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**FACTORS INFLUENCING READINESS OF CASHLESS SYSTEM  
IN MALAYSIA**

**By**

**KALADEVI SHUNMUGAM**



**Thesis Submitted to  
Othman Yeop Abdullah Graduate School of Business,  
Universiti Utara Malaysia,  
in Partial Fulfillment of the Requirement for the Master of Sciences (Finance)**

## DECLARATION

I sincerely declare that the work in this thesis, entitled “Factors influencing readiness of cashless system in Malaysia” was conducted by me and there has been no previous work that has been presented for any academic master’s programme. In addition, the information derived from the reviews of literature has been duly acknowledged with in-text citations, and a list of references has been provided.

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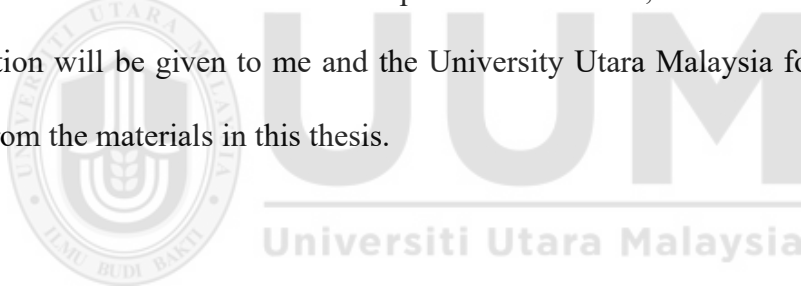
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This study might have certain shortfalls and limitations. However, I have thrived to ensure that this thesis is on par for the near future.

## ABSTRACT

The government of Malaysia has intended to transform Malaysia into a digital era by 2020, as stated in the Financial Blueprint 2011. Growth in electronic payments and mobile banking are significantly increasing, but private researchers have mentioned that Malaysia is not ready to meet this goal by 2020 due to a lack of security and data privacy. The objective of this paper is to determine the factors influencing readiness level of Malaysia in adopting digital payments and going cashless. Key variables like usage, awareness, trend analysis and descriptive comparison between cash and cashless economy are being used as core parameters in this study. Regression analysis was conducted to generate the outcomes. The results indicated that Malaysia was 20% cashless in 2018. Hence, the country is still far from meeting its aim of wanting to be operating in full cashless mode by 2020. It has been deduced that Malaysia may potentially need an estimated amount of 10 years or more to be able to operate fully in cashless mode and completely utilise digital payments as routine paying methods. Furthermore, sufficient strategic moves and action plans to boost digital payments and awareness in assisting transformation towards digitalisation are required in Malaysia. Also, involvement from all parties, including profitable and non-profitable organisations from every economic sector will assist towards realising this digital transformation.

**Key Words;** Digitalisation, Electronic payments, Cashlessness, Readiness



## ABSTRAK

Kerajaan Malaysia ingin mencapai matlamat digitalisasi pada tahun 2020 seperti yang dinyatakan dalam Pelan Pembangunan Kewangan 2011. Kadar kenaikan pembayaran secara elektronik dan perbankan mudah alih meningkat dengan ketara tetapi para penyelidik swasta menyatakan bahawa Malaysia belum bersedia untuk mencapai matlamatnya pada tahun 2020 kerana kekurangan keselamatan dan privasi data. Objektif makalah ini adalah untuk menentukan tahap kesediaan Malaysia dalam menerima pembayaran digital dan tanpa tunai. Faktor seperti penggunaan, kesedaran, analisis trend dan perbandingan deskriptif antara tunai dan ekonomi tanpa tunai digunakan sebagai parameter teras dalam kajian ini. Analisis ini berasaskan regresi. Hasil menunjukkan bahawa Malaysia hanya beroperasi sebanyak 20% tanpa tunai pada tahun 2018 dah agak jauh untuk mencapai tujuannya beroperasi tanpa tunai pada tahun 2020. Malaysia memerlukan 10 tahun lagi untuk beroperasi sepenuhnya tanpa tunai dan menggunakan sepenuhnya pembayaran digital sebagai kaedah pembayaran rutin. Langkah dan rancangan tindakan yang lebih strategik untuk meningkatkan pembayaran digital dan kesedaran dalam membantu transformasi ke arah digitalisasi diperlukan di Malaysia. Penglibatan dari semua pihak, organisasi yang menguntungkan dan tidak menguntungkan dari setiap sektor ekonomi sangat digalakkan untuk bersama-sama berusaha ke arah transformasi digital.

**Kata Kunci;** Digitalisasi, pembayaran elektronik, ekonomi tanpa tunai, tahap kesediaan





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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0: INTRODUCTION**

As the global finance economy cultivates the importance of having cashless transactions, many other countries have followed in the footsteps of leading countries in financial services, such as the United States of America (USA), Sweden, Netherlands and China (Global Data, 2020). Cashless system has been proven to minimise the financial crimes and corruption rates. Besides that, it is an efficient way to save cost and also environment friendly because digital payments reduce the need of producing bank notes or minting coins. Hence, the researcher would like to understand where Malaysia stand among other countries that have accepted cashless as a pragmatic way of dealing in business world.

In accordance to this, this chapter will introduce the cashless system, digital payments and modes of digital payments available in the Malaysian financial industry, followed by the problem statements, research objectives, research questions and the significance of this topic.

#### **1.1: BACKGROUND OF STUDY**

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70 percent Malaysians prefer shops that accept digital payments, according to Visa Study. (2019, September 19). *The News Strait Times Business*. Retrieved from <https://www.nst.com.my/business/2019/09/522620/70-percent-malaysians-prefer-shops-accept-digital-payments-according-visa>. Accessed November 21, 2019.



## APPENDICES



## Data population and sampling

	IV 1	IV 2	IV 3	DV
	Number of Volume (Millions)	Subscribers of Internet Banking (Millions)	(D1-D0)/D0	Implementation of Digital Payments (Volume)
Year	Usage	Awareness	Growth	Readiness
2008	39.8	6	12%	966
2009	41.5	8	4%	1,010
2010	42.9	10	1%	1,017
2011	49.1	12	13%	1,150
2012	54.4	14	12%	1,287
2013	63.6	16	11%	1,432
2014	70.9	18	11%	1,594
2015	82.6	20	15%	1,838
2016	97.5	23	17%	2,159
2017	110.6	26	13%	2,435
2018	124.6	30	8%	2,618
	Source; Refer Basics Payment Indicator (Raw File - Column L - V, Row 12)	Source; Refer IB & MB Subscribers (Raw File - Row 9 - 19, Column C)	Source; T2 E Payments ( Summation of Volumes ( Credit Card + Charge Card + Debit Card + E Money) ( Column C , E G, I, Row 10 - 20) (Refer next sheet)	Source; T2 E Payments ( Summation of Volumes ( Credit Card + Charge Card + Debit Card + E Money) ( Column C , E G, I, Row 10 - 20) (Refer next sheet)



# Moving From Cash to Cashless Economy: - A Study of Consumer Perception Towards Digital Transactions

Richa Goel, Seema Sahai, Anita Vinaik, Vikas Garg

*Abstract: In this era, we can see a very significant level of change in the means of making and receiving payments. Due to constant level of technological infrastructure and policy changes, there has been an increase in the number of modes of payments. Cashless economy is the future of Indian economy where there will be no physical flow of cash. All the payments will be made and received in the virtual world. Cashless economy got popular after demonetization where plastic money was widely used. The study is aimed towards studying the level of awareness among the citizens about cashless economy. The study also helps in determining the factors which influence the people to switch from cash towards cashless payments and what are the benefits people avail by using other means of payments. The primary data was collected by distributing questionnaires to 280 respondents, who have been using any digital mode of payment. Data is collected from students, working professionals and business class people. The questionnaire asks questions about the benefits people avail while using digital payment methods and what are the various factors which influence the people to use digital payment methods and what are the risks they face associated with digital payments. After the research conducted we can say that the working professionals and business class people use digital payment methods more. There are various factors which influence the people to shift such as offers, cashback etc. There is still a long run for India to be cashless to full extent as the government needs to develop a smooth and secure infrastructure.*

*Index terms: Cashless economy, technological development, demonetization, digital payment methods.*

## I. INTRODUCTION

The prime minister of India, on 8th November, 2016 demonetized the two largest denominations of currency notes of INR 500 and INR 1000, which were ceased with immediate effect with a few exceptions. The entire nation was in a state of shock because such a huge render was declared invalid in just one announcement and it was not the first time the government of India has not taken such a step earlier. Indian government took this step in 1946 and 1978 but in 2016 it faced a lot of criticism as people were left with only INR 100 notes or less denomination to transact with. The main aim of this step was aimed to attack on counterfeit currency, currency used for terrorist financing, black money and corruption.

Not only this the Prime Minister of India is also working towards digitization of India (DIGITAL INDIA). Thus, both moves DEMONETISATION and DIGITIZATION if worked upon effectively will help the Indian Economy to become Cashless Economy. Cashless Economy refers to the term where the physical flow of currency notes and coins are replaced with digital flow of money, which includes use of plastic money, digital means and over the net transactions. Such a replacement doesn't mean immediate removal of currency notes but slowly and gradually expelling of paper currency by means of following a proper procedure. Physical money means the paper currency notes and coins issued by the government as legal tender. Plastic money involves the use of plastic cards such as debit cards, credit cards, pre-paid cards, contact less cards etc. Electronic payment modes include all kinds of mobile wallets and payments made done through smart phones, laptops etc.

## A. AROUND THE WORLD SCENARIO

As per the survey conducted by CNBC most cashless countries are:

Germany:

Share of non-cash payments: 76%

Share of people using debit cards: 88%

South Korea:

Share of non-cash payments: 70%

Share of people using debit cards: 58%

United States of America:

Share of non-cash payments: 80%

Share of people using debit cards: 72%

The Netherlands:

Share of non-cash payments: 85%

Share of people using debit cards: 98%

Australia:

Share of non-cash payments: 86%

Share of people using debit cards: 7

Sweden:

Share of non-cash payments: 89%

Share of people using debit cards: 96%

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# Moving From Cash to Cashless Economy: - A Study of Consumer Perception Towards Digital Transactions

United Kingdom:

Share of non-cash payments:89%

Share of people using debit cards:88%

Canada:

Share of non-cash payments:90%

Share of people using debit cards:88%

France:

Share of non-cash payments:92%

Share of people using debit cards:69%

Belgium:

Share of non-cash payments:93%

Share of people using debit cards:86%

## B. METHODS OF DIGITAL PAYMENTS IN INDIA

**Banking Cards:** These includes all types of plastic cards such as credit card, debit card, cash card, travel card etc. they provide 2 factor authentications for a secure transaction.

**USSD:** Unstructured Supplementary Service Data is an innovative of making payments without the use of internet and smartphone. The payments can be made by a feature phone by dialling \*99#.

**AEPS:** Aadhar Enabled Payment System is a means by which a person can make payments at the point of sale by Aadhar authentication.

**UPI:** Unified Payment Interface powers multiple bank accounts into a single mobile application, merging all or some of the banking services.

**Mobile Wallets:** It is a means of carrying cash in digital format. Credit card or debit card can be linked to the mobile wallet for making payments or some money can be loaded into the mobile wallet.

**Internet Banking:** It is a medium through which various banking services like NEFT, RTGS, ECS, IMPS etc. can be availed over the institution's website.

**Mobile Banking:** It is a service provided by banks providing its customers a platform to conduct various banking services by use of their mobile phones or tablets through the apps provided by the bank.

## C. STRENGTHS OF INDIA GOING CASHLESS

**A planned strategy:** The government of India followed a detail criterion by first SIT on black money, then Jan Dhan Yojana which was followed by tracking on foreign accounts and money hoarders. Then, the income declaration scheme and finally, demonetization.

**Financial inclusion:** The government of India is focussing on reaching all the corner and to every citizen. Many bank accounts were created throughout the country as an initiative

taken up by government.

Steps taken by Government:

- Launch of BHIM app for smartphone users based on UPI.
- Launch of Aadhar merchant pay.
- Direct benefit transfer

## D. WEAKNESS FACED BY INDIA

- Cash is the dominating means of payment in the Indian economy.
- There is 24X7 electricity in India.
- E-illiteracy is also a major weakness.
- Smartphone market is still untapped.
- Lack of technological infrastructure.
- Sluggish economy.

## E. OPPORTUNITIES AVAILABLE WITH INDIA AFTER GOING CASHLESS

- Curbing black money- Going cashless will bring an end to the parallel economy running by black money.
- Tax collection- With digitization, tax collection will be made easy.
- Reduced real estate- going cashless will ensure only payment in white money.
- End of corruption- Going cashless will ensure a proper check on bank accounts, which will reduce the system of bribery.

## F. THREAT WITH GOING CASHLESS

- Threat of cyber-crimes.
- Threat of loss of database.
- Threat of data encryption.
- Cash is considered the most convenient and fastest means of payment.
- It is very difficult to gain trust and faith among Indians, as there are constant ups and downs in the economy.

## II. LITERATURE REVIEW

Mr. Pradeep H. Tawade (2017), "Future and scope of cashless economy in India." This paper helps in assessing the future trends and the impact of going cashless in the Indian economic scenario. After the study was conducted it was seen that the Government of India should consider many more steps in digitalizing India. And payment methods should be made more secure and risk-free.

Dhanda and Arora (2017), Genesis of cashless society: A study on growing acceptability towards plastic money. This paper is aimed towards studying the factors responsible for the rapid increase in acceptability of plastic card in the recent years. After the study was conducted it was seen that use of plastic cards is a matter of great pride among teenagers and is considered safe and free from any frauds.





Dr. Rashmi Gujrati (2017), India's march towards faceless, paperless, cashless economy. The paper is aimed towards creating a sense of awareness about cashless economy, its benefits, challenges and the steps taken by government toward cashless economy. After the research conducted it was seen that cashless economy comes with various benefits but brings in a lot more challenges with it.

Dr. Asha Sharma (2017), Potential for cashless economy in India. The study was conducted to find the scope of India becoming a cashless economy, challenges and opportunities related to cashless economy. The study shows that there is a significant scope of Cashless India as we can abolish various problems we face today but we must be prepared for the challenges and problems which cashless economy will bring.

Dominic, Saranya, and Rajani (2018), A study on transformation in behaviour of individual towards cashless economy. The study is aimed towards studying the behavioural changes in individual towards cashless economy. After the study conducted it was seen that many individuals have already moved or are moving towards a cashless nation but there is still a long way for India to become cashless.

Mr. Bharat Khurana (2015), Dream of cashless India: Benefits and challenges. The paper studies the benefits and challenges India might face if it becomes a cashless nation. It also helps in assessing the meaning of digital India and steps taken by government towards achieving the dream of cashless India. After the study no matter how much the government had done for fulfilling the dream of digital India but there is still a lot more that can be done to achieve that dream.

Metri and Jindappa (2017), Impact of cashless economy on common man in India. The study focusses on effect of going cashless on a common man living in India and the challenges related to going cashless. The study shows that India can never turn into a fully cashless economy as cash has been the dominating factor and always will be. Going cashless will only be feasible for a very small section of the society but not the whole nation.

Kumari and Khanna (2017), Cashless payment: a behavioural change to an economic growth. The paper aims to study how a behavioural change led to an economic growth in the Indian economic scenario. After the study conducted it was seen that various factors were responsible for such a change as people were finding various benefits and opportunities by adopting such a change.

Felix, Rebecca and Igbino (2015), Appraisal of the impact of e-banking and cashless society in the Nigerian economy. The paper was aimed towards understanding the impact of e-banking and cashless society on the people of Nigeria. But after the study was conducted it was seen that most of Nigerian citizens were not at all aware of such concepts and those who were aware were not fully using such facilities and there was no infrastructure development before implementing such changes.

Kousalya and Shankar (2018), Cashless economy/transaction. The paper was focussed towards understanding the impact of cashless economy and its importance in India. After the research conducted it was seen that the introduction of cashless economy in India will

bring about a positive impact on the financial sector and will help in modernisation of the payment system in India.

Kokila and Ushadevi (2017), A study on consumer behaviour on cashless transaction in U.T. of Puducherry. The paper was focussed towards understanding the awareness and trust among the customers about cashless transactions. It was seen that people were aware about the cashless transaction but were still in doubt with implementing the same in daily routine.

Thomas and Krishnamurthy (2017), Cashless rural economy- a dream or reality. The study is focussed towards understanding the impact of demonetisation on rural India and to keep a check on the government initiatives to make rural market a cashless economy. The studies show that the government of India should initiate various schemes to make the dream of cashless economy a reality.

Shrikala K.K. (2017), Cashless Transaction: Opportunities and Challenges with special reference to Kodagu district of Karnataka. The paper is aimed to find the opportunities available in the rural part of India and the challenges which may be faced while moving towards a cashless economy. It was seen that there are many opportunities and every opportunity come with its own challenges, but they can be avoided with proper implementation.

Shendge, Shelar and Kapase (2017), Impact and importance of Cashless Transaction in India. The paper focuses on impact and importance of cashless transactions in India. The study shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered.

Garg and Panchal (2017), Study on Introduction of cashless economy in India 2016: Benefits & challenges. The study focusses on finding benefits and challenges related to cashless economy in India. The study shows that there are various benefits related to cashless economy and various challenges related to the cashless economy.

Akinola (2012), Cashless Society, Problems and Prospects, Data Mining Research Potentials. The is focused on understanding the cashless society and the problems related to the same in Nigeria. The study shows that cashless society will face a lot of challenges and criticism by the citizens of Nigeria.

Bindra and Bindiya (2017), Going Cashless: stepping towards Digital India. The study is focussed to find out benefits, challenges and the growth prospects in India on the path of moving towards digital India. The study shows that digital India will bring a huge growth in the GDP of India and will also have other benefits are the society and the economy as well.

Thilagavathy and Santhi (2017), Impact and importance of Cashless Transaction in India. The paper focuses on impact and importance of cashless transactions in India. The study shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered.

# Moving From Cash to Cashless Economy: - A Study of Consumer Perception Towards Digital Transactions

Sharad Malhotra (2017), Impact of Cashless Society for the Economic Growth in India. The paper focuses on impact and importance of cashless transactions in India. The study shows that if India becomes a cashless economy there will be both positive and negative impact, but negative impacts can be overlooked if the gain from positive impact is considered. There would be lower costs and keep a check on financial crimes and TAX frauds.

### III. OBJECTIVES

#### A. PRIMARY OBJECTIVES

- To study consumer awareness on cashless transactions.
- To assess the customer trust and confidence in cashless transactions.
- To study benefits of cashless economy.
- To analyse future trends of cashless transactions.

#### B. SECONDARY OBJECTIVES

- To understand the factors influencing the customer moving towards cashless economy.
- To illustrate the steps taken by government to fulfil the dream of digital India.
- To assess the preparedness of Indian Government for implementing the cashless economy.
- To study the socio-economic impact of cashless economy on the society.

### IV. RESEARCH METHODOLOGY

This study reviews literature chosen with the primary as well as secondary data.

#### A. Research Design:

The research is analytical and descriptive in nature. The researcher for the purpose here had made use of primary data and secondary data. The researcher has made use of close ended questionnaire where sample of 280 was used. The data was collected and was analysed by using SPSS Software.

Secondary sources were also used with respect to Review of Literature, Journals and articles.

Descriptive Statistics was done by using Mean, Standard Deviation, Frequency and inferential statistics was used like correlation, regression and ANOVA.

#### B. Sources of Data

The data required for doing the research has been collected mainly by using primary and secondary sources. The primary sources include the questionnaire. The secondary source includes the various journals, research paper and internet websites.

#### C. Size of Sample

The study has been conducted by using the sample of 280.

### V. RESEARCH FINDINGS AND ANALYSIS SURVEY

#### A. RESPONSE RATE

RESPONSES	FREQUENCY
Returned complete Questionnaires	280
Returned incomplete	12
Unreturned	10
Total	300

This table shows the No. of questionnaires and their validity received for analysis

#### B. FINDING OUT DESCRIPTIVE STATISTICS FREQUENCIES

Items	Frequency	
Gender	Male	154
	Female	126
	Total	280
Age Group	Below 15 yrs.	8
	15-25 yrs.	126
	25-35 yrs.	66
	35-45 yrs.	30
	Above 45 years	50
	Total	280
Educational Qualification	School level	6
	Graduate	250
	Post graduate	24
	Total	280
Occupation	Working	60
	Non-working	220
	Total	280
Income	Below 15k	66
	15-25k	66
	25-35k	96
	35-45k	20
	More than 45k	32
	Total	280
Marital Status	Married	118
	Unmarried	162
	Total	280

This table shows the number of respondents and their demographic information

#### C. RELIABILITY

##### Reliability Statistics

Cronbach's Alpha	N of Items
.896	41

The table above shows the degree of the questionnaire's reliability. The value of alpha is 0.896 which is more than 0.6. This shows that the data is reliable for further analysis.

#### D. USING MEAN AND STANDARD DEVIATION



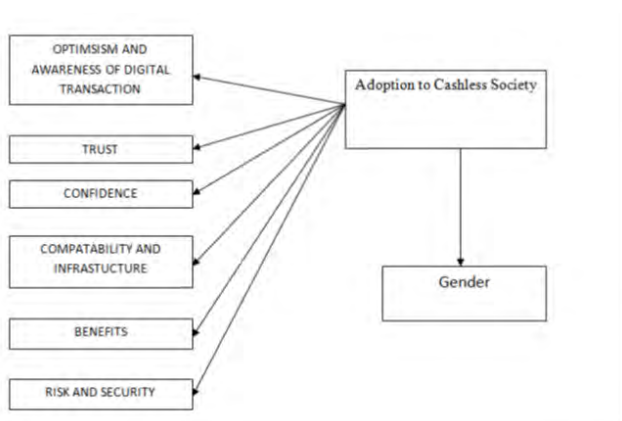
	N	Mean	Std. Deviation
U1	280	1.19	.494
U2	280	4.72	1.553
U3	280	4.00	.000
U4	280	1.32	.808
U5	280	3.19	1.686
O1	280	1.85	1.411
O2	280	1.72	1.452
O3	280	1.81	1.451
O4	280	3.81	.611
O5	280	1.84	.554
T1	280	1.83	1.462
T2	280	1.87	1.466
T3	280	1.98	1.550
T4	280	3.76	1.781
T5	280	3.61	.942
T6	280	3.50	1.136
C1	280	2.04	1.543
C2	280	2.05	.422
C3	280	1.47	.809
C4	280	2.47	.835
CO1	280	1.85	1.426
CO2	280	4.40	1.072
CO3	280	2.11	1.575
CO4	280	1.85	1.500
CI1	280	1.26	.673
CI2	280	1.68	1.428
CI3	280	1.76	1.460
B1	280	1.85	1.457
B2	280	1.74	1.464
B3	280	1.89	1.533
B4	280	1.85	1.529
R1	280	1.89	1.519
R2	280	1.96	1.500
R3	280	3.19	1.495
R4	280	1.87	1.421
Valid N (listwise)	280		

As we can see the mean in this table lies between 1 and 3, it shows that the respondents have a positive approach i.e. they opted to agree towards the parameters. Standard deviation shows the degree at which the mean is deviating from the actual mean.

### E. HYPOTHESIS

- There is no significant difference between level of consumer trust and confidence in their cashless transactions.
- There are no significant benefits of cashless economy to public.
- There is no significant difference between level of awareness among consumers and their cashless transactions.
- There is no significant potential level of cashless economy in India.

### F. CONCEPTUAL FRAMEWORK



### G. HYPOTHESIS-1

H0: There is significant difference between level of consumer trust and confidence in their cashless transactions.  
H1: There is no significant difference between level of consumer trust and confidence in their cashless transactions.

		Trust	Confidence
Trust	Pearson Correlation	1	.560**
	Sig. (2-tailed)		.000
	N	280	280
Confidence	Pearson Correlation	.560**	1
	Sig. (2-tailed)	.000	
	N	280	280

\*\* . Correlation is significant at the 0.01 level (2-tailed).

This table shows the relationship between trust and confidence.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.296	1	20.296	126.190	.000 <sup>b</sup>
	Residual	44.390	276	.161		
Total		64.686	277			

a. Dependent Variable: T  
b. Predictors: (Constant), C

This table shows the significant relationship of Trust and Confidence, where trust is dependent, and Confidence is independent.

The test shows that there is a significant relationship between the level of trust and level of confidence. So, we fail to reject the null hypothesis.

### H. HYPOTHESIS-2

H0: There is no significant relationship between gender and benefits of cashless economy to public.  
H2: There is a significant relationship between gender and benefits of cashless economy to public.

		Gender	Benefits
Gender	Pearson Correlation	1	-.070
	Sig. (2-tailed)		.247
	N	280	280
Benefits	Pearson Correlation	-.070	1
	Sig. (2-tailed)	.247	
	N	280	280

This table shows the relationship between Gender and Benefits.

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.335	1	.335	1.347	.247 <sup>b</sup>
	Residual	68.557	276	.248		
Total		68.892	277			

a. Dependent Variable: Gender  
b. Predictors: (Constant), B

# Moving From Cash to Cashless Economy: - A Study of Consumer Perception Towards Digital Transactions

This table shows the significant relationship of Gender and Benefit, where Gender is dependent, and Benefits is independent.

		Coefficients		t	Sig.	
		Unstandardized Coefficients	Standardized Coefficients			
Model		B	Std. Error	Beta		
1	(Constant)	1.499	.049		30.328	.000
	B	-.025	.021	-.070	-1.161	.247

a. Dependent Variable: Gender

The test shows that there is a significant relationship between the gender and level of benefits from the cashless society. So, we reject the null hypothesis and accept the alternate hypothesis.

## I. HYPOTHESIS-3

H0: There is no significant relationship between gender and the level of optimism towards cashless transactions.

H3: There is a significant relationship between gender and the level of optimism towards cashless transactions.

		Gender	O
Gender	Pearson Correlation	1	-.116
	Sig. (2-tailed)		.053
	N	280	280
O	Pearson Correlation	-.116	1
	Sig. (2-tailed)	.053	
	N	280	280

This table shows the relationship between Gender and their level of optimism towards cashless transactions. The relationship is negative in nature.

ANOVA <sup>a</sup>						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.927	1	.927	3.766	.053 <sup>b</sup>
	Residual	67.965	276	2.46		
	Total	68.892	277			

The test shows that there is no significant relationship between the gender and level of optimism towards cashless transactions.

So we fail to reject the null hypothesis

## VI. CONCLUSION

We can conclude that there is a long way for India to become a cashless economy. People still lack trust and confidence while using digital payment methods. A lot of development in the field of infrastructure is required to make the dream of Digital India a reality. There are many people who are still not aware about the cashless economy not only in India but outside of India. Government has faced a lot of criticism in the past from the public for the various plans implemented on the public. There are a lot of challenges in fulfilling the dream of digital India but in the long run cashless economy will help in growth and will bring a lot of benefits and opportunities with it.

Few of the major finding according to this study are:

- There are still a lot of people who do not use any kind of digital payment method.
- There are a lot of scope in the future for cashless society.
- People are mostly influenced by convenience and offers provided for switching to cashless modes of payments.
- There is still a lot to be done to digitalise India.
- People don't feel safe sharing their financial and personal information over the internet.
- People face various problems while using digital payment methods.

## VII. KEY SUGGESTIONS

- Government of India should try to educate people about the benefits of going cashless before taking any crucial steps.
- They should also be able to implement their plans properly and without troubling the public.
- They should also tell about the opportunities which the public will get if they become digital.
- People should try and use any digital payment method at least once.
- Government should develop infrastructure to cope up with any policy change or a plan implementation beforehand.
- People and government should work together to develop infrastructure and technology to digitalize India.

## REFERENCES

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4. Dr. Asha Sharma (2017), Potential for cashless economy in India
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6. Mr. Bharat Khurana (2015), Dream of cashless India: Benefits and challenges
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8. Kumari and Khanna (2017), Cashless payment: a behavioural change to an economic growth
9. Felix, Rebecca and Igbino (2015), Appraisal of the impact of e-banking and cashless society in the Nigerian economy
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## THE CHANGING TRENDS IN PAYMENTS: AN OVERVIEW

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**ABSTRACT:** The present era is entering into a new pace in payment system by using digital wallets filled with coupons and offers. The Digital India programme is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy. Faceless, Paperless, Cashless is one of the professed role of Digital India. Considering the benefits like transparency in transactions, scope for curtailing parallel economy and improving the ease of business, it is very essential that the transformation towards digital payments. Many changes took place in the recent past like launch of many digital wallets like - Paytm, Mobiwik, Free Charge etc. and government launching many United Payment Interface (UPI) solutions and BHIM app for smooth transition to digital payments. The paper highlights on the various modes of payments, benefits of cashless economy and preparedness for the implementation of the cashless economy by Indian Government. The study found that, the payment system initiatives taken by the government and RBI have resulted in greater acceptance and deeper penetration of non-cash payment modes.

**KEY WORDS:** Digital Payment System, Paytm, Pay U Money, digital wallets.

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### I. INTRODUCTION

Payment system plays an important role in driving the economic and social development of the country. The last decade has seen tremendous growth in use of internet and mobile phone in India. Increasing use of internet, mobile penetration and government initiative such as Digital India are acting as catalyst which leads to exponential growth in use of digital payment. Electronics Consumer transaction made at point of sale (POS) for services and products either through internet banking or mobile banking using smart phone or card payment are called as digital payment.

### II. OBJECTIVES OF THE STUDY

1. To know the various modes of payments.
2. To study the benefits of cashless economy.
3. To assess the preparedness for the implementation of the cashless economy by Indian Government.
4. To study the online high value payments

### III. RESEARCH METHODOLOGY

The study is based on secondary data. The required data has been extracted from various sources like research journals, periodicals, government publications, magazines, newspapers articles and the authenticated websites.

### IV. REVIEW OF LITERATURE

✓ **Sujith T S, Julie C D (2017)** the article entitled “Opportunities and Challenges of E-Payment System in India”. This study aimed to identify the issues and challenges of electronic payment systems and offer some solutions to improve the e-payment system. E-payment system not only provides more opportunities but many threats also. The study found that, Digital revolution has provided an easy way to go for digital payments. The study also found that, the reach of mobile network, Internet and electricity is also expanding digital payments to remote areas. This will surely increase the number of digital payments.

✓ **Mamta, Prof. Hariom Tyagi and Dr. Abhishek Shukla (2016)** the article entitled “The Study of Electronic Payment Systems”. This study aimed to identify the issues and challenges of electronic payment systems and offer some solutions to improve the e-payment system quality. The successful implementations of electronic payment systems depends on how the security and privacy dimensions perceived by consumers as well as sellers are popularly managed, in turn would improve the market confidence in the system.

✓ **Preeti Garg and Manvi Panchal (2016)** the article entitled “Study on Introduction of Cashless Economy in India 2016: Benefits and Challenge’s”. This paper studied the views of people on introduction of cashless economy in India. The study was conducted in Delhi region and data was collected with the help of structured questionnaire and analyzed using simple percentage method. Responses from respondents shows that cashless economy will help in curbing black money, counterfeit’s fake currency, fighting against terrorism, reduce cash related robbery, helps in improving economic growth of our country. Major challenges that can hinder the implementation of the policy are cyber fraud, high illiteracy rate, attitude of people, lack of transparency and efficiency in digital payment system. The study found that, the introduction of cashless economy in India can be seen as a step in right direction. It helps in growth and development of economy in India.

✓ **Vidya Shree DV, Yamuna N. and Nitua Shree G (2015)** the article entitled “A Study on new Dynamics in Digital Payment System - with special reference to Paytm and Pay U Money”. The research paper is focusing on the impact of the new digital payments systems on customers and problems encountered if any. The study found that, people are more aware about the online payments through mobile applications and there is a wider increase in growth rate. The study also found that, Paytm and Pay U money is providing easy payment structures compared to Digital payment system.

## V. PAYMENT MODES

### ✚ PAPER BASED MODE:

Paper based system come with a considerable cost to the society. These include both direct cost such as cash-printing, transporting notes, weeding out soiled notes, cheque-printing, postage, clearing and handling costs etc and indirect cost such as loss of tax revenue, creation of black money, security risk etc.

❖ **Cash** – Cash remains the predominant mode in the country. The value of banknotes and coins in circulation as a percentage of GDP is very high in the country. The cash GDP ratio of India stood at 10.6 % which was highest among BRICS countries. Adoption of cashless transaction has been significantly pushed by Prime Minister Mr. Narendra Modi as part of government reforms after demonetization of high value currency of Rs. 500 and 1000. Demonetization has presented a unique platform for adoption of digital payment, as an alternative to cash for Indian consumers.

❖ **Cheque** - The cheque was the only alternative to cash for a long time. The payment initiatives taken by the Government and BI have resulted in greater acceptance of non-cash payment modes. Cheque clearing system has been migrated to imafe-based cheque system. The CTS has provided better liquidity management and operational benefits to the banks.

### ✚ ELECTRONIC PAYMENT MODE :

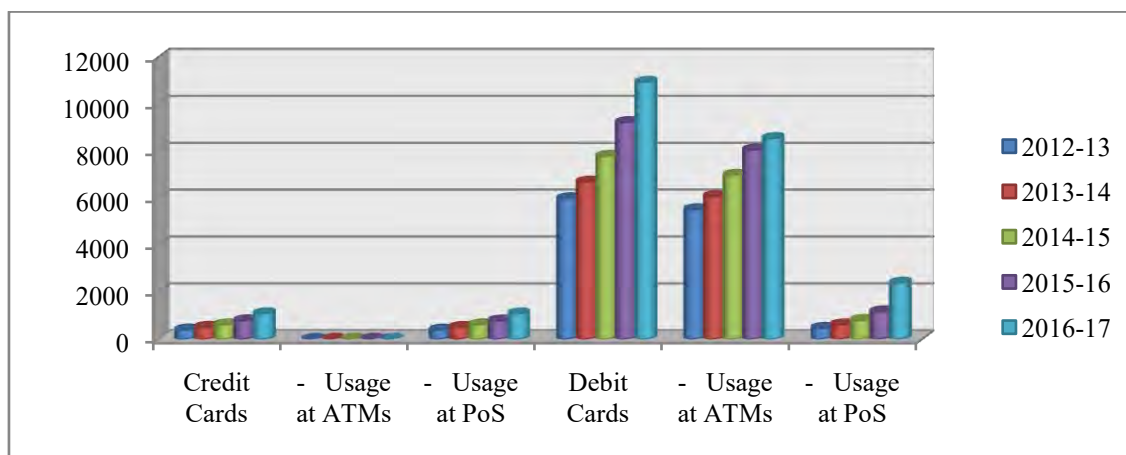
❖ **Cards** - Card payment include payments made using debit cards, credit cards, or prepaid/stored value cards. Card payments can be made face-to-face or carried out remotely.

**Table 1: Usage of Credit and Debit Cards**

Particulars	(Volume in Million)				
	2012-13	2013-14	2014-15	2015-16	2016-17
Credit Cards	399.13	512.03	619.41	791.67	1,093.51
Usage at ATMs	2.52	2.96	4.29	6.00	6.37
Usage at PoS	396.61	509.08	615.12	785.67	1,087.13
Debit Cards	5,999.21	6,707.10	7,804.57	9,247.00	10,962.36
Usage at ATMs	5,530.16	6,088.02	6,996.48	8,073.39	8,563.06
Usage at PoS	469.05	619.08	808.09	1,173.61	2,399.30
Total Credit and Debit Cards	<b>6,398.35</b>	<b>7,219.13</b>	<b>8,423.99</b>	<b>10,038.67</b>	<b>12,055.87</b>

The above table shows that, debit cards are used mostly for withdrawal of cash from ATMs and the debit cards usage at PoS is low. Its usage improved in 2016-17 due to shortage of cash. Debit cards have overtaken credit cards in India.





❖ **RuPay** - It is a coinage of two terms Rupee and Payment. The RuPay card was launched on 26 March 2012 by national Payments Corporation of India(NPCL).These are linked to an individual's bank account. Can be used at shops, ATMs, online wallets, micro-ATMs, and for e-commerce purchases. As of April 2018, the RuPay card is issued across the length and breadth of the country to the savings and current account holders of over 1000 banks in India.

❖ **AEPS**: The Aadhaar Enabled Payment System uses the 12-digit unique Aadhaar identification number to allow bank-to-bank transactions at PoS. AEPS services include balance enquiry, cash withdrawal, cash deposit, and Aadhaar to Aadhaar fund transfers.

❖ **Mobile**: Mobile payment services are operated under financial regulation and performed from or via a mobile device. Instead of paying with cash, cheque, or credit cards, a consumer can use a mobile to pay for a wide range of services and digital or hard goods. As on 31<sup>st</sup> May, 2017 there are 1,180,82 million wireless subscribers. High level of mobile user penetration provides immense opportunity to boost mobile banking.

❖ **IMPS**: Interbank Mobile Payment Service was launched in the year 2010 as a remittance product through mobile phones. It is an interbank electronic fund transfer service through mobile phones. IMPS facilitate customers to use mobile instruments as a channel for accessing their banks accounts and remitting funds.

❖ **USSD**: Unstructured Supplementary Service Data based mobile banking. It is linked to merchant's bank account and used via mobile phone on GSM network for payments up to Rs. 5,000 per day per customer.

❖ **UPI**: The United Payments Interface envisages being a system that powers multiple bank accounts onto a single mobile application platform of any participating bank. Merges multiple banking features, ensures seamless fund routing, and merchant payments. It facilitates P2P fund transfers. On 30<sup>th</sup> December, 2016 the government launched Bharat Interface for Money (BHIM) a mobile application for digital banking. The app enables users to transfer money to another person's bank account by simply using their Virtual Payment address (VPA).

❖ **Electronic / Mobile Wallets**: They are used via the internet and through Smartphone applications. Money can be stored on the app via recharge by debit or credit cards or net-banking. Consumer wallet limit is Rs. 20,000 per month and the merchant wallet limit is Rs. 50,000 per month after self-declaration and Rs. 1,00,000 after KYC verification.

## VI. THE TOP FIVE MOBILE PAYMENT WALLET OF INDIA

- **Paytm**: Transferring money instantly to the bank from Paytm account Safe to store customer's CVV number. Paytm has launched an app password feature for Paytm Wallet in order to ensure the money is safe even if the customer lose or misplace his/her phone. A customer can use Paytm even without a Smartphone.
- **Mobikwik**: Introduction of M-Wallet for easy storing and transaction of money. Instant recharge without sign-up. Encrypted and highly secured transactions. User friendly mobile application.
- **Pay U money**: Auto read of OTP. Picking up the transaction where it dropped. Risk monitoring.
- **Citrus**: Fastest among all the digital wallets. Citrus Pay wallet offers and discounts.
- **Oxigen**: Send money to other mobile phones Shows transaction history.

## VII. ONLINE HIGH VALUE PAYMENTS

★ **Real Time Gross Settlements (RTGS)**: RTGS system, introduced in India since March 2004, is a Interlink Research Analysis system through which electronics instructions can be given by banks to transfer funds from their account to the account of another bank. The (RTGS) Real Time Gross Settlement system is

maintained and operated by the RBI and provides a means of efficient and faster funds transfer among banks facilitating their financial operations. As the name suggests, funds transfer between banks takes place on a „Real Time“ basis. Therefore, money can reach the beneficiary instantaneously and the beneficiary’s bank has the responsibility to credit the beneficiary’s account within two hours. The minimum amount to be remitted through RTGS is 2 Lac.

★ **National electronic Fund Transfer (NEFT):** NEFT facilitates transfer of funds to other bank accounts across the country. NEFT settles transactions in batches. RBI has introduced half hourly settlement from 1<sup>st</sup> July, 2017 to facilitate early credit of remittance proceeds. There is no restriction on the minimum value of remittance and the amount is credited to beneficiary within two business hours from the batch in which the transaction was settled.

## VIII. MIGRATION FROM CHEQUE-BASED PAYMENT TO DIGITAL MODE

Table 2- RTGS customer/clearing/NEFT/NACH data

In value Terms	2012-13	2013-14	2014-15	2015-16	2016-17
RTGS Customer	5,12,997.84	5,73,614.03	6,31,050.74	7,00,899.82	8,49,950.51
Paper Clearing	1,00,396.48	93,348.17	85,434.14	81,860.79	80,958.15
ECS/EFT/NEFT	31,876.80	47,545.67	63,562.75	85,984.05	1,20,222.90
NACH (National Automated Clearing House)	0.00	214.81	1,220.88	3,801.83	7,916.17

The above table shows that cheque payment value has decreased from 100 trillion in 2012-13 to 81 trillion in 2016-17. There is increase cheque volume in 2016-17, due to small payments made by cheque due to denomination. There is a gradual growth in RTGS value from 2012-13 (513 trillion) to 2016-17 (850 trillion). There is significant increase NEFT and NACH due to shifting of business, government and institutional transactions from cheque to NACH and NEFT.

## IX. FINDINGS OF THE STUDY

1. The payment system initiatives taken by the Govt. and RBI have resulted in greater acceptance and deeper penetration of non-cash payment modes.
2. Ever-improving technology and telecommunication facilities have given fillip to alternative electronic payment system.
3. Cheque as a mode of payment has lost its relevance and will remain at least in the medium term.
4. Government’s initiatives such as the introduction of GST, demonetization etc is likely to widen the tax net and enlarge the formal economy.

## X. SUGGESTIONS

1. For smooth implementation of cash less system in India, the following measures are recommended.
2. Government has to bring transparency and efficiency in e-payment system, strategies used by government and RBI to encourage cashless transactions by licensing payment banks, promoting mobile wallets.
3. As a part of „Make in India“ initiative by the government, RuPay cards, Aadhar based payment systems should be given preferential treatment. Government should withdraw service charge on cards and digital payments.
4. Measures to discourage use of cash, by introducing charges on withdrawal of money beyond a limit.
5. A financial literacy campaign should be conducted by government time to time to make population aware of benefits of electronic payments.
6. To improve financial inclusion, in addition to business correspondents, e-Seva Kendras etc may be allowed to make micro receipts and payment transaction using Aadhar authentication.
7. To accelerate the adoption of digital payments, women should be educated through campaigns. Financial literacy will lead to women empowerment. This will lead to digital and social revolution.
8. In schools also basic banking skills may be imparted.
9. Incentivizes all sections for increasingly adopting non-cash electronic modes of payment in lieu of cash. Schemes such as Lucky Grahak Yojana and digidhan Vyapar Yojana have to be continued to encourage electronic modes of payment.

## XI. CONCLUSIONS

Demonetization has presented a unique platform for adoption of digital payment, as an alternative to cash for Indian consumers. Cashless economy will help in curbing black money, counterfeit’s fake currency, fighting against terrorism, reduce cash related robbery, helps in improving economic growth of our country.

Major challenges that can hinder the implementation of the policy are cyber fraud, high illiteracy rate, attitude of people, lack of transparency & efficiency in digital payment system. The study shows that the introduction of cashless economy in India can be seen as a step in right direction. It helps in growth and development of economy in India.

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