ELECTRONIC PAYMENTS AND ITS IMPACT ON INDIAN ECONOMY

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Abstract

E payments have led to a lot of opportunities for varied startups but has it benefitted to Indian economy. This research paper throws light on the thought process of the sample on the impact of digital payments on the Indian economy. This research paper will also give insights on the usage of digital payments by employees and business people from Kolkata and Nagpur.

[Keywords-E payment, Indian economy, sample]

1. **Introduction**

In the term of Modi government from 2014-2019 India had faced many ups and downs regarding the growth because of two major decisions of demonetization and GST rollout which had a direct impact on Indian economy. In this research one of the major reasons for rolling out demonetization which was creating the hype of a cashless economy will be discussed upon. Due to the roll out of demonetization various digital payment wallets got an opportunity to multiply their business. The government also took initiative in order to attract people to use the E- payment method instead of cash. The effort of government was synergized with the discounts and offers offered by private sector players like Paytm, Phone pe etc.

2. **Objective of the study-**

- To analyze the acceptance level of E- payment methods amongst the salaried class and the person who owns his/her own business.
- To analyze the impact of digital transactions on variables which can boosts up the economy's growth.
- To analyze whether the initiatives taken by the government is boosting the use of E payments.

3. **Literature review**

Gunjan Sharma and Kushagra Kulshreshtha(2019), the following research paper is based on descriptive research pattern. The sample of this research are people whose intention is not clear for adopting the mobile wallet. This research paper concludes with the most dominant factors which affects the intention of people to adopt the same by exploratory factor analysis. This research paper will add on to our further research by mentioning the factors which are forcing people to opt for mobile wallet or not to opt for the same.

Shilpa Bhimrao Gaonker(2018) ,this research paper was written with an objective to find out the barriers which is coming on the way of cashless economy, factors which are involved which influenced economy to move towards cashless society, benefits of cashless transaction and what are the steps taken by government to encourage cashless transaction. This research was done through secondary source mainly from the reports of RBI, GOI, MEDIANAMA etc. This research paper will add on to our further research by mentioning the challenges and the steps for reducing the challenges to make India a cashless economy

Dr Vivendra Chavda(2018),this research paper is made by the survey of rural respondents of Gandhi Nagar by using non probability convenience sampling. This research paper had an objective to find out how rural respondents perceive the digital payments. This research concluded that there were limited people who were aware of the digital payments and very less people used the same for the payment of the various bills. This research paper will add on to our further research by mentioning the situation in rural areas like Gandhi Nagar which pose a challenge for Indian economy in adoption of digital payments.

Pankaj Yadav(2017),this paper is entirely based on the survey of 350 people all over India belonging to consumer category by a quantitative research approach. This paper was created with an objective to check intensity of the factors which can force a customer to use mobile wallet. The conclusion of this study was that Perceived ease of use, Perceived Risk, Trust, Perceived quality of service, and Perceived cost have not been influencing the intention of customers to adopt mobile wallet but the only factor which influenced the customer's intention was its perceived

usefulness. This research paper will add on to our further research on can digital payments can make India economy a superpower by mentioning about the factors which needs to be modified so that it can be used to attract people to go for digital payments.

Zahoor Ahmad Shah(2017),this research paper has been formed with an objective of to analyze the infrastructure situation which is needed to support digital payment and digital modes of payments available in India. The research is done through the secondary data published by RBI NCPI. This research concludes that new tech has made a new path for more digital products but India has a long way to accept and innovatively use this technology. This research paper will add on to our further research on can digital payments can make India economy a superpower by mentioning about the factors which needs to be modified so that it can be used to attract people to go for digital payments. This research paper will add on to our further research on can digital payments can make India economy a superpower by mentioning about the technology and modes of payments that India could tap till now.

M. Nithin P. Jijin and P. Baiju(2018), this research paper is prepared with objectives to analyze the trend payment instrument for the transactions and to answer the question how the demonetization has impacted the usage of the payment instruments. The study is based on secondary data published by RBI on a monthly basis. The data is analyzed through the method of Intervention Analysis in Timeseries (ITSA). The research paper concludes that the demonetization had a negative impact on digitalization since it did not push the growth of digital payments in India. This research paper will add on to our further research on can digital payments can make India economy a superpower as it mentions about the impact of demonetization on digital payments since this step was taken by government to move towards digitalization.

Rajwinder Kaur (2017), this research paper is prepared on the objectives to determine the growth rate through the analysis of the use of electronic channels and to analyze the steps taken by the government in order to keep a track on digitalization. The research is of descriptive in nature. The sample for this research were 100 individuals of SBS Nagar in Punjab. The method used for sampling is convenience sampling. This paper concluded that the people had a positive thinking towards the digital payments but the incentives provided by government did not help as cash was still considered as king. This research paper will add on to our further research on can digital payments can make India economy a superpower as it provides information about half-hearted incentives of government which could not attract people towards the digitalized payments.

Ibrahim P. A., Nasir Zameer(2018),this research paper is based on the objective to analyze the impact of cashless economy on MSME sector and to examine how India is moving to cashless economy. The research paper is based on secondary data and descriptive statistics is used to analyze the data. This research paper concludes that the cashless economy will help to curb corruption and money laundering. The sudden change to cashless economy was difficult to adopt by the the MSME but the positive outlook encouraged this sector to accept the change. This research paper will add on to the new research since it mentions the effect on MSME which is important for employment generation in the country.

Mr. Harish Tigari(2018),this research paper is prepared on the objective to analyze how digitalization has impacted Indian economy and also to analyze the percentage of population using digitalized payments and other services. This research paper is prepared from secondary data. This research paper will add on to the new topic which will prove that whether it really changed the economy and how it has helped to make India a cashless country

Dr.G.China.Babu(2018),this paper is prepared on the objective to examine the awareness level of digital payments in the economy and also to study the benefits derived from the same. This research paper was prepared through a sample survey of 200 customers across India and the method used was convenience sampling. This paper concluded that the customer in India have a good knowledge on cashless payments also it was highlighted that cashless payment method is good for Indian economy. This research will add on to the new research suggesting the acceptance level of digital payments in India

Mrunal Chetan bhai Joshi(2017) ,this research paper is prepared on the objective to study a trend in digital payment through various modes and also to study new digital payments method. This research paper is based entirely on secondary data and the tools used to analyze data are cross tabulation, trend percentage analysis etc. The paper concluded that there are growth digital payments in last three years and people are readily using new modes of digital payments. This research paper will add to the new research as it highlights growth of digital payments and reducing dependency on cash.

Vir Pratap Dr Ganga Kumar Binha(2018),this paper is prepared on the objective to analyze the positives and negatives of M wallet and to study the barriers and stimulators to cashless economy. This paper is prepared is based on survey of 100 people and the data is analyzed through simple percentage method. This paper concluded that mobile is gaining acceptance the main reason of acceptance was discounts and offers. This paper will be useful in order to write the reasons to why digital payments is successful.

Lavish Bhandari(2008),this paper is prepared with an objective to analyze the unorganized sector in economy regarding the dependency on cash. The research paper completely relies on secondary data. This paper concludes that large mases of unorganized sector relies on cash and also highlights that technological development can help to penetrate unorganized sector to reduce dependency on cash and increase the use of digital payments. This paper can be used to add on more barriers on the way to cashless economy.

Olena Slozko And Anna Pelo(2014) ,this paper is prepared on the objective to find relation between GDP growth and increased usage of e-payment and how digital payments influence economic development. This paper used correlation analysis to get to a conclusion. The paper concluded that the digital payment increased efficiency of the economy and it also concludes that increase in digital payments increases GDP growth.

Alim Maherali(2017),this research paper shows how digital payments plays an important role in increasing government tax revenue. This paper used secondary sources of data released by World bank named Global Fintech and one primary raw data was from World bank online database. This paper concluded that how number of key insights was used related to individual tax revenues and their impact on economy.

Prof Pushpa,S Abbigeri,Dr. Rajeshwari M. Shetter(2017),this research paper shows the various types of payments, the preparedness for the implementation of cashless economy by the Government of India. This paper used secondary sources of data like government publications, magazines, authenticated websites. This paper concluded that the initiatives taken by RBI and govt resulted in greater value in creating awareness about non cash payments.

Arpita Pandey and Mr. Arjun Singh Rathore(2019),this research paper shows digital payments attracted various investors and made way towards modernization and making cashless India. And also, to check the adoption of technology by people. This paper used secondary sources of data from different research papers, reports and government data. This paper concluded that many people doesn't have their Aadhaar linked just to avoid paying taxes and also said that in many places in India doesn't have internet connectivity so making digital India becomes difficult.

Prasad Rajendra Byakod Chaya U Pooja Kulgude Abhishek Sharma Priyanka SinghChandra Sen Mazumder(2017),this research paper tells us about the current technical infrastructure for the use of digital payment systems in selected areas and also identified the variables that influence the customers towards various payment services. This paper used primary data collection and also used questionnaire from two rural areas of Karnataka. This paper concluded that to make rural areas adopt DPS with regard to use of UPIs and portable wallets and enhanced security of transactions need to be ensured.

Asim Husain(2017),this research paper is prepared on the objective to analyze the factors responsible for cashless transactions, to evaluate the role of government to encourage cashless transactions system in India. The nature of the study is descriptive, analytical and comparative. This study has covered five urban cities of Uttar Pradesh. The sampling technique used by the researcher is simple random technique. The primary data is collected through questionnaire and secondary data is taken from reports, magazines, journals etc. The conclusion derived from the study was that consumers were attracted to digital payments because of various offers offered by it and steps undertaken by government not fully but partially helped to create a hype for digital payments.

4.   Research Methodology

1.   This research used is primary data.
2.   The data from the samples will be completely unbiased based on the Likert scale from Tier 1 and Tier 2 cities in India like Nagpur Kolkata.
3.   Objectives such as to analyze the acceptance level and to find out the significance of government initiatives Likert scale will be used to undertake correlation analysis.
4.   The sampling method used to collect primary data is convenience and snowball sampling
5.   Correlation analysis wil1 be applied in order to analyze the relation between government initiative and increase in the digital transactions
6.   Multiple linear regression analysis will be used to find out whether e-payments helps in economic development or not.

5.   Research Design

The research design used for this study is quantitative research design because this research includes making connection between variables for example correlation between government initiatives and the encouragement to the people to use e-payments. In the second objective there has been an attempt to form a relation between variables like time, cost, financial inclusion, transparency with economic development.

6.   Sample selection

- The sampling method used to collect primary data is convenience and snowball sampling.
- The population for research is working population from Nagpur and Kolkata
- The sample size is 103
- Non-random sampling technique was used.

7.   Tools used for Analysis

Correlation analysis-To analyze whether the initiatives taken by the government is boosting the use of E payments.

Logistic regression analysis - To analyze the impact of digital transactions on variables which can boosts up the economy's growth.

8.   Problem Statement

- E payments might be accepted by the salaried class as well as business class.

- Relation between increase in E payments and variables that boosts up the growth of the economy.

- To what extent government incentives are boosting up the utilization of E payments.

9.   Need for Study

E payment method is an innovative step to move towards cashless society therefore it is important to known the benefits and challenges that will come on its way for its implementation to the fullest. Even one negative change in variable in the country can suffer the entire economy therefore it is not only important to study the impact of E payments in the upper middle and premium class but also salaried, poor and the micro small medium enterprises to get a detailed outlook of the positioning of the E- payments n the minds of people.

10.   Research Question

The research consists of three major answers of the questions-

- Whether the initiatives taken by the government is enough for boosting the digital transactions growth?

- What was the impact of digital transactions on the Indian economy?
- Whether the usage of the E payment methods is higher amongst salaried class or business class?

11. Scope of the Study

This study will be conducted in Bangalore, Nagpur and Kolkata through a questionnaire and this questionnaire will be circulated through social media applications like WhatsApp etc. to ensure increased connectivity but with no physical presence. The population for the study is the working-class people of Nagpur and Kolkata.

12. Limitations of study

The study will help in finding out which among the two is more cash intensive but the result from these three cities might not give accurate results as it can vary city to city. Since there is no personal interview the with respondent it will be difficult to get trap their reaction while filling in the questionnaire.

13. Research Gap-

This research paper will provide an additional knowledge by-

- Analyzing the frequency of the transactions made by salaried and business class through E payments also by finding out which out of these is more cash intensive.
- Finding out correlation between government initiatives and increase in digital transactions.

14. Data analysis and interpretation

Objective that is to analyze the acceptance level of E- payment methods amongst the salaried class and the person who owns his/her own business the results obtained were considering 1-Never, 2- Rarely, 3-sometimes, 4- often, 5 always

City	Nagpur	Kolkata	Overall
Employee	3.9 (Often)	4.0(Often)	3.8(Often)
Businessman/woman	3.0 (Sometimes)	3.4(Sometimes)	3.2(Sometimes)
Overall	3.5(Often)	3.7(Often)	3.5(Often)

Interpretation- From the following outcomes which are the average of the responses obtained from 5-point Likert scale tool it can be seen that employees from Nagpur and Kolkata combined used e-payments often then compared to a businessman/woman.

Objective- To analyze the impact of digital transactions on variables which can boosts up the economy's growth.

Null hypothesis- Economic development is not depended upon the independent variables of cost, time, financial inclusion, transparency of e-payments

Alternate hypothesis- Economic development is not depended upon the independent variables of cost, time, financial inclusion, transparency of e-payments

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.088	.388		.226	.822
	Transparency	.129	.091	.129	1.426	.157
	Security of transaction	.270	.083	.279	3.234	.002
	Cost of transactions	-.032	.067	-.036	-.477	.634
	Financial inclusion	.398	.095	.354	4.199	.000
	Time	.217	.073	.236	2.979	.004

Dependent Variable: Economic development

Interpretation – Most of the variables except the cost of transactions shows increase in the points with the increase in economic development. The cost of transaction variable is showing that it decreases with 0.32 points in relation with economic development.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.721[a]	.519	.495	.747	.519	20.971	5	97	.000	

a. Predictors: (Constant), Time , Security of transaction, Cost of transactions, Financial inclusion, Transparency

Interpretation- The proportion of variance that can be determined by independent variables for dependent variable is 51.9% which is a good determiner of the same

ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	58.553	5	11.711	20.971	.000[b]
	Residual	54.165	97	.558		
	Total	112.718	102			

a. Dependent Variable: Economic development

b. Predictors: (Constant), Time, Security of transaction, Cost of transactions, Financial inclusion, Transparency

Interpretation- Since the significance level is P<0.001 the test is highly significant therefore null hypothesis is rejected.

Descriptive Statistics

	Mean	Std. Deviation	N
+Economic development	3.80	1.051	103
Financial inclusion	3.84	.937	103
Cost of transactions	3.50	1.195	103
Security of transaction	3.60	1.088	103
Transparency	3.70	1.046	103
Time	3.87	1.143	103

Considering the average of the responses that where received from 5 pointer likert scale of agreeableness it can summarized that sample population agree that there is increase in economic development with increase in financial inclusion, decrease in cost of the transaction, increase in security of transaction, increase in transparency and decrease in time of the transaction. According to the 3rd objective that is to analyze whether the initiatives taken by the government is boosting the use of E payments correlation analysis was done and the results were

Objective- To analyze whether the initiatives taken by government encourages people to use e-payments.

Null Hypothesis- Initiatives taken by government and people encouraged to use digital payments are negatively correlated

Alternate Hypothesis- Initiatives taken by government and people encouraged to use digital payments are positively correlated.

CORRELATION

		Do you find government initiatives helpful in attracting people to opt for e-payments? (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree)	Did the initiatives taken by government influenced you to use e- payments? (1- Strongly Disagree, 2- Disagree, 3- Neutral, 4- Agree, 5- Strongly Agree)
Do you find government initiatives helpful in attracting people to opt for e-payments?	Pearson Correlation	1	.601[**]
	Sig. (1-tailed)		.000
	N	103	103
Did the initiatives taken by government influenced you to use e- payments?	Pearson Correlation	.601[**]	1
	Sig. (1-tailed)	.000	
	N	103	103

**. Correlation is significant at the 0.01 level (1-tailed).

The correlation between the initiatives taken by government and its effect on sample population to encourage the usage of e-payments is high at 6.01. The test is highly significant since P<0.001 and is less than the given significance level of 0.01 and therefore null hypothesis is rejected order encourage the successful promotion and implementation of digital payments.

Correlations

		Economic development	Financial inclusion	Cost of transactions	Security of transaction	Transparency	Time
	Economic development	1.000	.605	.214	.520	.505	.435
	Financial inclusion	.605	1.000	.244	.410	.452	.366
	Cost of transactions	.214	.244	1.000	.206	.277	.297
	Security of transaction	.520	.410	.206	1.000	.540	.141
	Transparency	.505	.452	.277	.540	1.000	.320
	Time	.435	.366	.297	.141	.320	1.000
	Economic development	.	.000	.015	.000	.000	.000
	Financial inclusion	.000	.	.006	.000	.000	.000
	Cost of transactions	.015	.006	.	.018	.002	.001
	Security of transaction	.000	.000	.018	.	.000	.078
	Transparency	.000	.000	.002	.000	.	.000
	Time	.000	.000	.001	.078	.000	.
	Economic Development	103	103	103	103	103	103
	Financial inclusion	103	103	103	103	103	103
	Cost of transactions	103	103	103	103	103	103
	Security of transaction	103	103	103	103	103	103
	Transparency	103	103	103	103	103	103
	Time	103	103	103	103	103	103

15. **Conclusion-**

According to the data analysis and interpretation of the data obtained from the prepared questionnaire it was found that the employee used e-payments more often than the businessman/woman. It was also concluded that the overall usage of e-payments in Kolkata was higher than in Nagpur but by a small margin. After doing regression analysis on economic development due to usage of digital payments it was found out that there was actually growth in economy with usage of e-payments because of its advantages of reduction in cost and time, increase in transparency and financial inclusion. A correlation analysis helped to find out that the government initiatives were actually encouraging people of Kolkata and Nagpur to use digital payments.

16. **Suggestions and recommendations**

The present study investigates the impact of digitalization on Indian economy. The study suggests
that the greater transparency, accountability and the security measures are the key determinants which are going to influence on the success of dream project of the government i.e. Digital India, so the government has the greater responsibility to ensure to make digitalization much more transparent and cost saving.

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