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# Analysis of Benefits of E Payment System to Customers in a Pandemic Situation with Special Reference to Alappuzha

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**Abstract:** *The world has been moving towards all things electronically. It happened with the lockdown coming into effect, especially for electronic payments in India. So this research is to study the benefits of e-payment to customers and the major problems faced by them. The objective of the present study was accomplished by conducting a descriptive research. In this study both primary and secondary data was used. The approach adopted in the study is survey approach. The main techniques used for this study is questionnaire. In this study sample unit is commoners who use online payment. The sampling area is restricted to Alappuzha district. The data collected for this study was analysed using simple percentage analysis. It found that most of them prefer online payment because of the various benefit it offers. Majority of them use Google pay as their payment platform and mobile banking as their payment gateway. It found that the major factors which backed them from opting online payment were security, privacy, theft and fraud. When the respondents were asked about their internet access only a least of them had no access, rest have internet access either at home or at work place. In order to improve security most of them suggested to turn two factor Authentication.*

**Key words:** *E Payment, COVID 19, Google pay, Internet*

## I. INTRODUCTION

In today's digital era, especially in a pandemic situation the use of internet had increased tremendously. Pandemic induced people to take internet as an alternative to continue with their work, education, shopping etc. With the ease of smartphones and virtual accessibility of products, services, and online payment have boosted the way people are shopping and making online. The e-commerce industry initially started with cash on delivery basis for the people to get to know about the new online industry. After the customers are well versed, the company started introducing various platforms of the online payments. An E-payment system can be defined as a type of inter-organizational information system for money related transactions, connecting numerous associations and individual clients. E-payment has given access to various financial platforms like debit card, credit card, digital wallets, net banking etc. Even though cash has become a less common mode of transaction due to convenience of e payment, it has also raised a threat of fraud and privacy concerns in the mind of internet users.

With a number of cultural, societal, and technological trends intersecting we are now seeing the demand for electronic payments and cashless commerce skyrocket. The widespread availability of smart phones devices and growing acceptance of contact less cards especially during COVID-19 pandemic has made consumers re-evaluate how they prefer to make payments. In an e-payment system both buyer and seller use digital modes to send or receive money by which both of them can avoid visiting banks. It eliminates the risk of handling cash that may be risky at times. Since online payments are usually automatic they have low labour cost. Today consumers can make payment through electronic modes by using cards and other platforms that are made available through all type of smart devices. The acceptance of particular payments by sellers and businesses has an important influence on the purchase made by their clients, as the availability of the various modes help the consumer to prefer that is available to them as well. Even though a large section of the population was hit hard by the pandemic, internet service providers gained large benefits. Other than that mobile wallet providers like pay-tm, Pay-pal, google pay etc. With the payback also attract many consumers to use e-payment modes aiding the organization with significant growth. The digital wallets are further enabling economies to a cashless society, thereby achieving goals of Digital India. Digital wallets and mobile wallets are moreover electronic version of the liquid cash in physical wallet with more features and functions. E-payment wallets reduce cost of cash holding and handling for the retailers. Retailers on online platform have introduced lucrative discounts and cash back offers to get payment orders for all cashless payments.

The online platform retailers have encouraged more customers to choose a payment mode other than Cash on Delivery, it also helps a business to retain their customer. Consumers will return to the same website where his or her details are stored for making payments. More-over through improvements in Artificial Intelligence and other technological advancement we can also ensure more security to the customers. This research is intended to study benefits of E-payment system to the customers and also to find the problems faced by the individuals.

## II. REVIEW OF LITERATURE

In this paper 'A study on the perception of customers towards e-payments and be-commerce in local survey' authors S. Kousalya, Swetha Krishnan, Mridhula. Sowmya. A. M. mentioned that the trust in Ecommerce mainly depends upon the online payment system which allows a customer to make payment to the online merchant or service provider. Consumers are becoming more and more comfortable in making online transactions and are concerned about conducting electronic business transactions and the risks involved that have a vital impact on the transition of electronic business. E-Payments provides greater freedom to individuals in paying their taxes, licenses, fees, fines and purchases at unconventional locations and at whichever time of the day i.e., 365 days of the year. The authors found that credit and debit cards will become obsolete, because they saw the increasing development of mobile technology and the internet industry. (S. Kousalya, 2017).

In this paper 'A study on the usage of Pay-TM', the authors Abhijit Tadse and Harmeet Singh Nannade mentions that Digital wallets are quickly becoming mainstream mode of online payment and mobile users can nowadays use their smartphones to make money transaction or payment by using applications installed in the phone. The authors through their survey states that the Pay-Tm has to work upon the Payment gateway to improve the transaction efficiency as 70% people faced problem with payment gateway. Only 5% people claim to have got assistance every time they had a failure so the service could be improved to cater the needs of maximum customers. Pay-Tm is currently performing well in terms of privacy but it has to work upon discounts/offers, transaction time and bring about innovation to increase customer satisfaction. (Abhijith M. Tadse, 2017).

In this paper 'E-Payment System on E-Commerce in India' the Authors Karamjeet Kaur, Dr. Ashutosh Pathak mentioned that the reliable and cashless payment system offers immunity against theft of paper and e-money, and adopting e-payment solutions or systems for different reasons. In addition to cost reduction, reference was made to a number of other benefits, including improved customer service, improved working capital, increased operational efficiencies and cycle times, processing efficiencies and enhanced compliance to organizational policies and-procedures. Various strengths of e-payment systems such as quality customer service, greater reach, time saving customer loyalty, easy access to information, 24 hours access, reduce paper work, no need to carry cash easy online applications etc. (Karamjeet Kaur, 2015).

## III. STATEMENT OF THE PROBLEM

When the country went into a lock down almost everything from learning, work, entertainment, socializing, shopping etc. went online. As a result the role of e-payment system has also increased drastically. We all have witnessed the importance of online transactions during a pandemic situation. It really helped the people to make payment according to their convenience. So it's time to fully embrace cashless transactions. But there are some difficulties to overcome. With the IT and Artificial intelligence it is also important to have a sustainable and lucrative business model that caters to the new age digital ecosystem with a robust cyber security system. Hence this study wanted to know the proportion of use of e-payment and the problems faced by the individuals while using the e-payment system. It also wanted to study the payment sites used by the individuals and to know about the payment gateway being used.

## IV. OBJECTIVES OF THE STUDY

The following are the objectives of study which are subjected to pandemic situation are as follows:

- 1) To study the benefits of e-payment system to customers.
- 2) To find the frequency of usage.
- 3) To find the payment gateway and platform used.
- 4) To find the problems faced by customers while making online payment.

## V. SIGNIFICANCE OF THE STUDY

This study would like to throw light upon various benefits offered by E-payment system to customers in a pandemic situation and also to state the different problems faced by the individuals while making payment. This study also gives an overview about the customer's choice on different payment platforms like Google pay, Phone-pe, Paytm etc. and also intend to find the most commonly used payment gateways i.e.; net banking, mobile banking, cash on delivery, credit cards, debit cards etc. Which enabled the general public to make payment in a more convenient and cost-effective way.

## VI. RESEARCH METHODOLOGY

This study was aimed at finding benefits of e-payment system to customers in Alappuzhadistrict. The research objectives were accomplished using the following technologies:

### A. Methods of Data Collection

In case of data collection there are two types of data i.e., Primary data and secondary data.

### B. Primary data

For this study it need information from persons who use online payment methods. For this it needed to make use of primary data. This fresh data was obtained using a questionnaire. A total of the 50 respondents filledthe questionnaire.

### C. Secondary data

Secondary data is collected through previous records, reference books and online sources. Secondary data was also used for the study apart from the primary data which was obtained. Secondary data consists of already existing data mainly related to benefits of e-payment methods.

### D. Sampling

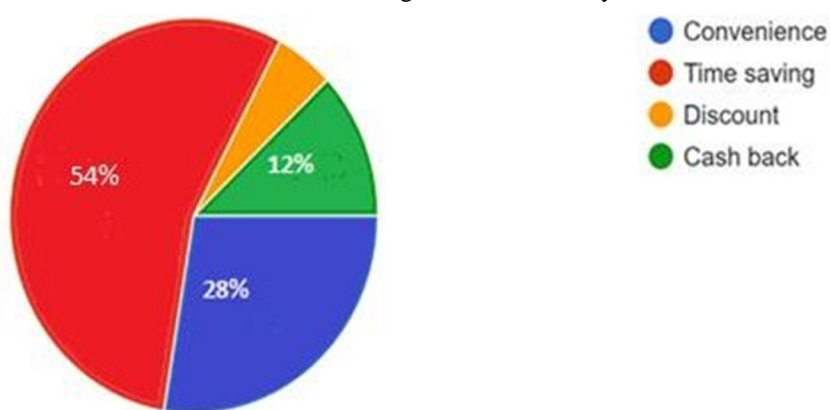
In this study sample unit is commoners who use online payment in Alappuzha district. The sampling area is related to Alappuzha district. The sample size for this study is 50 individuals. Sampling procedure used in this study is convenience sampling. Convenience sampling was selected due to its simplicity.

## VII. ANALYSIS OF DATA

Table 1: Table Showing Benefits of E-Payment

Sl.No	Particulars	No. of Respondents	Percentage
1	Convenience	14	28%
2	Time Saving	27	54%
3	Discount	3	6%
4	Cash Back	6	12%
	Grand Total	50	100%

Chart 1: Chart Showing Benefits Of E-Payment



### Interpretation

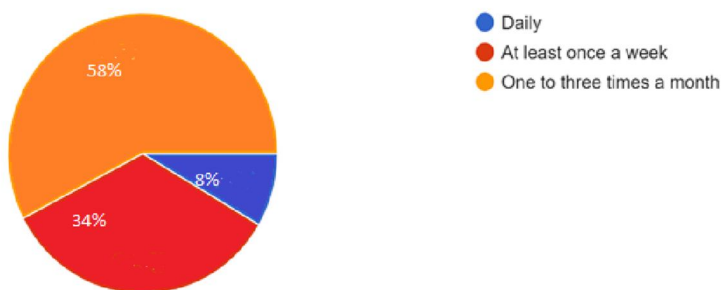
28% opt it because of convenience, 54% because of time saving, 6% because of discount and 12% because of cash back. So majority of the respondents chose it because of time saving andconvenience.



Table 2: Table Showing Frequency of Usage

SL.NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	1-3 times a month	29	58%
2	At least once a week	17	34%
3	Daily	4	8%
	Total	50	100%

Chart 2: Chart Showing Frequency of Usage



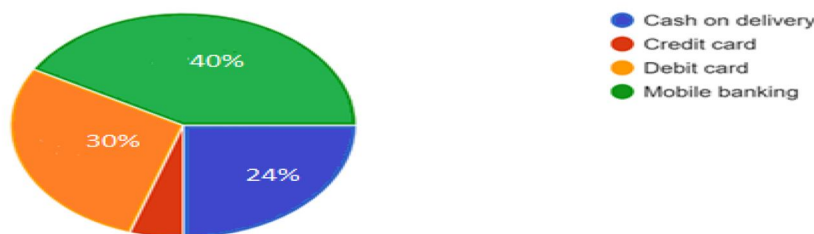
#### Interpretation

58% make online payment 1-3 times a month, 34% make it at least once a week and 8% make daily. Therefore majority of them make online payment 1-3 times a month

Table 3: Table Showing Digital Gateway Used By The Consumers

SL NO	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Mobile banking	20	40%
2	Debit card	15	30%
3	Cash on delivery	12	24%
4	Credit card	3	6%
	Total	50	100%

Chart 3: Chart Showing Digital Gateway Used By The Respondents



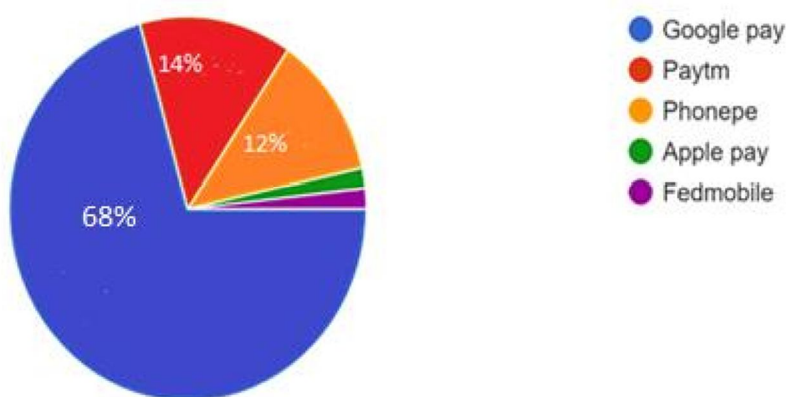
#### Interpretation

40% use mobile banking, 30% of them use debit cards, 24% opt for cash on delivery and 6% use credit card as their payment gateway. From the above table we conclude that majority of the respondent's use mobile banking

Table 4: Table Showing Digital Platforms Chosen by The Consumers

SL NO.	PARTICULARS	NO. OF RESPONDENTS	PERCENTAGE
1	Google pay	34	68%
2	Paytm	7	14%
3	PhonePe	6	12%
4	Fed - mobile	2	4%
5	Apple-pay	1	2%
	Total	50	100%

Chart 4: Chart Showing Digital Platforms Used Regularly ByConsumers



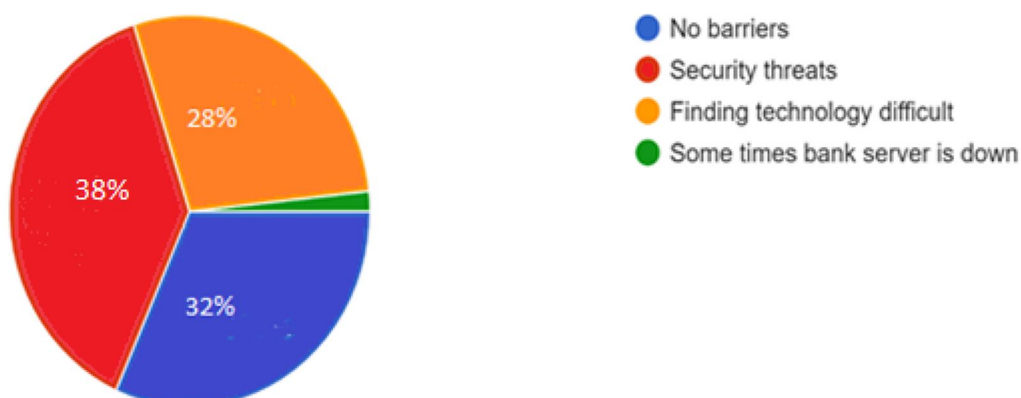
#### Interpretation

About 68% of respondents use google pay, 14% of them use Paytm, 12% of them use PhonePe, 4% use fed-mobile and another 2% use apple pay. From this we can understand that most of them use google pay

Table 5:Table Showing Barriers of Online Payment

SL NO	PARTICULARS	NO OF RESPONDENTS	PERCENTAGE
1	Security threats	19	38%
2	No barriers	16	32%
3	Finding technology Difficult	14	28%
4	Sometime bank server is Down	1	2%
	Total	50	100%

Chart 5: Chart Showing Barriers of Online Payment



#### Interpretation

When the respondents were asked about the barriers of online payment, 38% chose the option security threats, 32% chose the option no barriers, 28% chose the option finding technology difficult and 2% chose the option some time bank server is down. So we can conclude that security threat is the major barrier for making online payment

### VIII. FINDINGS

- 1) 54% of the respondents adopt online payment platform because of time saving 28% of the respondents use it because of convenience. Another 12% of use it because of cash back and the remaining 6% it because of discount benefit. It is clear from the table that most of the respondents use it because of time saving.
- 2) 58% make online payment 1 to 3 times a month, 34% make it at least once a week and 8% make daily. Therefore majority of them makes online payment one to three times a month.
- 3) 40% use mobile banking, 30% of respondents debit card, 24% use cash on delivery and 6% use credit cards as their payment gateway. From the above table it can be concluded that majority of respondent's use mobile banking.
- 4) About 68% of respondents use Google pay, 14% use paytm 12% of them use phone pay, 4% use fed mobile and another 2% use apple pay. From this it is clear that most of the respondents use Google pay.
- 5) When the respondent were questioned about the barriers of online payment 38% choose the option security treats, 32% choose no barriers, 28% choose the option finding technology difficult and 2% choose the option sometimes bank server down. So it can be concluded that security treat is the major barrier for online payment.

### IX. CONCLUSION

The downward impact of covid-19 on the payment landscape has been profound and significant, yet not irreparable. Elements in the payment ecosystem are most adaptable to disruption and least dependent on physical infrastructure have been able to withstand, mitigate and even so far as capitalise the crisis. The pandemic has compelled individuals as well as organisations to re-evaluate their payment framework and infrastructure so as to incorporate considerations of disruption mitigation and continuity planning. Additionally, the pandemic has put a spotlight's on inherent flaws brought forth by rigidity or inflexibility of being overly reliant on cash basis sole method of payment, for many legacy players in the industry as well as individual consumers. The covid-19 crisis called into question the ascension of cash being the ultimate liquid asset, causing payers to evaluate its consideration as a sacrosanct payment method with the most access and convenience. Payers have displayed considerable apprehension to reward to cash payments once they have accepted digital method of payment. It is being said, cash is not expected to disappear anytime in the near future. Cash withdrawal in the NFS network have displayed signs of rebounding to pre covid-19 levels indicating that the Indian populace has a certain tendency and propensity to transact in cash. Thus, covid-19 may have given a sizeable push in the endeavour to marginalised cash transactions, but not so far as to eradicate is completely. Nevertheless, COVID-19 has been a silver lining, in many ways, for acceptability of digital payments in India. A key factor that served as a festering barrier towards the growth of digital was the impenetrability of existing payment infrastructure.

However, the description caused by the pandemic allowed businesses the bandwidth to step back and reconsider the payment protocols for inclusion of digital from a streamlining and ease perspective. Also, individuals were inclined to consider digital payments in lieu of prevention to physical access to their funds.

As highlighted by the polls conducted, security, fraud, privacy, lack of awareness, -and lack of internet access are the major reasons for non-adoption of digital payment by individual.

#### **X. SUGGESTIONS**

- 1) Two factor authentication gives more sophisticated level of protection. This is mainly used while entering an account. As the name suggests, it provides two different authentication factors to verify themselves. EX: it includes security questions, OTP etc.
- 2) Using advanced anti-malware programme will protect both classified and unclassified attacks on your computer and other digital devices. Make sure that the anti- virus programme is able to detect newly created and mutated malware threats.
- 3) Deal with reputed websites only. Do not directly pay to any website unless you know about it.
- 4) It is better to use credit card rather than using debit card. It is extremely risky to use a debit card as it is linked to our bank account.
- 5) Encryption is a method to conceal the information in a string of codes that appears as random data which is complex to decode.
- 6) Secure Socket Layer [SSL] is the most widely deployed and used security measure that provide security over internet communications.
- 7) It is essential to create general awareness within people about online security and fraud. Prevention is always better than cure
- 8) It's also smart to stay current with all security updates that are available for your business network of computers. Because hackers are constantly coming up with new techniques, it's critical to stay one step ahead.

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