ISSN: 1001-4055 Vol. 44 No. 6 (2023)

Impacts on Digital Payment System After the Outbreak of Covid-19

C. R. Suganya Devi¹, Sowmeeya S. R.², Vidhya S.³, Jayapriyanka K.⁴

Assistant Professor¹, Post Graduate Student^{2,3,4}

Department of Electronics and Communication Engineering,

Bannari Amman Institute of Technology, Sathyamangalam

Abstract: -The COVID-19 is like a fog of some diseased particulate matters evolving around the universe like a cosmopolitan metropolis. The outbreak of COVID-19 made everyone to a standstill in their houses and longing to get back to their usual lifestyle. However, this COVID-19 changed everything in everyone's life, starting from the source of income to the expenditures they evolve around in their daily life. This Outbreak produced a serious issue in the Digital payment system in all aspects. There are both Pros and Cons in the Digital Payment system. Most of the applications that commence the digital payment is been newly started and giving a new source of income to the software developers and in another hand, most of the transportation units lost their income due to less number of online transactions, like a coin the Outbreak of COVID-19 made many changes in our day to day life and the Digital Payment fields. This Paper will revolve around the concept of Digital marketing before and after the outbreak of COVID -19.

Keywords: COVID-19, Payment system, Business Impacts, Social Impacts, Sectoral Impacts, Short and Long term ways

1. Introduction

The spread of Covid-19 has made every people suffer from their chores and financial status even somebody is on the verge of losing their jobs. The Outbreak of this Pandemic made many changes in everyone's life. It has turned everyone's life into the waste case scenario. The changes in people's financial status and their break of work made them feel stressed out. To limit the spread of the virus many a nation like India has provoked the weapon called the lockdown. In this lockdown, the minds of people are craving to have something. But most of the people are good with their family spending their time and making their life easier to live. But some makes their life hard to live. Everyone has their sort of feelings in the outbreak of the Covid-19, some enjoy it and some hate it and even some are neutral.

According to this scenario, most of the online mode of works are been getting predominantly adsorbed by the people and is getting filled at once. It is something that sounds good, but the financial crisis is been getting more versed in other jobs like manufacturing units, IT sectors, and even in academic institutions. Thus the Digital payment is getting its peak in this pandemic. It becomes the hot topic of the nation. Due to the contactless sense of transaction, many companies are creating different types of applications to serve the thirst of the people. Thus the people are likely to sit back in their couches and want to transfer their amount digitally to the desired areas. Thus this method is currently evolving in all other minds. They are ordering online and go cashless is a sort of practice been followed from the early '20s but due to the pandemic, it became more intense.

Galea, S., Merchant, R. M., & Lurie, N. (2020), proposed a paper consecutively rewarding the impacts of the mental health consequences of people in the Covid-19 and the physical distancing among people and the need for the prevention of the early intervention of the diseases through communication. McKibbin, W. J., & Fernando, R. (2020), proposed a book in which he has been discussing the economic crisis that every nation is facing in this Pandemic situations and he also proposes some methods to be followed to consolidate the problem into a single issue. Ivanov, D., & Das, A. (2020), in his paperwork proposed the outbreak of SARS and its

impacts and the outbreak of Covid-19 and how it is causing much nuisance in every body's life and the economic crisis that s been commemorated due to the Covid-19.

Pandey, N., & Pal, A. (2020), in his work lavishly legitimated the viruses' serious issues on the people's lives and the lockdown situation that has made people urge to use the digital measures for their life and the lockdown has changed most of the people's mental condition. Li, S., Wang, Y., Xue, J., Zhao, N., & Zhu, T. (2020), proposed a survey on the impacts of Covid-19 and the psychological effects that people are getting their mental pressure increased due to the self-quarantine. Casero-Ripollés, A. (2020), in his art proposed the impacts of media influencing the people's lives during the Covid-19 lockdown and how they are enjoying their life during the quarantine and the role of social media in the people's life.

Ivanov, D., &Dolgui, A. (2020), in his survey the sustainability of the network hindrances is been discussed. He in his point of view discussed the people's mental health is being boosted through social media and the addiction to social media is also been increased due to the fewer work conditions.

In all the event case analysis, some of the sectors like entertainment food and beverages have faced a drastic change in their businesses but other fields like IT, agriculture, Manufacturing and many more faced their downfall in this pandemic.

Business Impacts:

The Outbreak of the virus made the business sectors lavishly go down in the lockdown and according to all the people being at home is good and safe. But they say "this outbreak has changed the life upside down, due to the work roles they play in and the payable situations in their daily life, not only in the large Sectoral business it happens in all sort of living like the hotels, transport, living, tourism, IT sectors, Academic Institutions, Manufacturing and more. Thus the online payment has been also faded out in these sectors too. The online payment of bills, debuts, salary credits all has been deployed due to the pandemic.

Sectoral Impacts:

Online payment plays a major role in everyone's life like salary credit, movie ticket booking, cab booking, online food delivery, online product delivery, online debut transfer, all these were been running ceaselessly through the online mode, but they now face a little back hindrance let's see which fields are getting high, low and medium problems in the pandemic.

SECTORS	IMPACTS	REMARKS
Aviation's	Low	The aviation field is facing its worst play in its pace as most of the flights are cancelled due to the pandemic and no tourism is happening and no one is hiring flights for travel.
Tourism and Hospitality	Low	Tourism is the source of income for many nations and due to the pandemic, it has been locked down and made most of the tourists stay back in their houses locked up.
Electronics andConsuma bles	Low	The increasing technological factors polish the economic ways into its coats and make sense in all the people's welfare but now due to the pandemic, the online transactions between the companies have been dramatically changed and hence the sectors are getting weaker.
Hotels and restaurants	Low	The hotels and restaurants are the most important for all the food lovers and tempt them to try different foods and assess them. But due to the lockdowns and the Pandemic, the restaurants are facing more trouble and the funding and the online transaction have been drastically reduced.

Physical	Low	The physical retail shops are affected due to this Covid-19 as such people of	
Retail	all wages buy their regular amenities regularly but nowadays		
		changed and they are trying to get them nearby or through online modes. This	
		also has affected the retail shops a lot.	
E-	Medium	They were not adhered properly due to the lockdown and they have changed	
Commerce		into the essentials, so the non-essential goods were locked up to the core.	
Cross	Medium	The Payment companies are feeling more crucial in this lockdown due to the	
Border		factory and the institutional shutdown. They are facing a lot of challenges due	
Payments		to cross border transactions are not yet been completed properly.	
Small and	Medium	This person lies in the middle of the workbench as they are facing a great	
Medium		problem in transporting and facilitating the debuts they got for their	
Business		businesses.	
International	Medium	This criterion has lost its endurance due to the negative impact of the people	
Remittance		in the salary wages of the Indians abroad.	
Telecom	High	This Department has been given more importance in this lockdown as such	
		more transactions like recharges are done online and most people need lots of	
		data to have their hunger filled up.	
Insurance	High	Due to the Pandemic, most people renew their old policy in the online mode	
		of transactions and get their new policies done. This makes this field to shine	
		in a great leap	
EdTech	High	Most of the educational institutional payments are transacted online so that	
		they are getting highly paid online and the educational institutes are making a	
		good profit from that.	
Government	High	Online transactions like EB bills and debts of the people in the government	
		sectors are paid online and most of the eminent transactions are made online	
		to the government.	
Health	High	The online payments have been increased in these sectors from the scratch to	
care/Pharma		the boon of the levels. As they showed a drastic change in the online mode.	
cy			

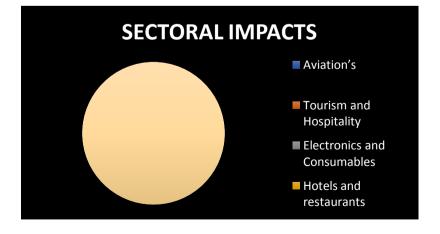


Figure: 1 Pie Chartindicating the Sectoral Impacts

1. Relative Impacts On the Payment Categories

SECTORS	IMPACTS	REMARKS	
Cards	Low	The provoking transmission of the Virus the usage of the card has reduced an the most important transactions through digitally without the cards.	
DD	Low	The important transactions are done through Demand Drafts but nowaday due to the pandemic, the DD transaction has been reduced all the transaction are made online.	
ATM	Low	Most of the Provoking outbreaks are happening in the ATM stalls so no one is scheduling them to go to the ATM stalls to withdraw their amount and they prefer the online modes.	
NEFT/IMPS /Net banking	Medium Most preferably nowadays people use these types of transaction me and use the digital methods of payment in the mean of time.		
UPI	High	It is the best method of transferring the amount safely without any errors and it has reached a hyper level in the digital transaction process.	
Wallets	High	People are abruptly changing from the NEFT/IMPS/Net banking to the wallets. They provide easy transactions and safe transactions. Thus people of all ages use these wallets for transferring the amount. They don't like to wait for a long time.	



Figure: 2 Pie Chart Indicating the Impacts on Payment Categories

Impacts Of Wallets Which Rules The Life Of People During The Covid-19:

SECTORS	IMPACTS	REMARKS
Momoexpress	Low	It is digital based transmissions in India and owes a good place in the digital payment world but most of the people are not known to many of the peoples.
Citrus Pay	Low	Causalities use this type of payment method. It is being used by all the retail merchants.
Oxigen	Low	One of the leading companies in digital payment systems but most of the causalities are not aware of this wallet

Mswipe	Low	Considered to be the safest money transfer platform but is not used by many people, because it is not aware of the people.
Ola money	Low	Considered to be the safest money transfer platform but is not used by many people, because it is not aware of the people.
City master pass	Low	It is also one of the safest payment methods where we get a double verification process on the user side, but not familiar with people.
YonoSBI	Medium	It is designed by SBI but predominantly we need an SBI SB account to access this method.
Vodafone MPesa	Medium	It is designed by Vodafone but predominantly we need a Vodafone number to activate the account.
Airtel payment Banks	Medium	It is designed by Airtel but predominantly we need an Airtel number to activate the account.
Payumoney	Medium	This is one of the common digital wallets seen in all the retail stores but its security is in the deal, so many people are not using this.
Mobiwik	Medium	This is one of the uprising wallets but the usage of the wallets is less among people.
HDFC Pay ZAP	Medium	It is designed by SBI but predominantly we need an SBI SB account to access this method.
ICICI Pockets	Medium	It is designed by SBI but predominantly we need an SBI SB account to access this method.
Jio money	Medium	It is designed by JIO but predominantly we need a JIO number to activate the account.
ВНІМ	High	It is one of the high valued and most trusted wallets in India as it is owned by the Government of India. So many of the online retail shops use this BHIM for transactions.
Free charge	High	It is also one of the highly used wallets in India because it has lots of options and choices that provide us to use them often.
Phone Pay	High	This is also one of the trusted wallets by the people that come with various options.
Amazon Pay	High	This is designed by Amazon and provides many offers during any retail purchase in Amazon and it also variant spices available in the application.
Paytm	High	This is one of the commonly used by all the people in the world for transactions. Every mobile will have these applications built-in.
Google Pay	High	This is the most predominant and user-friendly Wallet produced by Google and it also produced a good transaction rate with utmost care and security. The third parties cannot interrupt in the transactions. It's a user-friendly and most predominantly used wallet in the pandemic.

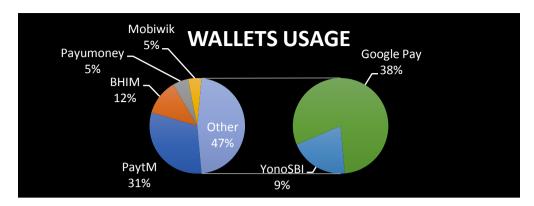


Figure: 3 Pie Chart Indicating the Wallets Usage.

2. Conclusion:

The Pandemic made everyone know what is happening around them and made them live a happy and healthier life with all the amenities. This pandemic changed everyone's life. It didn't even change their lifestyle but also changed their way of payment and most of them are using digital transactions and most of the retail shops started everything digitalized in the payment and also in the form of selling their goods. It perhaps seems to be good at a part but there are riskier. Digitalization is a method of technological development but it is not secure while using third-party applications. Because the third party applications are prone to be cracked by any of the seeking hackers and the data stored in them can be easily accessed, so to maintain the security we should follow the pay on the cash method. It is not mandatory to follow them strictly but it is a secure way. Because money is everything and money plays a major in everyone's life, without money nothing is possible nowadays. Going Cashless is a good and well-established technology but it should be practiced without any third-party interventions.

3. Acknowledgement:

We would like to thank the Bannari Amman Institute of Technology for helping us to carry out the survey among the faculty and student members about the Impacts of Digitalization after the outbreak of COVID-19.

4. References:

JOURNALS:

- [1] Galea, S., Merchant, R. M., & Lurie, N. (2020). The mental health consequences of COVID-19 and physical distancing: The need for prevention and early intervention. *JAMA internal medicine*, 180(6), 817-818.
- [2] McKibbin, W. J., & Fernando, R. (2020). The global macroeconomic impacts of COVID-19: Seven scenarios.
- [3] Ivanov, D., & Das, A. (2020). Coronavirus (COVID-19/SARS-CoV-2) and supply chain resilience: A research note. *International Journal of Integrated Supply Management*, 13(1), 90-102.
- [4] Pandey, N., & Pal, A. (2020). Impact of Digital Surge during Covid-19 Pandemic: A Viewpoint on Research and Practice. *International Journal of Information Management*, 102171.
- [5] Li, S., Wang, Y., Xue, J., Zhao, N., & Zhu, T. (2020). The impact of COVID-19 epidemic declaration on psychological consequences: a study on active Weibo users. *International journal of environmental research and public health*, 17(6), 2032.
- [6] Casero-Ripollés, A. (2020). Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak. Casero-Ripollés, Andreu (2020). "Impact of Covid-19 on the media system. Communicative and democratic consequences of news consumption during the outbreak". El Profesional de la información, 29(2), e290223.

- [7] Ivanov, D., &Dolgui, A. (2020). Viability of intertwined supply networks: extending the supply chain resilience angles towards survivability. A position paper motivated by the COVID-19 outbreak. *International Journal of Production Research*, 58(10), 2904-2915.
- [8] Leung, K., Wu, J. T., Liu, D., & Leung, G. M. (2020). First-wave COVID-19 transmissibility and severity in China outside Hubei after control measures, and second-wave scenario planning: a modeling impact assessment. The Lancet.
- [9] Kumar, S., Maheshwari, V., Prabhu, J., Prasanna, M., Jayalakshmi, P., Suganya, P., ... & Jothikumar, R. (2020). Social-economic impact of COVID-19 outbreak in India. *International Journal of Pervasive Computing and Communications*.
- [10] Chen, H., Qian, W., & Wen, Q. (2020). The impact of the COVID-19 pandemic on consumption: Learning from high-frequency transaction data. *Available at SSRN 3568574*.
- [11] McMichael, T. M., Currie, D. W., Clark, S., Pogosjans, S., Kay, M., Schwartz, N. G., ... & Ferro, J. (2020). Epidemiology of Covid-19 in a long-term care facility in King County, Washington. *New England Journal of Medicine*, 382(21), 2005-2011.
- [12] Luo, H., Tang, Q. L., Shang, Y. X., Liang, S. B., Yang, M., Robinson, N., & Liu, J. P. (2020). Can Chinese medicine be used for the prevention of coronavirus disease 2019 (COVID-19) A review of historical classics, research evidence, and current prevention programs? *Chinese journal of integrative medicine*, 1-8.
- [13] Keesara, S., Jonas, A., & Schulman, K. (2020). Covid-19 and health care's digital revolution. *New England Journal of Medicine*, 382(23), e82.
- [14] Reeves, J. J., Hollandsworth, H. M., Torriani, F. J., Taplitz, R., Abeles, S., Tai-Seale, M., ... &Longhurst, C. A. (2020). Rapid response to COVID-19: health informatics support for outbreak management in an academic health system. *Journal of the American Medical Informatics Association*, 27(6), 853-859.
- [15] Søreide, K., Hallet, J., Matthews, J. B., Schnitzbauer, A. A., Line, P. D., Lai, P. B. S., ... &Teh, C. S. C. (2020). The immediate and long-term impact of the COVID-19 pandemic on the delivery of surgical services. *The British journal of surgery*.
- [16] Wenham, C., Smith, J., & Morgan, R. (2020). COVID-19: the gendered impacts of the outbreak. *The Lancet*, 395(10227), 846-848.
- [17] Ivanov, D. (2020). Predicting the impacts of epidemic outbreaks on global supply chains: A simulation-based analysis on the coronavirus outbreak (COVID-19/SARS-CoV-2) case. *Transportation Research Part E: Logistics and Transportation Review*, 136, 101922.
- [18] Beaunoyer, E., Dupéré, S., &Guitton, M. J. (2020). COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies. *Computers in Human Behavior*, 106424.
- [19] Flaxman, S., Mishra, S., Gandy, A., Unwin, H. J. T., Mellan, T. A., Coupland, H., ... & Monod, M. (2020). Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe. *Nature*, 1-5.
- [20] Liu, Q., Zheng, Z., Zheng, J., Chen, Q., Liu, G., Chen, S., ... & Zhang, C. J. (2020). Health Communication Through News Media During the Early Stage of the COVID-19 Outbreak in China: Digital Topic Modeling Approach. *Journal of Medical Internet Research*, 22(4), e19118.
- [21] Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395(10228), 945-947.
- [22] Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395(10228), 945-947.
- [23] Fagherazzi, G., Goetzinger, C., Rashid, M. A., Aguayo, G. A., &Huiart, L. (2020). Digital Health Strategies to Fight COVID-19 Worldwide: Challenges, Recommendations, and a Call for Papers. *Journal of Medical Internet Research*, 22(6), e19284.
- [24] Allam, Z., & Jones, D. S. (2020, March). On the coronavirus (COVID-19) outbreak and the smart city network: universal data sharing standards coupled with artificial intelligence (AI) to benefit urban health monitoring and management. In *Healthcare* (Vol. 8, No. 1, p. 46). Multidisciplinary Digital Publishing Institute.
- [25] Grasselli, G., Pesenti, A., &Cecconi, M. (2020). Critical care utilization for the COVID-19 outbreak in Lombardy, Italy: early experience and forecast during an emergency response. *Jama*, 323(16), 1545-1546.