



# A study on Impact of COVID on Digital Transactions in Kendrapara District of Odisha

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## Abstract:

The introduction of the internet and mobile banking encouraged people to do digital financial transactions. The innovation of e-wallets further facilitated digital transactions. When the government went for demonetization, it encouraged cashless transactions. The outbreak of COVID 19 compelled the people to stay at home and created the need for digital transactions. The study is done to analyze the demographic profile of people of Kendrapara doing digital transactions, the opinion of people regarding the problems of doing digital transactions, and to examine the impact of the demographic characteristics change in the amount of the digital transaction during COVID in the Kendrapara district of Odisha which has a large rural population. The study is based on a primary source of data. Primary data have been collected from the respondents with the help of a questionnaire. A sample of 131 respondents has been taken from the Kendrapara district of Odisha, including 96 respondents through online mode and 35 respondents from offline mode. Out of 131 respondents, two are not using the internet, and only 83 do digital financial transactions. A multinomial regression model is used to know how the change in the amount of digital financial transactions effected by the results of the demographic factors. For executing the multinomial regression model, SPSS software is used.

It was found from the multinomial regression model that age, educational qualification, occupation, and monthly income are the demographic factors that have an impact on the change in the digital transaction amount from the pre covid period to during the covid period.

Keywords: COVID-19, Digital Transactions, Demographic Factors, Problems of doing digital transactions

## 1. Introduction

Digital transaction means the cashless transaction that takes place without cash or reducing payments in cash. In other words, instead of cash, digital payments are made to settle the payments. Cashless transaction in an economy does not mean a cash shortage; rather, it indicates creating a culture for people to settle the transactions digitally. In a modern economy, money moves electronically. Hence, the spread of digital payment culture and the expansion of infrastructure facilities are needed to achieve the goal.

A digital society describes an economic state whereby financial transactions are not with money in physical banknotes or coins but instead through the transfer of digital information (usually an electronic representation of money) between the transacting parties. During the 1990s, electronic banking facilitated more non-cash transactions in developed nations. Digital payment methods had become well established in various countries across the world by the 2010s. Online platforms like PayPal, payments by smartphone or electronic cards, digital wallet systems, electronic banking, and online bill payment systems helped people go for cashless transactions.

The digital India program is a program of the government of India which has started with an intention to transform India into a digitally empowered knowledge-based economy. This program involves cashless transactions, which helps in bringing transparency while doing digital transactions in India. In this digital environment, the Covid-19 pandemic changed the lifestyle and affected the way of doing transactions. COVID-19 pandemic has become one of the significant problems in the world economy and financial markets. With the effects of this pandemic of coronavirus outbreaks, India, like many countries around the world, is taking many steps, including blocking the country as a whole; Universal travel limit; Closing public places and travelling; also urge the public to maintain the social distance and work from home. From the effects of the Covid -19 pandemic, there is further increasing the need for digital transactions, i.e., E-cash transactions. However, in the present situation, digital transactions have become necessary and, many areas and sectors are participating in the digital transactions revolution.

"A good start is halfway done" - this statement applies to the digital transactions in India. Although challenges are many, the government is already preparing to utilize this pandemic situation for a safer and brighter future for digital transactions system without using the physical transfer of money.

## 2. Need and Significance of the Study

Digital transactions system plays a vital role in day-to-day life. It helps bring transparency and assist in mobilizing the funds, which contribute to the economy's growth. It is considered as being a convenient mode for digital transactions, which prevents money laundering and corruption. Today every nation wants to be fully digitalized, which will empower society in a better manner. The motive behind this concept is to build a participative, transparent and responsive system. However, India is characterized by diversities; unlike developed nations, the infrastructure and facilities are still not reaching everywhere. It is not easy to initiate the system successfully without an understanding of the challenges. Hence, this system is a new initiative, but in the Kendrapara district, 90 per cent of the population lives in rural areas. In Indian rural areas, there is a bottleneck in information and communication technology infrastructure, which is a prerequisite for digital

transactions. So, the current research aims to study digital transactions by the people of the Kendrapara district and the impact of Covid on their digital transactions.

### 3. Literature Review

Mohd and Pal (2020) have made a study in their article to know the level of awareness, challenges, and benefits of cashless transactions among the citizens of the Kangara district of Himachal Pradesh. The study found that the respondents face many problems while making cashless transactions, such as no security, poor network connectivity, less digital awareness, problems of illiteracy, problems in making small payments, etc. Moreover, there is less awareness of the latest modes of digital payments.

Ranjith et al. (2021) studied consumers' perceptions concerning online and digital payments and the safety of these transactions in this world of connected technologies. Their study was qualitative and also used literature reviews to analyze the concept of digital transactions. The reviews delve insights into the various challenges and advantages of using digital transactions. The findings revealed that digital transactions are accepted in India, and usage is increasing year by year.

Divyapriya and Velanganni (2020) have carried out a study to determine the usefulness of digital payments in Chennai. This study used the convenient random technique for data collection from 100 digital banking users. It was revealed from the study that debit cards are the highest means for digital payments by users of digital transactions. Advancement and Technological Banking Factor is the eminent aspect of digital payment satisfaction, which holds aspects like Retrieve payment profile, regulation of Banks norms, and billing agreements.

Panjaitan et al. (2020) studied the protection of consumers in e-commerce activities in the current digital industrial era, which ranks third in Indonesia's five largest online shopper cities and has the highest number of internet users. It was concluded from the study that with a large number of internet users and online shoppers in Medan, the government must improve information technology-based infrastructure and e-commerce traders. Digital transaction activities should also be supported by strengthening the internet network security.

Sudiksha Shree et al. (2020) have studied how factors such as 'perception' and 'trust' in digital payments and experience with online fraud affect consumers' payment behaviour. At the same time, demographic factors like age, gender, and income are relevant factors that determine this choice; a person's usage of digital payment methods is influenced by the perception of these instruments and her trust in the overall payments framework and banking system in general. It was found that the degree to which experience with online fraud deters usage of digital payments varies with the purpose of the transaction.

Rajat and Apurva (n.d.) studied the different types of digital payment systems in India and the rise of transactions through the Digital Medium. It was revealed from the study that there is an impact of Demonetization of Five Hundred- and Thousand-Rupee notes on the rise of Digital Payments in India.

Sudha et al. (2020) studied the impact of the COVID – 19 outbreaks on digital payments. This study aimed to determine the effect of Covid-19 on Digital payments, compare the respondents' buying behaviour before

lockdown and during the lockdown, and analyze the mode of payment and the problems they face. It was concluded that the closure of businesses and the lockdown have resulted in lower transaction volumes overall. Jain et al. (2020) have studied the impact of the COVID – 19 on E- Wallet's payments in the Indian economy. The objectives of this study were to study the impact of covid-19 on e-wallet in India, how it will E-commerce grow and affect the payment industry, and change the transaction Volume. It was concluded to choose safe and easy digital payment methods and follow preventive measures to combat the epidemic collectively.

#### **4. Objectives and Hypothesis**

##### **4.1. Objectives**

The followings are the objectives of the current study:

1. To analyze the demographic profile of people of Kendrapara doing digital transactions.
2. To evaluate the effect of demographic factors on change in the digital transactions amount among people before and during the COVID period.
3. To examine the opinion of people regarding the problems of doing digital transactions.

##### **4.2. Hypothesis**

The null hypothesis for the second objective is:

There is no combined effect of demographic factors on change in digital transactions among people before and during the COVID period.

#### **5. Research Methodology**

The primary purpose of this research paper was to access the opinion of respondents of the Kendrapara district regarding awareness of digital transactions, change in the number of digital transactions, and problems faced by using these transactions. The study is based on a primary source of data. Primary data have been collected from the respondents with the help of a questionnaire in February and March in pre and during the COVID period. A sample of 131 respondents has been taken from the Kendrapara district of Odisha, including 96 respondents through online mode and 35 respondents from offline mode. Out of 131 respondents, two are not using the internet, and only 83 do digital financial transactions. For the analysis of the data, the number of frequencies is counted to know the demographic profile of respondents on digital financial transactions and problems facing while doing the digital financial transactions, and a multiple logistic regression model is used to know how the change in the amount of digital financial transactions effected by the results of the demographic factors. For executing the multiple logistic regression SPSS software is used.

## 6. Analysis and Discussion of Results

Of the 131 respondents, 83 respondents make a digital financial transaction. For the following first objective of the study, their demographic profile is analyzed.

Objective 1: To analyze the demographic profile of the people of the Kendrapara district doing digital transactions.

The following table 1 shows that the demographics profile of sample respondents who are doing digital transactions

**Table 1: Demographics Profile of Sample Respondents**

Sr. No.	Age	Frequency	Percentage
1	20 and Below	35	42.17
2	21-40	44	53.01
3	41-60	2	2.41
4	Above 60	2	2.41
	Total	83	100
Sr. No.	Gender	Frequency	Percentage
1	Male	58	69.88
2	Female	25	30.12
	Total	83	100
Sr. No.	Occupation	Frequency	Percentage
1	Government Employees	14	16.87
2	Private Employees	11	13.25
3	Self Employed	12	14.46
4	Students	43	51.81
5	Others	3	3.61
	Total	83	100
Sr. No.	Educational Qualification	Frequency	Percentage
1	Degree/Diploma	33	39.76
2	School	15	18.07
3	Post Graduate	22	26.51
4	Professional	11	13.25
5	Others	2	2.41
	Total	83	100
Sr. No.	Income	Frequency	Percentage
1	Upto 20,000	35	42.17
2	20,001 to 40,000	12	14.46
3	40,001 to 60,000	24	28.92

4	60,001 & above	12	14.46
	Total	83	100

Table 1 shows the demographic analysis of the respondents based on their age, gender, occupation, educational qualification and income. After analysing the respondents' demographic profile, the study is made to know the effect of the demographic characteristics on the change in digital transaction amount due to the COVID pandemic, which is the second objective of the study. The 2nd objective is:

Objective 2: To evaluate the effect of demographic factors on change in the digital transactions amount among people before and during the COVID period.

It is found that most of the respondents are male and belong to the age group of 21-40 years. Most of the respondents are students, i.e., 51.81 per cent, and most people have a degree/ diploma with a monthly income maximum of 20,000.

For this second objective, the hypothesis is:

There is no combined effect of demographic factors on change in digital transactions among people before and during the COVID period.

The multinomial logistic regression model is used for testing the above hypothesis. For this model, the dependent variable is changed in digital transaction amount coded as 1 for the increase in digital transaction amount during the covid period compared to pre covid period, 2 for the decrease in digital transaction amount during the covid period compared to pre covid period and 3 for no change in digital transaction amount during and pre covid period. The independent variables are age, gender, educational qualification, occupation and monthly income. All the independent variables are categorical. The multiple regression model is executed using SPSS software, and three essential output tables – Goodness of Fit, Pseudo R Square, and Likelihood Ratio tests are produced below.

The Goodness-of-Fit table provides two measures that can be used to assess how well the model fits the data, as shown below:

**Table 2.1: Goodness-of-Fit**

	Chi-Square	df	Sig.
Pearson	39.728	58	.968
Deviance	39.880	58	.967

The first row, labelled "Pearson", presents the Pearson chi-square statistic. The other row of the table (i.e., the "Deviance" row) presents the Deviance chi-square statistic. The above goodness-of-fit table shows that the p-value is more significant than 0.05 for both the chi-square statistics and the model is, therefore, statistically significant. Based on this measure, the model fits the data well, and thus the null hypothesis is rejected.

In multinomial logistic regression, pseudo R2 measures are considered similar to R2 in ordinary least-squares linear regression. The following table 2.2 shows the results of Pseudo R-Square.

**Table 2.2: Pseudo R-Square**

Cox and Snell	.574
Nagelkerke	.652
McFadden	.403

SPSS Statistics calculates three Pseudo R2 measures - Cox and Snell, Nagelkerke and McFadden. Table 2.2 shows the values of Pseudo R2. All the measures are greater than 0.4, which is significant in econometrics. It is observed that the overall model is fit. However, to understand the significance of the relationship between the dependent variable with each independent variable, the results of Likelihood Ratio tests are studied. The values of Likelihood Ratio tests are presented in table 2.3.

**Table 2.3: Likelihood Ratio Tests**

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	Df	Sig.
Intercept	63.633	0.000	0	
Age	76.708	13.075	6	.042
Gender	64.380	.747	2	.688
EducationalQualification	90.161	26.527	8	.001
Occupation	78.693	15.060	8	.058
MonthlyIncome	81.715	18.082	6	.006

The Likelihood Ratio Tests table 2.3 shows the statistical significance of the independent variables. Table 2.3 shows that gender (the "gender" row) is not statistically significant because its p-value is 0.688. Occupation is not statistically significant at a 5% level of significance, but it is significant at a 10% significance level. The other independent variables like age, educational qualification, and monthly income are statistically significant because p values are less than .05.

For studying the problems faced by the respondents, which is the third objective of the study, frequency counting is done from the responses collected through the questionnaire. The objective is:

Objective 3: To examine the opinion of people regarding the problems of doing digital transactions.

The various problems faced by respondents while making the digital transactions has been presented in table 3.

Table 3: Responses of respondents regarding the Problems in doing the digital transactions

Sr. No.	Problems	Frequencies	Percentage
1	No Problems	25	30.12
2	Security Only	17	20.48
3	Poor Internet Connectivity Only	30	36.14
4	Security and Poor Internet Connectivity	11	13.25
	Total	83	100

It is evident from the above table – 3, that majority of respondents i.e., 36.14 percent have the only problem of poor internet connectivity while making the digital transactions.

## 7. Findings of the study

- 1) Out of 131 respondents, 83 respondents are aware about the digital transactions.
- 2) The majority of the respondents of this study are students (51.81%), and educational qualifications are degree/diploma (39.76%) and are having monthly income in the range of up to 20,000 (42.17%).
- 3) Overall, there is a combined effect of age, gender, educational qualification, occupation and income on the change in the digital transaction amount from the pre covid period to during the covid period. However, the study of individual demographic characteristics shows that gender has no statistically significant impact on such change.
- 4) Most of the respondents (36.14%) face poor internet connectivity in doing digital transactions.

## 8. Conclusion

The digital India program is a flagship program 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 roles of digital India. As part of promoting digital transactions and converting India into a cashless society, various digital payment modes are available. The study found that people of the Kendrapara district, where the rural belt is significant, are highly aware of digital transactions. The weak information and communication technology network disrupt the internet connectivity, and the poor internet connectivity is the major problem for the people of the Kendrapara district in doing digital transactions.

The internet service providers and government need to strengthen internet connectivity and penetrate the use of the internet. The awareness is to be increased for making digital transactions by assuring the security of such transactions.



## Reference

Mohd.,S. and Pal, R. (2020), “Moving from Cash to Cashless: A Study of Consumer Perception towards Digital Transactions”, PRAGATI: Journal of Indian Economy, Vol. 7 (1), Jan-Jun 2020, pp. 1-13.

Ranjith P.V., *et.al.* (2021), “A literature study of consumer perception towards digital payment mode in india”, PSYCHOLOGY AND EDUCATION (2021) 58(1): 3304-3319, ISSN: 00333077.

Sudha.G., *et.al* (2020), “Impact of Covid-19 Outbreak in Digital Payments”, INTERNATIONAL JOURNAL FOR INNOVATIVE RESEARCH IN MULTIDISCIPLINARY FIELD ISSN: 2455-0620 Volume - 6, Issue - 8, Aug – 2020 Monthly, Peer-Reviewed, Refereed, Indexed Journal with IC Value: 86.87

Jain, A. *et.al* (2020), “ The Impact of COVID-19 on E-wallet’s Payments in Indian Economy”, International Journal of Creative Research Thoughts (IJCRT), Volume 8, Issue 6 June 2020, ISSN: 2320-2882.

“Preparing for the Post COVID-19 World: Implications for Global Payments”, Banking & Financial Services, TATA Consultancy Services.

Divyapriya, N. and Velanganni, R. (2020), “Digital payment: empirical study on usage of digital platform in making digital payments”, Malaya Journal of Matematik, Vol. S, No. 2, 3586-3589, 2020.

Panjaitan, H. *et.al* (2020), “Consumer protection in digital transactions in Medan”, IOP Conf. Series: Earth and Environmental Science 452 (2020) 012037.

Sudiksha, S. *et.al.* (2020), “ Digital payments and consumer experience in India: a survey based empirical study”, Journal of Banking and Financial Technology, <https://doi.org/10.1007/s42786-020-00024-z>

Rajat, R. N and Parasar, A., “ An Analysis on the Rise in Digital Transactions in India”, <https://ssrn.com/abstract=3660907>.