Original Article

Unique Methods for Highly Populous Countries to Leverage Post-Pandemic Economy to Ramp Up Digital **Payments**

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Abstract - The covid-19 pandemic has disrupted the economic and commercial aspects of the country. There is a new analysis present in this paper that helps in suggesting the primary pathway for mitigating the loss of the economy from the pandemic. This requires a targeted transformation that is digital and countries that have middle income in diving the existing framework within the present economies. It helps to develop a certain framework for understanding the effects of the digital economy that focuses primarily on the digital infrastructure, such as ICT services, e-commerce services, and online work.

Keywords - Digital transaction, Digital currency, ICT Services, Online payment.

1. Introduction

It is not unknown to anybody that COVID-19 has affected both developed and developing countries. Densely populated countries have faced huge difficulties due to an increase in population. The opportunities for jobs and education are more. The pandemic has shut down all sectors' operations worldwide, and therefore, populous countries have been adversely impacted. The countries on the list of dense populations are China, Mexico, India, Bangladesh, Brazil, the United States, Pakistan, Nigeria, and Indonesia. Efforts have been made to curb the pandemic, and those attempts comprise the imposition of quarantine.

Other endeavours are preparing health facilities and isolating infectious cases and contacts that have been traced, including public health resources, human resources, and execution costs. The health system's expenditures have been involved in providing health facilities for infectious cases. Tax revenues have declined due to the pandemic, and expenditures have increased due to the pandemic [1]. The countries that are densely populated are highly impacted, and therefore, a need for solutions is required to root the issues. To leverage the economy post-pandemic, ramping up digital payments is of great use.

Unique methods exist for conducting this activity fruitfully in the case of highly populous countries. Ramping up digital payments has greatly helped people all over the world. It has been regarded as one of the most convenient ways of payment, and people are fond of making payments online instead of paying by cash. Digital payments have several advantages in customers' lives, and countries with

high populations are profitable by introducing this kind of payment [2]. The need for an increase in this method is required to cover up the loss in the economies of densely populated countries. More purchases of goods have occurred and can happen further by making payments digitally. This study is going to focus on the expansion of the use of digital payments, its reasons and benefits. The core of this study is to detect fruitful methods that can help increase populated countries' economies.

2. Literature Review

2.1. Advantages of Digital Payments and its Impact on the **Economy of Densely Populated Countries**

Convenience is offered by online payments for the seller and the customers, and payments can be made by users from any place and at any time. It is not mandatory to carry cash, and hence, the customers can be able to buy anything without any stress. There has been an improvement with the recurring payments by it, as the easiest way is offered by digital payments for setting it and forgetting. The checkout experience becomes cumbersome when the matter concerns traditional payment methods [3]. The process of the individuals with online payment methods can speed up checkout, and instant payment can be made easily.

The transaction is simplified by the rapid tap and swipe required while making payments digitally. This results in the simplification of life and increased cash flow in real-time. Bestowing customers with options for digital payments positively impacts their shopping [5]. The assurance of a seamless checkout process can be done by the seller, as online payments are quick and convenient. There has been a presence of several options for making payments digitally; hence, customers have been offered to use any method they prefer. Switching to making payments digitally has several potential benefits for highly populated countries.

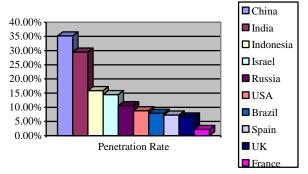


Fig. 1 Percentages of using mobile payment option by different countries (Source: [4])

Financial Inclusion has been increased by utilizing the mode of online payment. The opening of accounts through the social transfer program has expanded the frequency possessed by remittances received with the help of formal payment channels in Mexico [6]. The introduction of digital payments can highly fulfil the loss of economy at the time of the pandemic situation. Unlimited shopping done by customers is one of the biggest reasons for the need to ramp up the use of online payment. This concludes that countries with more population have been highly facilitated by digital payments, and thus, digital payments should be ramped up in those countries.

2.2. Unique Methods to Enhance and Increase the Use of Digital Payments

The first method refers to the opening to the latest digital payment technologies and methods that are positioned to be a vital influence on economic prosperity. Financial prosperity is possessed by several countries, including countries with high populations impacting everything [7]. The impact has been on remittances and transfer of funds with the help of cryptocurrency, which blockchain technology has backed. Countries, including Ukraine, and many others, have adopted Bitcoin just as a lawful tender. This signifies the progress in the adoption of the latest technology. The second technique is to bestow incentives for utilization, as online payment modes are greatly dependent on the platform.

To have an increased mainstream adoption, there must be the delivery of value to customers. This results in better power of purchase and has driven the merchant's or platform's interest in supporting online payments. The third specific method is to attract those who are disabled, as these methods have failed at checkout. Shopping carts online have functioned easily, rarely for individuals utilizing screen readers. One of the critical problems is the complexity acquired by the process for individuals with cognitive and mobile impairments [8]. These challenges can be eliminated with the help of the simplification of the process of checkout.

This can bring more customers online and can increase the matter of online purchases. This, in turn, can help in minimizing the loss in financial conditions of countries, specifically populated countries. The fourth tactic is the expansion of the kinds of transactions, as this can broaden the purchasing options for the customers. To do this, loans should be offered by the merchants to the consumers, or the payments should be spread over a long time. This method must be embedded within more devices, and kitchen and office appliances can order supplies.

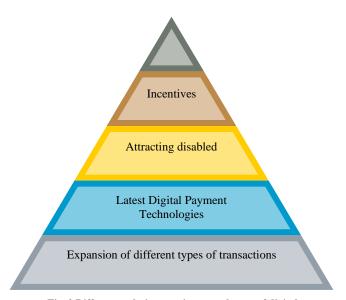


Fig. 2 Different techniques to increase the use of digital payments

3. Methodology

This study has been conducted with the help of mixed methods, as both primary and secondary data are useful for the effectiveness of this study. The research approach that is useful for this study is the Abductive Approach of Research. The author has been capable of getting several advantages by the utilization of this specific research approach. The data that have been collected for conducting this study will be analyzed fruitfully by the investigator by using this approach for this research. The author has acquired the capability of gaining more knowledge with regard to the effectiveness of digital payments and their utility in increasing the economy of countries.

The reason for the utilization of online payments for customers and the advantages of online payments on consumers have been known better by this. The research design that is efficacious for the great success of this particular study is the Exploratory design of the research. It is an effective approach in the matter of the acquisition of background data on the specific subject matter [9]. The

author has obtained the background details of financial loss in the matter of countries by utilizing this research design. This research design helps address the reason for the occurrence of the issue during the pandemic time. The author's satisfaction has been met as the facts regarding the need to ramp up digital payments have been uncovered and highlighted its need.

Rather than these, there has been the use of the Pragmatism Research Philosophy for this study. The scholar has used this philosophy as the data have been gathered by the methods of primary and secondary. An important role has been played by digital payments at the time of the pandemic situation as contactless payments have been made by the customers to the sellers [10]. The deal of contactless payments was of great use at that time. Moreover, the spread of the disease has been stopped to at least some extent by using digital payments. The continuous utilization of this technique has helped the countries a lot in expanding their economy. Data has been collected from Google Scholar, an authentic platform for gathering secondary data. Information about Digital payments has disclosed the fact that the lives of people have changed drastically after using online payments.

Different questions with regard to the advantages of online payments have been asked of the respondents. The questions associated with the effectiveness of the increase in the use of this payment mode for highly populous countries have also been interrogated. 20 participants have been involved in this process, and replies have been gathered on time for the successful completion of the project. The study has focused on primary and secondary data collection methods. Secondary data collection methods used in a research study are research journals and research articles of other researchers. It helps in understanding the perspective of other researchers, thereby drawing accurate conclusions about this study. The primary data collection method involves performing an online survey through Google Forms. A total number of 6 questions were asked to a group of a few people that responded according to their perspective in the context of digital payment setup [11]. Google Forms is an effective method of conducting surveys without needing to visit a physical place. This ensures the safety of the respondents and also reduces the time that will be consumed otherwise during conducting a field survey. Both the secondary and primary data collection methods have been used since this study is about the digitization of payment using online payment procedures. It is important to understand the perspective of online payment users in the present time.

4. Data Analysis and Discussion

4.1. Secondary Analysis

Digital currencies and payments play an important role in the situation post-pandemic. Digital payments are often contactless and are encouraged by the government to boost the economy. Two different phenomena are related to digital currency and have been aided during a pandemic. The coins and banknotes have been suspected of carrying digital payments and are proffered of dirty notes. The delivery services have been encouraging customers to make payments with the help of digital payments such as credit and debit cards and mobile payments in different parts of India [12]. Digital, there are convenient methods of fund transfer that vary from the donors to the recipients, as observed in the cases of relief. The event of disaster management has restrained civilian mobility in different payment service providers. This has been observed in the case of Covid-19 and therefore needs further explanation.

Issues regarding surveys and their privacy gained prominence in their digital usage during the lockdown. They rely on different digital means for monitoring the pandemic spread and tracing the contacts of different organizations to state the concern of surveillance. The post-pandemic results measure the population for the digital means to become prevalent. The concern of surveillance and privacy needs to be addressed so that they are reliable and efficient in tracking the disease's spread. Covid-19 has developed a newer application to track citizens alongside the virus symptoms [13]. These technologies are innovative for developing government surveillance that has evolved repeatedly. The online classes that have been done during the lockdown situations have suffered from privacy intrusion and spaces in their home. In the digital age, privacy is considered a high priority for researchers and is a dominating factor for mobile payments.

Fraud can be reduced by digital payments as several technologies are leveraged by digital payments. This is done for securing and encrypting transaction data along with multi-factor authentication. Bad actors face issues in initiating fraudulent transactions. Types of Digital payments, including "virtual credit cards", assist the users in possessing the one-off payment committed to one vendor in the case of one amount. This helps in protecting the hacking of real credit cards [14]. It is reported by the "Association for Financial Professionals" that organizations of about 92% accept paper checks. 86% of them have accepted it as the outgoing payment. The betterment of the company can be occurred by paying on-time invoices all the time by the digitization of payments. The change is reflected by the account balance immediately after the occurrence of the payment. The currency conversions occur at the same moment as a particular transaction. Therefore, expenses and income can be tracked by executives, and business decisions have been made quicker. This has occurred within vital areas, including investing, recruiting and spending [15]. The smoothness of doing economic transactions has become the greatest motivator for going digital. It has become an easier and safer spending option at the time of traveling [16]. The credit card and the mobile wallet can be easily blocked when stolen remotely. The users of populous countries, including India, have benefitted more by using digital payment methods.

4.2. Primary Analysis

A survey has been done on participants in the form of Google Forms to collect their responses. There were different people with different responses that helped to understand their perspectives on this digital currency study.

Gender of population who uses digital payments



Fig. 3 Gender

The respondents were asked about their gender, and 55% of the respondents that responded were female. This indicates that the female population uses digital payment modes more than the male population of 45%.

Age group of people that primarily uses digital payment



Fig. 4 Age group

The respondents were asked about their age group, and 47% of the population responded in the age group of 25 to 40. This helps to understand that more people in this age group use online payment modes as their primary transaction methods. There 26% of people belong to the age group above 40, and 26.3 % of the population belongs to the age group of 18 to 25. The usage of digital payment on a significant scale is depicted by the age group of 25 to 40.

Online payment service methods promote digital payments post pandemic

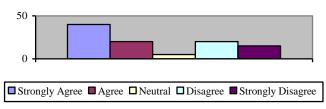


Fig. 5 Online payment method

Respondents have been asked whether the online transaction mode promotes digital payment. There are 40% of the population that has agreed on the fact that online payment methods are promoting digital services. There are other responses in which 20% of people disagreed, and another 20% agreed on the digital payment methods. 15% of respondents have responded as strongly disagree with the online mode of transactions.

Internet banking has improved post pandemic

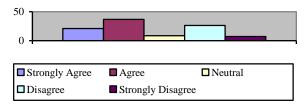


Fig. 6 Internet banking

Respondents have been asked whether internet banking services were developed during the situation post-pandemic. There were 36% population that have responded to agree, and 26% of people responded to disagree. This indicates that most of the population agrees on the fact that Internet banking has been developed in the situation post-pandemic.

Usage of digital payments is increasing?

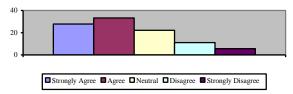


Fig. 7 Growth of digital payment service

Respondents have been asked about the usage of digital payment in developing countries such as populous countries. There was 33% population that have responded agreed on the fact that in developing countries, digital payment services have increased. There were around 22% of people that have remained neutral on this topic, and 11% people have disagreed with the above question.

Has pandemic restriction promoted the usage of digital payments?

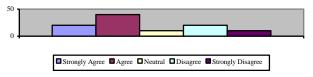


Fig. 8 Relevance of the pandemic on digital payment service

Respondents have been asked whether the pandemic restriction has promoted the usage of digital payments. There were around 40% of the people that have responded agreed with the above situation. This indicates that the restriction of the pandemic has increased the usage of digital payments. There 20% disagree on the above topic of digitalization due to the pandemic.

Digital payment is considered a secure and fast payment type

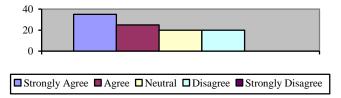


Fig. 9 Digital payment service

Respondents have been asked whether digital payment has been considered a secure transaction method. 35% of the people have agreed on the security of online payment. This indicates that people are more reliable and trustable towards the digitalization of transactions. There were 20% and 25% population that have agreed and disagreed with the above situation.

4.3. Discussion

From the above data analysis, it can be discussed that digital payment systems have increased significantly after the pandemic situation. There are several benefits of using online payment methods, such as they are fast, reliable, and secure [17]. Digitalizing payment methods has helped reduce the pandemic since no contactless payment methods have been

introduced after the pandemic. A pandemic can produce several consequences, such as destroying an empire, creating nations, and changing the political contour. A dramatic shift has been observed that depends on the emerging trend of shaping the digital world [18]. In this study, a significant increase in digital payment methods usage has been observed for transferring the value of one payment account into another by using digital devices. It has also been observed that after the Covid-19 pandemic, people have become concerned about physical contact and cash transactions [19]. Using digital payments is a better alternative way of reducing cash transactions and increasing digital payment systems.

5. Conclusion

The government regulates the services of online payments with the help of regulatory bodies situated worldwide. It is advisable to study the policy recommendation that is a combination of feedback and helps to accelerate the process of digitization [20]. Throughout this study, it has been observed that digital payment perception affects the payment behaviour of an individual. Digital payments have been driven by the positive outlook that has been introduced for reducing online fraud experiences due to their methods of digital payments [21]. The impact of fraud in digital transactions has reduced significantly and could not be ignored as the demographic factors for better adoption of digital payments. Digital payment adoption is expected to increase depending on the development of socioeconomic factors, such as data collection from geographically diverse groups. Data have been collected by using the process of simple random sampling that includes respondents completing surveys online. Technical companies and ecommerce have increased their closure of physical stores, thereby conducting log survey payments to assess individual variables. This type of survey will impact the payment behavior of a large number of people in a structured way.

References

- [1] Yunfeng Shang, Haiwei Li, and Ren Zhang, "Effects of Pandemic Outbreak on Economies: Evidence from Business History Context," *Frontiers in Public Health*, vol. 9, pp. 1-12, 2021. [CrossRef] [Google Scholar] [Publisher Link]
- [2] Gede Sri Darma, and I Putu Teddy Noviana, "Exploring Digital Marketing Strategies during the New Normal Era in Enhancing the Use of Digital Payment," *Jurnal Mantik*, vol. 4, no. 3, pp.2257-2262, 2020. [CrossRef] [Google Scholar] [Publisher Link]
- [3] Girish Santosh Bagale et al., "Small and Medium-Sized Enterprises' Contribution in Digital Technology," *Annals of Operations Research*, vol. 326, pp. S3-S4, 2021. [CrossRef] [Google Scholar] [Publisher Link]
- [4] Statista.com, 2023. [Online]. Available:
- [5] M. Noor Ardiansah et al., "The Effect of Electronic Payments Security on E-Commerce Consumer Perception: An Extended Model of Technology Acceptance," *Management Science Letters*, vol. 10, no. 7, pp.1473-1480, 2020. [CrossRef] [Google Scholar] [Publisher Link]
- [6] Itai Agur, Soledad Martinez Peria, and Celine Rochon, "Digital Financial Services and the Pandemic: Opportunities and Risks for Emerging and Developing Economies," *International Monetary Fund Special Series on COVID-19*, pp. 1-13, 2020. [Google Scholar] [Publisher Link]
- [7] Ben Williamson, Rebecca Eynon, and John Potter, "Pandemic Politics, Pedagogies and Practices: Digital Technologies and Distance Education during the Coronavirus Emergency," *Learning, Media and Technology*, vol. 45, no. 2, pp.107-114, 2020. [CrossRef] [Google Scholar] [Publisher Link]

- [8] Haitham M. Alzoubi et al., "The Effect of E-Payment and Online Shopping on Sales Growth: Evidence from Banking Industry," *International Journal of Data and Network Science*, vol. 6, no. 4, pp.1369-1380, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [9] James Jiang, Gary Klein, and Ralf Müller, "Mixed-Methods Research for Project Management Journal®," *Project Management Journal*, vol. 53, no. 3, pp. 215-218, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [10] Robin Bell, and Vessela Warren, "Illuminating a Methodological Pathway for Doctor of Business Administration Researchers: Utilizing Case Studies and Mixed Methods for Applied Research," *Social Sciences & Humanities Open*, vol. 7, no. 1, 2023. [CrossRef] [Google Scholar] [Publisher Link]
- [11] Rahul De, Neena Pandey, and Abhipsa Pal, "Impact of Digital Surge during Covid-19 Pandemic: A Viewpoint on Research and Practice," *International Journal of Information Management*, vol. 55, 2020. [CrossRef] [Google Scholar] [Publisher Link]
- [12] Mao Suzuki, and Shiming Yang, "Political Economy of Vaccine Diplomacy: Explaining Varying Strategies of China, India, and Russia's COVID-19 Vaccine Diplomacy," *Review of International Political Economy*, vol. 30, no. 3, pp. 865-890, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [13] Elizabeth C. Verna et al., "Clinical Research in Hepatology in the COVID-19 Pandemic and Post-Pandemic Era: Challenges and the need for Innovation," *Hepatology*, vol. 72, no. 5, pp.1819-1837, 2020. [CrossRef] [Google Scholar] [Publisher Link]
- [14] Economictimes.indiatimes.com, 2023. [Online]. Available: https://economictimes.indiatimes.com/here-are-the-advantages-of-cashless-payments-and-the-pitfalls-you-should-beware-of/tomorrowmakersshow/55956343.cms
- [15] Digital Payments: The Benefits, How to Use them in your Business and What to look for in a Provider, Forbes.com, 2023. [Online], Available: https://www.forbes.com/sites/forbesbusinesscouncil/2023/02/21/digital-payments-the-benefits-how-to-use-them-in-your-business-and-what-to-look-for-in-a-provider/?sh=49a4d51b5b7a
- [16] Satya Bhusan Dash, and Priyanka Sharma, "Reviving Indian Tourism amid the Covid-19 pandemic: Challenges and workable solutions," *Journal of Destination Marketing & Management*, vol. 22, 2021. [CrossRef] [Google Scholar] [Publisher Link]
- [17] Robinson Jim, "Thoughts on the Post-Pandemic New Normal in Air Travel," *Journal of Airport Management*, vol. 15, no. 1, pp. 6-19, 2020. [Google Scholar] [Publisher Link]
- [18] Amrita Agarwal, "Rethinking the Indian Health System for the Post-COVID-19 World," World Scientific Series in Grand Public Policy Challenges of the 21st Century, Flattening the Curve, pp. 63-86, 2023. [CrossRef] [Google Scholar] [Publisher Link]
- [19] Si Ying Tan et al., "Mitigating the Impacts of the COVID-19 Pandemic on Vulnerable Populations: Lessons for Improving Health and Social Equity," *Social Science & Medicine*, vol. 328, 2023. [CrossRef] [Google Scholar] [Publisher Link]
- [20] Tobias Tesche, "Pandemic Politics: The European Union in Times of the Coronavirus Emergency," *JCMS: Journal of Common Market Studies*, vol. 60, no. 2, pp. 480-496, 2022. [CrossRef] [Google Scholar] [Publisher Link]
- [21] Kathleen Marshall Park, "Navigating the Digital Revolution and Crisis Times: Humanitarian and Innovation-Inspired Leadership through the Pandemic," *Journal of Strategy and Management*, vol. 14, no. 3, pp. 360-377, 2021. [CrossRef] [Google Scholar] [Publisher Link]