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# I DIGITALIZATION IN INDIA: TRENDS AND CHALLENGES

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#### ABSTRACT

Digitalization is the method of changing information into a digital form. Currently, India ranks 36<sup>th</sup> at international levels, in internet inclusion (COAI, 2018). In August 2017, India's broadband penetration was 23 percent. Since 9<sup>th</sup>November 2016 people in urban areas started to prefer net banking, credit/debit card, e-wallet/mobile app, cheque (NPCI, 2017). In 2016-17, India's digital payments increased to 55 percent; against 28 percent in 2016 (NITI Aayog, 2018). The first section of the paper concentrates on studying the concepts of Digitalization. The second section identifies the digital payments in India, followed by the digital initiatives undertaken by the Government of India and concludes.

Keywords: Digitalization, Digital Payments, Digital Technology, Indian Economy

#### INTRODUCTION

Digitization is when varied forms of information are transformed into a single binary code. Convenience, Discount/Cashback rewards, Easy tracking of spending- Digital payments are completely traceable and can be reconciled. The disadvantages are: Security (risk of identity theft), poor internet connectivity, risk of fraud, high costs, lack of technical knowledge especially in the rural areas Dang & Ali, 2018). Despite the unused potential, India already is the second largest online market worldwide. The majority in India are mobile phone internet users, who take the benefit of cheap substitute to costly landline connections which need desktop and infrastructure.

# LITERATURE REVIEW

Digitalisation is a buzz word of the modern era. Numerous researchers have conducted studies on this topic. Few studies are presented here:

Yoo *et al.*, (2012) analyses the reprogrammability of digital technology which are characterized by convergence and generativity. The researcher finds the significance of combinatorial innovation. Digital technology helps the firms to introduce new commodities and services.

Budhiraja, Kaur & Vashishta, (2017) concentrates on various benefits that Indian economy is getting due to digitalization. The findings reveal that digitalization boost up cashless transactions all over the India and worked as a helping aid during time of demonetisation, it also decreased the need of paper in all organization and different sectors. Digitalization is the most competent method of fully utilizing the potential of Indian youth which will act as catalyst in development of Indian economy. Agrawal & Sen (2017) concentrates on the developmental role in the economy, emphasizing on the microfinance industry, innovations in distribution, infrastructure and education, new technologies like mobiles, and the Aadhaar scheme. Ujjivan, the microfinance institutions manage operations through handheld devices like mobile phones. EShakti enables maintenance of records of SHGs in electronic form and creation of MIS.

### **RESEARCH METHODOLOGY**

The present research paper is descriptive in nature. The data is collected from various reports, journals and articles. Percentage method is used in the study. Line graphs are used to represent the data.

### Objectives

- 1. To identify digital transactions in India.
- 2. To study the digital initiatives carried out by the Government of India.

#### **Digital Payments in India**

The digital payments are classified into cash-like payment system and cheque-like payment system. M-Wallets and Mobile Banking can operate through bank account with the use of banking apps or browsers. The examples of few modes of payment are given below:

- (a) NEFT & RTGS: Help one-to-one and business-tobusiness funds transfer.
- (b) Plastic Money: Over 750 million cards are in circulation.
- (c) BHIM: This app enables the user to transfer money by using a mobile number.

The table 1 given below shows the various mode of payment that can be done using internet.

	DEBIT / CREDIT CARD	RTGS / NEFT	IMPS	UPI	USSD	E-WALLET
SUITABLE FOR	Online/offline mer- chant sale.	High value online transactions.	Instant transfer	Instant transfer	Feature phones without Internet connectivity	Small-ticket transactions.
TRANSACTION LIMIT	Set by card issuer	No upper limit, minimum ₹2 lakh, Up to ₹10 lakh, minimum ₹1.	₹2 lakin per day	₹1 lakh	₹5.000	₹20,000 per month (₹1 lakh fo KYC-compliant wallet holders).
DETAILS REQUIRED	Card number CVV Expiry date	Account number Password Beneficiary registration IFSC code	Account number Password Beneficiary registration IFSC code	VPA (virtual payment ID) of recipient, m-Pin.	Only Aadhaar number, IFSC or code allotted by banks on registration	Login ID
COST	Debit cards: Up to 0.75% for transactions up to ₹2,000; up to 1% for transactions above ₹2,000. Credit cards: around 2.5% per transaction	RTGS: Up to ₹55 per transaction. NEFT: Up to ₹25 per transaction.	₹5-15, depending on transaction amount.	Less than 50 paise per transaction.	As levied by the telecom operator.	Only if you transfer money from your wallet into your bank account.

Table 1: Various Modes of Digital Payment

The digital buyer penetration in India increased by 13.5 percent from 2014 to 2016 and in 2018 the buyers purchasing online is likely to grow further. In the table 2, the volume of RTGS touched about 9.54 million in April 2017 as compared to 8.33 million in April 2016 witnessing growth of 14.6 percent. In April 2017, the total value of digital payments touched 1, 11,743.70 million as compared to 86,459.34 million in April 2016 registering a growth of 29.2 percent. This undoubtedly shows the tremendous improvement in various modes of digital payments after demonetization.

Digital Payment System Indicators							
Month/Year	Item	April			% Change 2017/ 2016	% Change 2016/ 2015	
		2015	2016	2017			
Volume (Million)	RTGS	7.90	8.33	9.54	14.6	5.4	
Value (Rupees Billion)		82,958.17	86,459.34	1,11,743.70	29.2	4.2	
Volume (Million)	- EFT/NEFT	83.53	111.84	143.17	28.0	33.9	
Value (Rupees Billion)		6,043.58	8,324.52	12,156.17	46.0	37.7	
Volume (Million)	Immediate Payment Service (IMPS)	12.37	26.78	65.08	143.0	116.6	
Value (Rupees Billion)		100.89	210.44	562.06	167.1	108.6	
Volume (Million)	Credit Cards	57.74	73.42	107.06	45.8	27.2	
Value (Rupees Billion)		181.51	230.11	333.76	45.0	26.8	

Volume (Million)	Debit	696.11	851.68	928.32	9.0	22.3
Value (Rupees Billion)	Cards	2,115.58	2,400.13	2,543.41	6.0	13.5
Volume (Million)	M-Wallet	67.05	48.76	320.57	558.0	-27.3
Value (Rupees Billion)		11.96	22.93	74.42	224.6	91.7
Volume (Million)	Mobile	19.75	48.67	106.18	118.2	146.4
Value (Rupees Billion)	Banking	188.62	524.83	1,612.17	207.2	178.3

Source: Database of Indian Economy, RBI

#### **Digital Initiatives in India**

1. Retail e-commerce in India (in million US dollars): India is growing immensely in e-commerce market. Millions of new internet users take benefit of mobile connections to shop. In 2016, through the digital channels the physical goods sold in India was about 16.07 billion US dollars in revenues whereas in 2017 it increased to 20.05 billion US dollars (IAMAI, 2017).

2. Aadhaar: It is the main attribute of 'Digital India', which provides every citizen with Aadhaar number. The intention of this initiative is to improve the welfare of the society and to encourage good governance.

3. Mobile Seva App store: Public services are provided through mobile devices.

4. Bharat Broadband Network (BBNL): To provide broadband network to around 2,50,000-gram panchayats.

5. Bharat Interface for Money (BHIM): Using this app payment transaction has become very effortless and quick. (Ministry of Electronics & Information Technology, Government of India.

## CONCLUSION

Although since 9<sup>th</sup> November 2016 the day after the notes ban was announced many people in urban areas have started preferring internet banking, debit or credit cards, cheque for the higher payments but in villages still the internet dissemination is very low. Internet cost is also high. Internet exchange infrastructure is not properly developed in villages; the tele-density in villages should be improved. Internet connection should be made as a social good. Wi-Fi facilities can be made easily available especially to the people in villages. Smartphone should be sold at affordable prices to meet the needs of people in rural India.

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