing tasks quickly without expending excessive energy. It can also relate to the time spent on an activity. In the context of making payment transactions using a barcode scanning payment system, efficiency implies that these transactions are completed swiftly and punctually. Time is a crucial resource for consumers, whether they are shopping online or in traditional stores (Bhatnagar et al., 2000). Short and practical transaction times are significant factors in determining customer satisfaction with a system. When a system can simplify and expedite the process, customers will feel more satisfied with the service provided. Key aspects include the accuracy and speed of the barcode scanning payment system. A fast and accurate system allows customers to complete transactions more efficiently, reduces waiting time, and minimizes potential errors during the payment process. Consequently, the shopping experience becomes more enjoyable and stress-free. Customer satisfaction increases significantly when they can rely on a system that not only simplifies but also accelerates their daily transactions. These factors are critical in creating customer satisfaction and ensuring long-term success for businesses that adopt such technology. The hypothesis regarding efficiency is formulated as follows.

H3: Efficiency affects customer satisfaction.

Usefulness

Someone will use a certain system or product if it provides benefits to its users; conversely, if the technology is deemed useless or less useful, it is not utilized (Laloan et al., 2023). A system can be said to be useful if it is able to make users' lives more practical and efficient. Users will rate a system as useful if it significantly helps simplify their daily activities, especially in terms of buying and selling transactions. For example, in the world of digital payments, a system is considered useful if it can speed up the transaction process, reduce the hassle of carrying cash, and increase financial security. In addition, a system that makes it easier to track expenses and provides easy access anytime and anywhere will also be valued by users. When a system provides tangible benefits that are felt in daily life, especially in the context of transactions, users are more likely to feel satisfied and loyal to the system. Therefore, practical benefits are the main factors that make a system valued and considered useful by its users. In addition, perceived usefulness is defined as the degree to which a person considers the implementation of a particular system will improve his job performance (Karim et al., 2020). When a person's job performance increases, customer satisfaction can be said to be achieved. The hypothesis regarding usefulness was developed as follows.

H4: Usefulness has an effect on customer satisfaction.

Safety

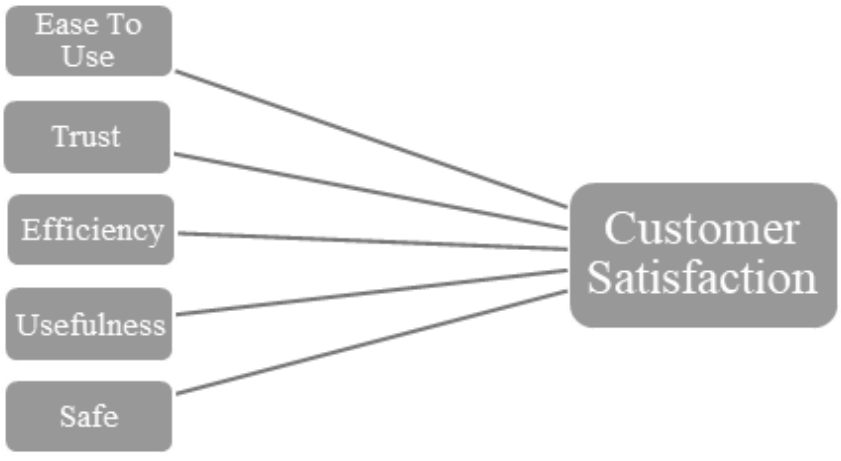
Security is the website's ability to protect consumers' private data from unauthorized disclosure while conducting electronic transactions (Guo et al., 2012). The use of barcode scanning payment systems, like any other digital payment method, must prioritize user security. This includes protecting customers' personal and financial information and preventing potential threats such as fraud and hacking. Security is critical for digital payment transactions, where the app must be able to protect one's digital payment data from unauthorized persons (Iradianty, 2021). With strong security measures in place, customers can trust and feel confident using the payment system. Such trust is crucial, as customers are more likely to use a system they believe is safe and reliable. When user security is ensured, customers will feel satisfied with the services provided. This satisfaction stems not only from the speed and ease of the payment process but also from the confidence that their data is well protected. The sense of security enhances their overall experience, making them more likely to continue using the system in the future. Prioritizing security in barcode scanning payment systems is therefore essential for improving customer satisfaction. When customers feel safe and satisfied, their loyalty to the system will increase, ultimately contributing to the success and growth of the payment system in the market. Therefore, the hypothesis can be developed as follows.

H5: Safety affects customer satisfaction.

Conceptual Model

Figure 1 presents a conceptual framework that outlines the hypothesized relationships among the study variables. The model visually depicts the interconnectedness of these elements and provides a foundation for understanding the underlying mechanisms at play.

Figure 1. The Conceptual Model



RESEARCH METHOD

This research utilized quantitative methods. Quantitative research involves collecting data that can be measured numerically, which can be done through questionnaires, observations, or the processing of secondary data. The collected data was then analyzed using statistical methods to derive objective and reliable conclusions. This study utilized primary data collected through a questionnaire distributed to 107 respondents, with 57

respondents from Indonesia and 50 respondents from India. The questionnaire is designed to assess the impact of barcode scanning payment systems on customer satisfaction. The focus of this study was to explore the relationship between customer satisfaction and several important variables, namely ease of use, trust, efficiency, usefulness, and safety. By collecting data from both countries, this research aims to gain a broader picture of how these factors affect customer satisfaction. The analyses from this questionnaire are expected to provide deep insights into the aspects that contribute to user satisfaction in barcode-based payment systems, as well as provide recommendations for future system improvements and development.

RESULTS

Respondent Profile of Barcode Scanning Payment System Users

Table 1. Respondent Profile of Barcode Scanning Payment System Users

	Quantity	Percentage (%)
Gender		
Male	49	46
Female	58	54
Age		
17-25 years	46	43
26-30 years	17	16
31-40 years	11	10
More than 40 years	33	31
Nationality		
Indonesia	57	53
India	50	47
Based on the following types of barcode scanning payment system, which one have you used?		
QRIS	57	53
BharatQR	21	20
UPI QR	29	27
Occupation		
Student	42	39
Lecture	6	6
Private Worker	29	27
Employee	11	10
Civil Servant	8	7
Entrepreneur	4	4
Housewife	4	4
Teacher	1	1
Retired Civil Servants	1	1
Daily Worker	1	1
How long have you been using the barcode scanning payment system?		
< 1 month	7	7
2-6 months	10	9
7-11 months	13	12
>12 months	77	72
How often do you use the barcode scanning payment system to carry out buying and selling transactions for a product during one month?		
1 time	18	17
2 times	4	4
More than 2 times	85	79

In Table 1, based on the results of the questionnaire filled out using Google Forms, it can be seen that the users of the barcode scanning payment system total 107, with the majority being women (54%) followed by men (46%). The results also indicate that the respondents come from Indonesia (53%) and India (47%). The research did not include a comparative test based on the countries, Indonesia and India, to determine the effects of the barcode scanning payment system on aspects such as ease of use, trust, efficiency, usefulness, and safety on customer satisfaction. The questionnaire results show that 96% of respondents have used the barcode scanning payment system, while only 4% have never used it.

Most respondents identified the applications used for barcode scanning payment systems as QRIS (53%), BharatQR (20%), and UPI QR (27%). Respondents who completed the questionnaire come from various occupations: students (39%), lecturers (6%), private workers (27%), employees (10%), civil servants (7%), entrepreneurs (4%), housewives (4%), teachers (1%), retired civil servants (1%), and daily workers (1%). Additionally, the questionnaire results for the duration of using the barcode scanning payment system show that usage can be divided into several groups: less than 1 month (7%), 2-6 months (9%), 7-11 months (12%), and more than 12 months (72%). For the frequency of using the barcode scanning payment system in one month, the groups are: once a month (17%), twice a month (4%), and more than twice a month (79%).

Validity Test Results

Table 2. Validity Test Results

Variable	Indicator	r Count	r Table	Significant	a	Explanation
Ease To Use (X1)	X1.1	0.948**	0.1900	0.000	0.05	Valid
	X1.2	0.968**	0.1900	0.000	0.05	Valid
	X1.3	0.948**	0.1900	0.000	0.05	Valid
Trust (X2)	X2.1	0.889**	0.1900	0.000	0.05	Valid
	X2.2	0.929**	0.1900	0.000	0.05	Valid
	X2.3	0.896**	0.1900	0.000	0.05	Valid
Efficiency (X3)	X3.1	0.920**	0.1900	0.000	0.05	Valid
	X3.2	0.959**	0.1900	0.000	0.05	Valid
	X3.3	0.937**	0.1900	0.000	0.05	Valid
Usefulness (X4)	X4.1	0.960**	0.1900	0.000	0.05	Valid
	X4.2	0.975**	0.1900	0.000	0.05	Valid
	X4.3	0.959**	0.1900	0.000	0.05	Valid
Safety (X5)	X5.1	0.966**	0.1900	0.000	0.05	Valid
	X5.2	0.968**	0.1900	0.000	0.05	Valid
	X5.3	0.953**	0.1900	0.000	0.05	Valid
Customer Satisfaction (Y)	Y.1	0.927**	0.1900	0.000	0.05	Valid
	Y.2	0.892**	0.1900	0.000	0.05	Valid
	Y.3	0.917**	0.1900	0.000	0.05	Valid

Note: ***r count > r table, sig. < a

Table 2 indicates that the validity test results are valid because the statement items have r values greater than r table or significance values less than 0.05.

Reliability Test

Table 3. Reliability Test Results

Variable	Cronbach's Alpha	Standard	Explanation
Ease To Use (X1)	0.950	0.60	Reliable
Trust (X2)	0.888	0.60	Reliable
Efficiency (X3)	0.931	0.60	Reliable
Usefulness (X4)	0.962	0.60	Reliable
Safety (X5)	0.959	0.60	Reliable
Customer Satisfaction (Y)	0.896	0.60	Reliable

Note: Cronbach's Alpha > 0.6

From the data processing in Table 3, it can be seen that all variables are reliable, as indicated by Cronbach's alpha values greater than 0.60.

Multicorrelation Test

Table 4. Multicorrelity Test Results

Coefficients[a]			
Collinearity Statistics			
Model		Tolerance*	VIF**
1	X1	0.178	5.613
	X2	0.223	4.488
	X3	0.269	3.714
	X4	0.125	8.000
	X5	0.509	1.963
a. Dependent Variable: Y			

Note: *Tolerance Value > 0.1 **VIF < 10

The multicollinearity results in Table 4 show that the tolerance values are greater than 0.10 and the VIF values are less than 10. Therefore, there is no evidence of multicollinearity, indicating that all variables pass the multicollinearity test.

Simultaneous Hypothesis Test (F Test)

Table 5. Simultaneous Hypothesis Test Results (F Test)

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	515.548	5	103.110	36.370*	0.000**
	Residual	286.340	101	2.835		
	Total	801.888	106			
a. Dependent Variable: Y						
b. Predictors: (Constant), X5, X1, X3, X2, X4						

Note: *F > 2,304 **sig < 0.05

The calculated F value of 79.567 is greater than the F table value of 2.304, and the significance value is 0.000, which is less than 0.05. Therefore, H0 is rejected, and Ha is accepted. This indicates that the variables Ease of Use, Trust, Efficiency, Usefulness, and Safety have an effect on Customer Satisfaction (see Table 5).

Partial Hypothesis Test (T-Test)

Table 6. Partial Hypothesis Test Results (T-Test)

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.074	1.021		1.052	0.296
	X1	-0.087	0.155	-0.079	-0.564**	0.574
	X2	0.133	0.144	0.116	0.924**	0.358
	X3	0.278	0.133	0.239	2.085*	0.040
	X4	-0.035	0.190	-0.031	-0.187**	0.852
	X5	0.612	0.081	0.627	7.532*	0.000
a. Dependent Variable: Y						

Note: *t > 1,982 **t < 1.982

The t-value for the Ease of Use (X1) variable is -0.564, which is less than the t-table value of 1.982, and the significance value is 0.574, which is greater than 0.05. Therefore, H1 is rejected, and H0 is accepted, indicating that the Ease of Use variable has no effect on Customer Satisfaction. The t-value for the Trust (X2) variable is 0.924, which is also less than the t-table value of 1.982, and the significance value is 0.358, which is greater than 0.05. Consequently, H2 is rejected, and H0 is accepted, implying that the Trust variable has no effect on Customer Satisfaction. The t-value for the Efficiency (X3) variable is 2.085, which is greater than the t-table value of 1.982, and the significance value is 0.04, which is less than 0.05. Thus, H3 is accepted, and H0 is rejected, indicating that the Efficiency variable has an effect on Customer Satisfaction. The t-value for the Usefulness (X4) variable is -0.031, which is less than the t-table value of 1.982, and the significance value is 0.852, which is greater than 0.05. Therefore, H4 is rejected, and H0 is accepted, concluding that the Usefulness variable has no effect on Customer Satisfaction. Finally, the t-value for the Safe (X5) variable is 7.532, which is greater than the t-table value of 1.982, and the significance value is 0.00, which is less than 0.05. Consequently, H5 is accepted, and H0 is rejected, indicating that the Safety variable has an effect on Customer Satisfaction (see Table 6).

Test Coefficient of Determination (R^2)

Table 7. Test Results of the Coefficient of Determination (R^2)

Model Summary[b]				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.802[a]	0.643	0.625	1.68376
a. Predictors: (Constant), X5, X1, X3, X2, X4				
b. Dependent Variable: Y				

Based on the data in Table 7, the Adj R Square value is 0.643 or 64.3%. This coefficient value indicates that the variables Ease of Use (X1), Trust (X2), Efficiency (X3), Usefulness (X4), and Safety (X5) can explain the Customer Satisfaction (Y) variable by 64.3%, while the remaining 35.7% can be explained by other variables.

DISCUSSION

Ease of Use Has No Significant Effect on Customer Satisfaction

Based on the test results and analysis obtained, there is no significant impact between ease of use and customer satisfaction in the use of barcode scanning payment systems in Indonesia and India. This was demonstrated in the analysis carried out through SPSS software, which showed a negative result with a t count (-0.564) < t table (1.982) and a significant value (0.574) > 0.05. Thus, the first hypothesis (H1) is rejected, and the null hypothesis (H0) is accepted. The test results are based on partial analysis.

From the above description, it can be concluded that ease of use is not a noteworthy factor affecting customer satisfaction in Indonesia and India. This result aligns with the research by Juniwati (2015), which states that ease of use has no significant impact on customer satisfaction. Nowadays, technology is developing very quickly and almost everything can be done easily. In today's technological advancements, ease of use is no longer the main factor. Speed, efficiency, and innovation are some other factors that now have a greater influence on customer satisfaction. Therefore, ease of use indicators and variables no longer have a significant influence on customer satisfaction. Continuous technological developments and increasingly fierce competition make companies concentrate on innovation and overall quality improvement to maintain and improve their customer satisfaction. Customers now pay more attention to more complex and innovative aspects of the products or services they use.

The differences between Indonesia and India result in variations in customer behavior and satisfaction factors. More analysis is needed to understand these differences further.

Trust Has No Significant Effect on Customer Satisfaction

Regarding the hypothesis analysis conducted, it was found that there is no significant influence between trust and customer satisfaction in the use of barcode scanning payment systems in Indonesia and India. This was demonstrated in the analysis conducted through SPSS software, which showed a t count (0.924) < t table (1.982) and a significant value (0.358) > 0.05. Thus, the second hypothesis (H2) was rejected, and the null hypothesis (H0) was accepted. The results obtained from partial testing led to the conclusion that there is no significant impact of trust on customer satisfaction in Indonesia and India. This conclusion aligns with the research by Sumadi and Soliha (2015), which showed that trust has no effect on customer satisfaction.

After conducting an in-depth analysis, it was found that trust in the payment system cannot be considered as one of the main factors affecting customer satisfaction. Today, online payments have evolved rapidly and are not limited to just barcode scanning. Various other online payment systems, such as Near Field Communication (NFC), Tap cards, and other methods, are now more commonly used. Therefore, trust in barcode-based payment systems no longer has a significant influence on customer satisfaction. Many other payment systems available today offer a higher level of security and trust. Customers tend to feel more comfortable and secure by using more sophisticated and secure payment methods. Therefore, companies should consider the various payment options available to ensure customer satisfaction and convenience in online transactions.

Efficient Affects Customer Satisfaction

The analysis and hypothesis testing found that there is an influence between efficiency and customer satisfaction in the use of barcode scanning payment systems in Indonesia and India. This was proved in the analysis done through SPSS software, showing positive results with t count (2.085) > t table (1.982) and a significant value (0.04) < 0.05. Thus, the third hypothesis (H3) is accepted, and the null hypothesis (H0) is rejected. The analysis performed resulted in data values derived from partial analysis, concluding that the efficiency variable has a positive impact on customer satisfaction for users of barcode scanning payment systems in India and Indonesia. This is similar to the research by Mustika (2022), which states that efficiency has a positive influence on customer satisfaction.

Efficiency is one of the main factors influencing customer satisfaction. In the context of this analysis, efficiency refers to the accuracy, speed, and practicality of time spent using the barcode scanning payment system in transactions in Indonesia and India. Efficiency

also means that users who make payments through barcode scanning can save more energy. Saving energy implies that users do not need to take out their wallets to make payments or wait for change from purchase transactions. Payment using barcode scanning is an efficient method because, with just one scan, the transaction can be completed immediately. This efficiency automatically increases customer satisfaction in using barcode scanning-based payment systems. The speed and ease of completing transactions without the need for additional steps make customers feel more comfortable and satisfied.

This indicates that efficiency is one of the main factors that affect customer satisfaction. In this fast-paced world, customers value systems that save them time and minimize hassle. Therefore, the efficient use of barcode scanning technology not only eases the transaction process but also contributes significantly to customer satisfaction. Companies that can provide efficient payment solutions will have a competitive advantage in retaining and increasing their customer base.

Usefulness Has No Significant Effect on Customer Satisfaction

The results conclude that there is no significant influence between usefulness and customer satisfaction in the use of barcode scanning payment systems in Indonesia and India. This is demonstrated in the analysis carried out through SPSS software with a negative result, showing -t count (-0.187) < t table (1.982) and a significant value (0.852) > 0.05. Thus, the fourth hypothesis (H4) is rejected, and the null hypothesis (H0) is accepted. The results were analyzed using partial analysis. The analysis concluded that usefulness is a component that does not play a role in affecting customer satisfaction in using barcode scanning payment systems in India and Indonesia. This result aligns with the research by Kenyta (2022), which states that perceived usefulness has no significant influence on customer satisfaction.

The evolution of today's technology has made every system useful and relevant to the user. Systems are designed to provide tangible advantages in users' daily activities. Modern online or digital payment systems must offer significant benefits to fulfill users' needs and expectations. Since usefulness has become the basic standard expected from any payment system, the usefulness variable can no longer be considered one of the main factors affecting customer satisfaction. Users now expect more than just usefulness; they seek excellence in speed, security, and ease of access. Therefore, while usefulness remains important, other factors such as innovation, efficiency, and trust now have a greater impact on customer satisfaction. Companies must focus on providing added value that goes beyond basic usefulness to maintain and improve customer satisfaction. By prioritizing these elements, businesses can ensure they meet the evolving expectations of their customers and stay competitive in the market.

Safety Influences Customer Satisfaction

Based on the test, the analysis of the hypothesis indicates an influence between usefulness and customer satisfaction in the use of barcode scanning payment systems in Indonesia and India. This is demonstrated in the analysis conducted through SPSS software, showing a positive result with t count (7.532) > t table (1.982) and a significant value (0.00) < 0.05. Thus, the fifth hypothesis (H5) is accepted, and the null hypothesis (H0) is rejected. The analysis concluded that safety is a variable that significantly affects customer satisfaction in Indonesia and India. In this study, "safe" refers to users feeling more secure using a barcode scan payment system compared to other payment systems. This result aligns with the research by Siagian et al. (2022) and Vasić et al. (2019), which states that perceived security affects consumer satisfaction.

In today's technological era, the safety factor has become increasingly important due to the rise of fraud. The security variable confirms that security is a crucial factor for

customers. A secure payment system protects customers' personal information and transactions, which increases trust and satisfaction. Therefore, companies must ensure that their systems meet the highest security standards to maintain customer trust. Good security not only prevents fraud but is also a key element in maintaining and increasing customer satisfaction and loyalty in the long run. If customers feel safe when making payments using barcode scanning, it will positively impact their satisfaction. Not all online or digital payment systems offer a high level of security. Those that do will be more desirable and will directly affect customer satisfaction.

Security is one of the main factors influencing customers' decisions when choosing a payment method. When customers are confident that their personal information and transactions are well-protected, their trust in the system increases. This not only boosts customer satisfaction but also encourages loyalty and repeat usage. Therefore, security significantly affects customer satisfaction, and companies must ensure their payment systems meet the highest security standards to maintain and improve customer satisfaction. Prioritizing security can differentiate a company in a competitive market, fostering a loyal customer base that feels confident in the safety of their transactions.

CONCLUSION

The barcode scanning payment system is a method that uses barcode scans for transactions. This system is considered more practical compared to other payment methods. Applications such as BharatQR and UPI QR in India function similarly to QRIS in Indonesia for payment transactions. A system is deemed practical and of good quality when it achieves high customer satisfaction. Customer satisfaction is influenced by various factors that can either enhance or diminish it.

The analysis conducted in this study aims to determine the impact of customer satisfaction on the use of barcode scanning payment systems. The study concluded that efficiency and security variables significantly impact customer satisfaction. Respondents from India and Indonesia who use barcode scanning payment systems in their daily lives find them easy and practical. This practicality reduces the time and effort required to complete a transaction, which increases efficiency. Additionally, respondents feel more confident using the system due to the security measures that protect their privacy and data during transactions. High security ensures that their personal and financial information remains safe, which in turn increases trust and comfort in using the payment system. With the combination of efficiency and security, barcode scanning payment systems successfully provide a satisfying experience for users in these two countries, so it can be concluded that these two variables significantly contribute to customer satisfaction.

Today, the security aspect plays an important role in online payment systems. Respondents highly value the speed and practicality of these systems, as they reduce the time and effort required to complete transactions and eliminate the need to handle cash. Barcode scanning payment systems are not only fast and convenient but also offer high security, which is important for protecting customers' personal and financial information. Security and efficiency are the main factors that influence customer satisfaction, as they provide convenience and a sense of security in every transaction. Customers feel more at ease when using a fast and secure payment system, which in turn increases their trust and loyalty to the service. Therefore, the efficiency and security aspects of barcode scanning payment systems have a significant impact on customer satisfaction, making them crucial elements in their transaction experience.

Conversely, the variables of ease of use, trust, and utility did not show a significant impact. Additionally, 35.7% of factors influencing customer satisfaction were not

surveyed in this study, indicating the possibility of other contributing factors not yet researched.

Research has shown that efficiency and security significantly affect customer satisfaction. The current barcode scanning-based payment system must prioritize these aspects to maintain and enhance customer satisfaction. The results of this study are expected to encourage barcode scanning payment systems such as QRIS, BharatQR, and UPI QR to focus more on efficiency and safety aspects to achieve better customer satisfaction. By improving efficiency, payment systems can simplify and speed up the transaction process, while enhancing security will protect customers' personal and financial data, thus providing a sense of safety and comfort. Therefore, focusing on these two aspects is expected to increase customer satisfaction and loyalty toward using barcode-based payment systems in the future.

This research provides constructive suggestions for banks, particularly central banks in Indonesia and India, to improve regulations on barcode scanning payment systems to make them safer. The implication of this study is to enrich the theory of payment system variables and customer satisfaction.

LIMITATION

The limitations of this research are population objects that originate only from Indonesia and India. Besides, the statement in the questionnaire is still unable to reveal and represent each variable.

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DECLARATION OF CONFLICTING INTERESTS

The author declares that there is no conflict of interest**.**

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