

# **DIFFUSION OF INNOVATION CHANGING CASH PAYMENTS INTO DIGITAL PAYMENTS USING QRIS IN PASAR GEDE SURAKARTA**

**Syarif Nurrohman; Sidiq Setyawan**

**Communication Science Programs, Faculty Of Communication And Informatics,  
University Of Muhammadiyah Surakarta**

## **Abstrak**

Pengadopsian inovasi pembayaran QRIS akan lebih cepat apabila penyebaran informasi tentang inovasi tersebut dilakukan melalui komunikasi yang efektif dan saluran komunikasi yang tepat, sehingga meminimalisir adanya kesalahpahaman dan memberikan kemudahan pemahaman terhadap adopter. QRIS merupakan sebuah cara pembayaran yang terbaru sebagai bentuk pembaruan dibidang perekonomian yang diciptakan oleh Bank Indonesia guna memberikan kemudahan, kenyamanan, dan rasa aman bagi penggiat transaksi perekonomian. Penelitian ini dilakukan dengan tujuan untuk mengetahui bagaimana proses difusi inovasi dari pembayaran konvensional menjadi pembayaran digital menggunakan QRIS. Jenis penelitian ini adalah penelitian kualitatif dengan pendekatan deskriptif. Data hasil wawancara dan observasi menjadi data primer. Teknik sampling yang digunakan dalam penelitian ini adalah teknik purposive sampling, dengan narasumber yang diteliti adalah seller dan pengunjung di Pasar Gede Surakarta yang sudah memutuskan untuk menggunakan QRIS. Penelitian ini menggunakan model analisis data model interaktif yaitu pengumpulan data, reduksi data, penyajian data, dan menarik kesimpulan. Kemudian triangulasi sumber menjadi model validasi data dalam penelitian ini. Hasil penelitian ini menunjukkan bahwa difusi inovasi dari pembayaran konvensional menjadi pembayaran digital menggunakan QRIS di Pasar Gede Surakarta, adalah difusi inovasi yang bersifat sentralistik. Proses difusi inovasi melalui unsur: inovasi, saluran komunikasi, jangka waktu, sistem sosial. Sebagai sebuah bentuk inovasi, pembayaran QRIS memenuhi 5 karakteristik inovasi namun terdapat satu karakteristik yang tidak memuaskan adopter yang menyebabkan lambannya adopsi inovasi di tempat penelitian. Inovasi QRIS disebarkan melalui beberapa saluran komunikasi, dari komunikasi interpersonal melalui sosialisasi, dan melalui media massa dengan menggunakan spanduk dan poster yang ditempelkan disekitar area Pasar Gede Surakarta. Dengan menggunakan dua macam saluran komunikasi tersebut mendukung kesadaran masyarakat akan adanya inovasi QRIS. Jangka waktu pengadopsian inovasi masing-masing adopter berbeda. Proses difusi inovasi dalam penelitian ini melalui lima tahapan: knowledge, persuasion, decision, implementation, dan confirmation. Proses adopsi dalam penelitian ini berjalan lancar dan baik. Informan melalui tahapan tersebut sampai akhirnya menerima dan mantap untuk mengadopsi inovasi berupa pembayaran digital menggunakan QRIS.

**Kata Kunci** : Difusi Inovasi, Pembayaran Digital QRIS, Pembayaran Konvensional, Digitalisasi

## **Abstract**

Adoption of QRIS payment innovations will be faster if information about these innovations is disseminated through effective communication and appropriate communication channels, thereby minimizing misunderstandings and providing easy understanding for adopters. QRIS is a renewable payment method as a form of reform in the economic sector created by Bank Indonesia to provide convenience, comfort, and security for economic transaction activists. This research was conducted to discover how the diffusion of innovation from conventional payments to digital payments uses QRIS. This type of research is qualitative research with a descriptive approach. Data from interviews and observations become primary data. The

sampling technique used in this study was purposive, with the sources studied being sellers and visitors at Pasar Gede Surakarta who had decided to use QRIS. This study uses an interactive data analysis model: data collection, data reduction, data presentation, and conclusion. Then triangulation of sources becomes a data validation model in this study. The results of this study indicate that the diffusion of innovation from conventional payments to digital payments using QRIS at Pasar Gede Surakarta is the diffusion of innovations with a centralized system—the diffusion process of innovation through the elements: innovation, communication channels, timeframe, and social systems. QRIS payments fulfill five innovation characteristics, but one characteristic does not satisfy adopters, which causes slow adoption of innovations in research sites. The QRIS innovation was disseminated through several communication channels, from interpersonal communication to outreach, and through the mass media by using banners and posters around the Pasar Gede area, Surakarta. Using these two communication channels supports public awareness of the QRIS innovation. The time for adopting an innovation is different for each adopter. The innovation diffusion process in this research goes through five stages: knowledge, persuasion, decision, implementation, and confirmation. The adoption process in this study went smoothly and well. The informants went through these stages until they finally accepted and were determined to adopt innovations in digital payments using QRIS.

**Key Words** : Diffusion of Innovations, Digital Payment with QRIS, Conventional Payment, Digitization

## **1. INTRODUCTION**

### **1.1. Background**

Over time the social system changed significantly. It can be seen that more and more new technologies are emerging. Technology that has a role in human life is getting easier. This led to significant changes in the social system. The emergence of this new technology indicates that the digital era is growing. (Setyawan, 2017) Technology is an object created to reduce the uncertainty that will arise between causal processes to achieve the desired result. The form of technology is usually in the form of hardware and software.

Digitalization is one form of the technological convergence process. Convergence of technology through innovations disseminated to a social system to create influence in it (Wuryantai, 2013). Understanding innovation is an idea, or concept that has just existed that is accepted by society or a collection of other recipients (Setyawan, 2017).

In the spread of an innovation or new idea, there is a theory that can explain the process. This theory is called the diffusion innovation theory. This theory explains how the delivery process or communication through specific channels to a group of people in a social system. This is in line with the understanding that diffusion is a process of spreading innovation through certain channels according to the passage of time channeled to members of a social system (Sahin & Rogers, 2006). The description of diffusion is a communication carried out to spread a message through new ideas with a special nature of communication. In addition, diffusion

concerns the dissemination of new ideas from new sources of invention or creation that generate new ideas for the first user or adopter (Setyawan, 2017).

The changing mindset of humans is directly proportional to the increasingly advanced technology that makes humans prefer to make cashless transactions. Because with a cashless payment system, it is more practical, and there is no need to carry cash or debit cards. This is one of the reasons why people now prefer to transact cashless. Only through mobile phones can we make payment transactions easily. According to a survey conducted by Visa, an American multinational financial services company headquartered in Foster City, California, United States, submitted through the website of [ajaib.co.id](http://ajaib.co.id) (Hariyanto, 2020) in July 2020 provided survey results that showed a shift in habits in society due to the influence of Covid-19 so that the world entered the New Normal era. Visa conducted surveys in 40 countries, including Indonesia. The result of the survey conducted is that 62% of respondents in Indonesia choose to make cashless transactions through card payments or mobile payments applications, or electronic payments.

Explanation of why people prefer to make digital payment transactions (*cashless*), with the focus of this study, researchers chose to examine QRIS (Quick Response Code Standard Indonesia) payment technology, which can be described through the innovation diffusion theory. Researchers decided to research QRIS technology because this technology is one of the new technologies launched on August 17, 2019, by Bank Indonesia and can only be implemented nationally on January 1, 2020, with data that 5.8 million retail merchants have been connected to this payment system (Nugroho, 2021). Researchers see that, for now, the QRIS payment system is still experiencing development in terms of its system, and its users are still growing. So researchers want to know more about how adopting new QRIS technology is running smoothly or experiencing problems in the facts in the field. As mentioned earlier, researchers refer to the diffusion of innovation theory to see how facts are in the area.

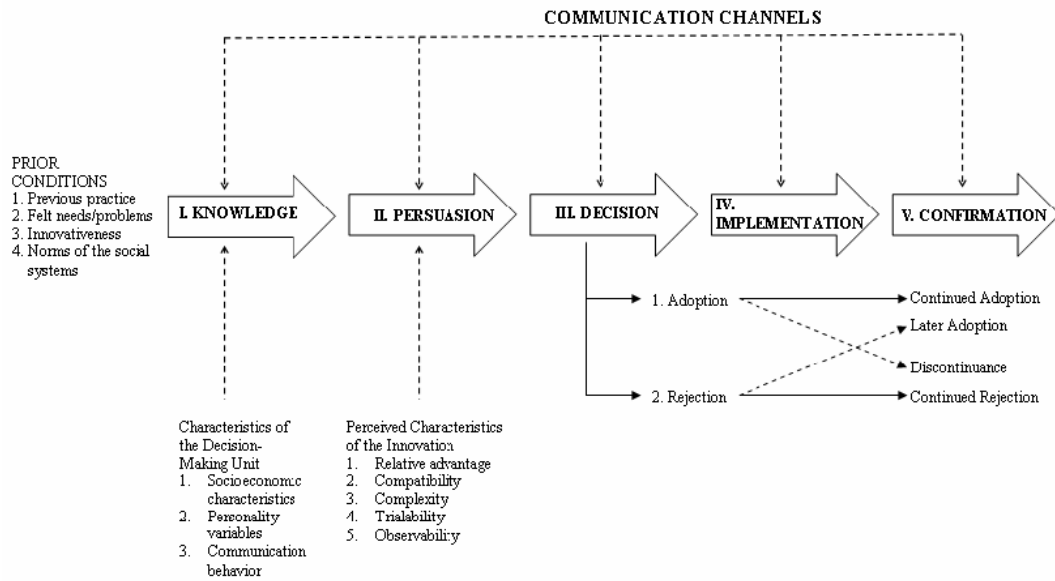
According to Kurniawati et al. (2021), The Indonesian Standard Quick Response Code, commonly called QRIS, integrates various types of QR from various payment system service providers (PJSP) using one QR code. QRIS was developed by the payment system industry in collaboration with Bank Indonesia to make the QR code transaction process easier, faster, and safer. All payment system service providers that use QR code payments must implement QRIS. Then what is meant by QR code is a two-dimensional matrix code consisting of three square pattern signs in the lower left corner, upper left corner, and upper right corner, with black modules in the form of boxes, dots, or pixels containing alphanumeric data, characters and save marks. In payment systems, QR codes are technological developments that help devices

transmit data so that activities can be carried out quickly, efficiently, and easily, especially in payment transactions (Sriekaningsih, 2020).

The research will be carried out at Pasar Gede Solo Traditional Shopping Center by involving seller and consumers who use QRIS payment technology with a productive age range from 15 to 64 years old (Sinaga, 2019). Researchers chose the place because they wanted to see how adopting technology (diffusion of innovation) occurred in traditional shopping centers. This is to see the facts after the completion of the Covid-19 pandemic, as it is known that traditional shopping centers have a certain consumer segmentation.

Seeing the notion of innovation diffusion is a process of adopting innovation. The process goes through five stages, the first of which passes through the stages of **knowledge**. Prospective adopters find out about what innovations will be adopted. Prospective adopters find out how the innovation works. Then the second goes to the stage of **persuasion**. Prospective adopters develop a positive or negative attitude towards existing innovations. But at this stage, it does not mean that innovation is certainly rejected or adopted. At this stage, it is limited to seeing the interest of prospective adopters by developing positive or negative attitudes. Then the next stage is the prospective adopter deciding whether to adopt or reject the existing innovation. This third stage is called the stage **decision**. In this third stage, if the prospective adopter chooses to adopt, the adopter will make full use of the innovation, and if the prospective adopter rejects, there is no use in the innovation. The following (fourth stage) is the stage of **implementation**. Adopters begin implementing or using the innovations they adopt according to their use and work. And the last stage (fifth stage) is the stage **confirmation**. Individuals, i.e., adopters, reconsider whether the innovation they adopt works as they want. Adopters can change their decisions if they find something that goes against the innovation they should (Qazi et al., 2018). The five process stages are strongly influenced by the **communication channels** worn, given the spread and acceptance of innovation through communication between individuals or from individuals to a group.

Figure 1. Innovation Diffusion Process Chart



Source: Sahin & Rogers, 2006

This research can be carried out because QRIS is a new payment technology. Until now, QRIS technology is still experiencing development from the factors of its technological system to the number of users who are still growing. This research is interesting because it wants to explore facts in the field about the pattern of innovation diffusion processes that occur in traditional shopping centers with their consumer segmentation. Researchers want to get facts on the ground on whether the process of adopting QRIS payment innovation is still ongoing after the end of the Covid-19 pandemic. As we know, the beginning of this persistent innovation was supported by the Covid-19 pandemic situation first. Researchers also want to see the condition of adopters who have used QRIS. Whether they continue to be used or experience difficulties that lead to the selection of other decisions and vice versa. Previously did not want to use QRIS, then finally, with particular reasons and interests, adopters chose to adopt in the end.

### 1.2. Research Question

How is the process of adopting QRIS payment innovation by adopters?

### 1.3. Research Purpose

To discover the process of accepting digital payment innovations (*Cashless*) using QRIS for adopters.

### 1.4. Literature Review

In understanding how the diffusion of innovation can run in a social system, especially in the environment of young people in the city of Solo, researchers will describe several aspects that play a role in the process of dissemination and acceptance in the diffusion of innovation.

#### **1.4.1. Payment Digitization**

It can be seen that the development of technology gives birth to innovations that aim to support every human activity or are created to overcome a problem. From innovation to giving birth to what is called digitalization (Setyawan, 2017), which is a process of giving and using a digital system, such as changing from analog to digital technology (Amanda, 2022).

As with any payment system, the payment system was originally through an object agreed by each individual as a legal good to be a means of payment called money. In the days of all buying and selling transactions, the legal payment for that transaction was money. So that humans experience hassles when buying and selling transactions are of large value. Humans feel bothered by having to carry money in large values. This is a concern that, finally, with the development of technology, humans began to think about creating an innovation so that buying and selling transactions with large values can be done simply, efficiently, and without hassle (Hardiky et al., 2021).

Innovation is a form of change carried out by an organization or individual that includes creativity in creating new products, services, ideas, or processes that update the previous way (Agustia, 2017). As stated by Agustia (2017) in his research entitled "*Inovasi Pelayanan Pembayaran Pajak Secara Elektronik (E-Billing) di Kantor Pelayanan Pajak Pratama Pekanbaru Tampan*" Tax Service Office that the reason for innovation needs to be made is because of the rapid changes in the business environment. So an organization or individual must immediately adapt and manage innovation as a determinant of the success of the organization or individual.

An innovation emerged in payment transactions. Starting from the shift from conventional buying and selling transactions to online transactions (through *e-commerce*). This requires changing the payment system that originally used cash, and now payments can be made digitally or *Cashless*. For example, payment via QRIS. The payment system is based on online data that can be done through each user's mobile phone. Only with *Scan QRIS* barcode through digital payment applications such as Go-Pay, Shopeepay, or applications *Mobile Banking Other* (Fandiyanto, 2019).

#### **1.4.2. Diffusion of Innovation**

Diffusion is a form of special communication carried out through some special channel also by the communicator. This study will discuss two main discussions, namely, how a message is spread and how the message will be received. This will explain how the role of the communicator as a perpetrator of message dissemination

and the role of the communicant as a recipient of the message (*message reception*)(Nazari et al., 2013).

Before getting into the core of the discussion, researchers will explain the aspects that exist in the process of diffusion of innovation. Diffusion of innovation is a process of delivering messages in the form of new ideas (innovation) that can be used as a tool to solve an existing problem. The caption Sahin & Rogers (2006) mentions four main elements that exist in the process of diffusion of innovation, namely:

#### **1.4.2.1. The Innovation**

Innovation is an idea, idea, practice, or object that is accepted as a novelty by an individual or adopter. According to Akmalia & Rikumahu (2018), An innovation created must have strong characteristics to influence an individual's acceptance of an innovation, which are as follows: Relative Advantage, Compatibility, Complexity, Trialability, and Observability.

Sahin & Rogers (2006), The acceptance of a new technology depends largely on how capable the product itself is. In addition, how the product offers benefits to prospective adopters is also very influential in the acceptance of new technology.

QRIS digital payment technology is considered to be able to provide convenience to its users compared to previous payment technologies. This has a considerable influence on the market acceptance of QRIS digital payment technology.

Sahin & Rogers (2006), Recognize innovation characteristics such as complexity, compatibility, ease of use, and the ability to see functionality directly determines how society and users perceive technology.

#### **1.4.2.2. Communication Channels**

According to (Wibowo, 2019), There are two channels commonly used in the process of diffusion of innovation, namely mass media channels and interpersonal channels. Mass media is anything that is used as a means of disseminating news, including radio, television, newspapers, etc., whose sources of information can reach many audiences. Face-to-face channels, on the other hand, are more effective in persuading someone to adopt a new idea, especially when they connect two or more people who are close to each other.

#### **1.4.2.3. Time**

One important factor in the process of adopting innovations (diffusion of innovation) is time. The time dimension is one of the important factors because the time dimension provides space for adopters to begin to understand and choose the decision to adopt or reject this innovation (Dibra, 2015).

#### **1.4.2.4. A Social System**

Diffusion of innovation is the process of spreading new ideas. Innovation is disseminated through special channels that are passed on overtime to members of a social system. A social system is a set of entities that are mutually committed to working together to solve problems and achieve specific goals. The social system that exists in society determines whether an innovation can be inherited properly. Social systems play an important role in the diffusion that occurs in society, social systems such as norms, opinions of opinion leaders, types of diffusion that occur, and the consequences of diffusion itself (Setyawan, 2017).

The social system is closely related to individuality and the abundance of recruiters in society, which is an important factor affecting the acceptance of technology (Setyawan, 2017).

According to the rate and speed of innovation, members of the social system can be divided into innovators, people who, by nature, like new things and often experiment. Second, early adopters are influential people whose friends around them are informed and who are more advanced in the environment. Third, the early majority consists of people who are one step ahead of others and embrace innovation. Then the late majority are the people who want to accept innovation only if everyone around them accepts it. After all, the companies left behind are the last layer embracing innovation (Širůček & Galečka, 2017)(Wibowo, 2019).

#### **1.4.3. Stages in the Diffusion of QRIS Digital Payment Innovation (*cashless*)**

The increasing number of digital products that have sprung up proves that digital payments are starting to become a trend in today's society. This is supported by a statement from Yosep Aditya Susanto, Head of Sales and Operation Development (Digital Goods) Tokopedia, in an article published by Suara.com (Nurhadi, 2022) which stated that there had been a two-fold surge in transactions over the past year, especially in digital products, education fees, and state revenues. This shows that people are starting to like digital payment innovation (*cashless*). In the past, people who made



payment transactions (financial matters) had to use legal tender, namely banknotes and coins. In the present time, the transaction model has begun to shift to digital media or *Cashless*. The shift in payment methods was also influenced by the circumstances of the last two years when the world was shaken by the Covid-19 pandemic. Society is required to reduce direct interaction with others so that the community is required to interact promptly. *Online*. With this, people are getting comfortable with cashless payments (Kurniawan, 2022). The change from cash payments to non-cash payments should go through several processes in it. This process is called innovation diffusion, in which innovations are communicated specifically to a social system so that the social system can accept or reject the new innovation. That is proof that this change from cash to non-cash payments has a very strong relationship with communication because the diffusion of innovation as a process that changes the way is one form of communication.

According to Setyawan (2017), diffusion of innovation is the process by which individuals first learn about innovation through several processes. This process is carried out with several repeated sequences of actions and choices. There, one evaluates the emergence of new ideas to better decide whether to adopt an innovation. This can be done through sustainable practices. Below is an overview of some stages of the decision-making process in the diffusion of innovation as follows. The innovation decision-making process is a linear five-step mental process that an individual (or other decision-making entity) goes through from the initial recognition of an innovation, then forming an attitude towards it, until deciding to adopt it or be rejected. Then implement and use new ideas and practices to finally confirm the chosen decision. At various stages of the decision-making process, individuals seek information to reduce their uncertainty about expected innovation outcomes (Dibra, 2015).

Given the pre-adoption process or knowledge gathering in the early stages of innovation diffusion, ease of use of technology becomes an absolute requirement for the technology itself, and at this stage, potential users think about whether the technology is easy or not. Consideration of whether the technique is easy becomes an important reference at this early stage instead of thinking about the actual use of technology (Setyawan, 2017).

On the other hand, in the post-adoption or implementation and validation phase, adopters reflect on the benefits that technology offers them. In other words, a user's initial desire to use a technology is influenced by whether the technology is easy to use,

and their desire to continue using it is influenced by their belief that the technology will help them (Setyawan, 2017).

Digital payments through QRIS have unique differences from other payment methods. QRIS has ease and simplicity in its use. It encourages a lot of desire for members of the social system to use it. It is noticed that the level of complexity of innovation has a huge influence on building one's trust to accept the technology (Širůček & Galečka, 2017).

## 2. METHOD

In this study, researchers used the method of **Case Studies**, where this method is suitable for use when research is related to how and why. Then the form of research that uses the case study method will investigate contemporary phenomena in life and also focus on the design and implementation of research only (Setyawan, 2017).

According to Nur'aini (2020), Case study methods can be divided into three types: explanatory, investigative, and descriptive. It is important to know the differentiator of the research strategy is to identify the types of research questions that need to have substance and form. The case study method is almost the same as the historical method, only supplemented by systematic interviews. Types of evidence in the case study method include documents, equipment, interviews, observations, and in some cases, participant observation and informal manipulation.

Researchers focused the study on subjects with productive age, ranging from the age of 15 years to the age of 64 years (Sinaga, 2019). Researchers chose the subjects of the study because, in that age range, the average person already has a personal mobile phone. Such as survey data conducted by the *Badan Pusat Statistik* (BPS) Indonesia regarding smartphone/gadget users over the age of five. The following table shows the percentage distribution of gadget users in Indonesia in 2022:

Table 1. the percentage distribution of gadget users in Indonesia in 2022

Kelompok Umur	Proporsi Individu yang Menguasai/Memiliki Telepon Genggam Menurut Kelompok Umur (Persen)		
	2020	2021	2022
<15	24.96	38.27	40.25
15-24	87.75	90.78	91.82
25-64	72.39	72.10	74.09
65+	25.66	25.79	27.46

Sumber: Badan Pusat Statistik, 2022

According to the table above, the distribution of gadget users with the largest percentage is between the ages of 15 and 64 years. At that age, the majority of individuals already own and use their own gadgets. So the researchers decided to choose research subjects with an age range of 15-64 years.

In addition, researchers want to see how the pattern of innovation diffusion processes occurs between these age ranges. The age range consists of adolescence, adulthood, to the elderly. So it can be seen at any age where the diffusion of innovation goes or does not work. The research subjects will be taken from QRIS technology users in traditional shopping centers. Researchers chose the shopping center because researchers wanted to see if the innovation could be adopted evenly in traditional markets with existing conditions there. The research will be focused on various parties that intersect with these innovations. Here researchers took research subjects from seller and buyers in the traditional shopping center Pasar Gede. Researchers decided to conduct research at Pasar Gede Surakarta because the traditional market has become one of the tourist shopping destinations in Solo City. As stated in the results of Puteri & Fajarwati, 2016 research entitled "*Pengaruh Eksistensi Pasar Tradisional Terhadap Perkembangan Wilayah Kota Surakarta*" with the research location in Pasar Gede Surakarta, it was conveyed in its conclusion that Pasar Gede Surakarta is the oldest market in Solo City which has a function as a means of buying and selling activities and trading activities take place, but more than that it is also a means of social and cultural interaction, as well as a means of recreation which is one of the tourist destinations of Surakarta City. This shows that Pasar Gede is an area that has a diversity of visitors.

In this study, there are two types of data used, namely primary data and secondary data. **Primary** data is data obtained by researchers from interview activities that produce data in the form of narrative explanations of research subjects as informants and observations of the intended research subjects whose results are in the form of photos to strengthen the data obtained from interviews that have been conducted.

Observation, namely systematic observation and recording of learned symptoms. The results of these observations are presented in the form of stories and photographs, which are used to support information obtained from interviews. The observation technique used by researchers is a non-participant observation technique, which is a technique carried out by researchers by making direct observations in the field or the location of subjects and research objects in Pasar Gede Surakarta (Widya Kartika, 2017).

**Secondary** data is data obtained by quoting from sources that exist outside the research related to the object of research. Usually, sources are documents, books, archives, and records. In this study, researchers used evidence from interview records, photos of conditions in Pasar Gede Surakarta, and photos together with resource persons as secondary data from this study.

To obtain secondary data, researchers cite data or arguments from previous research results in the form of scientific journals, books, or others. Researchers cite information about shifts in the lifestyles of social societies in terms of payment methods. Then the researcher also cited information about payment innovations using QRIS and did not forget to find out information on how users respond to existing innovations, namely payment technology through QRIS.

The interview process with research subjects is carried out by asking open-ended questions and focusing on the depth of information. Questions are asked in an informal style to create comfort for the subject so that researchers can explore useful, complete, and in-depth information. If the data obtained is incomplete, researchers try to visit sources or ask questions through digital communication media such as Whatsapp to meet the lack of data.

The sampling technique used in this study was **purposive sampling**. The researcher will determine who are the subjects that he will make as a source of data in his research based on the criteria he has determined. The subject criteria in this study are seller and visitors in Pasar Gede Surakarta who previously used conventional payments with cash and then switched to digital payments using QRIS technology who are willing to be resource persons in this study and are in a location that has been determined by the researcher, namely the Pasar Gede Surakarta area. Researchers determine these criteria to ensure that the Informant is someone who already understands the existence and advantages of how technological innovation in the economy, especially payment methods, functions. In this study, there were five informants, each consisting of 4 **innovators** and one **late majority**. The biodata of the five informants in this study are as follows: Informant 1: Sri Wahyuni (56 years old), Informant 2: Susianawati (43 years old), Informant 3: Wieharto (52 years old), Informant 4: Almey (23 years), and Informant 5: Seruni (23 years). This research did not use the **Laggards** adopter type because the subjects in this study were respondents who initially came from conventional payment users using cash and then switched to digital payments using QRIS.

Data analysis techniques in this study are **Deductive**, i.e., this research departs from **Everett M. Rogers' Theory of Diffusion of Innovation**. Then researchers look for facts in the field to prove it. This study used data analysis **interactive models from Miles & Huberman** So that this research is carried out continuously until there is no more related data,

and it is considered that the collected data is sufficient to provide facts in the field to existing theories. This interactive model of data is grouped into three parts, the first of which is data collection. Data collection in this study used interviews, observations, and data snippets from several sources outside the study. Then the second is data reduction by grouping the data that has been collected according to the problem formulation carried out. The last is the presentation of data, displaying a discussion then from the discussion, conclusions are drawn with the theory that the researcher uses (Widya Kartika, 2017).

The data development technique used by researchers in this study is source triangulation. **Source triangulation** is a data development technique that focuses researchers on using various data sources to establish the truth of the data taken. The data sources used are the results of interviews and observations to take data from sources outside the research conducted (Widya Kartika, 2017).

### **3. RESULTS AND DISCUSSION**

#### **3.1. Research Result**

Innovation is an idea, work, or object that is considered new by individuals or groups in society (Sahin & Rogers, 2006). The change from conventional payments using cash to digital payments influenced by payment system innovation with the Indonesian Standard Quick Response Code or abbreviated as QRIS, which is read in a “kris” way, is clear evidence of technological developments in the economy. As stated on Bank Indonesia’s website channels and services, the QRIS payment system was initially created to create an easy and time-efficient digital payment system because one QRIS can be identified for various banking services or just one QRIS can accept payments from various sources of funds (Indonesia, 2022).

In addition, the background of this research is the ongoing Covid-19 pandemic which lasted for two to three years from 2020 to 2022, which limited people from direct interaction and limited community activities where people were asked to stay at home. This has a huge impact on the economic sector. The way people conduct economic transactions has changed a lot. As usual, shopping is direct, but due to distance restrictions and activities made by the government, the way people shop has changed to online. However, after the relaxation, where people are allowed to carry out activities outside but still have to keep their distance, this encourages people to use digital payment systems such as QRIS, where people are encouraged to be able to use it to reduce or limit direct contact with others.

The use of conventional payment systems (cash) has a high possibility of virus transmission during the Covid-19 pandemic. Even though the current Covid-19 pandemic is

declared over, because the use of QRIS began to be used during the last pandemic, researchers want to know how QRIS was adopted after the completion of the Covid-19 Pandemic. How is the absorption of QRIS innovations that occur in the community after the end of the Covid-19 pandemic? Researchers especially want to know the conditions that occur in Pasar Gede Surakarta. Researchers took data from five respondents, three respondents were seller, and two respondents were visitors to Pasar Gede. Researchers want to know how the absorption of digital payment system innovation occurred by five existing respondents. Here are five respondents:

No.	Name	Age	Profession
1.	Sri Wahyuni (Informant 1)	56 years old	Herbal medicine Seller in Pasar Gede
2.	Susianawati (Informant 2)	43 years old	Vegetable Seller in Pasar Gede
3.	Wieharto (informant 3)	52 years old	Vegetable Seller in Pasar Gede
4.	Almey (informant 4)	23 years old	Students (as visitors at Pasar Gede)
5.	Seruni (informant 5)	23 years old	Students (as visitors at Pasar Gede)

The five respondents above agreed on their names, ages, and professions to be included in this scientific publication.

### 3.1.1. QRIS Innovation as a New Form of Payment

The development of technology from time to time will affect the habits of a social system. Ancient people still rarely have gadgets. Now the average person has gadgets to support their daily lives. This has a direct impact on traditional markets that were previously synonymous with conventional means of payment with cash, now starting to change following technological developments. The proof is now that seller are starting to adapt to digital payments. As stated by Informant 2:

*“..... sebelum adanya QRIS, awalnya alat pembayaran sah di sini (di Pasar Gede) uang tunai mas. Masih ada sih beberapa pakai transaksi barter, tapi bisa dihitung jari dan hanya dilakukan antar pedagang aja mas.”*

(Interview with Informant 2, May 22, 2023)

From data that has been collected through interview methods with several sellers and buyers in Pasar Gede, payment using cash is still a necessity compared to payments using newer technology, for example, the QRIS payment system. As stated by Informant 1:

*“sebetulnya itu saya enak pembayaran kontan (tunai) kayak gini.”*

*“.....langsung tunai gini, mau buat jajan-jajan ndak usah (bingung), pas kehabisan uang nanti (mau) jajan kok ndadak ke ATM.”*

(Interview with Informant 1, March 30, 2023)

Informant 1's statement is clarified by Informant 3's statement, which explains why cash is still needed by the seller in Pasar Gede:

*".....memang ya dari sisi mata rantai sosialnya, jadi dari tingkat struktur jual belinya, masih belum semuanya menggunakan sistem pembayaran terkini. Atau bisa di jelaskan bahwa sistem pembayaran QRIS ini belum digunakan oleh semua tingkatan mata rantai perdagangan. Sehingga pedagang masih perlu uang tunai untuk membayar restock barang dagangannya."*

*".....memang biasanya uang langsung digunakan mas kalau di pasar tradisional itu. Dapet langsung dibelanjakan. Makanya uang cash itu lebih menguntungkan, orang-orang (khususnya pedagang di pasar tradisional, Pasar Gede) masih lebih besar kepercayaannya terhadap uang tunai."*  
(Interview with informant 3, May 23, 2023)

Some of the findings above illustrate that conventional payments using cash are still needed in the buying and selling area in Pasar Gede and that the distribution chain in Pasar Gede cannot all be paid by QRIS. So that sellers are also more comfortable holding cash because cash can be directly used for other sellers' needs. Given that the digital payment ecosystem is not evenly distributed.

Although conventional payments with cash are still maintained or still the main choice of seller in Pasar Gede, they do not rule out the possibility of using digital payments. Digital payments using QRIS are an **Innovation** technology in the economy. **Innovation** is something that is considered new by a person or group of community units that have differences from those that have existed before (Sahin & Rogers, 2006). This QRIS technology facilitates economic transactions or payment transactions in Pasar Gede Surakarta to accompany conventional transactions using pre-existing cash. As stated by Informant 1:

*"ya kalau saya, ada yang minta pakai ini (pembayaran menggunakan QRIS) tak kasih, tapi kalau ndak ada yang tanya ya gak tak kasih."*

*".....Mau, mau menggunakan pembayaran digital namun kalau ada yang tunai lebih milih tunai gitu ya."*

(Interview with Informant 1, March 30, 2023)

The two statements submitted by Informant 1 and from the observations that have been carried out by researchers, it illustrates that seller do not rule out the possibility of using digital payments if buyers choose to make payment transactions using digital payments using QRIS, but if they can cash the seller still choose cash payments. With various buyer characters in Pasar Gede, researchers found several buyers from Informant 1 who chose to make payments using QRIS, and some buyers directly spent

cash to pay for the goods they bought. This is made clear by the statement made by Informant 2:

*“Sebenarnya juga enak tunai mas, tapi kalau gak enak e ya kalau tunai itu tadi, kadang susah mau cari kembalian. Kemudian pernah kejadian mas, pembeli bawa uang seratus ribu, padahal barang yang dibeli tujuh ribu, padahal saya belum punya kembaliannya, akhirnya barang saya suruh bawa dulu, eh malah orangnya gak balik lagi.”*

*“.....iyaa iyaa.. kalau ini kan langsung cepret kita gak bingung cari kembalian.”*

*“iya bisa (Informan 2 bersedia menggunakan inovasi QRIS) mas.”*

(Interview with Informant 2, May 22, 2023)

From the statement of Informant 2 above, it is clear that QRIS payments certainly have their own advantages compared to conventional payments with cash. So that it became the main attraction felt by respondents of this study to use a digital payment system using QRIS. In addition, the desire to keep up with the times in order to compete with other traders who have used it (QRIS) earlier is also one of the reasons that encourage prospective adopters (research respondents in Pasar Gede) to use QRIS, as stated by Informant 2:

*“kalau sekarang tidak bisa mengikuti teknologi ya ketinggalan beneran mas, aku saja yang sudah mencoba mengikuti teknologi merasa tertatih-tatih.”*

(Interview with Informant 2, May 22, 2023)

This explains that trade competition is also influenced by the times. Where nowadays, most people everywhere do not carry cash because it feels better and simpler just to bring gadgets or cards that are also able to make payment transactions, as stated by Informant 1:

*“sekarang kan orang belanja itu pada gak bawa uang mas.”*

(Interview with Informant 1, March 30, 2023)

The statement of Informant 1 above is corroborated by the statement of another respondent, Informant 4, as a visitor to Pasar Gede:

*“menurut saya lebih menguntungkan karena kita gak ada perasaan khawatir kalau misalnya uang nya kurang kalau mau bayar, atau gak khawatir kalau gak bawa uang sama sekali. Sekarang juga jarang sekali membawa uang saat di luar, karena menurut saya pakai hp sekarang sudah bisa buat bayar apapun.”*

(Interview with Informant 4, June 1, 2023)

From the previous one using cash, it turns out that there are shortcomings and difficulties when making cash payment transactions, as said by Informant 2. Informant



2 felt difficulties when making transactions using cash. He felt confused about finding change and sometimes also experienced problems with the goods purchased by the customer lost to the customer concerned. The customer had not paid because there was no change. This gave rise to Informant 2's desire to use QRIS. Because according to him, by using QRIS, transactions can be safer, faster, and more precise. The money paid also fits according to the amount of price spent by the customer. That is one aspect that encourages prospective adopters to adopt QRIS innovation. Because QRIS has practicality for transactions, although it has advantages that can encourage prospective adopters to adopt the innovation, there are also obstacles that will be considered by prospective adopters in making decisions to adopt the innovation. They consider social norms, or social habits, that exist in Pasar Gede Surakarta itself.

### 3.1.2. Characteristics of QRIS Innovation

An innovation has characteristics that will influence the decision of prospective adopters who are receiving information about the innovation. The characteristics of innovation have a large role in the spread of innovation because it affects whether an innovation will be adopted or not adopted according to the different grace periods of each prospective adopter. **Relative advantages, complexity, Observability, Compatibility, and trialability** is a characteristics of innovation that can influence the decision of prospective adopters in the process of diffusion of innovation (Fahad & Shahid, 2022). As explained in section 3.1 earlier, it is illustrated that digital payment innovation has its own advantages over conventional payments, thus influencing the decision of prospective adopters to continue to use the QRIS digital payment system even though cash remains a need for prospective adopters in Pasar Gede, as stated by Informant 3:

*“jadi pemanfaatan secara prinsip bagus ya, dari sisi pemanfaatannya sistem ini memiliki kemudahan, dia lebih memiliki kepastian, kemudian lebih aman, dan lebih efektif dalam proses transaksinya (dari segi waktu dan penyimpanannya).”*

(Interview with Informant 3, May 23, 2023)

Likewise, according to the opinion of Informant 2, who explained his views regarding QRIS innovation as follows:

*“Enaknya kalau pakai sistem pembayaran QRIS kita tidak susah-susah harus cari*

*uang receh untuk kembalian. Pembayaran lewat itu langsung tanpa bingung  
cari  
kembalian.”*  
*“.... kalau untuk dampaknya sih saya lebih tenang mas dengan uang yang  
masuk, uang yang masuk jadi lebih aman.”*  
(Interview with Informant 2, May 22, 2023)

Several statements submitted by Informant 3 and Informant 2 above illustrate that the QRIS payment system has its own advantages compared to using conventional payments with cash. This shows that QRIS has the characteristics of **Relative Advantages** innovation, namely the extent to which innovation has better advantages compared to the idea or method it replaces (Wiratno, 2020). Supported by the statement of Informant 4 as one of the visitors in Pasar Gede who was willing to be a respondent in this study, who expressed his opinion as follows:

*“karena menurut saya teknologi ini memudahkan sekali ya mas.”*  
*“..... menurut saya lebih menguntungkan karena kita gak ada perasaan  
khawatir kalau misalnya uang nya kurang kalau mau bayar atau gak khawatir  
kalau gak bawa uang sekali. Sekarang juga jarang sekali membawa uang saat  
di luar, karena menurut saya pakai hp sekarang sudah bisa buat bayar  
apapun.”*  
(Interview with Informant 4, June 1, 2023)

Both parties to the payment transaction agree that the QRIS payment system has its own advantages compared to conventional payments with cash. Such as the findings of data in research by Widya Kartika (2017) entitled “*Difusi Inovasi Perubahan Ojek Konvensional Menjadi Go-Jek Online*” stated its findings that informants from the study stated the changes experienced. The advantage was felt by the informants in the study. Likewise, with this research, the benefits felt by prospective adopters are directly proportional to their thinking about the capacity of digital payments using QRIS to accommodate conventional payment methods. As conveyed by Informant 1, he answered the researcher’s question in the form of the feasibility of QRIS payments to be used as one of the payment methods in Pasar Gede, Informant 1’s answer was as follows:

*“iyaa iyaa layak dipakai (karena teknologi sekarang semakin maju).”*  
*“..... sekarang kan orang belanja itu pada gak bawa uang mas.”*  
(Interview with Informant 1, March 30, 2023)

Like Informant 1, Informant 2 also argues the same:

*“aku biasa saja mas, saya sih sudah terbiasa dengan teknologi ini. QRIS juga  
layak jadi salah satu alternatif cara pembayaran juga mas. Selain itu  
pembayaran digital lebih aman pikir saya, ya to(?)”*

(Interview with Informant 2, May 22, 2023)

Likewise with Informant 3, according to him:

*“kalau saya yakin itu layak untuk dipakai. Tapi tetep uang tunai itu mengiringi. Makanya akan ada pilihan-pilihan ya, meskipun ada orang yang hanya belanja sedikit bisa pakai tunai atau QRIS, tapi untuk pembayaran dengan jumlah yang banyak pasti lebih enak, nyaman dan aman dengan sistem pembayaran terkini yaitu QRIS atau transfer.”*

(Interview with Infroman 3, May 23, 2023)

Looking at the three forms of response that researchers get, it shows that payments using the QRIS method have the feasibility to accompany and even replace conventional payments. Because previously they had felt the advantages of QRIS so that they could conclude that QRIS payments were feasible or had innovation characteristics in the form of **compatibility**, that is the degree of similarity between the previous method and the new way where the new way can accommodate the previous way to be used (Wiratno, 2020).

Despite the advantages of QRIS, respondents experienced some difficulties when respondents as prospective adopters wanted to try the innovation or when respondents who had used the innovation were called adopters using the innovation. Level **Complexity** As one of the characteristics of innovation, it greatly affects how decisions will be taken by prospective adopters or adopters. **Complexity** level of an innovation compared to the previous way (Kaur et al., 2020). As stated by Informant 5:

*“kalau kekurangannya dibanding uang tunai itu, ini ya kekurangan bisa dikendala sinyal, bisa juga kalau misalnya lagi kendala gak ada saldo kaget ya itu, apalagi ya kendalanya, dulu pas awal pemakaian sempet sering trobel, tidak tau dari aplikasinya atau dari mananya, tapi gak bisa buat pembayaran. Pembayaran gagal terus.”*

(Interview with Informant 5, June 1, 2023)

The use of QRIS, one form of digital transaction, requires a network. Signals have a very important role in the process of transacting using QRIS. Bad signals can have an impact on the difficulties experienced by prospective adopters or adopters who want or have used the innovation. Facts in the field, for the area in Pasar Gede, there is already a signal service provider that is quite good. Thus, the use of QRIS in Pasar Gede is a bit of an obstacle related to signals. As Informant 4 says:

*“.....tadi saya satu kali bayar pakek qris berhasil dengan gampang mas. Gak ada kendala di prosesnya juga. Lancar tadi sih.....”*

(Interview with Informant 4, June 1, 2023)

In addition to signal constraints, the level of technological insight is also one of the important points that have an impact on the level of difficulty experienced by prospective adopters or adopters. As stated by Informant 2, at the beginning of its use, Informant 2 had difficulties:

*“kalau dulu pas awal-awal sedikit bingung, kok sistemnya seperti ini, tapi pas awal-awal ada yang mengontrol dari BRI. Kemudian saya tanya-tanya sama orangnya. Dengan berjalannya waktu saya mulai paham penggunaannya. Mulai banyak tau info tentang cara penggunaannya. Dan aku juga wes mulai paham hal-hal teknologi teknologi mas.”*

*“..... kalau sekarang tidak bisa mengikuti teknologi ya ketinggalan beneran mas, aku saja yang sudah mencoba mengikuti teknologi merasa tertatih-tatih.”*  
(Interview with Informant 2, May 22, 2023)

Similar to Informant 2, Informant 1 also experienced the same thing:

*“kalau kendalanya itu saya itu punya HP tapi saya gak mudeng. Biasanya kan, ...he em, cek lewat HP Banking. .... saya ndak ndak anu ndak mudeng saya, udah tua gini bingung mas. Jadi kalau ada yang pakai QRIS itu pas terus tak foto. .... ho oh buktinya tak saya foto terus nanti kalau saya ngecek ke bank ini saya saya. .... iya kasih tau, saya tanya terus di kasih tau.”*

(Interview with Informant 1, March 30, 2023)

In line with the opinion of Informant 3:

*“sebetulnya secara prinsip pada awalnya saja ya, hanya bingung dengan penggunaan awalnya saja. Karena belum biasa dengan cara yang baru”.*

*“.....Karena sistem QRIS ini masih belum masif penggunaannya, sehingga pemakai awal atau disebut sebagai newbie pasti mengalami kesusahan. Apalagi dengan kondisi umur dan wawasan teknologi yang masih kurang. Pasti mengalami beberapa kesulitan. Contohnya ada beberapa pedagang di sini yang sebenarnya sudah mempunyai barcode QRIS, namun disembunyikan. Karena mereka takut untuk menggunakannya. Takut bingung dengan sistemnya.”*

(Interview with Informant 3, May 23, 2023)

In addition to technical obstacles from the internal system, obstacles also arise from prospective adopters or adopters in this study who experience problems are respondents. They feel inadequate in the field of technology because of age because they do not have enough technological insight. It was felt by traders as respondents to this study that they felt afraid to use a new system. They are afraid to use it for fear of being wrong and fear of confusion in using it. As stated by Informant 3, being less accustomed to something new has the impact of feeling afraid and confused to try it. That is the level of difficulty experienced by respondents in addition to difficulties in terms of internal technical aspects of the QRIS system. But over time, they adapted

smoothly so that the use of QRIS became much better and more convenient. This is in line with the opinion of Widya Kartika (2017), in her research entitled *“Difusi Inovasi Perubahan Ojek Konvensional Menjadi Go-Jek Online”* the results of his research explained that the lack of detailed information obtained by adopters causes difficulties experienced by adopters. But over time, with them asking people who know better, adopters begin to get used to the innovation.

The next characteristic of innovation is **Trialability**, i.e., the possibility that an innovation can be tested in advance or bound to use it. This can influence the decision of prospective adopters in the process of adopting innovations. When conducting trials, prospective adopters will find out a lot about the innovation (Fahad & Shahid, 2022). In accordance with the facts on the ground, prospective adopters argue that they have not experienced a trial period for this innovation. However, they immediately use it if they are willing to use the innovation. As Informant three said:

*“Sebetulnya kita gak ada masa uji coba, kita langsung pakai, kemudian secara alamiah teman-teman ada yang mengundurkan diri mulai tidak digunakan, ....”*

(Interview with Informant 3, June 26, 2023)

In agreement with Informant 3, Informant 1 also said the same thing:

*“gak ada masa uji cobanya mas.....”*

*“Gak ada og mas, langsung saya dikasih gitu aja, terus langsung saya gunakan gitu aja mas.”*

(Interview with Informant 1, June 26, 2023)

But unlike Informant 2:

*“udah ada uji cobanya, udah dikasih contoh juga, ....”*

*“Ada kok mas (ada masa uji cobanya), beberapa bulan sekali, dulu beberapa bulan sekali di cek mas sama petugasnya mas. Dulu kan awalnya jaman corona itu mas, kan awal corona itu mas QRIS itu beredar di pasar sini.”*

(Interview with Informant 2, June 26, 2023)

Judging from the differences in opinions between Informant 1 and Informant 3, and Informant 2, it is evident that education for QRIS innovation is still uneven in accordance with previous research, which states that testing an innovation has a positive relationship with its adoption rate (Nazari et al., 2013). Of the three seller, only one received a trial session at the beginning of using QRIS. It also has an impact on how the process and conditions of adopters in adopting an innovation.

The characteristics of the latter are **observability**. Rogers (2003) defines it as the extent to which the results of an innovation can be seen by others. This has an effect

if a social system still depends on one figure who is a role model. Because of this last innovation characteristic, prospective adopters will see how the success of an innovation is implemented by others. If other people succeed in using it, other potential adopters begin to be interested in using it as well (Setyawan, 2017). But the facts on the ground are different, as stated by Informant 1:

*“enggakk, bukan karena melihat pedagang lain pakek QRIS mas, jano aku ya gak begitu pengen pakek QRIS ini mas, Cuma masukan dari pelanggan tadi lo mas, yang nyuruh saya buat pakai QRIS. Kebetulan juga ada pihak bank BCA yang nawarin ke saya, karena transaksi saya sering banyak jadi saya di tawarin buat pakai QRIS, akhirnya ya saya iyaikan buat pakek QRIS ini mas.”*

(Interview with Informant 1, June 26, 2023)

When viewed from the answer submitted by Informant 1, the interest in using QRIS arises because there are demands from consumers. Consumers gave demanded Informant 1, a seller in Pasar Gede, to have QRIS. Finally, Informant 1 is willing to use QRIS. In line with Informant 1, Informant 4 conveyed his choice to use QRIS:

*“Saya sih lebih enak pakai QRIS mas, jadi kalau di pusat perbelanjaan gini saya bakalan cari yang pakai QRIS dulu tuh, kalau udah gak ada baru saya cari yang sembarang, asalkan barang yang saya cari ada. ....”*

(Informant Interview 4, June 1, 2023)

Different from Informant 1, Informant 2 conveys something else:

*“Pertama kali yang mendapat penyuluhan kan kita mas, yang jadi percontohan kan kita, yang lainnya kan mayoritas hampir 90% gak mau.”*

*“Kalau ini saya memang pengen sendiri pakai QRIS mas, biar jadi contoh untuk pedagang yang lain.”*

(Interview with Informant 2, June 26, 2023)

In line with what was conveyed by Informant 2, Informant 3 also conveyed the same thing:

*“.....Jadi memang dari saya sendiri yang pengen memakai QRIS ini mas. Niat saya juga pengen mengikuti tren, mengikuti teknologi masa kini, begitu sih mas.....”*

(Interview with Informant 3, June 26, 2023)

In fact, in this study, encouragement from outside parties and interest from oneself become positive points for the process of diffusion of innovation. Observability characteristics by looking at the successful use of innovations from others or encouragement from outside parties influenced one Informant in this study. Informant 1 was willing to use QRIS because there was input from his customers to use QRIS.

### 3.1.3. QRIS Innovation Adoption Process as a Payment Media

**Communication Channel** is a means that allows the dissemination of messages from one individual to another, with the aim of gaining understanding between the two (Sahin & Rogers, 2006). According to facts in the field, information about QRIS was obtained through socialization carried out by related banks to each trader in Pasar Gede. As stated by Informant 3:

*“.....sebenarnya bank-bank sudah mulai masuk ke Pasar untuk mempromosikan atau mensosialisasikan sistem pembayaran QRIS ini.....”*  
(Interview with Informant 3, May 23, 2023)

Then Informant 1 also argued the same, he received an offer directly from the bank:

*“yakan ini anu mas, apa itu langsung dari bank itu menawarkan ke pasar.....”*  
(Interview with Informant 1, March 30, 2023)

In accordance with the data findings through interviews, the initial entry of information on QRIS payment innovation was indeed through **Interpersonal Communication** carried out by the Bank by socializing with each Pasar Gede seller to offer a new payment system using QRIS. Then now, the dissemination of QRIS innovation information has begun to be intensified through **mass media, such as banners and posters** installed at the entrance of Pasar Gede so that visitors also know. As stated by informant 5:

*“oh iya saya tau, saya lihat tadi di Pasar Gede ada spanduknya gede banget ya didepan ya, bisa bayar pakek QRIS gitu.”*  
(Wawancara with Informant 5, June 1, 2023)

**Time** is a basic concept that cannot be explained individually. Because time is an aspect that is always present in every event of events. The process of innovation diffusion, adopter categorization, and adoption rate all include a time dimension (Sahin & Rogers, 2006). The beginning of the introduction of this QRIS innovation began with the emergence of the Covid-19 Pandemic in 2020, as stated by Informant 2:

*“.....Dulu kan awalnya jaman corona itu mas, kan awal corona itu mas QRIS itu beredar di pasar sini.”*  
(Interview with Informant 2, June 26, 2023)

This QRIS innovation began to enter Pasar Gede during the 2020 Covid-19 pandemic. From 2020 to 2023, prospective adopters dug up information about QRIS. Even Informant 2 has been using QRIS since the beginning of QRIS socialization during the Covid-19 Pandemic until now in 2023. However, each adopter has a different adoption

time, such as Informant 1. Initially, Informant 1 already had QRIS provided by Bank BRI, but for the reason that the average customer did not use Bank BRI, so Informant 1 was reluctant to use it:

*“Pertama saya dikasih-e, tapi gak saya gunakan. Iya gak tak gunakan, ya piye ya. Aku itu BRI itu pie ya mas pelanggan-pelangganku itu semuanya banyaknya BCA. La saya pakai BRI itu gak gak minat tapi dipasang kan itu kios saya yang satu di sana. Ho oh dipasang (QRIS BRI) tapi gak tak gunakan kalau ada yang tanya, “anu punya QRIS bu?”, ndak punya saya gitu. La terus ini ada BCA itu menawarkan anu pakai belanja pakai QRIS pembayaran pakai QRIS, terus saya langsung minat, BCA sama Bank Jateng.”*

(Interview with Informant 1, March 30, 2023)

Then after there was input from customers to use QRIS, Informant 1 was willing to use it. Coinciding with Bank BCA offering QRIS services to Informant 1:

*“.....Cuma masukan dari pelanggan tadi lo mas, yang nyuruh saya buat pakai QRIS. Kebetulan juga ada pihak bank BCA yang nawarin ke saya, karena transaksi saya sering banyak jadi saya di tawarin buat pakai QRIS, akhirnya ya saya iyakan buat pakek QRIS ini mas.”*

(Interview with Informant 1, June 26, 2023)

**A social system** Is a group of interrelated units that have involvement in solving a problem to achieve a common goal. The diffusion of innovation is influenced by the social system because of the diffusion of innovation within the social system itself (Sahin & Rogers, 2006). Then the facts in the field reveal that prospective adopters are influenced by the process of adopting innovations. Because in fact, prospective adopters choose to use QRIS innovation with the aim of getting a wider customer segmentation, and there are prospective adopters who adopt this innovation because there is input from their customers. As stated by Informant 3:

*“yaa kalau secara dampaknya pasti ada, Cuma memang belum begitu berasa dampak itu kita rasakan, memang kemudian orang-orang yang modern itu larinya pastinya yang memakai QRIS yang lebih mudah, simple, dan pas. Kan berarti ada penambahan dari sisi jumlah konsumen, Cuma belum signifikan.”*

*“kalau saya yakin itu layak untuk dipakai dengan segala kelebihannya.”*

(Interview with Informant 3, June 26, 2023)

From the opinion conveyed by Informant 3, it was illustrated that the use of QRIS had a positive impact on Informant 3, so he decided to use it.

Then there are respondents who get input from their customers to use QRIS payments, as conveyed by Informant 1:

*“.....Cuma masukan dari pelanggan tadi lo mas, yang nyuruh saya buat pakai QRIS.....”*



*“.....akhirnya ya saya iyakan buat pakek QRIS ini mas.”*  
(Interview with Informant 1, June 26, 2023)

Due to input from customers, Informant 1 finally decided to use QRIS so that customers could also transact in their place comfortably.

There are several stages in the process of adoption or the process of diffusion of innovation. The adoption process is the steps taken by an individual or social group ranging from getting information to wanting to implement an innovation (Wibowo, 2019). The stages in the adoption process are as follows: **knowledge** is the initial stage in the process of adopting an innovation. At this stage, a prospective adopter will think about whether or not the innovation is easy or not, rather than thinking about the actual usefulness of the innovation (Setyawan, 2017). In this study, Pasar Gede traders and consumers as **adopters** who have realized the advantages or positive value of QRIS payment innovations offered by the Bank as **Innovator**. As stated by Informant 2:

*“....Enaknya kalau pakai sistem pembayaran QRIS kita tidak susah-susah harus cari uang receh untuk kembalian. Pembayaran lewat itu langsung tanpa bingung cari kembalian.”*  
*“ ..... Saya merasa aman, karena uang langsung masuk ke rekening.”*  
(Interview with Informant 2, May 22, 2023)

Similar to Informant 2, Informant 4 also revealed how the advantages of QRIS payment innovation he felt:

*“kalau menurut saya kalau QRIS itu bisa apaya, gak bingung gitu tinggal buka handphone tinggal di scan, ....”*  
*“menurut saya lebih menguntungkan (QRIS) karena kita gak ada perasaan khawatir kalau misalnya uang nya kurang kalau mau bayar.”*  
(Interview with Informant 4, June 1, 2023)

From the statements submitted by Informant 2 and Informant 4, at the knowledge stage, Informant 2 and Informant 4 felt the advantages that existed in the QRIS payment system they used. They feel comfortable, safe, simple payment process and payment with the right nominal.

**Persuasion** is the stage at which **innovators** will invite **Prospective Adopters** to use existing innovations (Setyawan, 2017). In the case of this study, persuasion was carried out through channels of **interpersonal communication**. Where the Bank as an innovator in the process of adopting QRIS payment innovation, socializes with sellers in Pasar Gede. Based on the results of the interview, it can be seen that adopters are trying to find more information about QRIS payment innovations to Bank officers as innovators in this adoption process. If they experience doubts or difficulties, they will

ask the innovator. This has a positive impact because adopters will understand more about how to use this QRIS payment innovation. As stated by Informant 1:

*“ho oh buktinya tak saya foto terus nanti kalau saya ngecek ke bank.....”*  
*“.....saya tanya, ini udah masuk belum ya mas/mbak, terus di kasih tau. Oh ini udah masuk bu .....*”

(Interview with Informant 1, March 30, 2023)

Likewise, Informant 2 also asked the Bank regularly visit Informant 2 every few months to check the continuity of QRIS usage at Informant 2's stall:

*“.....tapi pas awal-awal ada yang mengontrol dari BRI (Bank). Kemudian saya tanya-tanya sama orangnya. Dengan berjalannya waktu saya mulai paham penggunaannya. Mulai banyak tau info tentang cara penggunaannya.....”*

(Interview with Informant 2, May 22, 2023)

From the data obtained, it is known that adopters ask innovators if they experience difficulties or have curiosity about information from this QRIS payment innovation. Innovators will also answer to provide clarity and understanding to adopters. That is the creation of effective communication with diverse information and satisfying adopters in exploring information. So that adopters can also adopt and use QRIS Innovation calmly, smoothly, and comfortably. As stated by Informant 2:

*“.....pas awal dulu ada petugas bank yang keliling di sini, akhirnya kalau ada kebingungan saya tanya ke petugasnya itu. Jadi saya tenang untuk pakainya juga mas. Kalau ada masalah saya laporkan kemudian di benahi dan di kasih edukasi juga. Jadi semuanya enak. Saya juga jadi paham.”*

(Interview with Informant 2, June 26, 2023)

**Decisions** are the stage where adopters will decide to adopt QRIS payment innovations or will refuse to adopt those based on or influenced by the benefits and ease of use. Then sustainability in using the innovation is influenced by the adopter's belief that the innovation will be useful in the future (Setyawan, 2017). In this study, researchers found that adopters assess the good or bad of QRIS innovation based on benefits and aspects of needs in the field of economic transactions or payment transactions in the market. As stated by Informant 3:

*“kalau saya yakin itu layak untuk dipakai.....”*  
*“.....dari sisi pemanfaatnya sistem ini memiliki kemudahan, dia lebih memiliki kepastian, kemudian lebih aman, dan lebih efektif dalam proses transaksinya (dari segi waktu dan penyimpanannya).....”*

(Interview with Informant 3, May 23, 2023)

The opinion of Informant 3, who stated that his willingness to adopt because, according to Informant 3, in terms of utilizing QRIS innovation has several advantages. Starting

from having certainty, then creating a sense of security, and having efficiency in the transaction process. Then Informant 2 also conveyed the same thing. Informant 2 felt the benefits if he used this QRIS payment innovation:

*“.....saya sih sudah terbiasa dengan teknologi ini. QRIS juga layak jadi salah satu alternatif cara pembayaran juga mas. Selain itu pembayaran digital lebih aman pikir saya, ya to.”*

*“.....saya lebih tenang mas dengan uang yang masuk, uang yang masuk jadi lebih aman.....”*

*“.....Enaknya kalau pakai sistem pembayaran QRIS kita gak susah-susah harus cari uang receh buat kembalian. Pembayaran lewat itu (QRIS) langsung, gak bingung cari kembalian.”*

(Interview with Informant 2, May 22, 2023)

**Implementation** is the stage in the process of adopting an innovation when the adopter begins to use the innovation spread by the innovator. In this study, adopters started using QRIS as legal tender. Adopters will experience firsthand the benefits of the innovations they use, as well as know exactly how QRIS works. This QRIS usage experience will affect whether adopters will continue to use it or not.

*“yaa kalau secara dampaknya pasti ada, Cuma memang belum begitu berasa dampak itu kita rasakan, memang kemudian orang-orang yang modern itu larinya pastinya yang memakai QRIS yang lebih mudah, simple, dan pas. Kan berarti ada penambahan dari sisi jumlah konsumen, Cuma belum signifikan.”*

(Interview with Informant 3, June 26, 2023)

According to Informant 3, there must be an increase in consumers who prefer to make payments digitally. According to Informant 3, such a consumer model will definitely find sellers who can accept digital payment transactions. So he concluded that with the use of QRIS, there will definitely be additional consumers. Then Informant 2 argued that by using QRIS, he felt calmer. Because the money enters and is stored in the account so that it feels safe:

*“kalau untuk dampaknya sih saya lebih tenang mas dengan uang yang masuk, uang yang masuk jadi lebih aman.....”*

(Interview with Informant 2, May 22, 2023)

**Confirmation** is the stage where the adopter will evaluate the results of the innovation decisions that have been made. Whether the adopter will continue to use the innovation or stop using it, or who previously refused to use it? (Setyawan, 2017), at this stage, usually, the adopter will think again and may adopt in the end (Rogers, 2003). As stated by Informant 3:

*“.....QRIS ini bakalan saya pakai terus mas, namun tidak dipungkiri kalau kita tetap membutuhkan uang tunai.....”*

(Interview with Informant 3, June 26, 2023)

Likewise with Informant 1:

*“ya mau mas, Cuma kalau ada yang minta pakai QRIS.”*

*“.....untuk jaga-jaga aja, untuk variasi cara pembayaran mas. Jadi pelanggan bisa milih mau pembayaran tunai, QRIS atau transfer. Dan pakai QRIS kalau ada yang minta aja, kalau gak ada yang minta ya langsung pembayaran tunai mas.”*

(Interview with Informant 1, June 26, 2023)

As stated by Informant 1 and Informant 3, then the two Informants will continue to use this QRIS innovation but accompanied by a cash payment system. QRIS payments will be a variation of payment methods accepted by sellers. Because according to Informant 3:

*“.....kebanyakan pembayaran ke suplier itu masih konvensional. Harus pakai uang tunai. Nah itu yang masih jadi kendala, apabila uang gak bisa langsung di cairkan.”*

(Interview with Informant 3, June 26, 2023)

According to the Informant, cash is still a necessity for traders in Pasar Gede because the suppliers of merchandise sold by traders there only accept payments using cash. So that cash payments are still the main choice of payment in Pasar Gede.

The adoption process is also based on individual characteristics such as their socioeconomic status and the behavior they usually engage in when communicating. According to (Rogers, 2003), Members of the social system can be divided into groups of adopters according to their level of innovation or speed of acceptance of innovation (Wibowo, 2019). First, **innovators** are those who basically like new things and often do experiments. In accordance with the results of interviews and observations, innovators in this research theme are Informant 2, Informant 3, Informant 4, and Informant 5 because the four informants started using QRIS when QRIS launched and began to be introduced by related parties. As stated by Informant 2:

*“ iya mas memang saya sendiri yang pengen pakek QRIS ini. Kan dulu pas covid di sini lumayan kaku mas orang-orangnya. Mulai dari gak mau berdekatan sampai ada yang gak mau bicara. Akhirnya saya memilih pakek qris ini biar pembayaran tanpa kontak langsung.....”*

(Interview with Informant 2, June 26, 2023)

Like Informant 2, interest in trying QRIS innovation since its launch by related parties was also experienced by Informant 3, Informant 4, and Informant 5.

The second **Early adopter** is usually people who are responsive to the existence of mass media. Because they are responsive to the mass media, they will also be careful in gathering information (Zubir & Isdianto, 2011). In addition, they are people who are usually role models in a social system (Widya Kartika, 2017).

Third is the **early majority**, someone who adopts a new idea first compared to society in general. But behind the decision, there is caution in taking steps to determine the right decision (Zubir & Isdianto, 2011).

Fourth **late majority** are individuals who do not feel the need at first. But over time, the conditions of the surrounding environment influenced his decision to adopt a new idea (Widya Kartika, 2017). In this study, Informant 1 entered into this adopter group:

*“pertama saya dikasih-e, tapi gak saya gunakan. Iya gak tak gunakan, ya piye ya. Aku itu BRI itu pie ya mas pelanggan-pelangganku itu semuanya banyaknya BCA. La saya pakai BRI itu gak gak minat tapi dipasang kan itu kios saya yang satu di sana. Ho oh dipasang (QRIS BRI) tapi gak tak gunakke kalau ada yang tanya, “anu punya QRIS bu?” , ndak punya saya gitu.....”*  
(Wawancara dengna Informan 1, 30 Maret 2023)

*“.....Cuma masukan dari pelanggan tadi lo mas, yang nyuruh saya buat pakai QRIS. Kebetulan juga ada pihak bank BCA yang nawarin ke saya, karena transaksi saya sering banyak jadi saya di tawarin buat pakai QRIS, akhirnya ya saya iyakan buat pakek QRIS ini mas.”*  
(Interview with Informant 1, June 26, 2023)

Based on the interview, Informant 1 initially refused to use QRIS Innovation. As time went by, there was input from customers, and finally, Informant 1 decided to use QRIS.

The last group of adopters is **Laggards**, individuals who reject innovation. This group of adopters prefers to use old ideas (Zubir & Isdianto, 2011). In this study, none of the informants were included in the laggards group because all informants in this study were individuals who knew and used QRIS innovations.

### **3.2. Research Discussion**

In accordance with the findings of data found by researchers, taken from interviews and observations, several facts were found that could explain how the conditions for the adoption of innovations occurred in Pasar Gede Surakarta. This research data was taken from five informants consisting of two informants of Pasar Gede visitors and three informants of Pasar Gede traders.

Diffusion of innovation is a process of delivering messages in the form of new ideas (innovation) that can be used as a tool to solve an existing problem. In the caption (Sahin & Rogers, 2006), innovation itself is a thought, idea, good, or service that is considered to be

updated from the previous way by an individual or group of people in the form of a community organization or social system (Setyawan, 2017).

According to the findings of field data taken from interviews and observations conducted by researchers, the informants in this study were aware of QRIS and had been using the innovation for some time. In accordance with the determination of the research subject, the informants in this study are traders and visitors to Pasar Gede who already know the existence of QRIS and use it. **Innovation** This study aims to provide convenience in payment transactions. As stated on the website Channels and Services of Bank Indonesia (2022) stated that the purpose of QRIS innovation is to provide convenience to the Indonesian people in payment transactions. In accordance with the results of interviews and observations of researchers in the field, information was obtained that QRIS payments are an update from conventional payments using cash. The statements in the study are in line with the research conducted by Wibowo (2019) entitled “*Proses Difusi Inovasi Program Sistem Aplikasi Tingkat Instansi (SAKTI)*,” where the government of the Directorate General of Treasury innovates in the field of state financial management known as the Agency-Level Financial Application System (SAKTI) to realize the spirit of Good Governance. It equally explains that existing innovations aim to improve the previous system and provide convenience to its users.

In accordance with the purpose listed on the official website of Bank Indonesia (2022), the purpose of creating this QRIS system is to provide convenience to the Indonesian people in payment transactions. The first innovation characteristic is **Relative Advantages**, where innovation to be more easily accepted by prospective adopters must have characteristics that provide better benefits and convenience compared to the previous method (Sahin & Rogers, 2006). In accordance with the facts in the field obtained from interviews and observations made by researchers, informants feel the advantages of this QRIS Innovation, which is to provide a sense of ease, security, and efficiency in transaction time and how to transact. This has a positive impact on the adoption that will be carried out by prospective adopters. So the informants in this study decided to adopt the QRIS innovation. This is in line with statements from previous research conducted by Fahad & Shahid (2022) entitled “Exploring the Determinants of Adoption of Unified Payment Interface (UPI) in India: A Study Based on Diffusion of Innovation Theory,” which states that these characteristics of relative advantages have a positive impact on adopter adoption. So there are positive effects felt by users with the use of QRIS, encouraging users to continue to adopt the innovation.

Then, in addition to the benefits already felt by the users, the level of **compatibility** is the aspect that determines whether an innovation provides feasibility or is able to accommodate

the previous method (Wiratno, 2020). In accordance with the observations made by researchers, informants stated that QRIS innovation was able to accommodate previous payment transaction methods. As a fact, informants stated that the use of QRIS provides a sense of security for the money paid by customers. They don't worry about having to save cash when using conventional payments. QRIS innovation also tends to have a positive impact on its adopters, so adopters are comfortable using QRIS payment transactions. This is in line with research conducted by Agustia (2017) entitled "*INOVASI PELAYANAN PEMBAYARAN PAJAK SECARA ELEKTRONIK (E-BILLING) DI KANTOR PELAYANAN PAJAK PRATAMA PEKANBARU TAMPAN*" which states that the innovations in his research are in accordance with the needs of previous transactions. So as to create a positive response to the innovation.

But it is undeniable that each innovation also has its own level of complexity. **Level Complexity** is the level of complexity in an innovation. The lower the difficulty of innovation, the easier it is to accept the innovation (Kaur et al., 2020). Researchers found that adopters experienced difficulties only when they first used QRIS innovations. Over time, with the habituation carried out by each adopter and the monitoring carried out by the Bank so that adopters can ask the Bank officer directly if they experience confusion. Finally, the adopters can enjoy and feel comfortable with the existing QRIS innovations. This reveals the fact in the field that communication in the form of appeals, socialization, or in the form of questions and answers with the nature of interpersonal communication has a positive impact on the adoption of each adopter. In line with the research results of Widya Kartika (2017) entitled "*Difusi Inovasi Perubahan Ojek Konvensional menjadi GO-JEK Online,*" which states that there are difficulties when adopting by adopters. However, these difficulties can be overcome by communication between users carried out by existing adopter groups.

Then there is a theory that explains the characteristics of innovation. **Trialability** is an innovation characteristic that describes the extent to which an innovation can be tested. The more likely an innovation can be piloted, the more likely it is to be adopted by adopters (Qazi et al., 2018), in this case, the researcher obtained the fact from the results of observations and interviews he conducted that informants get a trial period on a very small scale. The spread of QRIS innovation tends to go directly to its use without a trial period. Of the five informants in this study, only one Informant received a trial and pilot period. This has an impact on the slow adoption of QRIS innovation and tends to reluctant for traders in Pasar Gede to use QRIS. Of the many traders in Pasar Gede, only a small number use this QRIS innovation. Without a massive trial period, most traders are afraid to use this QRIS innovation. For direct use, they are afraid of stuttering related to technology. The findings of fact in the study are different from

the findings of fact in previous studies conducted by Setyawan (2017) with the title “*POLA PROSES PENYEBARAN DAN PENERIMAAN INFORMASI TEKNOLOGI KAMERA DSLR,*” which states that the innovations in the study have equal access to be tested throughout the social system. So the findings of fact in this study are contrary to the findings of fact in previous studies. Freedom of access to trials has not been obtained by some informants in this study.

Then the adoption of an innovation can also be influenced by how adopters see the success of the adoption of innovations made by the first adopter. First adopters usually fall into the group of innovators who have the desire to try new things without thinking. That’s called innovation characteristic **observability**, which theorizes that environmental conditions can also influence adopters’ decisions in adopting or resisting the adoption of innovations (Fahad & Shahid, 2022). The facts in this study, taken from observations made by researchers, show that informants as adopters adopting this innovation have an interest in adopting QRIS innovation because of the encouragement from their environment, such as input from customers and the desire that arises to follow the development of existing technology. This has encouraged the interest of informants to adopt QRIS innovations. In line with the research by Kaur et al. (2020) entitled “Why do people use and recommend m-wallets?” Which states that observation ability has an influence on adopter interest in adopting an innovation. Because the influence of the environment has a great impact on the opinion of each adopter.

Innovation information must be disseminated through an intermediary sending messages, namely **Communication channels**. There are two kinds of information dissemination media, namely, through interpersonal communication or through mass media. Innovations in this research are disseminated through direct interaction with **interpersonal communication**. Because information about this QRIS innovation was obtained by informants from Bank employees who conducted socialization with traders in Pasar Gede. In addition to interpersonal communication, information about QRIS is also disseminated through mass media, such as banners and posters installed in the entrance area of Pasar Gede Surakarta. So that visitors also know that Pasar Gede has begun to accept payment methods with QRIS. Previous research conducted by Widya Kartika (2017) with the title “*Difusi Inovasi Perubahan Ojek Konvensional Menjadi GO-JEK Online*” stated that adopters explore information about Gojek through mass media. In addition, adopters also began to communicate between new users and people who were considered to know more about the Gojek innovation. Interpersonal communication is considered to have a greater positive impact than mass media because communication is carried out directly between people, so that information can be conveyed better.



In accordance with the adopter's conditions before the adoption of innovation, it influences the adoption made by the adopter. In this study, the condition of conventional payment practices, then the needs of adopters in payment media, then the advantages of using QRIS compared to conventional payments, and social norms that exist in society about payment techniques affect the course of adoption by adopters. So the period of **time** Each adopter will vary according to the conditions of each adopter (Saidah et al., 2022). In accordance with this understanding, there are several groups of adopters according to how long they adopt innovations. The five adopter groups are innovators, early adopters, early majority, late majority, and laggards. In this study, there were four innovators who felt the need to keep up with the times by using a more sophisticated and secure payment system, and one late majority who experienced rejection first. Then after getting input from customers, adopters began to re-adopt the innovation.

Social conditions also influence the adoption of innovation. Because a social system must have habits that have been formed from their ancestors, **Social System** is the location where individuals who come together create a system of habits to solve a problem leading to a common goal (Widya Kartika, 2017). In previous research conducted by Widya Kartika (2017) with the title "*Difusi Inovasi Perubahan Ojek Konvensional Menjadi GO-JEK Online,*" this gojek innovation was created so that a social system can keep up with the times and create convenience in its life. However, the social conditions, perspectives, economics, and education of each community affecting the absorption of innovation cannot be done simultaneously. As with the results of this study, researchers obtained data from interviews and observations, the condition of each individual in a social system affects simultaneously and not simultaneously an innovation is adopted. With the conditions of each seller, only a small number of sellers are willing to adopt QRIS innovation. Because many sellers still have the thought that with cash, it is easier to make transactions in traditional markets compared to more sophisticated payment systems such as QRIS innovation.

Stages in adopting innovation: the first **knowledge** is the initial stage in the process of adopting an innovation. At this stage, a prospective adopter will think about whether or not the innovation is easy or not, rather than thinking about the actual usefulness of the innovation (Setyawan, 2017). In this study, Pasar Gede sellers and consumers as adopters who have been aware of the advantages or positive values of QRIS payment innovations offered by the Bank. Adopters get complete information about innovation through bank employees who socialize with traders.

Then the second stage of adopting innovation, namely **persuasion**, is the stage where innovation will be disseminated to prospective adopters to use existing innovations (Setyawan, 2017). In the case of this study, persuasion was carried out through **interpersonal communication** channels. Where the Bank, in the process of adopting QRIS payment innovation, socializes with sellers in Pasar Gede. Based on the results of the interview, it can be seen that adopters are trying to find more information about QRIS payment innovations to Bank officers in this adoption process. If they experience doubts or difficulties, they will ask the innovator. This has a positive impact because adopters will understand more about how to use this QRIS payment innovation. In addition, the dissemination of information on QRIS innovation is also through **mass media in the form of banners and posters** installed in front of the entrance of Pasar Gede so that visitors in Pasar Gede can start accepting payment transactions using QRIS.

Field facts obtained by researchers from interviews and observations After getting socialization from the Bank, entering the **decision** stage is the stage where adopters will decide to adopt QRIS payment innovations or will refuse to adopt those based on or influenced by the benefits and ease of use. The sustainability of using the innovation is influenced by the adopter's belief that the innovation will be useful in the future (Setyawan, 2017). In this study, researchers found that adopters assess the good or bad of QRIS innovation based on benefits and aspects of needs in the field of economic transactions or payment transactions in the market. The Informant stated his willingness to adopt because, according to the Informant, in terms of utilizing QRIS, innovation has several advantages. Starting from having certainty, then creating a sense of security, and having efficiency in the transaction process. The facts on the ground are that there were four informants who immediately decided to adopt QRIS, and there was one Informant who chose not to use QRIS first because one Informant felt no need for this QRIS payment system.

After deciding to adopt or reject the adoption of the innovation, then four adopters start using the innovation, called the **Implementation** stage is the stage in the adoption process of innovation when adopters start using the innovation that is deployed. In this study, adopters started using QRIS as legal tender. Adopters will experience firsthand the benefits of the innovations they use, as well as know exactly how QRIS works. The experience of using QRIS will affect adopters in the next stage, namely the confirmation stage, whether they will continue to use it or not. According to Informant, there must be an increase in consumers who prefer to make payments digitally. According to Informant, such a consumer model will definitely look for sellers who can accept digital payment transactions. So he concluded that with the use of

QRIS, there will definitely be an increase in consumers. Then the Informant argued that by using QRIS, he felt calmer. Because the money comes in and is stored in the account, it feels safer to use the QRIS innovation. However, there was one Informant who refused to adopt it at the previous decision stage because he felt there was no need for QRIS innovation. But at this stage of implementation, surely one Informant who refused also saw how it was adopted by other adopters. In addition, one Informant initially refused to get input from his customers to use QRIS. Then enter the next stage, namely the **Confirmation** stage, which is the stage where the adopter will evaluate the results of the innovation decisions that have been made. Whether the adopter will continue to use the innovation or stop using it, or who previously refused to use it then at this stage decided to use it (Setyawan, 2017), at this stage usually, the adopter will think again and may adopt at the end (Sahin & Rogers, 2006). The fact found by researchers in the field, the four informants who had decided to adopt the innovation from the beginning would still use the QRIS innovation, then one Informant who had previously rejected the adoption at the beginning, after going through the implementation stage with various influences from their environment such as the fact that in the field one Informant got input from his customers to use the QRIS innovation. Finally, the last Informant decided to use QRIS as well. But the five informants retained conventional payments. In fact, sellers still need cash to buy their merchandise because the suppliers of merchandise there only accept payment using cash. So that cash payments are still the main choice of payment in Pasar Gede. In addition, visitors are also on guard to keep carrying cash due to the fact that in the field, most sellers in Pasar Gede have not provided payment methods via QRIS.

#### 4. CLOSING

The diffusion process of this innovation includes four elements that support the process, namely **innovation, Communication Channel, time, and social system**. This QRIS payment innovation meets all the characteristics of innovation, namely: **relative advantages, compatibility, complexity, trialability, and observability**. These five characteristics of innovation have an influence on the decisions made by adopters. The process of adopting innovation in this research goes through the following five stages: **knowledge, persuasion, decision, and implementation and confirmation**.

QRIS in Pasar Gede is fused through one **Communication Channel**, which is **interpersonal communication**. It can be seen from the information submitted by the Informant the informants know about the existence of QRIS because of the socialization carried out by Bank officers with each trader in Pasar Gede Surakarta. The process of diffusion of QRIS

innovation through interpersonal communication with traders over forty years old, so they feel comfortable with this communication channel. The resulting impact is that the informants in this study decided to adopt this QRIS innovation. Because when they have difficulties, they can ask directly with officers in the field. So that creates a sense of comfort for adopters in the field. In addition to Interpersonal Communication, information dissemination about QRIS innovation is also disseminated through **mass media** in the form of banners and posters installed in front of the entrance of Pasar Gede so that visitors also know that Pasar Gede can start accepting payments with QRIS.

**Time** is a basic concept that cannot be explained more fundamentally. Time does not stand alone because time is an aspect that is always present in every event (Widya Kartika, 2017). In this research, QRIS payment innovations adopted by adopters in Pasar Gede Surakarta have different time spans. It can be influenced by the elements of innovation and the characteristics of innovation that intersect with the character of each adopter. From this study, it can be seen that the innovation rate of adoption of each Informant who switched from conventional payments using cash to digital payments using QRIS in this study there are several groups of adopters, namely: Informant 1 is included in the group **late majority**. Then Informant 2, Informant 3, Informant 4, and Informant 5 are included in the group **Innovator**.

Based on data obtained in the field through interviews with several informants and from observations during the research, it can be concluded that the **Diffusion of Innovation changes from conventional payments using cash to digital payments using QRIS in Pasar Gede Surakarta** In this research is the diffusion of innovation with a **centralized system** where the diffusion of this innovation begins with someone making innovation in the form of QRIS payments and then disseminating information to prospective adopters who act as active recipients. The adoption process in this study went smoothly even though there were several obstacles experienced by adopters. However, it can be overcome by the Bank as the person in charge of the system. Informants as adopters go through several stages until finally accepting and firmly adopting this QRIS payment innovation.

#### **4.1 ACKNOWLEDGEMENT**

*Alhamdulillahirrabbi'alam*, praise the researcher for the presence of Allah AWT, who has bestowed his mercy and grace so that this scientific publication can be completed properly. We pour out prayers and greetings to the Prophet Muhammad SAW, may in *yaumul qiyamah*, we include servants who get intercession. The author would like to thank his parents, family, Mr. Sidiq Setyawan, M.I.Kom., as the supervisor, the Informant who has been interviewed, and

friends and all parties who cannot be mentioned one by one for all the prayers, motivations, and moral support so that the author can complete this research.

## BIBLIOGRAPHY

- Agustia, I. (2017). Inovasi Pelayanan Pembayaran Pajak Secara Elektronik (E-Billing) di Kantor Pelayanan Pajak Pratama Pekanbaru Tampan. *Administrasi Publik Fakultas Ilmu Sosial Dan Ilmu Politik*, 4(2), 3–4.
- Akmalia, A. N., & Rikumahu, B. (2018). Analisis Tingkat Adopsi Layanan Perbankan Digital Menggunakan Teori Difusi Inovasi. *Jurnal Mitra Manajemen*, 2(4), 273–285. <http://ejournalmitramanajemen.com/index.php/jmm/article/view/125/69>
- Amanda, P. (2022, July 4). *Digitalisasi: Pengertian, Manfaat, dan Peran Pentingnya - Vocasia*. Vocasia.Id. <https://vocasia.id/blog/digitalisasi-adalah/>
- Badan Pusat Statistik. (2022). *Proporsi Individu yang Menguasai/Memiliki Telepon Genggam Menurut Kelompok Umur (Persen), 2020-2022*. <https://www.bps.go.id/indicator/27/1222/1/proporsi-individu-yang-menggunakan-telepon-genggam-menurut-kelompok-umur.html>
- Dibra, M. (2015). Rogers Theory on Diffusion of Innovation-The Most Appropriate Theoretical Model in the Study of Factors Influencing the Integration of Sustainability in Tourism Businesses. *Procedia - Social and Behavioral Sciences*, 195, 1453–1462. <https://doi.org/10.1016/j.sbspro.2015.06.443>
- Fahad, & Shahid, M. (2022). Exploring the determinants of adoption of Unified Payment Interface (UPI) in India: A study based on diffusion of innovation theory. *Digital Business*, 2(2), 100040. <https://doi.org/10.1016/j.digbus.2022.100040>
- Fandiyanto, R. (2019). Transformasi Sistem Pembayaran Elektronik Di Indonesia Dan Implikasinya Terhadap Kemajuan Bisnis Kreatif Berbasis Daring Di Wilayah Eks-Keresidenan Besuki. *The 5th SNCP-2019*, 5, 144–153.
- Hardiky, M. I., Nova, D. K., Rahmadewi, A., & Kustiningsih, N. (2021). Optimalisasi Digital Payment Sebagai Solusi Pembayaran Umkm Roti Kasur. *Jurnal Riset Entrepreneurship*, 4(1), 44. <https://doi.org/10.30587/jre.v4i1.2193>
- Hariyanto. (2020). *Survei: Pembayaran Cashless Meningkatkan di Era New Normal*. Ajaib.Co.Id. <https://ajaib.co.id/survei-pembayaran-cashless-meningkat-di-era-new-normal/>
- Indonesia, B. (2022). *Kanal dan Layanan*. Bi.Go.Id. <https://www.bi.go.id/QRIS/default.aspx>
- Kaur, P., Dhir, A., Bodhi, R., Singh, T., & Almotairi, M. (2020). Journal of Retailing and Consumer Services Why do people use and recommend m-wallets? *Journal of Retailing and Consumer Services*, 56, 102091. <https://doi.org/10.1016/j.jretconser.2020.102091>
- Kurniawan, A. (2022, April 20). *Hikmah Pandemi Covid-19 Dompot Digital Naik Daun*. Djkn.Kemenkeu.Go.Id. <https://www.djkn.kemenkeu.go.id/kpknl-semarang/baca-artikel/14974/Hikmah-Pandemi-Covid-19-Dompot-Digital-Naik-Daun.html>
- Kurniawati, E. T., Zuhroh, I., & Malik, N. (2021). Literasi dan Edukasi Pembayaran Non Tunai Melalui Aplikasi QR Code Indonesian Standard (QRIS) Pada Kelompok Milenial. *Studi Kasus Inovasi Ekonomi*, 05(01), 23–30.
- Nazari, F., Khosravi, F., & Babalhavaeji, F. (2013). Applying Rogers' diffusion of innovation theory to the acceptance of online databases at university zone of Iran. *Malaysian Journal of Library and Information Science*, 18(3), 25–38.
- Nugroho, H. (n.d.). *Inovasi : Bayar Piutang Negara Pakai QRIS*. Djkn.Kemenkeu.Go.Id. Retrieved January 6, 2023, from <https://www.djkn.kemenkeu.go.id/artikel/baca/13899/Inovasi-Bayar-Piutang-Negara-Pakai-QRIS.html>

- Nur'aini, R. D. (2020). Penerapan Metode Studi Kasus Yin Dalam Penelitian Arsitektur Dan Perilaku. *INERSIA: LNformasi Dan Ekspose Hasil Riset Teknik Sipil Dan Arsitektur*, 16(1), 92–104. <https://doi.org/10.21831/inersia.v16i1.31319>
- Nurhadi, M. (2022, September 25). *Tren Pembayaran Digital Naik Dua Kali Lipat Dibanding Tahun 2021*. Suara.Com. <https://www.suara.com/bisnis/2022/09/25/122600/tren-pembayaran-digital-naik-dua-kali-lipat-dibanding-tahun-2021>
- Puteri, L. C. P., & Fajarwati, A. (2016). Pengaruh Eksistensi Pasar Tradisional terhadap Perkembangan Wilayah Kota Surakarta. *Jurnal Bumi Indonesia*, 5(3), 1–9. <http://lib.geo.ugm.ac.id/ojs/index.php/jbi/article/view/532/0>
- Qazi, W., Raza, S. A., & Shah, N. (2018). Acceptance of e-book reading among higher education students in a developing country: The modified diffusion innovation theory. *International Journal of Business Information Systems*, 27(2), 222–245. <https://doi.org/10.1504/IJBIS.2018.089113>
- Rogers, E. (2003). *Diffusion of innovations, by Everett Rogers (1995) Related papers COMPLEX ADAPT IVE SYST EMS AND T HE DIFFUSION OF INNOVAT IONS*. 8.
- Sahin, I., & Rogers, F. (2006). *Detailed Review of Rogers ' Diffusion of Innovations Theory and Educational Technology-Related Studies Based on Rogers ' .* 5(2), 14–23.
- Saidah, M., Trianutami, H., & Amani, F. S. (2022). Difusi Inovasi Program Digital Payment di Desa Kanekes Baduy. *Jurnal Ilmu Komunikasi Jurnal Communicology*, 10(2), 138–153.
- Setyawan, S. (2017). Pola Proses Penyebaran Dan Penerimaan Informasi Teknologi Kamera DSLR. *Komuniti*, 9(2), 146–156.
- Sinaga, M. (2019). *BAB II TINJAUAN PUSTAKA 2.1. Usia*. 1–19. [http://eprints.undip.ac.id/79040/3/BAB\\_II.pdf](http://eprints.undip.ac.id/79040/3/BAB_II.pdf)
- Širuček, M., & Galečka, O. (2017). Alternative evaluation of S&P 500 index in relation to quantitative easing. *Forum Scientiae Oeconomia*, 5(1), 5–18. <https://doi.org/10.23762/fso>
- Sriekaningsih, A. (2020). *QRIS dan Era Baru Transaksi Pembayaran 4.0* (D. H (ed.); I). Penerbit ANDI (Anggota IKAPI). [https://books.google.co.id/books?hl=en&lr=&id=NnEQEAAAQBAJ&oi=fnd&pg=PP1&dq=QRIS+Indonesia&ots=aX7ku8BFkU&sig=zqeaV0ww\\_li6\\_PhHjnCtBDVHTms&redir\\_esc=y#v=onepage&q=QRIS Indonesia&f=false](https://books.google.co.id/books?hl=en&lr=&id=NnEQEAAAQBAJ&oi=fnd&pg=PP1&dq=QRIS+Indonesia&ots=aX7ku8BFkU&sig=zqeaV0ww_li6_PhHjnCtBDVHTms&redir_esc=y#v=onepage&q=QRIS Indonesia&f=false)
- Wibowo, I. T. (2019). Proses Difusi Inovasi Program Sistem Aplikasi Keuangan Tingkat Instansi (SAKTI): Studi Kasus Pada Ditjen Perbendaharaan di D.I. Yogyakarta Tahun 2018. *Indonesian Treasury Review: Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 4(4), 323–337. <https://itrev.kemenkeu.go.id/index.php/ITRev/article/view/139/110>
- Widya Kartika, A. (2017). Difusi Inovasi Perubahan Ojek Konvensional Menjadi GO-JEK Online (Studi Deskriptif Kualitatif Perubahan Driver Ojek Konvensional Menjadi Driver GO-JEK Online di Kota Solo Melalui Pendekatan Teori Difusi Inovasi). *Eprints.Ums.Ac.Id*. <http://eprints.ums.ac.id/id/eprint/57325>
- Wiratno, W. E. (2020). Analisis Adopsi Aplikasi Uang Elektronik melalui Pendekatan Teori Difusi Inovasi. *Jurnal Ekonomi Dan Bisnis*, 9(1), 155–177.
- Wuryantai, A. E. W. (2013). Digitalisasi Masyarakat: Menilik Kekuatan dan Kelemahan Dinamika Era Informasi Digital dan Masyarakat Informasi. *Jurnal ILMU KOMUNIKASI*, 1(2), 131–142. <https://doi.org/10.24002/jik.v1i2.163>
- Zubir, E., & Isdianto, J. (2011). *Kategori Adopter dan Tingkat Keinovatifan Masyarakat Nelayan (Studi Kasus Nelayan Desa Tanjung Satai Pulau Maya Karimata dan Desa Harapan Mulia Sukadana, Kabupaten Kayong Utara, Kalimantan Barat)*.