Dr. Anjali Sane Assistant Professor Associate Dean MIT World Peace University Pune, India

Dr. Jivan Biradar Assistant Professor School of Commerce MIT World Peace University Pune, India

HOW FAR IS INDIAN SOCIETY FROM DIGITAL PAYMENT SYSTEM?

1. Introduction:

The World is changing rapidly with the advancement of technology. All countries in the World are adopting advanced technology in all walks of the human life and in their day-to-day activities. The use of modern technology has become need of the current hour. The advancement in technology is giving many benefits to the nation in terms of minimizing cost of production and optimum utilization of scarce and precious natural resources. It is observed that governments of many countries are taking initiatives for less use of cash for all types of payment and are giving preference to digitization of the society to minimize cost of transactions and to improve welfare of the society.

There are various advantages of digitization of payment system to the society - decrease in transaction cost, increase in transparency and accountability of payment system are few of them. It also leads to increase in the creditworthiness of payment system among the stake holders. Against this backdrop, in this article, the authors have tried to analyze the current status of digitization in various sectors in the Indian economy.

2. Digital Payment Scenario at World Level:

The Global Payment Report-2021 published recently by Fidelity Information Services reveals the current status of digitization of payment at the global level as well as at the country level. It is observed from the report that the use of digital/mobile wallet method in e-com payment has taken 44.5 per cent share, whereas it is forecasted that the share will increase up to 51.7 per cent by 2024 (table 1). And contrary to this, bank transfer and cash on delivery methods of e-com payment will decline in coming years. This shows the shift in the payment system at World level which is giving more opportunities for digitization of payment activities in the coming era.

Table 1: Share of e-com payment methods at World Level (%)

Sr. No.	Particulars	2020	2024*
1	Digital/Mobile Wallet	44.5	51.7
2	Credit Card	22.8	20.8
3	Debit Card	12.3	12.0
4	Bank Transfer	7.7	5.3
5	Cash on Delivery	3.3	1.7
6	Charge & Deferred Debit Card	3.3	1.6
7	Buy Now Pay Later	2.1	4.2
8	Direct Debit	1.2	1.0
9	Pre-Paid Card	1.1	0.5
10	PostPay	0.9	0.5
11	PrePay	0.4	0.2
12	Other	0.4	0.4
13	Total	100.00	100.00

Source: Global Payment Report, 2021 by Worldpay from FIS, Page No. 9

Note: *Forecasted; Numbers adjusted for rounding may impact totals.

The point of sale (POS) payment methods is also showing similar trends. At the World level, cash method of payment is at fourth position and digital/ mobile wallet, credit card and debit card are at first three positions respectively in 2020. This shows the dominance of uses of digital payment methods in the World. They have forecasted that; digital/ mobile wallet method of payment will increase from 25.7 per cent in 2020 to 33.4 per cent in 2024 (table 2).

Table 2: Share of Point of Sale (POS) payment methods at World Level (%)

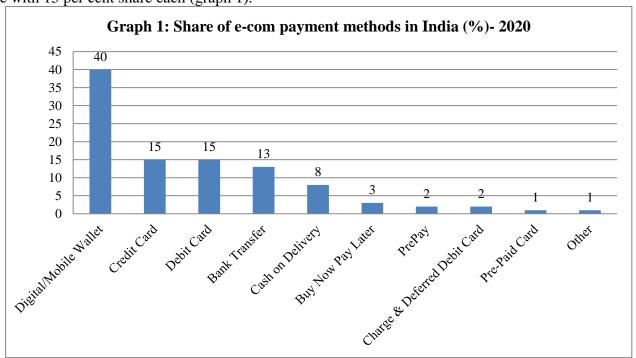
Sr. No.	Particulars	2020	2024*
1	Digital/Mobile Wallet	25.7	33.4
2	Credit Card	22.4	22.8
3	Debit Card	22.3	22.4
4	Cash	20.5	12.7
5	POS Financing	3.5	3.3
6	Pre-Paid Card	3.4	3.2
7	Charged Card	2.2	2.3
8	Total	100.00	100.00

Source: Global Payment Report, 2021 by Worldpay from FIS, Page No. 9 **Note:** *Forecasted; Numbers adjusted for rounding may impact totals.

3. Digital Payment Scenario in India:

The Government of India (GoI) has taken various initiatives to promote use of digital payments in Indian Economy. In 2015, GoI has launched 'Digital India' scheme to deliver the Government's services to all citizens in electronic mode by improved infrastructure and by increasing internet connectivity through the advanced technology. Under this scheme, GoI has made available various services through the online mode and this has given boost to digitization of payment system in the country.

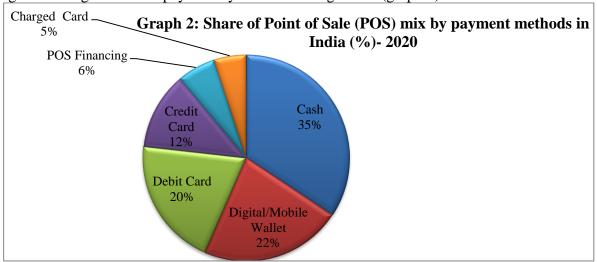
According to Fidelity Information Services (FIS) Global Payment Report-2021, in India, 40 per cent e-com payment is made using digital/ mobile wallet in 2020. The credit card and debit card are with 15 per cent share each (graph 1).



Source: Global Payment Report, 2021 by Worldpay from FIS, Page No. 79

Note: Numbers adjusted for rounding may impact totals.

But still it is observed that cash is the highest used method of payment in India. The share of cash is 35 per cent in POS payment method in 2020. So, considering this fact, India has a long way to go in the digitization of payment system in coming future (graph 2).



Source: Global Payment Report, 2021 by Worldpay from FIS, Page No. 79

Note: Numbers adjusted for rounding may impact totals.

4. Status of digitization in Indian Economy:

As an emerging economy, India is moving rapidly towards the digitization of various sectors in the last decade. The uses of digital payment system have many dimensions and determinants in all sectors. In the following section, we are going to discuss the current issues and opportunities of digitization in select sectors namely banking, infrastructure, travel and tourism, and education sector.

A. Banking:

Banking is the most important services in any economy in consideration of flow of funds from one section of the society to another section. Banking sector reforms in India have brought about many changes in the Indian banking services. Due to increase in the competition, banks started giving quality and valuable services to the costumer. Banks started using modern technology to deliver the banking services. All types of banks in India have started giving e-banking services to their customer. The services included in e-banking are mobile banking, net banking, use of point of sales (POS), debit and credit card etc. The use of digital payment increased in Indian in last decade due to various initiatives of banks for providing e-banking services.

Table 5: Percentage Share of Adults (Age 15 years and above) Using Electronic Payments in India (2014)

Particulars	Used Debit card in past one year	Used Internet to pay bills or buy thing	Mobile account for any digital transaction	
Total	10.67	1.23	2.35	
Rural	6.67	0.31	1.24	
Poorest (40%)	4.37	0.23	0.98	
Richest (60%)	14.76	1.88	3.25	
Female	3.25	0.38	1.17	
Male	17.79	2.04	3.49	

Source: Atul Sood, Ashapurna Baruah-2017

The World Bank Global Findex Data Base-2014, shows the Percentage Share of Adults (Age 15 years and above) Using Electronic Payments in India in table 1. It shows that, there are

only 10.67 per cent adults who used debit card in past one year and only 6.67 per cent in rural area. Addition to this, there is huge inequality across the level of income groups and gender. After demonetization decision, GoI has taken many initiatives to increase digital mode of payment in the country to minimize the black money, counterfeit currency and terrorism problems in Indian economy. Moreover, among various ways of electronic payment in India, people are more friendly with debit card than internet and mobile. And, the growth rate of all transactions delivery channels has declined in 2018 (Table 6). This shows, there is a need of development of more customer friendly digital payment channels and minimization of uses cost.

Table 6: Transactions through Internet/Electronic Banking Delivery Channels

Type of	Year						
internet/electronic channels	201 0	2014	Growth Rate in %	2017	Growth Rate in %	2018	Growth Rate in %
No of ATM deployed (In Actual Figure)	60,1 53	176,4 10	193.27	207,0 36	17.36	203,2 66	-1.82
No of POS deployed (In Actual Figure)	595, 958	1,058 ,642	77.64	3,027 ,382	185.97	3,595 ,912	18.78
No of CREDIT CARDS issued (In Millions)	18.3	20.36	11.07	35.49	74.31	44.21	24.57
No of DEBIT CARDS issued (In Millions)	181. 97	500.0	174.81	842.4	68.47	958.1 5	13.73

Source: Compiled from Bank wise ATM/POS/Card Statistics, Reserve Bank of India's website

B. Infrastructure:

Recently, GoI has announced the use of digital payment system in all toll collections center on every highway. This would increase efficiency of transportation in the country. It would also help to increase transparency in completing various infrastructure projects in various parts of the country.

However, nearly 70 per cent of population resides in rural area in India. This population requires good quality digital payment infrastructure, because the large share of population is away from formal banking system services. And, in uses of digital payment system, education and security issues of digital transaction are considered as prime obstacles. The number of internet users in India increased from 0.50 per cent in 2000 to 34.80 per cent in 2016, but still 65.17 per cent population are under the category of internet less (Non-Users) (Table 3), and this population is mostly in rural part of India.

Table 7: Internet Users in India

Year	Internet Users**	Penetration (% of Pop)	Total Population	Non-Users (Internet less)	% of Non- Users	1Y User Change %	1Y User Change
2016*	462,124,989	34.80%	1,326,801,576	864,676,587	65.17	30.50	108,010,242
2015*	354,114,747	27%	1,311,050,527	956,935,780	72.99	51.90	120,962,270
2014	233,152,478	18%	1,295,291,543	1,062,139,065	82.00	20.70	39,948,148
2013	193,204,330	15.10%	1,279,498,874	1,086,294,544	84.90	21.50	34,243,984
2012	158,960,346	12.60%	1,263,589,639	1,104,629,293	87.42	26.50	33,342,533
2011	125,617,813	10.10%	1,247,446,011	1,121,828,198	89.93	36.10	33,293,976
2010	92,323,838	7.50%	1,230,984,504	1,138,660,666	92.50	48.50	30,157,710
2009	62,166,128	5.10%	1,214,182,182	1,152,016,054	94.88	18.60	9,734,457
2008	52,431,671	4.40%	1,197,070,109	1,144,638,438	95.62	12.50	5,834,088
2007	46,597,582	4%	1,179,685,631	1,133,088,049	96.05	42.90	13,995,197
2006	32,602,386	2.80%	1,162,088,305	1,129,485,919	97.19	19.30	5,275,016

2005	27,327,370	2.40%	1,144,326,293	1,116,998,923	97.61	22.80	5,067,787
2004	22,259,583	2%	1,126,419,321	1,104,159,738	98.02	19.10	3,567,041
2003	18,692,542	1.70%	1,108,369,577	1,089,677,035	98.31	11.50	1,926,786
2002	16,765,756	1.50%	1,090,189,358	1,073,423,602	98.46	136.90	9,689,725
2001	7,076,031	0.70%	1,071,888,190	1,064,812,159	99.34	27.30	1,518,576
2000	5,557,455	0.50%	1,053,481,072	1,047,923,617	99.47	96.50	2,729,647

^{*} estimate for July 1, 2016, ** Internet User = individual who can access the Internet at home, via any device type and connection.

Source: Internet Live Stats (www.InternetLiveStats.com)

The creation of good internet network services across the country is prerequisite of digitization of infrastructure in India. This would increase efficiency in uses of infrastructure services in India and it would help to improve the welfare of the masses in the society.

C. Travel and Tourism:

The travel and tourism industry is also changing firstly with the uses of modern technology in way of doing their business. The digital payment and internet boom in India has given many opportunities to this industry. If you wanted to book a flight back in the 1990s, it would have taken more than 80 minutes to manually to process the reservation of ticket, and the ticket would have cost more than today in real terms. In today's digital age where bookings are confirmed in a second using own smart phone mobile and an entire trip can be planned with a few taps of the finger, thanks to technology, travel and tourism today are more convenient, accessible and affordable than ever before.

D. Education:

The education sector has experienced tremendous changes in current Covid-19 pandemic with respect to use of technology for delivering online education all over the World. In India, online mode of learning was not easily accepted by the stakeholders; however, as the pandemic situation continued, all have shifted to using the online mode for delivery of teaching learning. Penetration of mobile network has made it possible to reach to the students even in remote rural areas for online learning.

Students are also taking benefit of online education in the form of MOOCs and webinars from renowned universities and institutes of higher education from across the globe and are able to do many courses from any education Institute or University in The World. This has opened a possibility of skill enhancement which was not envisioned by anybody just 2 years back also. Though there are many challenges in online mode such as network connectivity, lack of personalized attention, increasing screen time leading to concentration problems etc., it is now accepted that the digitization of society would create more opportunities in education sector in India.

5. Conclusion:

The World is changing rapidly with the use of advancement of technology. All countries in the World are adopting advanced technology in all walks of the human life and in their day-to-day activities. The use of modern technology has become the need of the current hour.

At the world level, there is increase in the use of digital mode of payment and it has been forecast that, it would increase in coming years. In India, cash is the king; but digitization is increasing rapidly. However, there are some challenges also like less penetration of internet in rural and remote area. Many sectors in Indian society are using digital mode in the way of doing business. This has increased the ranking of Indian economy in the Ease of doing business, but still there is a long way to go for the Indian economy.

References:

- 1. Atul Sood, Ashapurna Baruah (2017), The New Moral Economy-Demonetization, Digitalization and India's Core Economic Problems, Economic & Political Weekly, Jan. 7, pp. 31-36.
- 2. Fidelity Information Services (2021), Global Payment Report-2021
- 3. Kumar Sharma, S. and Madhumohan Govindaluri, S. (2014), "Internet banking adoption in India", Journal of Indian Business Research, Vol. 6 No. 2, pp. 155-169.
- 4. Mohammad Abdul Hannan Mia and et al (2007), E-Banking: Evolution, Status and Prospect, The Cost and Management, Vol. 35, Number 1, January-February 2007, ISSN: 1817-5090, Institute of Cost and Management Accountants of Bangladesh.
- 5. RBI, (2001), Report on Internet Banking, Dept. of Economic Analysis and Policy Research, Mumbai (Chairman-Shri S.R.Mittal)
- 6. Reserve Bank of India, Database on Indian Economy-Various Years, Mumbai, India
- 7. World Bank Group (2017), The Global Findex Database, 2017 Edition. Washington, DC: World Bank