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- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

UNPUBLISHED DISSERTATIONS

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

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WEBSITES

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

COVID-19 PANDEMIC AND ITS IMPACT ON E-BANKING TRANSACTIONS IN INDIA

SHAKTI CHAND
RESEARCH SCHOLAR
DEPARTMENT OF COMMERCE
HIMACHAL PRADESH UNIVERSITY
SHIMLA

Dr. VIJAY KUMAR SHARMA
PROFESSOR
DEPARTMENT OF COMMERCE
HIMACHAL PRADESH UNIVERSITY
SHIMLA

ABSTRACT

As a result of modernization and digitalization in banking industry, digital payments are on rise due to their many advantages over cash like ease of use, 24x7 access, and security and transparency. Several Banks in order to get competitive advantage are offering many digital payment modes to their customers like BHIM UPI, Debit Cards, Credit Cards, Mobile banking etc. Due to the COVID-19 all the countries of the world were badly hit including all the sectors whether it is education sector, transportation sector, tourism sector and banking sector. Pandemic forced peoples to stay inside their homes as lockdowns and curfews were imposed in almost all the countries of the world, and due to the fear of getting infected peoples are hesitating in dealing in cash which gave boom to the digital payments. So, in the present research paper an attempt has been made to know about the impact of COVID-19 on various E-banking modes. Data has been collected from secondary sources like RBI reports, Govt. of India reports on digital transactions, various journals and other published materials. Statistical tools like percentage, average annual growth rate (AAGR) and compound annual growth rate (CAGR) are used for the analysis of collected data.

KEYWORDS

Covid-19, digitalization, digital transactions, e-banking, digital payments.

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INTRODUCTION

Banks are of vital importance for the economic development of a country. A country cannot develop without a well knitted banking system. Banks collect the money who have surplus in the form of savings out of their income and channels it to those who require it.

According to Banking Companies Regulation ACT 1949, banking means "the accepting for the purpose of lending and or investment, of deposits of money from the public, repayable on demand or otherwise, and withdrawable by cheque, draft or otherwise."

With the advent of digital era, the way banks provide services to their customers have been completely transformed, in other words we can say that banks have stepped into the digital era. Banks have introduced many new ways of performing banking transactions, nowadays customers need not to visit the banks premise to perform banking operations. Now they can use various e-banking products and services in order to perform banking transactions as well as merchant transactions. Digitization has given many products and services like ATM, debit cards, credit cards, Mobile banking, Internet banking and many more. By using these channels customer can withdraw money, make deposits, transfer funds to another person's account, check bank balance, request cheque book can recharge their mobile an DTH without going outside.

CONCEPT OF E-BANKING

E-banking is an electronic system through which a customer of a bank performs his banking operations electronically without visiting the bank's premise.

E-banking is blanket term used to indicate a process through which a customer is allowed to carry out, personal or commercial banking transactions using electronic and telecommunication network.

It is a product offered by banks which provide facilities such as: funds transfer, checking account statements, utility bills payments, opening bank accounts etc. by using a smartphone, personal computer, laptop or personal digital assistant. (businessjargons.com)

Internet banking (or E-banking) means any user with a personal computer and a browser can get connected to his bank's website to perform any of the virtual banking functions. Electronic banking services are the banking class of services that can be offered by a bank to individuals and companies through means via a fixed or mobile telephone, and internet. (Ratiu, 2011)

BANKING AND COVID-19

The first case of Coronavirus was reported in Wuhan, China on 31st March 2019 and then it travelled to the all over the world and in India first case of COVID-19 was reported on 30 January 2020 in Kerala. The WHO declared COVID-19 a pandemic on March 11, 2020. On 22 March 2020 to control the spreading of virus throughout the country Honorable P.M. made an appeal to impose voluntary curfew of 14 hours in 75 districts of Kerala, and on 24 March he announced a complete lockdown for 21 days throughout the country which was further extended till 31 May 2020. During this period of lockdown and curfew all the citizens were forced to stay at home. All the sectors were badly affected by COVID-19 whether it is education sector, industrial sector, tourism sector etc.

Banking sector was also affected by the pandemic as banks are the institutions having greater public dealings so in order to curb the pandemic situation banking hours were fixed and only one branch in every 5 KM. was allowed to open. Most of the banks informed their customers to stay at home and perform their banking operations from home which will keep them safe from getting infected, banks also reduced the cost of e-banking operations so that more and more customers adopt digital banking.

Due to the fear of getting infected by virus peoples were hesitating in dealing in cash and coins, to deal with this situation e-banking played a significant role and peoples moved towards the e-banking channels like Mobile banking, internet banking, IMPS and BHIM UPI etc. so in this paper an attempt has been made to analyze the impact of COVID-19 pandemic on the various e-banking channels.

REVIEW OF LITERATURE

J. Arati, (2019) conducted a study to access the impact of COVID-19 on customers satisfaction towards various e-banking products and services and the problems which were faced by them while using e-banking during COVID-19. Researcher used primary data for the fulfillment of research objectives. Data was collected

from 400 respondents through questionnaire. Study found that COVID-19 boosted the usage of e-banking, a significant percentage (85%) of respondents have used e-banking products and services during pandemic, further 27x7 banking, convenience, internet access and speedy process are the main reasons behind using e-banking services.

Deresse and Worku (2019) analysed the Ethiopian banking sector during the COVID-19 and inference that there is not a significant change in the way financial institutions do their business but the way employees and customers of banks interact with each other has been changed. The number of customers visiting the bank has been decreased to greater extent due to the fear of getting infected by COVID-19.

R. Kotkowaski & M Polasik, (2021) made an investigation how the COVID-19 has changed the payment pattern of peoples. Primary data has been collected from 5000 respondents from 22 countries of Europe. Results of the study implicated that the customers who were using e-banking channels for making payments post pandemic, continued more likely to do so during the pandemic, on the other hand customers who were using cash payments, have often continued to make payments in cash even in the COVID-19 situation. Researchers further concluded that pandemic has increased the gap between those customers who make payments in cash and who do not.

T.P.Wisniewski et al. (2021) examined the customers preferences regarding cash and cashless payments in 22 European countries during COVID-19 pandemic and found that, customers who are aware about the virus transmission through cash or coins opted for the various e-banking channels. The payment behavior has also been changed drastically due to pandemic, the drift away from physical currency to e-banking has transformed the online habits of the respondents not only till the pandemic exist but this will continue even after the COVID pandemic.

Divya and Hebbar, (2021) studied the impact of COVID-19 on the usage of Mobile banking and concluded that during the COVID-19 pandemic the users of Mobile banking have been increased to a notable level.

Pawan and Archna, (2022) conducted a study to know about the factors affecting the e-banking usage during the pandemic situation in India. Data was collected from both the primary and secondary sources. Researchers noticed that during the COVID-19 e-banking played a vital role in the protection of citizens from getting infected, it is not only economic and effective way of transacting but it proved to be a healthy way of transacting during pandemic as it decreases the chances of infection to a great extent.

RESEARCH METHODOLOGY

For the purpose of the study data has been collected from secondary sources like RBI reports, research articles, journals and various Govt. websites.

OBJECTIVES OF THE STUDY

1. To study the impact of pandemic (COVID-19) on different modes of E-banking.
2. To analyse the growth made by different digital payment modes in last five years.

TIME PERIOD OF THE STUDY

In the present study a period of five financial years is covered (2017-2022)

DISCUSSIONS AND INTERPRETATION

Volume and percentage of e-banking transactions have been presented in Table 1 from FY 2017-18 to FY 2021-22. In FY 2017-18 there were 1090.08 crore digital transactions out of which 30.67 percent transactions were performed through debit card and while RTGS was the least performer with the transaction percentage of only 1.14 percent.

In FY 2018-19 the scenario changes and BHIM UPI accounted for the 29.03 percent of the total 1836.58 crore digital transaction and debit card slipped to the second position with a percentage of 24.05 percent.

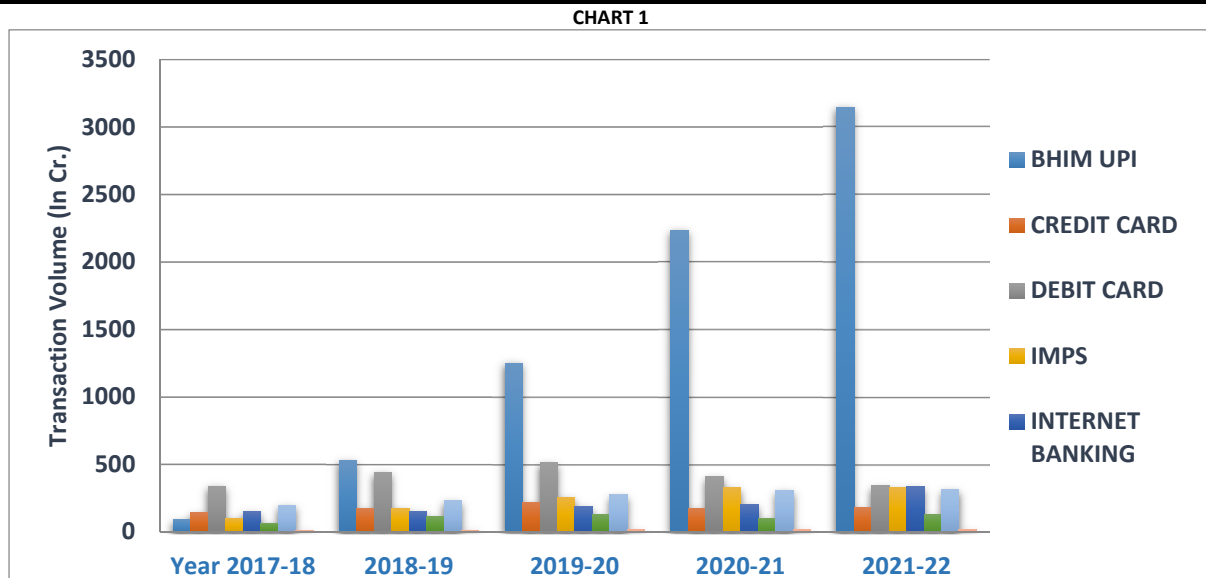
Further in FY 2019-20 when the pandemic (COVID-19) hit the world worst and forced peoples to stay inside their home due to lockdown in almost all the countries, digital banking played its role in a very noteworthy way. Due to the fear of getting infected peoples hesitated in dealing in cash and swipe their debit and credit cards at ATMs and POS terminals, then BHIM UPI played a significant role with a percentage of 43.99 percent to the total of 2845.12 crore digital transactions, although debit card remained at second position but its percentage declined to 18.00 percent from the previous 24.05 percentage as peoples feared that they may get infected while using these cards at ATMs and other places.

In FY 2020-21 with the ongoing pandemic peoples preferred to use e-banking modes to perform financial transactions, amongst all the modes almost 60 percent of the transactions were performed using BHIM UPI. In FY 2021-22 (up to 20-Jan-2022) there were total of 4786.05 crore digital transactions and BHIM UPI accounted for 65.64 percent (3141.63 cr.) of the total digital transactions while all other modes showed a declining percentage in comparison to the previous year except internet banking and mobile banking.

TABLE 1: VOLUME OF E-BANKING TRANSACTIONS THROUGH DIFFERENT MODES

S. No.	E-banking Mode	2017-18		2018-19		2019-20		2020-21		2021-22	
		Volume in cr.	% age	Volume in Cr.	% age	Volume in Cr.	% age	Volume in Cr.	% age	Volume in Cr.	% age
1	BHIM-UPI	91.30	8.38	533.19	29.03	1251.76	43.99	2232.96	59.11	3141.63	65.64
2	CREDIT CARD	140.51	12.89	176.20	9.59	217.73	7.70	176.47	4.67	180.45	3.77
3	DEBIT CARD	334.34	30.67	441.78	24.05	512.39	18.00	411.49	10.89	339.99	7.10
4	IMPS	101.29	9.29	175.29	9.54	257.91	9.06	327.83	8.67	327.89	6.85
5	INTERNET BANKING	149.35	13.70	151.75	8.29	189.42	6.65	203.93	5.43	335.56	7.01
6	MOBILE BANKING	66.21	6.07	112.82	6.14	126.39	4.49	99.41	2.63	126.98	2.67
7	NEFT	194.64	17.86	231.89	12.62	274.45	9.64	309.28	8.18	317.14	6.62
8	RTGS	12.44	1.14	13.66	0.74	15.07	0.52	15.92	0.42	16.41	0.34
	Total	1090.08	100	1836.58	100	2845.12	100	3777.29	100	4786.05	100

(Source: Digipay.gov.in)

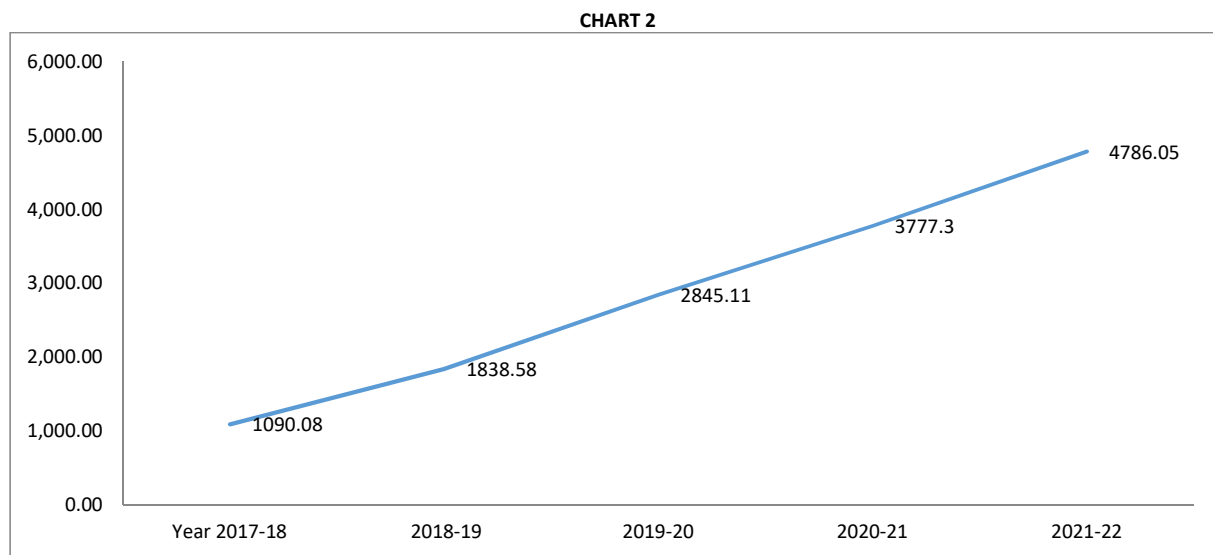


Year wise growth in the E-banking transactions has been highlighted in Table 2. It reveals that in FY 2017-18 volume of e-banking transactions was 1090.08 crore which increased to 1838.58 crore with a remarkable growth of 68.68 percent in 2018-19, further in FY2019-20 digital transactions in terms of volume grew by 54.74 percent. In FY 2020-21 volume of digital transactions became 3773.3 crore with an average annual growth of 32.62 percent. During 2021-22 (up to 20/01/2022) the number of digital transactions increased to 4786.05 crore showing an average annual growth of 26.84 percent. Overall the volume of e-banking transactions during 2017-22 marked a CAGR of 45 percent from 1090.08 crore in 2017-18 to 4786.05 crore in 2021-22 in last five years.

TABLE 2: GROWTH IN THE VOLUME OF E-BANKING TRANSACTIONS CUMULATIVE

S. No	Year	Volume (In Cr.)	Growth in %
1	2017-18	1090.08	
2	2018-19	1838.58	68.68
3	2019-20	2845.11	54.74
4	2020-21	3773.3	32.62
5	2021-22	4786.05	26.84
	CAGR		45%

(Source: Calculated from collected data)



Average annual growth and compound growth of different modes of e-banking have been presented in Table 3. Table highlights the following facts in relation to different modes of e-banking:

BHIM UPI: In 2017-18 the volume of e-banking transactions through UPI was 91.30 crore which increased with a tremendous growth of 484 percent in the FY 2018-19 having transaction volume of 533.19 crore. In FY 2019-20 transaction volume showed a growth rate of 134.77 percent. During FY 2020-21 and 2021-22 UPI marked a growth of 78.39 and 40.69 respectively. UPI witnessed compound annual growth of 142 percent in terms of volume of transactions in last 5 years which is highest amongst all the modes of e-banking in India

Credit Card: in the financial year 2017-18, there were 140.51 crore digital transactions through credit card which grew to 176.20 crore with an annual growth of 25.40 percent, which further increased to 217.73 crore in 2019-20. But in the financial year 2020-21 as the first lockdown was imposed in March 2020 in India due to the deadly COVID-19, transactions through credit card witnessed a sharp decline in the volume of digital transactions with a transaction volume of 176.47 crore and recorded a negative annual growth rate of -18.95. In 2021-22 the transaction volume increased slightly with the growth of only 2.26 percent in comparison to previous FY 2020-21. Speaking strictly credit card transactions only recorded a compound growth of 6 percent in last five years.

Debit Card: Debit card transactions were on first rank with a transaction volume of 334.34 crore transactions in FY 2017-18. In 2018-19 Debit card transactions showed a growth of 32.13 percent having 441.78 crore transactions. 15.18 percent growth in terms of volume of transactions was recorded in FY 2019-20. Similarly, as in case of Credit Card, Debit Card also witnessed a negative growth of -19.69 and -17.38 in 2020-21 and 2021-22 respectively due to COVID-19 pandemic, it is very surprising that debit card transactions recorded a growth of 0 percent in last five years when compound growth calculated.

IMPS: IMPS transactions grew 73.06 percent in volume during 2018-19 over 2017-18. During 2019-20 and 2020-21 the growth in terms of volume of transactions was 47.13 and 27.11 respectively, while in 2021-22 IMPS transactions only grew with 0.02 percentages. Overall during five years IMPS recorded a growth of 34 percent.

TABLE 3: VOLUME & GROWTH OF DIFFERENT MODES OF E-BANKING

S. No		2017-18	2018-19		2019-20		2020-21		2021-22		CAGR (in %)
		Volume (in Cr.)	Volume (in Cr.)	Growth in %	Volume (in Cr.)	Growth in %	Volume (in Cr.)	Growth in %	Volume (in Cr.)	Growth in %	
	E-banking Channels										
1	BHIM UPI	91.30	533.19	484.00	1251.76	134.77	2232.96	78.39	3141.63	40.69	142
2	CREDIT CARD	140.51	176.20	25.40	217.73	23.57	176.47	-18.95	180.45	2.26	6
3	DEBIT CARD	334.34	441.78	32.13	512.39	15.98	411.49	-19.69	339.99	-17.38	0
4	IMPS	101.29	175.29	73.06	257.91	47.13	327.83	27.11	327.89	0.02	34
5	INTERNET BANKING	149.35	151.75	1.61	189.42	24.82	203.93	7.66	335.56	64.55	22
6	MOBILE BANKING	66.21	112.82	70.40	126.39	12.03	99.41	-21.35	126.98	27.73	18
7	NEFT	194.64	231.89	19.14	274.45	18.35	309.28	12.69	317.14	2.54	13
8	RTGS	12.44	13.66	9.81	15.07	10.32	15.92	5.64	16.41	3.08	7

(Data Source: Digipay.gov.in)

Internet Banking: in financial year 2017-18 the volume of internet banking transactions was 149.35 crore which increased to 151.75 crore in 2018-19 with an increase of 1.61 percent. During 2019-20, transactions through Internet banking grew by 24.82 percent. In 2020-21 and 2021-22 internet banking saw a growth of 7.66 percent and 64.55 percent respectively in terms of transaction volume.

Mobile banking: The volume of digital transactions through mobile banking was 66.21 crore which showed a growth of 70.40 percent in FY 2018-19 with transaction volume 112.82 crore, which further increased to 126.39 crore in 2019-20 with 12.03 percent growth rate. During the year 2020-21 mobile banking transactions recorded a negative growth of -21.35 percent. In FY 2021-22 it again recorded a positive growth of 27.73 percent.

NEFT and RTGS: Volume of NEFT transactions was 194.64 crore in FY 2017-18, which increased to 231.89 crore in 2018-19 with the growth 19.14 percent. Further it was noted 18.35 percent and 12.69 percent in 2019-20 and 2020-21 respectively. It is noteworthy that there is only 2.54 percent growth noted during the year 2021-22 in the volume of digital transactions through NEFT. Transactions through RTGS also witnessed a growth in terms of volume from 12.44 crore in 2017-18 to 16.41 crore in 2021-22 with the overall growth rate (CAGR) of 7 percent in last five years.

MAJOR FINDINGS

The major findings highlighted by the study are as follow:

- Before FY 2018-19 debit card was playing a dominant role among all the e-banking channels having 30.67 % transaction volume but after FY 2018-19 BHIM UPI evolved as highly preferred channel with a transaction volume of 29.03 % and debit card slipped to 2nd rank with 24.05% transaction volume in 2018-19.
- During the first year of COVID-19 pandemic 2020-21 the growth in the volume of e-banking transactions through all the digital channels taken together was 32.62%.
- The overall growth in terms of volume of e-banking transactions cumulative during the study period (2017-22) was recorded 45%.
- During FY 2020-21 when lockdown and curfews were imposed in India BHIM UPI marked a significant growth of 78.39% and evolved as most preferred e-banking channel.
- During the study period BHIM UPI witnessed a compounded annual growth rate (CAGR) of 142% which is highest among all the modes of e-banking in India.
- It is quite surprising that debit cards, credit cards and mobile banking showed a negative growth rate of -18.95%, -19.69% and -21.35% respectively during the first pandemic year i.e. 2020-21.
- In last five years (2017-22) debit card witnessed compound annual growth rate of 0% in terms of transaction volume which is quite surprising.
- In FY 2021-21 IMPS recorded annual growth of 27.11% and a compounded annual growth of 34% in terms of transaction volume to the total transaction volume during the period under consideration.

CONCLUSION

The main aim of this research work is to study the impact of pandemic on different modes of e-banking as well as to analyse the growth made by different digital payment modes. From the results of the study it can be concluded that COVID-19 affected the people's preference of choosing the best e-banking mode in order to ensure their safety as well as convenience. As ATMs and Credit cards were also at a risk of being infected if used outside so they have witnessed negative growth during the starting pandemic year. And BHIM UPI emerged as a highly preferred mode of transacting as there is not any fear of physical contact with any one if transactions are performed using UPI. So BHIM UPI recorded a CAGR of 142% during the study period, and average annual growth of 78.39% both of which are quite noteworthy.

REFERENCES

1. Divya, M.P. and Hebbar C.K. (2021), A case study "on Mobile Banking is a boom to banking customers during the COVID-19 pandemic situation"- with special reference to the SBI customers of the Mangalore city, EPRA International Journal of Environmental Economics, Commerce and Education Management, ISSN-2348, Vol. 8, Issue 4.
2. Jadhav, A., (2019), "A study of COVID-19 on customers satisfaction towards e-banking services", Osmania Journal of International Business Studies, ISSN-00973-5372, Vol. 14, No. 1&2.
3. Kotkowski, R., and Polasik, M., (2021), COVID-19 Pandemic increases the divide between cash and cashless payment users in Europe", Economic Letters No. 110139, Vol. 209
4. Mersha, D. and Workel, A. (2020), "Effect of COVID-19 on the banking sector in Ethiopia", Horn of Africa Journal of Business and Economics (HAJBE), ISSN-2617-0086, special issue-I, pp. 28-38.
5. Pawan, K.V. and Tanwar, A. (2022) "Impact of COVID-19 on E-banking in India", Shodhsamhita, ISSN-2277-7067, Vol. 8, Issue 4.
6. Ratiu, C, Craciun, M.D., & Bucerzan, D. (2011), "Statistical Model of The People Confidence In E-Business Services", Analele Universitatii Maritime Constanta, Vol. 51(14), pp. 237-240.
7. Wisniewski, T.P., Polasik, M., Kotkowski, R., and Maro, A. (2021), "Switching from cash to cashless payments during the COVID-19 Pandemic and beyond", NBP Working Papers No. 337, ISSN-2084-624.

WEB SOURCES

8. http://cashlessindia.gov.in/digital_payment_methods.html assessed on May 13, 2022
9. <https://businessjargons.com/e-banking.html> assessed on May 13, 2022
10. <https://digipay.gov.in/dashboard/BI/Modewise.html> assessed on May 13, 2022
11. <https://rbi.org.in/scripts/Statistics.aspx> assessed on May 13, 2022
12. <https://www.npci.org.in> assessed on May 13, 2022

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