

# CASHLESS TRANSACTIONS THROUGH E-COMMERCE PLATFORMS IN POST-COVID-19

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#### ABSTRACT

Payments are made or received without the use of hard cash in cashless transactions. Going cashless eases life with authentication and formalized transactions. The convenience of making a financial transaction is likely the most compelling reason to go digital. Cashless transactions include payments made through cheque, DD, online transfer via RTGS or NEFT, credit/debit card, E-wallets, mobile wallets, UPI Apps, Gift cards, etc. One won't need to carry a large amount of cash and not wait in big lines for withdrawals, it's also a safer and more convenient way to spend. In India October 2016 Mastercard launched the cashless initiative and in November 2016 PM Narendra Modi announced a cash-free economy in India. According to Razorpay digital payment transactions in India raised 78% after covid-19. With the growth of 26.5% in the e-commerce market in India, digital payment for e-commerce and retail increased 260% after the second wave of covid-19. The main objective of the study is to find out the relationship between digital payment and e-commerce business with the analysis of efforts toward cashless transactions. This study also focuses on factors responsible for the e-commerce boom in India. With the using convenience sampling method, a structured questionnaire was used to analyze the objective of the study. SPSS-20 was used for factor analysis. The present study resulted in the pandemic situation having expanded the importance of e-commerce shopping trends among the buyers. Electronic shopping had made cashless transactions supportive, monetary, and ideal for customers to purchase from anywhere and anything during the pandemic situation. Webbased shopping or e-shopping customers consider this as it saves time, is more convenient, wide variety of products has easy price comparisons, and has no crowds.

Keywords: E-Commerce, Covid-19, Cashless Transactions, Pandemic

## **1. INTRODUCTION**

A cashless society describes an economic situation in which financial transactions are not conducted with money in the form of physical banknotes or coins, but with digital information (usually an electronic representation of money) between the transacting parties, a transfer takes place.<sup>[1]</sup>

Digital payment or you can say the cashless transaction is not a new concept in India. The boom of digital payments started even before the Covid pandemic. For this, the Government of India started a program called Digital India intending to transform India into a digitally empowered society and knowledge economy. "Faceless, Paperless, Cashless" is one of the stated roles of Digital India.

As a result of the lockdown period and other restrictions imposed by the Government of India during this COVID-19, mobility across India has been reduced. Everyone was compulsorily at home, and because of this, digital transactions started being considered during this period. Data from NPCI (National Payment Corporation of India) shows that digital payments have returned to pre-Covid-19 levels as people continue to prefer contactless payments. "The Covid-19 pandemic has fast-tracked the digital transformation of the payment ecosystem in India. In addition to increasing broad-based use of technology, the pandemic has fuelled the proliferation of digital modes of payment, leading the country towards 'low-cash' alternatives," the report said. Overall, the total digital transaction

[1]

https://www.researchgate.net/publication/326836292\_A\_Study\_On\_Public\_Awareness\_And\_Level\_Of\_Adoption\_Of\_Various\_Modes\_Of\_Cashless\_Transaction\_WITH\_SEPCIAL\_REFERE NCE\_TO\_COIMBATORE\_CITY



volume in 2020-21 was 4,371 crores as against 3,412 crores in 2019-20, which testifies to the resilience of the digital payment system in the pandemic situation.<sup>[2]</sup>

E-commerce means buying and selling goods and services online, which can be either B2B (Business to Business), B2C (Business to Customer), C2C (Customer to Customer), or C2B (Customer to Business). The Indian e-commerce market has been one of the biggest beneficiaries of the pandemic, as containment measures introduced millions to facilitate online shopping and encourage seasoned online shoppers to buy more. The compulsion of social distancing throughout the year, massive smartphone base, and reliable broadband galvanized e-commerce uptake beyond metros, deep in smaller towns and cities, bringing an element of 'trust in e-commerce. The outbreak necessitated the use of new technology tools and non-contact formats to meet unprecedented demand. These changes in consumer buying behavior are here to stay post-pandemic said analysts. The pandemic brought about a "structural shift" in shopping behavior with more and more customers and businesses relying on e-commerce.<sup>[3]</sup> Following is the chart showing the pre, post, and future forecasting of the E-commerce business in India.



# Market size of e-commerce industry across India from 2014 to 2018, with forecasts

#### Sources

#### Additional Information:

India Brand Equity Foundation; Various sources Various sources (Media sources); BCG; Bain & Company; Morgan Stanley; 2014 to 2018 (Media sources); BCG; Bain & Company; Morgan Stanley

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#### Source: World Economic Outlook, International Monetary Fund, April 2021.

<sup>[2]</sup> https://www.thehindubusinessline.com/money-and-banking/covid-19-pandemic-fuelled-digital-payments-modes-rbi-annual-report/article34657571.ece [3] https://economictimes.indiatimes.com/industry/services/retail/lockdown-proved-inflection-point-for-e-commerce-in-india/articleshow/81665377.cms?from=mdr

#### Impact of Covid-19 on E-commerce business:

PUBLIC POLICY & GOVERNANCE

According to the report by anticommerce, an E-Commerce supply chain service provider, the E-commerce industry saw 31% growth in orders from July to September 2020, realizing extraordinary demand during the Covid-19 pandemic.



Gross domestic product (GDP) per capita, measured at constant prices at purchasing power parity; 2017 International Dollar. The GDP per capita of each series is normalized to 100 in 2011. We use the populationweighted average as the aggregation method.

Government and other regulators are emphasizing digital transactions like UPI (Unified Payment Interface), NEFT (National Electronic Fund Transfer), RTGS (Real Time Gross Settlement), IMPS (Instant Payment Service), etc. to reduce the use of physical cash. Because physical cash has a higher risk of spreading COVID-19 transmission.

## **2. LITERATURE REVIEW**

Kotkowski et al. (2021) found that consumers are using cash transactions more frequently than before the pandemic and this points to the issue of financial inclusion. Fearing using cash, consumers are changing their buying behavior during this pandemic. A country-specific factor plays an important role and because of that, payment patterns differ between countries.

Saxena (2021) analyzed new growth models of e-retail and supply chains during the pandemic period. Also, companies have started new digital marketing. People spend more on health, nutrition, and wellness than on buving plush products and premium goods, so companies are now looking at their business strategies. This pandemic gives a reason for the existence of a new start-up.

Sunitha et al. (2021) concluded that digital transactions are more transparent, accountable, and scalable and accountable as more and more people are using cashless transactions nowadays, although there is also a need for cyber security. Nowadays all the small sellers are using this electronic transaction, so it is necessary that it can be easily accessed by them.

Aggrawal et al. (2021) investigated those mobile payments are a significant growth after demonetization. Digital payments are more acceptable and robust in metro cities as compared to rural areas, so the government should focus on them. This can reduce corruption and black money in cashless payments. In India, the number of users using smartphones, the internet, and digital payments has increased significantly. Now the government should focus on innovations in digital payments such as AI (Artificial Intelligence), and IT (Internet Technology) to achieve



collaboration between consumers and the government.

Tripathi (2020) surveyed how factors such as saving time, cashback and discounts, convenience, detailed records, reducing the risk of theft, tracking your expenses, and creating a cashless economy influence consumer attitude toward mobile payment applications. Research also indicates some factors such as barriers for consumers to mobile payment applications such as transaction fees, not knowing how to use, digital payments not being accepted everywhere, transparency, habit, and trust.

Sharma (2020) researches the e-commerce market in India after the COVID-19 pandemic. The results show that the popularity of e-commerce grew by 17% after the advent of the COVID-19 pandemic and is expected to continue to grow, with sectors such as electronics, fashion and accessories, health, and pharmacy, especially with average growth. performed well. of 133% in sales.

Rahman et al. (2020) concluded that cashless transactions are based on a conceptual framework concerning sociocultural and various unforeseen situations. In an e-commerce platform, the cashless transaction is a more suitable option to improve the economy in COVID 19.

Nivedita et al. (2020) found that the covid-19 pandemic not only increases the output of the e-commerce business but also increases the tax on the other hand, so the selling price is as difficult to deal with as before. Due to this pandemic, the e-commerce business has to face many hurdles like late delivery and all. The government should take some preventive measures to reduce the barriers to the e-commerce business.

Rathore et al. (2019) examined whether the government should take preventive action for cashless transactions to protect them from cyber-attacks. Now people are gradually switching to digital mode as people were more cashfocused before the pandemic. The e-payment transaction system is now accepted by all businesses and street vendors and is running faster than ever.

#### 3. OBJECTIVE OF STUDY

- To find out the relationship between digital payment and e-commerce business. ≻
- To figure out the efforts towards the cashless transaction. ≻
- To Identify and examine the factors responsible for the E-commerce boom in India post-COVID-19.  $\triangleright$

## 4. RESEARCH METHODOLOGY

#### Sources of data:

The data was collected through a questionnaire in Google form.

#### Sample Size:

A sample of 187 respondents such as the public in Ahmedabad is taken to this study.

#### Sampling technique:

The convenience sampling method is used for this study.

#### Area of Study:

The survey is conducted among the public in Ahmedabad city.

#### Limitation of Study:

- This study is limited only to 187 respondents only.  $\geq$
- Though the respondents are the public in Ahmedabad city opinion was able to collect only from the convenient ⊳ people.

#### **Tools & Technique**

Factor Analysis  $\geq$ 



# 5. DATA ANALYSIS

#### Chart 1: Gender



This pie chart shows that from the 187 respondents the females are using the highest cashless transactions i.e. 97 as compared to males 90.





This chart shows that the people who belong to the age group of 18-24 years are using the highest cashless transaction through E-commerce i.e., 46% of respondents and the lowest 1% of respondents belong to the above 60 years.



#### Chart 3: Category



This graph shows the result of the survey in which the students are the highest category (36%) of using cashless transactions through E-commerce transactions. This graph also represents the Government employees are lowest i.e., only 4%.

**Chart 4: Income** 



This graph is representing the person who has an income below 1 lakh using the highest cashless transaction through E-commerce simultaneously the lowest income group range is between 4 lakh to 5 lakh.



#### Chart 5: Do you purchase the product online?



This Graph Shows the results of a survey in Which 150(80%) people purchase an online product, and 37(20%) people are not purchasing an online product.





This bar chart shows that 94 respondents are that who don't want to touch their money during this pandemic this reason may increase the cashless transaction during this pandemic.

## Chart 7: Type of Products



This chart shows that the people are buying Fashion and accessories products through E-commerce i.e., 111 Respondents and the second-highest product is Electronics and IT Equipment i.e., 93 Respondents.

#### **Chart 8: Payment methods**



The Bar chart shows that 109 respondents are using Cash on Delivery while they are purchasing an online product and 88 respondents are using UPI for payment.



#### **Chart 9: Most preferred Payment methods**



This pie chart shows that the people most prefer Cash on Delivery i.e., 36% while they are purchasing an online product. And the debit card has followed the cash on delivery i.e., 29%. and the other mode of payment is comparatively less preferred.

#### Chart 10: Digital payment can prevent Covid-19



This chart shows that 86 % of people are thinking that digital transactions can prevent them from this Covid-19 situation.





#### **Chart 11: Overall Analysis of Cashless Transactions**

## 6. RESULTS AND FINDINGS

#### **Table 1: Total Variance Explained**

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %		% of Variance	Cumulative %		% of Variance	Cumulative %
1	4.603	46.030	46.030	4.603	46.030	46.030	3.541	35.408	35.408
2	1.143	11.435	57.465	1.143	11.435	57.465	2.206	22.057	57.465
3	.834	8.338	65.803						
4	.733	7.333	73.136						
5	.665	6.649	79.785						
6	.538	5.380	85.165						
7	.468	4.679	89.844						
8	.398	3.976	93.819						
9	.336	3.360	97.180						
10	.282	2.820	100.000						

The above table shows the total variance explained by each component i.e., Statement. We can see that 57.465% of



the variance is explained by two components. These components are nothing but the two factors in which all ten statements will be classified. The Principal Component Analysis method was used in SPSS for factoring. For the classification of statements into factors, the Varimax rotation method was used. The following table shows the classification of all statements into two factors.

	Compone	Component		
	ĺ	2		
CONVENIENT	.671	.279		
LESS COSTLY	.233	.779		
SAFE AND SECURE	.646	.259		
EASY AS COMPARED TO PAPER MONEY/ COINS	.796	.225		
LOW SERVICE CHARGE	.282	.781		
EASY TO MAINTAIN	.636	.360		
CARD IS LOST OR STOLEN	.139	.738		
ALERT TO SECURITY	.748	001		
PAY WITHOUT CASH	.659	.218		
MORE WILLING	.699	.266		
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 3 iterations.				

#### Analysis:

Factor analysis was run on SPSS. Two factors were formed by SPSS according to factor Loading. Classification of factor wise statement is as under:

#### Factor 1:

- 1) Cashless transactions are convenient for you
- 2) It is safe and secure
- 3) It is easy to compare to paper money/coins
- 4) It is easy to maintain digital transaction activity
- 5) A digital customer has to be alert to security issues when using digital transaction
- 6) During the pandemic, I am more willing to pay without cash than beforehand
- 7) During the pandemic, I am more willing to shop at a polish online shop or retail service

#### Factor 2:

- 1) It is less costly
- 2) It provides a low service charge
- 3) The problem will not arise if your card is lost or stolen

#### Names were given to factors as under

Factor 1: Preferable Factor 2: Economic

#### 7. CONCLUSION

The E-commerce sector in India has made critical roots in the metropolitan economy in a record time frame. With COVID - 19 provoked a change in customers immediately, the Indian economy is definitively set up for a dumbfounding improvement in the E-Commerce sector. Coronavirus has expanded the importance of electronic shopping among buyers. Past appraisals in this space have had the decision to support the disclosures of this examination. Electronic shopping has made it supportive, monetary, and ideal for customers to purchase from any spot and at whatever point of time during this pandemic time. Web-based shopping has brought a wide extent of things under one umbrella which has improved it for customers to pick what they need.



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