

A Study on Electronic Payment System in Electronic Commerce

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Abstract— Nowadays, e-commerce is used in all areas, from product design to customer service. Increasingly, more and more consumers are migrating to electronic commerce to make electronic bill payments, to purchase products and services. The growth and acceptability of electronic money led to various forms of systems, which improved the use of these systems through different devices one of the most significant ones was the electronic payment system. The electronic payment system has many benefits for payers, payees, electronic commerce, banks, organizations and governments. These benefits can lead to widespread electronic payment systems in the world. This study has been conducted with the main objective of knowing the perception and preference of the customers towards the E-payment system. The study also makes an attempt to know the satisfaction level of the customers and the problems faced by the customers. The primary and secondary data will be used for the purposes of study. The research will be conducted based on the customers using E-payment system. A Convenience sampling method will be adopted to collect the data from the customers. The data collected will be analysed to draw a meaningful conclusion.

Indexed Terms— E-Commerce, Electronic payment and customer service.

I. INTRODUCTION

In today's digital era, the usage of the internet has increased drastically. The increased development of ICT has brought many benefits to society and affected the lives and attitudes of human beings. Without the use of information technology, the business activities of all new and long-term careers and activities cannot be optimized. Many global initiatives have been undertaken to deal with this phenomenon. New technologies and the wider global network, in particular the internet, internal and external networks, are now being used in the digital economy, the online retail and finance and online banking sectors.

Nowadays, e-commerce is used in all areas from product design to customer service. E-Commerce is one kind of business process that interacts with customer quickly, such as online advertising, online payment, and online customer service, order tracking, product exchange. It helps to interconnect with a long-range of suppliers, distributors and trading partners, many of whom are in rural areas. E-commerce is a one kind of current trade method which is used by merchants, consumers, etc. to improve the value of goods and services and increase the speed of service delivery with the help of high-speed computer networks. Consumers are becoming more and more comfortable with making online transactions and are concerned about conducting electronic business transactions.

An electronic payment system comes to replace a cash payment system. Sales of goods and services increased significantly with the adoption of the use of electronic payment systems, so that electronic payments became an increasingly important part of the payment system. The merchant sells the goods to the customer, and the customer pays the price with the help of an electronic payment system. In the offline world, the payments are made with cash or check. The electronic payment system has many benefits for payers, payees, electronic commerce, banks, organizations and governments. These benefits can lead to widespread electronic payment systems in the world.

II. STATEMENT OF THE PROBLEM

Electronic payment is a form of direct payment and direct banking without having a physical presence. The growth of electronic payment has reduced operational and payment processing cost and boosted online commerce and online electronic services usage. In cashless economies, digital mode of payments such as Debit Cards/ATM, Credit Cards, Net Banking and Digital Wallets, various Payment apps like Paytm,

BHIM App etc., are in use instead of cash for payment of various expenses or transactions done by the individual or an organization. But its operations involve a wide variety of problems. It is subject to security threats like online frauds and cyber related crimes too exist in this regard. The awareness of e-literacy and the accessibility to the internet also affect the usage of electronic payment system. This study aims at understanding the satisfaction and preference of the customers, and also the problems faced by the customers in using electronic payment system.

III. OBJECTIVES OF THE STUDY

- To analyse and evaluate the perception and preference of the customers.
- To know the satisfaction level of the customers.
- To identify the problems faced by the customers in terms of using electronic payment system.

IV. SCOPE OF THE STUDY

The study is undertaken to know the different types of electronic payment system in Ecommerce. The study is mainly aimed at analysing the perception of the customers in terms of using electronic payment system. For the present study the data has been collected from the customers using electronic payment system in Mangaluru city.

V. RESEARCH METHODOLOGY

The primary and secondary data have been used for the study purpose. Collection of data through proper channel is very important for the study. The major sources of data which are used for the analysis and interpretation:

Primary data:

The primary data are those which are collected for the present study for the first time for the purpose of study and thus happened to be original in character. Questionnaire have been used for collecting the information. Questionnaire comprised of open ended and closed ended questions.

Secondary data:

Secondary data are those which have been collected on a previous occasion for some other studies by others and which have already passed through the statistical process. Secondary data may either be published data or unpublished data. Secondary data was collected from various sources for this study. They are as follows,

- Journals and articles
- Internet

Research design:

The research is conducted based on the customers using E-payment system. Convenience sampling method is adopted to collect the data from the customers.

Sampling unit:

In this study, the sampling unit comprise of the respondents from Mangaluru city.

Sampling size:

The study is carried among 100 respondents from Mangaluru city.

VI. LIMITATIONS OF THE STUDY

- The study is done taking into considerations the respondents from Mangaluru city only.
- The number of respondents is restricted to 100.
- Lack of willingness on part of respondents have made the study difficult.
- An interpretation of this study is based on the assumption that respondents have given all correct answers.

VII. DATA ANALYSIS AND INTERPRETATION

TABLE 1
LEVEL OF AWARENESS ABOUT E-PAYMENT SYSTEM

LEVEL OF AWARENES S	NO. OF RESPONDENT S	PERCENTAG E
Extremely aware	31	31

Moderately aware	60	60
Slightly aware	9	9
TOTAL	100	100

Source: survey data N=100

From the above table it is clear that out of 100 respondents, 60% of the respondents are moderately aware of the E-payment system, 31% of the respondents are extremely aware of the E-payment system and only 9% of the respondents are slightly aware of the E-payment system.

Based on above analysis it has been interpreted that majority of the respondents i.e., 60% are moderately aware of the E-payment system.

TABLE 2
PREFERRED MODE OF E-PAYMENT

MODES	NO. OF RESPONDENTS	PERCENTAGE
Debit card	44	44
Credit card	6	6
Net banking	26	26
Mobile wallets	80	80
Other	4	4
TOTAL	-	-

Source: survey data M. R. R=1.6
N=100

Note: 1. Here the percentage is not equal to 100 because multiple response rate.

2. Multiple Response Rate is equal to multiple response rate is divided by the total Number of respondents.

From the above table it is clear that out of 100 respondents, 80% of the respondents prefer mobile wallets, 44% of them prefer Debit card, 26% of them prefer net banking, 6% of the respondents prefer Credit card and 4% of the respondents prefer other E-payment system such as electronic checks etc.

Based on above analysis it has been interpreted that majority of the respondents i.e., 80% prefer mobile wallets.

TABLE 3
MOST PREFERRED ELECTRONIC PAYMENT APPLICATIONS

APPLICATIONS	NO. OF RESPONDENTS	PERCENTAGE
Google pay	88	88
PAYTM	20	20
BHIM	6	6
Phone pay	40	40
Other	1	1
TOTAL	-	-

Source: Survey data M. R. R=1.55
N=100

Note: 1. Here the percentage is not equal to 100 because multiple response rate.

2. Multiple Response Rate is equal to multiple response rate is divided by the total Number of respondents.

From the above table it is clear that out of 100 respondents, 88% of the respondents prefer Google pay, 40% of them prefer Phone pay, 20% of them prefer PAYTM, 6% of the respondents prefer BHIM app and 1% of the respondent prefer another E-payment platform such as PayPal etc.

Based on above analysis it has been interpreted that majority of the respondents i.e., 88% prefer Google pay.

TABLE 4
PURPOSE OF USING E-PAYMENT SYSTEM

PURPOSE	NO. OF RESPONDENTS	PERCENTAGE
Paying bills	66	66
Buy movie tickets	12	12

Transfer money	76	76
Other	0	0
TOTAL	-	-

Source: survey data MRR=1.54
N=100

Note: 1. Here the percentage is not equal to 100 because multiple responses.

2. Multiple Response Rate is equal to total number of responses divided by the Number of respondents.

From the above table it is clear that out of 100 respondents, 76% of respondents are using E-payment system for transferring money, 66% of the respondents are using E-payment system for paying their bills and 12% of the respondents are using E-payment system in order to book their movie tickets.

Based on above analysis it has been interpreted that majority of the respondents i.e., 76% are using E-payment system for transferring money because this saves lot of time.

TABLE 5
FACTORS INFLUENCING THE CUSTOMERS TO USE E-PAYMENT SYSTEM

FACTORS	NO. OF RESPONDENTS	PERCENTAGE
Time saving	79	79
Convenience	61	61
Cash back	37	37
Discounts	25	25
Other	0	0
TOTAL	-	-

Source: survey data MRR=2.02
N=100

Note: 1. Percentage is not equal to 100 because of multiple responses.

2. Multiple Response Rate is equal to total number of responses divided by the Number of respondents.

From the above table it is clear that out of 100 respondents, 79% of the respondents stated that time saving is the main influencing factor to use E-payment system. 61% of the respondents are influenced by the convenience factor, 37% of the respondents are influenced by the factor of cash back and only 25% of the respondents are influenced by discount factor.

Based on above analysis it has been interpreted that majority of the respondents i.e., 79% are influenced by the time saving factor.

TABLE 6
E-PAYMENT SYSTEM IS BETTER THAN TRADITIONAL PAYMENT SYSTEM

OPINION	NO. OF RESPONDENTS	PERCENTAGES
Strongly agree	12	12
Agree	64	64
Neutral	23	23
Disagree	0	0
Strongly disagree	1	1
TOTAL	100	100

Source: survey data N=100

From the above table it is clear that out of 100 respondents, 64% of the respondents has agreed with the statement “E-payment system is better than traditional payment system”, 23% of the respondents are neutral about the statement, 12% of the respondents has strongly agreed with the statement, 1% of the respondents has strongly disagreed with the statement and none of the respondents disagreed with the statement.

Based on above analysis it has been interpreted that majority of the respondents i.e., 64% agree with the statement- “E-payment system is better than the traditional payment system” as it is available round the clock as compared to the traditional payment system.

TABLE 7
SAFISACTION WITH REGARD TO SPEED OF THE TRANSACTION

OPINION	NO. OF RESPONDENTS	PERCENTAGE
Yes	94	94
No	6	6
TOTAL	100	100

Source: survey data N=100

From the above table it is depicted that out of 100 respondents, 94% of the respondents are satisfied with the speed of transactions and 6% of the respondents are not satisfied with the speed of transactions.

Based on above analysis it has been interpreted that majority of the respondents i.e., 94% are satisfied with the speed of transactions.

TABLE 8
LEVEL OF SATISFACTION WITH REGARD TO THE E-PAYMENT SYSTEM

LEVEL OF SATISFACTION	NO. OF RESPONDENTS	PERCENTAGE
Highly satisfied	10	10
Satisfied	69	69
Neutral	20	20
Dissatisfied	1	1
Highly dissatisfied	0	0
TOTAL	100	100

Source: survey data N=100

From the above table it is clear that out of 100 respondents, 69% of the respondents are satisfied with the E-payment system, 20% of the respondents are neutral, 10% of the respondents are highly satisfied, 1% of the respondent are dissatisfied and none of the respondents are highly dissatisfied.

Based on above analysis it has been interpreted that majority of the respondents i.e., 69% are satisfied with the E-payment system because of its convenience, speed of the transaction and it also saves their time.

TABLE 9
PROBLEMS FACED BY THE RESPONDENTS WHILE USING E-PAYMENT SYSTEM

OPINION	NO. OF RESPONDENTS	PERCENTAGE
Yes	59	59
No	41	41
TOTAL	100	100

Source: survey data N=100

Out of 100 respondents, 59% of the respondents stated that they have faced problems while using E-payment system and 41% of the respondents stated that they have not faced any problems while using E-payment system.

Based on above analysis it has been interpreted that majority of the respondents i.e., 59% faced problems while using E-payment system.

TABLE 10
TYPES OF PROBLEMS FACED WHILE USING E-PAYMENT SYSTEM

TYPES OF PROBLEMS	NO. OF RESPONDENTS	PERCENTAGE
Theft	3	3
Unauthorized access to personal information	5	5
Difficulty to remember the user name and password	35	35

Alteration of confidential information	13	13
Sometime amount will not get credited	1	1
Failed transactions	1	1
Network issues	3	3
Server problem	2	2
TOTAL	-	-

Source: survey data M. R. R= 1.07
N= 59

VIII. FINDINGS OF THE STUDY

- It is found that majority i.e., 60% of the respondents are moderately aware about the E-payment system.
- The study observed that majority of the respondents i.e., 80% of them prefer mobile wallets.
- The study found that most of the respondents i.e., 88% of them prefer Google pay because of its convenience.
- This study found that majority of the respondents i.e., 76% of them are using E-payment system for transferring money because it saves lot of time.
- Most of the respondents i.e., 79% of them are influenced by the time saving factor.
- The study observed that majority of the respondents i.e., 64% of them agreed with the statement- “E-payment system is better than traditional payment system” as E-payment system is available round the clock as compared to the traditional payment system.
- Majority of the respondents i.e., 94% of them are satisfied with the speed of transaction as transactions take place faster and it saves lot of time.
- The study revealed that majority of the respondents i.e., 69 % of them are satisfied with the E-payment

system because of its convenience, speed of transaction and it also saves their time.

- The study revealed that majority of the respondents i.e., 59% of them faced problem while using E-payment system.
- This study found that most of the respondents i.e., 35% of them faced problem due to difficulty in remembering the user name and password.

IX. SUGGESTIONS

- Simplify Electronic payment working system to smoother the process so that any person can be confident enough to use these E-payment services.
- Network issues is the major challenges of electronic payment system thus they should provide better infrastructure facility in order to overcome these problems.

CONCLUSION

Technology made our lives easier. One of the technological innovations in commerce, finance and banking is E-payment system. E-payment system helps us to perform financial transactions online. The study has made an attempt to understand the customer perception, satisfaction and preference towards electronic payment system. There are many problems and challenges faced by the users while using E-payment platform. In order to overcome the problems E-payment has to work upon the payment gateway to improve the transaction efficiency and also, they should increase the security of E-payment transactions. They have to use advanced technology that supports mobile transactions and make them convenient and more transparent. So that the consumer trust and habit on using electronic payment system will develop. This research concluded that overall satisfaction of the customer towards E-payment system is not very high but still satisfactory and E-payment system has to bring about the innovation to increase the customer satisfaction.

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