# Applications of Digital Payments and its impact on Service Quality & Satisfaction

***R.Lavanya, **Dr.T. Thirumaleswari**

***R.Lavanya, Ph.D Scholar, SCSVMV University, Kanchipuram.**

****Dr.T. Thirumaleswari, Assistant Professor Department of Management Studies, SCSVMV University, Kanchipuram.**

**Abstract:**Since the introduction of the cashless system, there has been a significant push toward the adoption of digital payment methods. The current research examined the preferences of customers for digital payment methods based on considerations such as Security, Convenience, and Cost. The research was conducted in the region of Hyderabad and involved the participation of 350 participants. Risk, openness, promptness, and the ability to receive immediate payment The data were analysed with ANOVA, and the results showed that there is no correlation between the use of digital payment applications and the effect those applications have on the level of customer satisfaction or the quality of service provided.

**Keywords:** Digital Payment Methods,

**The Preferences of Customers Regarding Digital Payment Methods**

**Introduction:**

Electronic commerce that is conducted over the internet has grown at an astonishingly quick pace. In addition, the significance of using the internet for banking, transactions, and paying bills has significantly increased. Playstore or Appstore, customer reviews of an application offered by a bank or payment company have become valuable sources of information for other customers. The most important factor that contributed to this pattern was the customers' insistence on user-friendliness, trouble-free operation, and adequate information about the services. Customers were satisfied not only with the high quality of the banks' operations but also with the convenience of managing their banking transactions via the portals and mobile applications of online banking. Customers were also satisfied with the high quality of the banks' customer service representatives. This chapter gives an overview of the service quality in the banking industry as well as the information technology that is used.

Use According to Oliveira and Martins (2011), information technology has been widely regarded as an important tool for improving the economic conditions and competitiveness of a nation. In addition, it was generally agreed upon that a company's level of competitiveness was significantly influenced by the degree to which it utilised information and communication technology. As a general rule, when compared to other industries, the banking sector has traditionally been one of the last to adopt new forms of information technology. This can be attributed to the industry's unique characteristics.

On the other hand, the turnaround in the banking sector has been helped along by the economic recovery, and the situation has recently improved. It was imperative for financial institutions to reevaluate their preferred distribution; determining which processes to convert to online channels,

which required efficient distribution strategies. The fact that going to the bank and following the many different procedures and rules in order to open an account, make transfers, etc. required a significant amount of time is an important consideration. Banks discovered alternative safe channels by analysing the behaviour of their customers. In addition, recent research has looked into the impact that computer technology has had on the decision-making processes of people who bank at specific institutions. The banking industry has become extremely information-intensive over the course of the last few years. In addition, more effective procedures and improved service to bank customers were critical for customer satisfaction and retention; as a result, technology has become a practical solution to the issues that have been plaguing the banking industry. Definitions of the variables that were taken into consideration for the study:

Service quality can be defined as an end-assessment user's of how well a product or service meets their requirements (Zeithaml & Bitner, 2000).

Customer satisfaction is a psychological phenomenon that refers to what customers anticipate receiving from a product or service that is provided by a particular organisation, as well as the customers' perceptions of how well the product or service actually performs (Pizam& Ellis, 1999).

**Review of Literature:**

In the analysis, Berry, Parasuraman, and Zeithaml (1985) revised and reevaluated the Service Quality scale in order to compare the SERVQUAL results with those of other researchers who employed and measured SERVQUAL on five client samples. Validity assistance in the banking service industry with the SERVQUAL model, allowing banks to calculate customer-perceived service quality based on the size developed in the SERVQUAL model for use in the banking industry.

Taylor and Cronin (1992) investigated the conceptualization and evaluation of quality of service, as well as the relationships between quality of service and customer loyalty, as well as their future applications. The value of the links between quality of service and customer satisfaction have been investigated by researchers, as well as an alternative method for enhancing perceived service quality. They proposed that a performance-based assessment of service quality was an improved method for evaluating the quality-of-service building. Taylor and Cronin (1992) classified these measures into three key categories: performance, significance, and objectives.

Chen and Tsai (2007) defined customer perception of service quality as "customer evaluation in conjunction with user experience of service delivery process standards." Prior research (Cadotte& Turgeon, 1988) focused on the attributes and effects of bank customer satisfaction66. Consumers utilised a variety of characteristics to determine the expected efficacy of the services. These characteristics include a level of operation, convenience, customization, quality, prompt service, and a thorough evaluation of the service's impact on customer happiness and purpose. In addition, the study found that it was challenging to identify certain characteristics that influence the level of customer loyalty, which are correlated with intangible service variables and others, such as a "value of funds" feature. Moreover, intangible attributes were also associated with operation, such as customer service, the relative ease of managing transfers, and the quality of the service received, whereas tangible attributes frequently related to physical services, such as the availability and quality of various installations. In Roberts (2006)67 and Nasution and Mavondo (2009), customer

satisfaction was measured based on a customer's positive experience with a given product, and qualities such as customer service were taken into account (2008).

Davis (1986) defines attitude as "the degree of evaluation of an individual's use of the target system on the job." Consequently, the attitude description and calculation matched the behavioural criterion definition proposed by Ajzen and Fishbein (1977). Similar to other industries, bank businesses have invested in information technology for a variety of reasons, including cost reduction, development of additional products without price increases, and improvement of service or product efficiency. It has been noted that the consumer experience of the information system has a significant impact on the successful implementation of the information system (Davis, 1989). According to Davis, the company would be unable to provide maximum benefits if consumers were unwilling to adopt the information system.

Gopal Krishna U M (2020), According to the findings of the research, the public sector banking industry is profitable when measured against criteria such as the Operating Profit Margin and the Price to Earnings ratio. Earnings per share, the Net Profit Margin, and Return on Capital Employed are all indicators that point to the profitable nature of banking in the private sector. As a result of this, banks operating in the public sector as well as banks operating in the private sector will be required to introduce new banking instruments and innovations in the industry in order to continue operating. Banks must be able to effectively manage credit risk and diversify into fee-based activities in order to achieve long-term success in this environment of intense competition.

Gopal Krishna U M (2019), According to the findings of the study, investors have distinct preferences regarding the various types of investment vehicles. The investor's preference in Investment Avenue will be determined by the investor's investment objectives, which may include risk, return, safety, and liquidity. The vast majority of investors participate in the stock market for the potential returns, whereas bond investors accept risk in exchange for periodic returns. Mutual fund investments are popular among investors who have a low risk appetite because of the diversification they provide.

Gopal Krishna U M (2019), The hypothesis of the study is that investors' investment knowledge is correlated with their propensity to take risks. However, the findings of the study indicate that this correlation is significant only for sharemarket, bond, gold & silver investment avenues; the results of the study indicate that this correlation is not significant for mutualfund, bank, or post office investment avenues. In addition, the level of investment knowledge and the amount of tolerance for risk that investors have can be affected by certain demographic factors. Regardless of age, gender, profession, or anything else, investors of any kind are expected to have distinctive qualities in their investments. This is the fundamental principle that underpins the practise of investing. As a consequence, the findings of the study lead to the inference that certain investors have a deep comprehension of their respective investments, whereas other investors lack such knowledge.

**Problem Statement**

Numerous banks used the internet to deliver transfer-related information and online transactions. Private businesses benefit from a rapid expansion of technological tools. As private payment providers grow, banks are finding ways to persuade customers to use their digital banking apps. According to research, maintaining customer satisfaction is one of the biggest banking management challenges today. Perceived service quality and customer loyalty are crucial for competitive

differentiation and customer retention. Superior service quality helps banks differentiate themselves, gain a strategic advantage, and boost performance. Internet customers are also computer or smartphone users who perform traditional customer tasks using web or mobile apps. No study examined how these variables affect customers' intention to use digital banking synchronously and how online feedback affects this intention. This study examines how digital payment application awareness, perception, and service quality affect customer satisfaction and intent to use. Before conducting the research, it was important to understand the previous theoretical pillars that influenced the present work. The following sections illustrate customer behaviour and technology theories in banking science.

**Sampling design**

The researcher had a specific plan for selecting samples from a particular population, which they referred to as their sampling design. The procedure for gathering information had been planned out in advance. There are a great number of sample models available, and the investigator used convenience sampling to select a sample population from those models. The sampling procedure, the sample size, and the sample unit are all components of the sample design. Participants in the study who made use of digital payment applications were considered the study's sample unit. In Hyderabad, online questionnaires were distributed to people who were known to be within a certain circle, including family, friends, and coworkers. In total, we finalised and analysed 350 of the responses we received. Before giving their responses, the groups were given a rundown of all the necessary questions.

**Data Collection methods:**

The questionnaire and data collection process were approved by field experts. Data collection began in December 2021 after approval. This survey used Google Forms. Edited a 5-point Likert scale questionnaire. Family, friends, and coworkers who can participate received the survey. The sample was random. As all questions were required, all respondents completed the survey. More information about data collection followed.

**Data Screening**

Data screening targeted incorrect answers, incomplete information, outliers, and normality assumptions. All users of digital payment apps were polled. 350 survey responses out of 400 were approved for further study. All 54 respondents answered all mandatory survey questions. IBM SPSS validated the data.

**Objectives of the study**

1. To Access the customers awareness about digital payment applications& its impact on satisfaction and service quality.

**Hypothesisof the study**

**$H_0$1:** There is no significant effect from Customer’s awareness of digital paymentson service quality of the applications

**$H_0$2:** There is no significant effect from Customer’s awareness of digital payments on satisfaction regarding the applications

**Table1.Application of Frequency Analysis to Preferred Payment**

| PaymentApplication | N |
|---|---|
| PhonePe | 150 |
| GooglePay | 120 |
| Paytm | 30 |
| BHIM | 15 |
| Other | 35 |

**Source**:PrimaryData

**Table2.ANOVA for Constructions regarding Preferred Payment Application**

| Constructs | Levene'sTest | | ANOVA | | WelchANOVA | |
|---|---|---|---|---|---|---|
| | Value | p | Value | p | Value | p |
| **ServiceQuality** | 1.795 | .129 | 7.713 | p<.001* | - | - |
| **CustomerSatisfaction** | .860 | .488 | 5.706 | p<.001* | - | - |

**Source**:PrimaryData, computedusingSPSS

None of the sample sizes exceeded 30, and the Google Pay/BHIM ratio was more than 1.5. Thus, the ANOVA Test was unreliable. Levene's test for Service Quality and Customer Satisfaction was insignificant, therefore variances were roughly same. Therefore, ANOVA was performed.

The ANOVA was significant for service quality (p.001) and customer satisfaction (p.001) in relation to preferred payment application, indicating that there was a substantial difference between these two constructs. Therefore, Tukey post hoc must be performed.

**Table 3. Tukey HSD Post Hoc for Perception with respect to Preferred PaymentApplication**

| Payment Application | PhonePe | GooglePay | Paytm | BHIM | Other |
|---|---|---|---|---|---|
| **PhonePe** | | | | | |
| **Google Pay** | .039* | | | | |
| **Paytm** | .596 | .004* | | | |
| **BHIM** | .312 | .689 | .058 | | |
| **Other** | .768 | .356 | .249 | .879 | |

**Source**:PrimaryData, computedusingSPSS

The Tukey HSD post hoc test revealed that there was a significant difference (p =.0039) between Google Pay and PhonePe in terms of perception. Post hoc analysis revealed a significant relationship between BHIM and Paytm (p =.004).

**Table4.Mean Preferred Payment Application Ratings**

| Payment Application | Mean (Perception) |
|---|---|
| PhonePe | 4.048 |

| | |
|---|---|
| GooglePay | 3.750 |
| Paytm | 3.415 |
| BHIM | 3.653 |
| Other | 3.562 |

**Source**:PrimaryData, computedusingSPSS

Consumers of Paytm had an overall impression level that was significantly lower (M = 3.415) compared to users of Google Pay (M = 3.750) and PhonePe (M = 4.048). The individuals that use PhonePe have the highest Perception Level.

**Table 42. Tukey HSD Post Hoc for Service Quality Regarding Preferred Payment Application**

| Payment Application | PhonePe | Google Pay | Paytm | BHIM | Other |
|---|---|---|---|---|---|
| **PhonePe** | | | | | |
| **Google Pay** | .000* | | | | |
| **Paytm** | .045 | p<.000* | | | |
| **BHIM** | .321 | p<.000* | .895 | | |
| **Other** | .875 | .020* | .0762 | .312 | |

**Source**:PrimaryData, computedusingSPSS

Testing with Tukey HSD post hoc found notable differences in BHIM's service quality compared to that of all the other different payment applications.

**Table 43. Mean Ratings of Service Quality with respect to Preferred PaymentApplication**

| Payment Application | Mean (ServiceQuality) |
|---|---|
| **PhonePe** | 3.851 |
| **Google Pay** | 3.462 |
| **Paytm** | 2.179 |
| **BHIM** | 2.102 |
| **Other** | 2.652 |

**Source**:PrimaryData, computedusingSPSS

The Service Quality offered by BHIM (M = 2.102) was much lower than that offered to users of any other application. Users of PhonePe experienced the highest quality of service.

**Table 44. Tukey HSD Post Hoc for Customer Satisfaction with respect to PreferredPaymentApplication**

| Payment Application | PhonePe | Google Pay | Paytm | BHIM | Other |
|---|---|---|---|---|---|
| **PhonePe** | | | | | |
| **Google Pay** | .264 | | | | |
| **Paytm** | .754 | .581 | | | |
| **BHIM** | .040* | .002* | .031* | | |
| **Other** | .680 | .689 | 0.889 | .001* | |

**Source**:PrimaryData, computedusingSPSS

When it comes to the level of customer satisfaction, the Tukey HSD post hoc tests proved to be statistically significant for all of the other different payment applications.

**Table 45. Mean Ratings of Customer Satisfaction with respect to Preferred PaymentApplication**

| Payment Application | Mean (CustomerSatisfaction) |
|---|---|
| **PhonePe** | 4.568 |
| **Google Pay** | 4.124 |
| **Paytm** | 3.460 |
| **BHIM** | 3.121 |
| **Other** | 3.671 |

**Source**:PrimaryData, computedusingSPSS

Customer Satisfaction of BHIM (M = 3.121) was significantly lesser than all other application users.

**Findings:**

According to the findings of the Welch analysis of variance performed on service quality, customer satisfaction, and the number of bank accounts held, there was no significant difference in the latent variables in connection to the number of bank accounts kept.

When consumers had a higher perception of the service quality when using the digital payment application, there was a higher possibility that they were satisfied with the application and anticipated using it again in the near future.

The purpose of this study was to investigate the factors influencing the intention of customers to utilise a digital payment application by utilising a combination of prior theories and frameworks. Specifically, the focus of this investigation was on the factors influencing the intention of customers to use a digital payment application. Customers' awareness, perception, the quality of the service provided, and level of contentment with the payment application all had a role in determining whether or not they intended to use a digital payment application for transactions.

**Suggestions:**

This study was the first attempt to analyse the intention of customers to use an application by merging their awareness, perception, quality of service, and level of enjoyment with a digital payment application. This was accomplished through the use of a digital payment application. Separate research has been conducted in the past to investigate similar concepts in relation to different service industries.

The findings of this study provide bank managers and banking specialists with crucial information that can be utilised in an appropriate manner in order to address the issue of customer satisfaction. The findings centre on three key strategies for resolving this issue, which are as follows: 1) how the perception and quality of service provided to customers leads to the satisfaction of those customers; 2) how the satisfaction of customers increases their intention to make payments; and 3) how the quality of service provided to customers can be effectively managed in order to effectively lead to the customers' intention to use the payment application.

The research indicates that positive client impressions and the high level of service provided by the application are the primary contributors to gratifying user experiences with the application. It was absolutely necessary to set quality standards that were both open and measurable. These criteria are further subdivided into procedural quality dimensions, such as high efficiency and safe transactions to fulfil the expectations of customers, as well as proper coordination, timely handling of issues, providing customers with trustworthy product information, etc., among other things.

The results of this research have been compiled into recommendations for the development of a digital payment application that takes into account both its usability and its practicability. Therefore, application developers ought to focus more on boosting the application's perceived utility (for example, task efficiency, or effectiveness) in order to enhance users' desire to use the programme. In addition, financial institutions and companies that process payments should make it a priority to develop applications that are helpful, effective, and easy to use. It was also helpful to get periodic client input on the bank's online payment application in order to make the necessary modifications. This feedback was gathered in order to improve the application.

**Conclusion:**

This study recommends bankers improve online distribution strategies to capitalise on payment app adoption. Priority #1 should be developing a high-value payment app. Effective, productive, reliable, and user-friendly describe the payment app.

A payment app should be user-friendly. Perceived ease of use was a key indicator of customer satisfaction with the app. Banks and payment companies should develop a user-friendly digital payment app that simplifies customer qualification. Strategies include visible navigation buttons, captivating images, and easy-to-use transfer payment engines.

Customers view online reviews as a source of information that contributed to their satisfaction with an application, so banks must take them seriously. The average online review rating correlates strongly with revenue, according to research.

**Limitations and Recommendations for Future Research**

This study has flaws. Interpreting results requires caution. The sample included Google form respondents. The sample was collected conveniently, which may have introduced bias.TAM conceptualises intentions as behaviours. Absent actual behaviour measures, intentions replace actual behaviour. Intentions can be used to predict actions in TAM research.

This study examined customer satisfaction with a payment application, as well as their perception of it, which influences their intent to use it. Additional variables may affect digital payment transactions. Businesses also benefit from card payments and websites using IMPS, RTGS, and NEFT, or internet banking. Future research should compare customers motivated by card payments, internet banking, and payment apps. The investigation may provide recommendations for bank management on how to best promote direct payment channels. This study can be repeated using a sample of actual bank customers to eliminate bias from online Google form samples and generalise the findings. Based on TAM's assumption of a strong relationship between intentions and actual behaviour, objective customer behaviour measures could be added to strengthen the model.

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