

EFFECTIVENESS OF USING QUICK RESPONSE CODE INDONESIAN STANDARD (QRIS) AS A PARKING PAYING TOOL (*Case Study in Gianyar District*)

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ABSTRACT : This research aims to analyze the effectiveness of using the Quick Response Code Indonesian Standard (Qris) as a parking payment tool carried out at 3 parking points in the Gianyar District using *Indonesian Standard Quick Response Code (QRIS)*. The time of this research was conducted from the 4th week in November to the 1st and 2nd week in December, so that the research time was 3 weeks. The population in this study focuses on e-parking in 3 (three) location points. The analysis tool used is Binary Logistic Regression. The results showed that the parking services of the three locations in the application of QRIS are still ineffective, even at the Gor Kebo Iwa and Alun - Alun locations, Gianyar District, the criteria are "Very Ineffective" with values that are not much different at 16% and 15.7%, the problem is that to customers (users) as well as parking attendants who do not heed directions from the Department of Transportation regarding the implementation of QRIS. While the Gianyar District Public Market has the largest percentage value of 25.5% which is included in the "Ineffective" criteria but certainly has the greatest effectiveness compared to the other two locations. Overall, age, gender, and type of cellphone have an influence on the effectiveness of using QRIS as a means of paying for parking in Gianyar District, seen from the Sig value.

KEYWORDS: *Effectiveness, QRIS, Parking*

I. INTRODUCTION

Parking is an integral component or aspect of transportation needs because transportation continues to grow from time to time. Utilization of transportation can be seen from various community activities, namely economic benefits, social benefits, political benefits, regional benefits but behind all the above benefits, parking has a negative impact where with the development of transportation, the increase in the number of transportation increases with the increase in the number of transportation, parking violators will emerge. .

The Covid-19 pandemic, which has been running since 2020, has reduced Gianyar's Local Revenue (PAD). Not only from the tourism sector, but also from parking fees. Where so far the Gianyar Regency Government through the Gianyar Transportation Agency (Dishub) has 48 parking points as a source of income including Payangan 1 point, Tegallalang 3 points, Blahbatuh 10 points, Ubud 5 points, Sukawati 13 points, Gianyar 13 parking points. The Head of the Gianyar Transportation Service, Wayan Suamba, Monday 22 February 2021 confirmed this, the decline reached 50%, which also lowered the PAD target of parking revenue in 2021 to fall by 50%. Based on data collected at the Gianyar Regency Government, there are several points of leakage in terms of the current receipt of parking fees, there are parking attendants who do not carry out their duties properly. Where the income that should go into the regional treasury is put into the pockets of parking attendants who don't carry out their duties properly, which leads to extortion behavior (pungli). As a result of illegal levies by parking attendants, parking retribution revenues do not run optimally.

The Electronic Based Government System (SPBE) continues to work to anticipate parking revenue leaks. Currently, his party is gradually directing parking payments to use an electronic system, namely through the Quick Response Indonesia Standard, which is a QR code provided for all types of digital payment transactions and has the aim of creating aspects of security and protection in making payment systems so that it will reduce the number of crime in the digital world (cybercrime) while making payments digitally.

The use of the e-parking system in addition to anticipating the potential for illegal levies by parking attendants, its use is able to reduce the risk of fraud, especially levy leaks because there are still manual processes carried out by humans, the risk of miscalculation, and of course with the hope that e-parking will increase revenue local origin (PAD), transparent management of local revenue (PAD) in the field of parking taxes, and improvement of the parking service system in Gianyar District. Apart from anticipating illegal levies and leakages, the implementation of e-parking is used to target the millennial generation who currently often use

digital wallets or e-wallets in making transactions. so of course the use of e-parking using QRIS will make it easier for customers, especially the millennial generation, to make parking payments. Based on research conducted by Damayanti et al., 2021 proves that the effectiveness of use or fast performance is the main factor why the millennial generation often uses e-wallets which will later be connected via QRIS.

Using this payment method, the vehicle owner only scans the QR code shown by the parking attendant. According to Putu Merry Astuti, 2019 in his research explained that the implementation of the e-parking system in the city of Tabanan is still not optimal due to the lack of public understanding in terms of using e-money cards in the process of parking payment transactions. According to Dewi Pradita & Utomo, 2021 in his research explained that the effectiveness of electronic parking in parking management in Surakarta City is still not effective, because socialization related to the use of e-parking to the community is considered less than optimal so that the public does not know clearly about e-parking information.

After implementing *e-parking* based on QRIS in Gianyar District has decreased every month, and does not meet the PAD target. It is noted that in December 2021 the total income is Rp. 3,519,076, in January 2022 of Rp. 17,386,373, and in February 2022 Rp. 4,109,390. In the first 3 months only those who have income of up to millions of rupiah because at that time for 3 months from December to February 2022 the Department of Transportation provided socialization regarding *e-parking*. After that the income goes through *e-parking* continued to experience a decline until in September 2022 it was recorded that it only produced Rp. 23,000 and in October 2022 earn only Rp. 15,000 only. From this it is known that *e-parking* using QRIS experienced a decrease in performance due to the lack of use of QRIS and decreased satisfaction from customers.

Of the various problems that exist, especially the application of an online parking payment system, the community is the key object to the success of implementing this system. Therefore researchers want to conduct research with the title "Effective Use of Quick Response Code Indonesian Standard (Qris) as a Tool to Pay for Parking".

II. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Indonesian Standard Quick Response (QRIS)

2.1.1 Definition of Indonesian Standard Quick Response (QRIS)

According to (Saputri, 2020) QRIS or Quick Response Indonesia Standard is a QR code that is provided for all types of digital payment transactions and has the aim of creating aspects of security and protection in making payment systems so that it will reduce the number of crimes in the digital world (cybercrime) while making digital payments. In addition to security, QR codes can also facilitate public transactions in the era of payments with digital wallets because they provide convenience in their use, namely consumers only need to scan the QR code provided by the seller. Consumers themselves only need to provide a cellphone and an adequate internet connection to be able to make payments by scanning a QR code.

QR code according to (Lonardi & Legowo, 2021) is a two dimensional matrix symbol consisting of strands of square squares arranged in a larger square pattern, called a module. The area of the square pattern will determine the version of the QR code. The QR code itself is an evolution of a barcode that can contain all information through a matrix and can only be read through a scanning process. With the existence of a QR code that makes digital payments easy, fast and safe, the use of QRIS is becoming a trend among millennials because it is considered more effective as a means of payment transactions and is the main driver of current economic growth. In addition, the implementation of QRIS has the intention of creating a minimal cash society as a manifestation of the National Non-Cash Movement (GNNT) which is currently being promoted by the Government together with Bank Indonesia.

Launching from the official website of Bank Indonesia, the Quick Response Code Indonesia Standard or QRIS is a unification of various QRs from many payment system service providers (PJSP) using QR-Code. QRIS was also developed by the joint payment system industry with Bank Indonesia so that the transaction process with the QR Code can be easier, faster and secure.

2.2 Definition of Satisfaction Level

According to Djoko Widagdo, (2019) Satisfaction is a person's feelings of pleasure or disappointment that arise after comparing perceptions/impressions of the performance/results of a product and their expectations. So the level of satisfaction is a function of the difference between perceived performance and expectations. If performance is below expectations, consumers will be disappointed. If performance matches expectations, consumers will be satisfied. Meanwhile, if the performance exceeds expectations, consumers will be very satisfied.

Payment System Development

According to (Bank Indonesia, 2008) payment system mechanisms must be connected to each other so that transactions occur more quickly and efficiently so that payment system technology innovations emerge. The payment system is inseparable from the existence of a legal umbrella, policy mechanisms and procedures, payment infrastructure innovations, and payment instruments and institutions. From a regulatory point of view, the payment system is regulated in Law Number 6 of 2009 where from this legal basis it will strictly have a regulatory function and pay attention to the development of each sphere of the payment system. In terms of infrastructure, the development of the payment system is always accompanied by technological innovations. Along with the development of the times, the payment mechanism is always required to meet people's needs easily. As a result, an Indonesian payment system emerged that led to system expansion based on advances in information technology. Meanwhile, when viewed from the payment instrument, card-based and electronic-based are increasingly becoming the main choices in conducting transactions in some communities.

In developing a payment system, security and efficiency factors are the most important things that must be considered as a basic reference for development. For this reason, it is necessary to increase access to the use of financial services in order to create a payment system that is efficient, fast, safe, reliable and protects the public interest.

Implementation of the Cashless Society

Less cash society or life with a minimum of money is a situation where people will get used to using non-cash instruments, especially in transactions of economic activity (Ewa Abbas, 2017). According to (Ramya et al., 2017) non-cash transactions have their respective advantages and disadvantages. The advantages of this system are: Convenience, namely that people can have the freedom to transact anytime and anywhere without carrying cash. Able to carry out a monitoring system by tracking expenses, for example in making tax payments which will have an impact on reducing fraud in the corruption factor. Budget discipline, namely the application used can help to find out how much spending is spent. The risk is lower when the payment instrument used is lost, so users can block it remotely.

The disadvantages of non-cash transactions are: The risk of identity theft is higher because it contains personal data needed for ownership data for credit cards or online wallets. Losing a phone can be a problem because all transactions are carried out using internet-based mobile phones. The advantages of having a cashless society in Indonesian society are greater than the disadvantages. However, this is inversely proportional to readiness which is still not developing rapidly. For this reason, creative ideas are needed which can be in the form of innovative payment solutions.

III. RESEARCH METHODOLOGY

This research was conducted at 3 parking points in the Gianyar District using *Indonesian Standard Quick Response Code* (QRIS) as a payment tool. The three points include: Parking on the side of the Gianyar market public road, Parking on the side of the Kebo Iwa Gianyar public road, Parking on the side of the public road at Gianyar Square. The time of this research was conducted from the 4th week in November to the 1st and 2nd week in December, so that the research time was 3 weeks.

The population in this study focuses on e-parking which is in 3 (three) location points with the length of the parking lot in the Gianyar Public Market parking area having a length of 330.09 meters, the parking area of Gor Kebo Iwa having a length of 307.37 meters, and at the parking area of the Alun - Alun District of Gianyar has a length of 370.71 meters. So that the overall parking area has a length of 1.008 km or 1,008.17 meters.

In this study used 2 types of sampling, namely accidental sampling and purposive sampling. Because in this study using accidental sampling so that the number of respondents studied is in accordance with the number of parking users encountered during the time of research. This research uses data collection techniques questionnaires, documentation, and interviews. Binary logistic regression analysis is a statistical method that is useful for looking at the relationship of a response variable (Y) that has a categorical scale with two or more predictor variables (X) with the aim of forming a regression model.

IV. RESULTS AND DISCUSSION

Binary Logistic Regression Analysis

Next is to find out the model for determining binary logistic regression analysis using the SPSS application, where the dependent variable (effectiveness, "effective = 1, while ineffective = 0), and the independent variable (X1 = Age, X2 = Gender "Male = 1, Female = 2", X3 = Phone Type, "Android = 1, IOS = 2". And the following are the results of the analysis:

1. Gor Kebo Iwa

Table 4.1. Partial and Simultaneous Tests for Gor Kebo Iwa in 2023

	Indicator	Sig
	Simultaneous Test	0.037
	X1 (Age)	0.035
Partial Test	X2 (Gender)	0.012
	X3 (Phone Type)	0.029

To determine the simultaneous effect of the independent variables, use the Sig value. on the model provided that the value of Sig. < 0.05. Based on the table above it is known that Sig. having a value of 0.037 or less than 0.05 means that simultaneously the independent variables (age, gender, and type of cellphone) affect the effectiveness of QRIS as a means of payment.

After knowing the simultaneous effect, then conducting a parsila test analysis whether individually or per each independent variable has an influence on the effectiveness of using QRIS. With the condition that the value of Sig. < 0.05. Based on the value of Sig. It is known that each independent variable has a Sig value. smaller than 0.05, where X1 (0.035), X2 (0.12), and X3 (0.029).

2. Gianyar Square

Table 1. Simultaneous and Partial Tests of Gianyar Square in 2023

	Indicator	Sig
	Simultaneous Test	0.014
	X1 (Age)	0.041
Partial Test	X2 (Gender)	0.047
	X3 (Phone Type)	0.042

To determine the simultaneous effect of the independent variables, use the Sig value. on the model provided that the value of Sig. < 0.05. Based on the table above it is known that Sig. having a value of 0.014 or less than 0.05 means that simultaneously the independent variables (age, gender, and type of cellphone) affect the effectiveness of QRIS as a means of payment

After knowing the simultaneous effect, then conducting a parsila test analysis whether individually or per each independent variable has an influence on the effectiveness of using QRIS. With the condition that the value of Sig. < 0.05. Based on the value of Sig. It is known that each independent variable has a Sig value. smaller than 0.05, where X1 (0.041), X2 (0.47), and X3 (0.042).

3. Gianyar Public Market

a. Simultaneous Test

Table 2. Simultaneous and Partial Tests of the Gianyar Public Market in 2023

	Indicator	Sig
	Simultaneous Test	0.039
	X1 (Age)	0.045
Partial Test	X2 (Gender)	0.046
	X3 (Phone Type)	0.019

To determine the simultaneous effect of the independent variables, use the Sig value. on the model provided that the value of Sig. < 0.05. Based on the table above it is known that Sig. having a value of 0.039 or less than 0.05 means that simultaneously the independent variables (age, gender, and type of cellphone) affect the effectiveness of QRIS as a means of payment

After knowing the simultaneous effect, then conducting a parsila test analysis whether individually or per each independent variable has an influence on the effectiveness of using QRIS. With the condition that the value of Sig. < 0.05. Based on the value of Sig. It is known that each independent variable has a Sig value. smaller than 0.05, where X1 (0.045), X2 (0.46), and X3 (0.019).

From the three locations studied, the results showed that there was an influence of age (X1), gender (X2), and type of cellphone (X3) on the effectiveness of using QRIS as a means of paying for parking in Gianyar District, this is also in accordance with research conducted by

Analysis of Satisfaction Levels Using CSI (Customer Satisfaction Index) Calculations Gap or Gap Between Expectations and Performance (Reality)

The value of the gap or gap between expectations and performance or the reality perceived by parking customers for services from both parking attendants and also from the QRIS application is an illustration of the need for service improvement that still needs to be carried out by parking attendants, the QRIS application, and also the government as a policy maker. And the results of the analysis are displayed in the form of tables and graphic images:

4. Gor Kebo Iwa

The application of QRIS will then carry out a gap analysis or gap between Expectations and Performance at the Kebo Iwa Gor location, as follows:

Table 3. Gap in Customer Expectations and Reality in Gor Kebo Iwa

Indicator	Reality	Hope	gaps
reliability	2.66	4.44	-1.78
Responsiveness	2.54	4.36	-1.82
assurance	3.4	4.86	-1.46
Empathy	2.74	4.22	-1.48
Tangibles	3.78	4.84	-1.06

Based on Figure 3, it can be seen that the gap that occurs between expectations and reality generally ranges from -1.82 which is the worst on the responsiveness indicator or dimension while the lowest is -1.06 on the tangible indicator. The gap value or gap value for all dimensions is negative, meaning that customers assess the service related to e-parking to be very unsatisfactory, because the expectations of customers are not met or the service is perceived as unfavorable and not satisfactory for customers. Based on Table 3, the value of the biggest gap is the responsiveness indicator, which means there is a shortage of parking attendants who are responsive in implementing QRIS as a parking transaction tool.

5. Gianyar Square

The application of QRIS will then carry out a gap analysis or gap between Expectations and Performance at the Gianyar Square location, as follows:

Table 4. The Gap in Customer Expectations and Reality in Alun - Alun Gianyar

Indicator	Reality	Hope	gaps
reliability	2.4	4.32	-1.92
Responsiveness	2.48	4.3	-1.82
assurance	1.88	3.88	-2
Empathy	3	4.48	-1.48
Tangibles	3.94	5	-1.06

Based on Table 4, it can be seen that the gap that occurs between expectations and reality with an average gap of -1.66 and generally ranges from -2 is the worst on the assurance indicator or dimension while the lowest is -1.06 found in tangible indicators. The gap value or gap value for all dimensions is negative, meaning that customers assess the service related to e-parking to be very unsatisfactory, because the expectations of customers are not met or the service is perceived as unfavorable and not satisfactory for customers. Based on Table 4, the value of the biggest gap is an assurance indicator, which means that there is a lack of guarantees for customer safety and convenience in implementing QRIS as a parking transaction tool.

6. Gianyar Public Market

The application of QRIS will then carry out a gap analysis or gap between Expectations and Performance at the Gianyar Public Market location, as follows:

Table 5. The Gap in Customer Expectations and Reality in the Gianyar Public Market

Indicator	Reality	Hope	gaps
reliability	2.4	4.28	-1.88
Responsiveness	2.1	4.1	-2
assurance	2	4	-2
Empathy	3.06	4.6	-1.54
Tangibles	2.84	4.38	-1.54

Based on Table 5, it can be seen that there is a gap between expectations and reality with an average gap of -1.8 and generally ranging between the worst at -2 found in the indicators or dimensions of assurance and responsiveness while the lowest is -1.54 found in empathy and tangible indicators. The gap value or gap value for all dimensions is negative, meaning that customers assess the service related to e-parking to be very unsatisfactory, because the expectations of customers are not met or the service is perceived as unfavorable and not satisfactory for customers.

Customer Satisfaction Level

Calculation of the value of customer satisfaction using the CSI method for each service quality indicator at the 3 (three) locations. CSI is used to determine the overall satisfaction level of the customer using an approach that takes into account the level of importance of the service or product attributes being measured. CSI will display data in a clear way related to the level of customer satisfaction, therefore at a set time an assessment can be carried out in order to revise things that are considered lacking and improve service quality in order to increase customer satisfaction.

Table 6. CSI on Reliability Indicators

Location	reliability		Score H x K
	H	K	
Gor Kebo Iwa	4.72	3	14.16
	4.16	2.32	9.65
Gianyar Square	4.44	2.6	11.54
	4.2	2.2	9.24
Gianyar Public Market	4.64	2.88	13.36
	3.92	1.92	7.53
Total Score	26.08	14.92	65.48

$$CSI = \frac{65,48}{5(26,08)} \times 100\% = 50,22\%$$

Based on the calculation above for the reliability indicator, there is a level of customer satisfaction in using parking services through QRIS as a transaction tool, a CSI value of 50.22% is obtained. The value of 50.22% is between the values of 35% - 50.99% which means that the level of customer satisfaction is in the less satisfied category because it is between the values of 35% - 50.99%.

Table 7. CSI on Responsiveness Indicator

Location	Responsiveness		Score
	H	K	
Gor Kebo Iwa	4	2	8.00
	4.72	3.08	14.54
Gianyar Square	3.96	1.96	7.76
	4.64	3	13.92
Gianyar Public Market	4	2	8.00
	4.2	2.2	9.24
Total Score	25.52	14.24	61.46

$$CSI = \frac{61,46}{5(25,52)} \times 100\% = 48,17\%$$

Based on the calculation above for the responsiveness indicator there is a level of customer satisfaction in using parking services through QRIS as a transaction tool, a CSI value of 48.17 is obtained. The value of 48.17% is between the values of 35% - 50.99% which means that the level of customer satisfaction is in the less satisfied category because it is between the values of 35% - 50.99%.

Table 8. CSI on Assurance Indicator

Location	assurance		Score
	H	K	
Gor Kebo Iwa	4.72	2.92	13.78
	5	3.88	19.40
Gianyar Square	3.76	1.76	6.62
	4	2.1	8.40
Gianyar Public Market	4	2.5	10.00
	4	2	8.00
Total Score	25.48	15.16	66.20

$$CSI = \frac{66,20}{5(25,48)} \times 100\% = 51,96\%$$

Based on the calculation above for assurance indicators, there is a level of customer satisfaction in using parking services through QRIS as a transaction tool, a CSI value of 51.96% is obtained. The value of 51.96% is between the values of 51% - 65% which means that the level of customer satisfaction is in the quite satisfied category because it is between the values of 51% - 65%.

Table 9. CSI on the Empathy Indicator

Location	Empathy		Score
	H	K	
Gor Kebo Iwa	5	4.04	20.20
	3.44	1.44	4.95
Gianyar Square	5	4.04	20.20
	3.96	1.96	7.76
Gianyar Public Market	5	3.92	19.60
	4.2	2.2	9.24
Total Score	26.6	17.6	81.96

$$CSI = \frac{81,96}{5(26,6)} \times 100\% = 61,62\%$$

Based on the calculation above for the empathy indicator, there is a level of customer satisfaction in using parking services through QRIS as a transaction tool, a CSI value of 61.62 is obtained. The value of 61.62% is between the values of 51% - 65% which means that the level of customer satisfaction is in the quite satisfied category because it is between the values of 51% - 65%.

Table 4.2 CSI on Tangible Indicators

Location	Tangibles		Score
	H	K	
Gor Kebo Iwa	5	4.6	23.00
	4.68	2.96	13.85
Gianyar Square	5	4.4	22.00
	5	3.48	17.40
Gianyar Public Market	5	3.72	18.60
	3.76	1.96	7.37
Total Score	28.44	21.12	102.22

$$CSI = \frac{102,22}{5(28,44)} \times 100\% = 71,89\%$$

Based on the calculation above for tangible indicators there is a level of customer satisfaction in using parking services through QRIS as a transaction tool, a CSI value of 71.89 is obtained. The value 71.89% is between grades 66% - 80% which means the level of customer satisfaction is in the satisfied category because it is between the scores 66% - 80%.

Table 10. Criteria for Indicators of Customer Satisfaction

Indicator	CSI	Criteria
reliability	50.22%	Less satisfied
Responsiveness	48.17%	Less satisfied
assurance	51.96%	Quite satisfied
Empathy	61.62%	Quite satisfied
Tangibles	71.89%	Satisfied

Based on the level of customer satisfaction using CSI analysis, it was found that 2 (two) indicators had unsatisfactory criteria, namely reliability and responsiveness indicators. Where this indicator relates to the reliability and response of the QRIS system in assisting parking transactions in Gianyar District. While the other indicators have a sufficient level of satisfaction on the assurance and empathy indicators and the tangible indicators are in the satisfied category. From these deficiencies in the reliability and responsiveness indicators, service quality improvement will be carried out, especially in these indicators, so as to increase customer satisfaction.

Factors Supporting and Inhibiting QRIS

In knowing the supporting and inhibiting factors for the implementation of QRIS in Gianyar Sub-District, the researcher has further stated several statements related to the problems that exist in several cities that implement QRIS as a tool for parking transactions in their area. Where there are 5 (five) statements on inhibiting factors and there are also 3 (three) statements on supporting factors. The following is the result of data tabulation of supporting and inhibiting factors:

Table 4.3 Statement of Inhibiting and Supporting Factors for the Implementation of QRIS

No	Obstacle factor	Supporting factors
1	Limited amount of parking available	Progressive Tariff Charges
2	Low discipline and public awareness of using the e-parking system	As support for the National Non-Cash Movement
3	The resources used in implementing QRIS are not yet optimal	Ensuring that none of the Retribution leaks and enters the treasury
4	Low community technology capabilities	
5	Lack of public awareness to have e-money	

Based on the table above, there are 5 (five) inhibiting factors, it is found that the inhibiting factors are 3 or "The non-optimal resources used in implementing QRIS" are the highest percentage of choices from respondents with a percentage of 44%, which means that human resources and application development resources are not optimal so that there is a large percentage of choices from respondents while the smallest is the inhibiting factor 1 " Limited number of available parking lots" with a percentage of 4% which means that the parking area provided is in accordance with the needs of parking customers in the Gianyar District. It becomes a challenge when you want to create a system that can run smoothly. The problems based on the respondents' answers are resources related to the application of QRIS as a parking transaction tool, especially parking attendants who have not been able to provide safe, orderly and secure parking for road users. Because often parking attendants don't carry out their duties properly, but ask customers for parking fees, so of course customers pay for services they don't get.

According to Table above, there are 5 (five) supporting factors, it is found that supporting factor 3 or "Ensuring that no Levies leaks and enters the cash" is the highest percentage of respondents' choices with a percentage of 50% while the smallest is supporting factor 2 "As support for the Movement National Non-Cash" with a percentage of 20%. Basically, public roadside parking has been regulated in such a way by the Gianyar District government, but the implementation and management carried out by the government has not been maximized because the annual targets set by the Department of Transportation have in fact not been achieved. This is due to the lack of discipline of the parking attendants when paying using cash. where parking attendants do not deposit parking proceeds and take the parking money for their personal needs. Because of this, the regional income target cannot be achieved optimally. So that the use of payment through the QRIS digital wallet is a solution that can be implemented by the government because the money spent by users of parking facilities goes directly into the local government account so that of course the parking revenue is maximized.

But if the supporting and inhibiting factors are linked, they have similarities where of course QRIS is used to reduce leakage of parking fees, so that local revenue cannot be realized optimally, but even so the use of QRIS is still not optimal because of the inhibiting factors, especially from the parking attendants themselves who are still using cash for transactions, either because they want to get income or some parking attendants still don't understand the mechanism for using QRIS as a parking payment tool.

E-Parking Performance Improvement Strategy

From the previous analysis it is known that in general the implementation of e-parking using QRIS in Gianyar District is still not effective and does not even provide satisfaction to its customers. Data shows that problems occur in: (1) people who are still reluctant to use QRIS, (2) parking attendants who still prefer to use cash instead of implementing QRIS, (3) parking attendants who do not provide fast response and information to parking customers, (4) a service system that is not yet reliable and trusted for customers.

Of the 4 (four) main problems in implementing QRIS in Gianyar District, researchers, through several related studies, provide strategies for improving e-parking performance in Gianyar District, as follows:

Providing counseling and information to the public regarding the importance of paying using QRIS. Based on the problems of the community who prefer cash over the use of QRIS, therefore socialization is needed from the Gianyar District Transportation Service to the community. So that people know that transactions using this online method also have a number of good benefits, such as being safe for health in the midst of the Covid-19 pandemic, avoiding negative accusations about fears of funds running into personal pockets because payment funds are guaranteed to go straight into cash area.

Providing parking training to parking attendants, especially regarding e-parking. When viewed in terms of the quantity of parking attendants, it is also considered sufficient based on statements from several parking attendants who have been interviewed. However, in terms of quality, some of them are said to have progressed quite a bit but still need to increase their activeness in using tools and their ability to operate QRIS. So it can be concluded that human resources in e-parking implementation are sufficient and have worked according to their respective duties. However, in terms of the quality and awareness of parking attendants, they are an inhibiting factor in implementing the program, so they still need to be improved in terms of their understanding of the use of QRIS, because apart from a number of parking attendants who are old, parking attendants are still found who do not use their tools to the fullest. This is similar to the research conducted by Billqis & Suryawati, 2022, that the quantity of parking attendants is sufficient but the quality is not yet sufficient so that it becomes an obstacle in implementing e-parking.

Therefore, training is needed related to improving the quality of parking attendants, especially for e-parking management, as implemented by the Semarang City Transportation Service. Parking officers are given training related to the technical operation of the application that will be used when collecting parking fees from the public. As a result, parking officers are faster and more responsive in withdrawing parking money from the public by using QRIS. Parking training is also carried out by the Bali Land Transportation Polytechnic with several competencies in improving the quality of parking attendants such as Ethics, Profession and Code of Ethics, Introduction and Basic Concepts of Parking, Knowledge of Road Signs and Markings, Parking Arrangements and Management, Parking Guidance and Supervision, and First Aid On Accident.

Develop a service system that is reliable and trustworthy, and affordable by the community. The goals of a service that is reliable and trustworthy, and affordable to the wider community is the expansion and improvement of the quality of communication networks throughout the country at affordable rates, the establishment of a public service information portal that can integrate management systems and government work processes, the establishment of a network of supporting organizations that bridge portals -public service information portal and information management related to management systems and work processes, as well as information security to ensure the smoothness and reliability of information transactions.

V. CLOSING

Conclusion

Based on the results and discussion above, the conclusions obtained in this study include:

1. The effectiveness of parking services from these three locations in the implementation of QRIS is still ineffective, even in the Gor Kebo Iwa and Alun - Alun locations, Gianyar District, the criteria are "Very Ineffective" with values that are not much different at 16% and 15.7%, the problems obtained that customers (users) as well as parking attendants who do not heed directions from the Department of Transportation regarding the implementation of QRIS. While the Gianyar District Public Market has the largest percentage value of 25.5% which is included in the "Ineffective" criteria but certainly has the greatest effectiveness compared to the other two locations. Overall, age, gender, and type of cellphone have an influence on the effectiveness of using QRIS as a means of paying for parking in Gianyar District, seen from the Sig value.
2. Based on the level of customer satisfaction using CSI analysis, it was found that 2 (two) indicators had unsatisfactory criteria, namely reliability and responsiveness indicators. Meanwhile, others gave sufficient satisfaction scores from the implementation of QRIS so that of course the service is quite good but of course it still needs improvement due to the lack of participation from the community.
3. The non-optimal resources used in implementing QRIS" is the highest percentage of respondents' choice with a percentage of 44%, which means that the lack of optimal human resources and application development resources is the main inhibiting factor while for the highest supporting factor is "Ensuring that there is no retribution leaks and enters the cash" being the highest percentage chosen by respondents with a percentage of 50%. To be able to fix various existing problems, a strategy is needed in the form of Providing Counseling and Information to the Community regarding the importance of paying using QRIS, Providing parking training to parking officers, especially related to e-parking, Developing a reliable and trusted service system, and affordable by the public

Suggestion

Researchers provide suggestions from the point of view of this research, with the hope of being able to be used as decision making, including:

1. It is hoped that the Government through the Gianyar District Transportation Service will be able to improve services and periodically conduct outreach to the public regarding the implementation of e-parking. The socialization provided can be in the form of virtual (social media) or conventionally by distributing brochures, installing banners, and even interviewing TV and newspaper media.

2. The Department of Transportation provides parking training to parking officers on an ongoing basis so that they are able to provide good service to the community as parking users, so that people can feel comfortable and safe.
3. Communities can more intensely use QRIS in conducting transactions not only related to reducing the circulation of banknotes but also in order to be able to increase regional fees which will have a direct impact on the community itself.

Implications

1. Optimizing virtual and conventional outreach to support the success of QRIS as a parking payment tool in order to increase Gianyar District's Original Local Income (PAD) from the parking sector.
2. The Department of Transportation is even more aggressive in being able to disseminate widely to the people of Gianyar Sub-District either through social media, newspapers, TV because of course the PAD obtained from the parking sector will return to the community.
3. The Department of Transportation can provide training to parking attendants in order to improve the quality of parking attendants, especially in relation to e-parking.

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