

AN ANALYSIS OF ONLINE VS OFFLINE PAYMENT METHODS - A STUDY ON CONSUMER PREFERENCE IN RURAL AREAS OF UDUPI DISTRICT

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ABSTRACT

An e-payment system is one of the method of making transactions or paying for goods and services through an electronic medium, without the use of cheque or cash. It's also called an electronic payment system or online payment system. This is a systems generated for customers which is useful for payment in a shopping purposes and transactions between purchaser and seller. This facilitates cashless transactions between both the parties. E-Payment system is useful in various aspects like e-commerce, cashless transactions, trading etc. The possibility of transferring money through online mode plays an important role that includes financial transactions like paying taxes, fees, fines etc. Now-a-days e-Payment systems have become popular due to the continuous use of the internet-based shopping and banking. The number of private and corporate transactions that are done electronically which is growing widely and vastly. In this study an attempt is made to analyse customers preference and satisfaction towards E- Payment system in the chosen district. The study also focusses on various electronic payment channels preference across the demographic characteristics of the customers.

Keywords : E - Payment, Customer satisfaction, Transaction, Cashless.

I Introduction

The online consumers are interested towards shopping over the Internet based payment system. Most clients today, including those in the private and public sectors as well as students, housewives, and employees, choose simple payment methods like online or offline. They might visit a bank for offline methods and choose Google Pay, Phone Pay, an e-banking system, a debit card, etc. for online methods. Banks now offer scanning systems to shopkeepers, business owners, and other types of customers. The majority of business owners maintain the scanning board so that clients can conduct transactions with the vendor or owner with ease. This paper contributes to this body of research by examining user preferences for offline and online payment methods, which in turn might increase or decrease the system of completing a transaction online [10]. We measure how specific characteristics of two payment methods (online and offline methods) affect customer attitudes towards these payment methods and, more specifically, the payment range within which a customer is willing to complete transactions with each one of them, also examine how income might affect the payment range [1]. Businessman or Shop keepers will be able to utilize the study information for developing products and services that meet the consumers' single platform E-payment system while also fulfil their objective of corporate social responsibility [16].

What is online payment ?

One of the simplest and quickest transaction methods available on the internet is online

payment. Online transactions between buyers and sellers are possible. Buyers complete purchases by paying the seller online. The buyer can use internet applications on their desktop or mobile devices to transact money. For convenience, the majority of today's youth use online payment methods. Writing applications and rushing to banks are now obsolete methods of conducting business. People choose this strategy since it takes time. Online payment is more practical if you want to bypass the line at the bank. Based on an online transaction system, this helps the seller retain customers and grow their business. Online banking comes in a wide variety.

1 GOOGLE PAY is also known as GPay which is a Digital Payment System developed by Google through its own App. It can be done through online and in person contactless purchases by using mobile phones. Its a transaction between a person to another person with the use of Android phones, Tablets or watches.

2 PHONE PAY is a Indian Digital Payments system developed by a Financial Services Company headquartered in Bengaluru. It is based on the UPI (Unified Payments Interface). The Phone pay is available in 11 Indian Languages. By using Phone Pay users can send and receive money, recharge mobiles, DTH, Data cards, Pay at Shops, invest in tax savings funds and many more facilities. Phone Pay is licensed by the Reserve Bank of India for issuance and operation of a Semi Closed Prepaid Payment system. Google Pay and Phone Pay can be activated with a passcode. When the user makes a payment to a merchant, the payment systems does not send the credit or debit card number with the payment. Instead, it generates a virtual account

number representing the user's account information. This service keeps the customer payment information private, sending an one-time security code. It will not show card details of users.

3 DEBIT CARD is also called as ATM (Automated Teller Machine) card. This card is available in the bank, where users having their account in the bank. To purchase a particular product from the shop, this card can be swiped and activated. This is also a form of cashless transaction method. If a user requires hard cash, he/she can collect cash by using this card through ATM machine.

4 CREDIT CARD is a financial instrument provided by the bank with pre-set credit limit. Its one of the credit facility provided by the bank by helping the users to make cashless transactions. Monthly bills will be sent by the bank to its users by mentioning the due date of payment. Before the due date users have to repay the amount or else bank will charge interest to the users. But bank will not issue Credit Card to everyone, based on their financial ability and transactions card can be issued.

5 E.BANKING is the electronic and telecommunications network for cash transactions, through e-banking system users can deliver various kind of banking products and services through their computer or Mobile phone. E-banking system also provides digital payment system from one bank to another bank by using digital ID, which is provided by the bank to the users. This is one of the convenient payment system to the users.

What is Off-line Payment ?

A face-to-face transaction between two parties is referred to as an offline payment system. This method doesn't utilise any internet or telecom connectivity. Cash, checks, and bank transfers can be used for offline payments that are made directly to the customer. Most of the people who find utilising the internet or online services uncomfortable choose offline payment methods. In an offline payment system, customers must visit banks, fill out paperwork, stand in line, and other such tasks. However, since this system involves a direct transfer from one person to another, fraud of any form will inevitably arise in it.

Literature Review

Eric W.K. See, Savvas Papagiannidis, J. Christopher Westland (2014) - This study looks at consumer perceptions about a payment method, which is a major determinant of whether a transaction will be completed both offline and online. More specifically, developed a model that examined how prepaid e-cash, debit cards, credit cards, and cash were used offline and online. Various traditional payment methods and user impressions of the appeal of e-cash were both

empirically evaluated. Users' impressions of a payment method were found to be influenced by consumer sentiments in both online and offline settings.

Yunji Moon & Deborah J. Armstrong (2019)

Online and offline commerce are fundamentally distinct in terms of boundaries and business structures when conducting traditional transactions. O2O commerce, on the other hand, blurs the lines and strengthens the connections between online and offline trade. The development of the emerging O2O business model is still in its early stages, despite the fact that O2O-related technologies like Near Field Communication (NFC), Location-Based Services (LBS), or Beacons have grown significantly over the previous 20 years (Tsai et al. 2015). (Xu 2017). It's not easy to use technology to quickly find a successful O2O business model. Organizations must comprehend what consumers want from the O2O channel and how a vendor of O2O services may meet those needs.

Yuewen Liu, Junlong Luo, Long Zhang (2020)

Mobile payments have gradually displaced traditional cash payments and taken over as the predominant payment method as a result of technological advancement and payment method variety. When their physical disparities are controlled, mobile payment is faster than cash payment even though it is more convenient. Does it influence how consumers behave.

Yash Kumar Gupta, Girish Jeswani & Olan Pinto (2021)

Online purchases have increased significantly as a result of the ongoing COVID-19 Pandemic. The present wallet payment architecture necessitates constant online connectivity. It has been noted that there is a chance of losing Internet connectivity for a number of reasons. In the event of an internet outage, developing a mechanism to permit offline transactions and distinguish three key situations where totally offline transaction capability is thought to be advantageous for both customers and businesses.

Research Gap

Based on the aforementioned literature review, the pros and cons of online and offline payment systems are all explored. However, there are no articles about Offline vs. Development of online payment system in rural areas. The knowledge and uses of the rural areas of the Udipi district are explained in this essay.

II Research Methodology

This paper includes primary data with a prepped questionnaire. The researcher met various level of

customers (students, house wives, employees of different sectors etc.) circulated the questionnaire in rural areas of Udupi District and analysed through SPSS software. The data was valued through the statistical tools and techniques for analysis of collected data and theoretical informations collected from different Websites, News papers, Magazines, Internet etc.

III Objectives

This paper is covered following objectives :

1. To find out knowledge and awareness of Online Vs Offline payment methods of users of particular area.
- 2.To analyse the differences between online and offline transactions through the users.
- 3.To identify the attitude and technology use of the online and offline transactions of users.
- 4.To analyse whether the qualification of the customer affects the online and offline payment systems.
- 5 Evaluation of payment system of the users.

IV Scope of Study

According to the questionnaire, samples were taken from specific village areas in the Udupi District. As per collection of data out of 210 respondents, 148 respondents are preferred online payment system and 62 respondents are preferred offline payment system. Offline payments can be done through cash, cheque, bank transfer etc and online payments can be done through cards and by using applications or software in a Mobile or Computer. The sample size of population for this research is Students, Housewives, Employees of Private and Public Sectors, Businessman etc.

Hypothesis

- H1: Interest on offline or Online Methods and Preference of different Type of Online Methods depends on demographic factors
- H1.a: Interest on offline or Online Methods of banking services depends on demographic factors
- H1.b: Preference of different Type of Online Methods depends on demographic factors
- H2:Satisfaction level on online mode of services has significance difference among demography
- H2.a:Satisfaction level on online mode of services has significance difference between gender
- H2.b:Satisfaction level on online mode of services has significance difference among age group
- H2.c: Satisfaction level on online mode of services has significance difference among occupation

V Data Analysis And Interpretation

Gender	Frequency	Percent
Male	124	59.0
Female	86	41.0
Total	210	100.0

Table : 1 Shows the Genderwise Analysis

It is observed that 41 percent of the respondents are Female and 59 percent of the respondents are Male. Thus, it can be stated that majority of the respondents are Male respondents.

Age	Frequency	Percent
Below 18	4	1.9
18 -29	92	43.8
30 -34	64	30.5
40 -49	44	21.0
60 and above	6	2.9
Total	210	100.0

Table :2 Shows the Agewise Analysis

It is observed that 1.9 percent of the respondents are below 18 years of age, 43.8 percent are in the age of 18 – 29 years, 30.5 percent are in the age group of 30 – 34 years ,21 percent are 40 - 49 years of age and 2.9 percentage are in the age group of 60 and above. Thus, it can be stated that majority of the respondents are in the group of 18– 29 years. Thus, it can be stated that majority of the respondents are in group of Above 18 years.

Usage of Internet Banking	Frequency	Percent
No	62	29.5
Yes	148	70.5
Total	210	100.0

Table :3 Shows the Use of Internet Banking

It is observed that 70.5 percent of the respondents are preferred Online banking and 29.5 percent of the respondents are preferred offline banking. Thus, it can be stated that majority of the respondents are preferred online payment systems.

Type of Online Methods	Frequency	Percent
Google Pay	83	39.5
Phone Pay	39	18.6
Paytm	12	5.7
E-Banking	14	6.7
Not Applicable	62	29.5
Total	210	100.0

Table : 4 Shows the Preferred Payment System

It is observed that 39.5 percent of the respondents are using Google Pay, 18.6 percent of the respondents are using Phone Pay, 5.7 percent of the respondents are using Paytm , 6.7 percent of the respondents are using E-Banking and 29.5 percent

of the respondents are not using online payment system. Thus, it can be stated that majority of the respondents are using Google Pay.

Occupation	Frequency	Percent
Student	46	21.9
House Wife	14	6.7
Employee of Private Sector	62	29.5
Employee of Public Sector	30	14.3
Self-Employee	34	16.2
Businessman	22	10.5
Any Other, Specify	2	1.0

Table : 5 Shows the Occupation of the Respondent

It is observed that 21.9 percent of the respondents are students,6.7 percent of the respondents are Housewife, 29.5 percent of the respondents are Employee of Private Sector, 14.3 percent of the respondents are Employee of Public Sector, 16.2 percent of the respondents are Self – Employee, 10.5 percent of the respondents are Businessman. Thus, it can be stated that majority of the respondents are Employee of Private Sectors.

Type of Online Methods	Never	Yearly	Monthly	Weekly	Daily
Banking In Person	30	50	102	28	-
	14.3	23.8	48.6	13.3	-
Telephone Banking	146	24	24	16	-
	69.5	11.4	11.4	7.7	-
Online Banking	62	-	24	67	57
	29.5	-	11.4	31.9	27.1
Mobile Banking	62	-	15	49	84
	29.5	-	7.1	23.3	40.0

Table : 6 Shows the Types of Online Method Preferred by the users.

It is observed that 27.1 percent of the respondents are using online banking and 40.0 percent of the respondents are using mobile banking daily. Thus, it can be stated that majority of the respondents are preferred online banking facilities.

It is observed that 50.5 percent of the respondents are frequently using Google Pay,21.0 percent of the respondents are is using Phone Pay, 1.9 percent of the respondents are using Paytm, 4.8 percent of the respondents are using E-Banking, 21.9 percent of the respondents are using Debit card, 29.5 percent of the respondents are preferred offline methods. Thus, it can be stated that majority of the respondents are preferred Google Pay online method.

Occupation	Frequency	Percent
Google Pay	106	50.5
Phone Pay	44	21.0
Paytm	4	1.9
E-Banking	10	4.8
Debit Card	46	21.9
Not Applicable	62	29.5

Table :7 Shows the frequently using Online Payment Method.

Type of Online Methods	Not Applicable	Monthly	Weekly	Daily
Cash	62	11	73	64
	29.5	5.2	34.8	30.5
Credit/Debit Card In Store	62	10	84	54
	29.5	4.8	40.0	25.7
Credit/Debit Card Online	62	26	76	46
	29.5	12.4	36.2	21.9
Electronic Bank Transfer	62	50	76	22
	29.5	23.8	36.2	10.5
Mobile Payment	62	32	61	55
	29.5	15.2	29	26.2
Cheques	62	90	54	4
	29.5	42.9	25.7	1.9

Table : 8 Shows the How do you use following Payment Method.

It is observed that as per response of the users majority are preferred online payment method. Here Mobile payment method is 26.2 percent.

Thus, it can be stated that majority of the respondents are preferred Mobile Payment method.

	Highly Dissatisfied	Dissatisfied	Neutral	Satisfied	Highly Satisfied	Mean	S.D.
Phone Pay	8	4	32	48	56	3.95	1.093
	5.4	2.7	21.6	32.4	37.8		
Google Pay	4	6	26	66	46	3.97	.947
	2.7	4.1	17.6	44.6	31.1		
Debit Card	2	4	30	78	34	3.93	.814
	1.4	2.7	20.3	52.7	23.0		
Credit Card	2	28	62	40	16	3.27	.937
	1.4	18.9	41.9	27.0	10.8		
E-Banking	4	14	56	46	28	3.54	.992
	2.7	9.5	37.8	31.1	18.9		
Paytm	2	20	58	46	22	3.45	.950
	1.4	13.5	39.2	31.1	14.9		

Table : 9 Shows the Satisfaction Level of Online Payment Method.

It is observed that 44.6 percentage of satisfaction and 31.1 percentage of Highly satisfaction found in

Google Pay. Thus, it can be stated that majority of the respondents are preferred Google Pay.

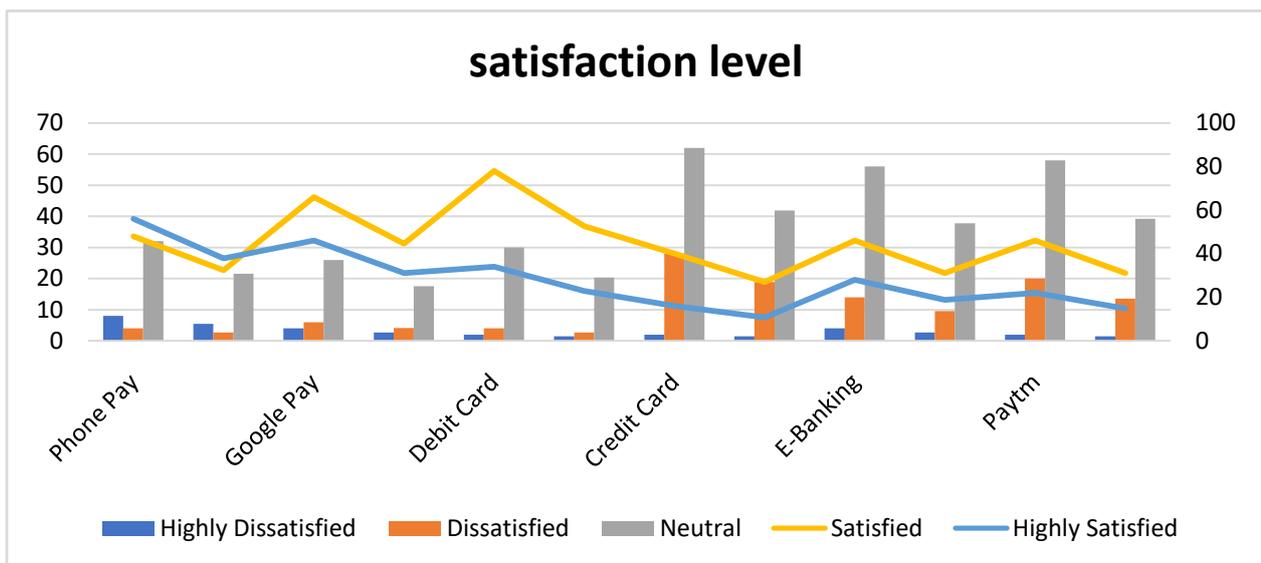


Fig 1 : Shows the Satisfaction level of Online Payment Method

Reason	Frequency	Percent
Saves Time And Flexible	126	60.0
Privacy	40	19.0
Better Rates	4	1.9
Convenience	16	7.6
Easy To Maintain Banking Transaction Activity	24	11.4

Table : 10 Shows the What Is The Reason For Selecting Online Banking Services ?

1.9 percent of the respondents are saying better rates, 7.6 percent of the respondents are saying Convenience, 11.4 percent of the respondents are saying easy to maintain banking transaction Activity. Thus, it can be stated that majority of the respondents are saying that online paying method is Saves Time and Flexible.

It is observed that 60 percent of the respondents are saying online payment is saves time and Flexible, 19.0 percent of the respondents are saying Privacy,

Reason	Frequency	Percent
Don't Trust Bank Security	10	4.8
Finding in technology Difficulties	12	5.7
Inconvenient (Takes Too Long Too Questions)	32	15.2
Don't Want To Take Risk In Bank Transactions	100	47.6
Any other	56	26.7

Table : 11 Shows the What Is The Reason For Selecting Offline (Visiting To The Bank) Banking Services

In this paper it is observed that, in 210 respondents, 62 respondents are preferred offline payment method in some reason. 4.8 percent of the respondents are don't trust bank security, 5.7 percent of the respondents are Finding in technology difficulties, 15.2 percent of the respondents are Inconvenient, 47.6 percent respondents are don't want to take risk and 26.7

percent of the respondents are not interested Offline payment methods.

Benefits	Frequency	Percent age
Using Net Banking Is Easier	168	80.0
Have You Lost Money Due To Digital Fraud	30	14.3
Have You Ever Had Cash Lost Or Stolen	46	21.9
E-Payment Systems Save Your Time And Money	192	91.4
E-Payment Systems Are Better Than Cash	192	91.4
A Digital Customer Has To Be Alert To Security Issues When Using E-Payment Systems.	194	92.4
It's A Friendly User	184	87.6

Table :12 Shows the Benefits of Usage of E banking

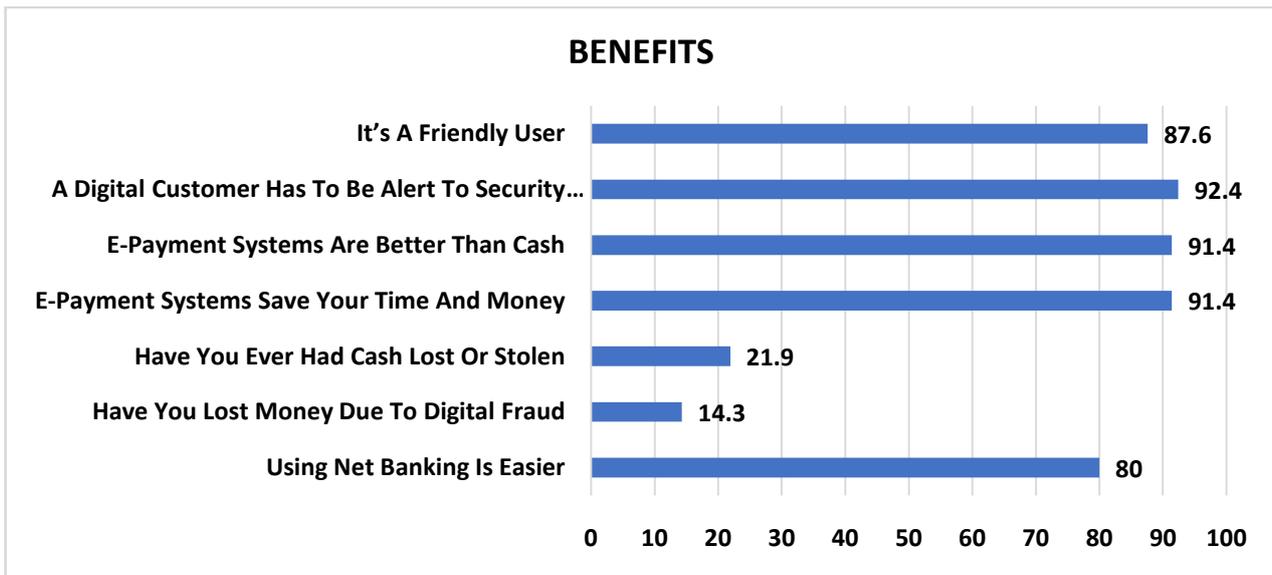


Fig 2 : Shows the Benefits of E - Banking

H1: Interest on offline or Online Methods and Preference of different Type of Online Methods depends on demographic factors

H1.a: Interest on offline or Online Methods of banking services depends on demographic factors

Demographic	CSTV/FETV	P
Gender	CSTV =1.233	P>0.05
Age	FETV =19.391	P<0.01**
Occupation	CSTV =40.320	P<0.01**

Considering the result of Chi-Square test for Independence In case Gender there is no association as the p value is more than 0.05, But there is a influence of age and occupation on Interest on offline or Online Methods of banking services, as the p value is less than 0.01.. Hypothesis is supported. H1.a is accepted. H1.b: Preference of different Type of Online Methods depends on demographic factors

Demographic	CSTV/FETV	P
Gender	CSTV =4.766	P>0.05
Age	FETV =32.541	P<0.01**
Occupation	FETV =60.137	P<0.01**

Preference of different Type of Online Methods, as the p value is less than 0.01. Hypothesis is supported. H1.a is accepted.

H2:Satisfaction level on online mode of services has significance difference among demography

H2.1:Satisfaction level on online mode of services has significance difference between gender

Results of The Mann-Whitney U test-Gender and Satisfaction Level

Considering the result of Chi-Square test for Independence In case Gender there is no association as the p value is more than 0.05, But there is a influence of age and occupation on

	Gender	N	Mean Rank		
Phone Pay	Male	124	106.02	0.153	.878
	Female	86	104.76		
	Total	210			
Google Pay	Male	124	104.34	0.347	.729
	Female	86	107.17		
	Total	210			
Debit Card	Male	124	97.18	2.564	.010
	Female	86	117.50		
	Total	210			
Credit Card	Male	124	105.92	0.126	.900
	Female	86	104.90		
	Total	210			
E-Banking	Male	124	105.05	0.134	.894
	Female	86	106.15		
	Total	210			
Paytm	Male	124	107.34	0.547	.584
	Female	86	102.85		
	Total	210			

Considering the result of The Mann-Whitney U testIn case Gender there is significance mean difference with respect to satisfaction level on debit card, as the p value is less than 0.05, for other online services there is no difference, Hypothesis not Supported

H2.2:Satisfaction level on online mode of services has significance difference among age group

Results of Thekruskalwallis test-age group and Satisfaction Level

Ranks

	Age	N	Mean Rank		
Phone Pay	Below 18	4	72.00	8.236	.083
	18 -29	92	106.57		
	30 -34	64	118.34		
	40 -49	44	91.36		
	60 and Above	6	78.17		
	Total	210			
Google Pay	Below 18	4	72.50	12.932	.012
	18 -29	92	110.70		
	30 -34	64	114.03		
	40 -49	44	94.36		
	60 and Above	6	38.50		
	Total	210			
Debit Card	Below 18	4	118.50		

	18 -29	92	104.41		
	30 -34	64	110.97	2.748	.601
	40 -49	44	102.86		
	60 and Above	6	74.50		
	Total	210			
	Below 18	4	100.00		
Credit Card	18 -29	92	106.93	1.305	.861
	30 -34	64	109.44		
	40 -49	44	99.41		
	60 and Above	6	89.83		
	Total	210			
	Below 18	4	92.00		
E-Banking	18 -29	92	98.20	12.396	.015
	30 -34	64	126.72		
	40 -49	44	93.73		
	60 and Above	6	86.50		
	Total	210			
	Below 18	4	65.00		
Paytm	18 -29	92	106.24	13.047	.011
	30 -34	64	122.44		
	40 -49	44	85.36		
	60 and Above	6	88.17		
	Total	210			

Considering the result of kruskalwallis test In case age group there is significance mean difference with respect to satisfaction level on Google Pay, E-Banking and Paytm, as the p value is less than 0.05, for other online services there is no difference, as

the p value is more than 0.05. Hence Hypothesis practically Supported.

H2.3: Satisfaction level on online mode of services has significance difference among occupation Results of the kruskalwallis test-occupation and Satisfaction Level

Ranks

	Occupation	N	Mean Rank		
Phone Pay	Student	46	113.24	19.476	P<0.01**
	House Wife	14	94.21		
	Employee of Private Sector	62	123.66		
	Employee of Public Sector	30	91.77		
	Self-Employee	34	78.56		
	Businessman	22	98.95		
	Any Other , Specify	2	179.50		
	Total	210			
Google Pay	Student	46	114.24	34.205	P<0.01**
	House Wife	14	111.07		
	Employee of Private Sector	62	133.02		
	Employee of Public Sector	30	94.43		
	Self-Employee	34	78.74		
	Businessman	22	66.50		
	Any Other , Specify	2	62.50		
	Total	210			

Debit Card	Student	46	101.85	36.516	P<0.01**
	House Wife	14	109.93		
	Employee of Private Sector	62	130.27		
	Employee of Public Sector	30	107.70		
	Self-Employee	34	88.21		
	Businessman	22	56.50		
	Any Other , Specify	2	190.50		
Total	210				
Credit Card	Student	46	108.63	24.764	
	House Wife	14	91.36		
	Employee of Private Sector	62	128.05		
	Employee of Public Sector	30	92.10		
	Self-Employee	34	90.74		
	Businessman	22	76.86		
	Any Other , Specify	2	200.50		
Total	210				
E-Banking	Student	46	99.50	33.565	P<0.01**
	House Wife	14	91.93		
	Employee of Private Sector	62	134.11		
	Employee of Public Sector	30	103.57		
	Self-Employee	34	89.79		
	Businessman	22	64.86		
	Any Other , Specify	2	194.50		
Total	210				
Paytm	Student	46	108.50	28.475	P<0.01**
	House Wife	14	101.36		
	Employee of Private Sector	62	128.95		
	Employee of Public Sector	30	100.03		
	Self-Employee	34	82.15		
	Businessman	22	70.95		
	Any Other , Specify	2	197.50		
Total	210				

Considering the result of kruskalwallis test In case occupation group there is significance mean difference with respect to satisfaction level on various online services , as the p value is less than 0.05, Hence Hypothesis is Supported.

Suggestions By The Users

As per suggestions analysed by the users there are 70% of users are preferring Online Banking and 30% of the users are preferring Offline Banking. Some of the suggestions received from the valued users are as mentioned below :

- Conducting a training session about net banking to the users is desired and also it must High end security
- Go Digital and One India Digital India

- E-banking is easy and it is a cashless transaction system saves time and maintains privacy.
- The glitch in online banking should be reduced.
- There are many fraud online websites and scammers. If this can be nullified or atleast minimised, online banking would be better.
- I am in full support for online transactions. It is very easy method and saves lots of time for the users.
- We have to be very careful while making online transactions.
- Internet banking should be popular and Every one must use internet banking
- Money can be easily transferred through the App. by using Android Mobile phone.
- Digital or online paytm is a must in future days.

Conclusion

To conclude this paper, as per the questionnaire and collection of data most of the users are preferring Online payment system. As per the analysis of Rural places of Udupi district, in a present scenario youngsters and those who are working all are preferring online payment system. After the launch of smart phones, laptops/computers, the users of Online Payment have increased. All the work can be done through online by using Mobile Phones in a easy way for transactions between one party and another. This also makes cashless transactions and maintains Digital System. The number of smartphone users have increased with the maturity of mobile networks, which has not only led to a new lifestyle but has also facilitated the development of mobile application services. Smartphones are regarded as essential communication devices. Currently, diverse groups of people are considering using mobile payment services. Thus, the motives for using mobile payment as well as individual motives for continuing usage are of great research interest. So, compare to online vs. offline payment system, online payment system is a one of the easiest and fastest payment method to the users.

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