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Review paper



The Covid-19 Pandemic and its Effects on Fintech in India: A Comprehensive Review

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Abstract

This research paper aims to identify the challenges and opportunities of the COVID-19 pandemic on Indian Financial Technology. This study covers the areas of Indian Fintech, the impact of COVID-19 on fintech, and the challenges and opportunities of Indian fintech. The study used systematic literature review concept mapping to produce data from related studies conducted during the pandemic. A qualitative data analysis technique was practiced, and the data was collected from secondary sources such as annual reports of the World Health Organization (WHO), Financial Stability Board (FSB), Reserve Bank of India (RBI), and other sources. This review tries to shed light on the emerging literature and find the answers that can suggest a clear understanding of the challenges and opportunities faced by Indian Financial Technology during the COVID-19 pandemic. Findings include a positive effect of COVID-19 on Indian financial technology as more and more people shift from traditional financial services to digital financial services due to COVID-19. Prominent opportunities and challenges for the Indian fintech resulting from the impact of the COVID-19 pandemic, including increased use of fintech through online shopping platforms, payments, and loans; accelerated digitalization of financial services; slowed economic activity; arose various risks; and decreased debtors' performance due to the impact of the pandemic. This systematic literature review helped the academic community to understand the impact of COVID-19 on the FinTech industry in India. Also, assist policymakers with the regulatory and policy changes needed to support the progress and resilience of the FinTech sector in the face of future disruptions. The literature will assist policymakers in planning post-COVID-19 economic recovery. This study helps industry practitioners to know consumer behavior shifts, technological advancements, and emerging market trends post-COVID-19.

Keywords: *COVID-19; World Health Organization; Fintech; Challenges and Opportunities.*

1. Introduction

Covid-19 has affected millions of people's lives and their livelihoods worldwide. Like other countries, India's experience with this pandemic has been heartbreaking, where people lost their jobs along with their loved ones. Nearly all the sectors were badly affected, from financial sectors to tourism and many more (Upadhayay, 2021). COVID-19 has first affected the healthcare sector, then various other sectors, including the economic and financial sectors, particularly the bank and non-bank financial institutions and fintech. But in a situation where countless things and habits change fast, even as people's ways of utilizing financial services change, that is the only reason for spreading fintech and its changes in people's behavior towards it (Tripalupi & Anggahegari, 2020). Fintech is considerably more than merely a reference to innovation linked to finance. Fintech is an innovative creation used to improve consumer money-related practices and shape effective responses for budgetary administration with the latest mechanical trends that are usual. Due to the Covid-19 pandemic, most firms are espousing new ways to handle and save their business. It also allows for shifting toward payment habits during the pandemic, and artificial intelligence changes the human touch for payment purposes (Nair et al., 2021). Most companies facilitate communication and exchange of goods and services worldwide, and the main reason behind the increases in the adoption and usage of fintech is that it is close to technology (Fu & Mishra, 2020).

In India, the Fintech industry has displayed huge growth over the past few years, and India is gradually becoming a center for countless Fintech startups; India secured the second position after China in the adoption of fintech services with 87%, and the prominent names in this list are Paytm, Pine labs, PayU, and Razorpay, etc. It was discovered that the top three verticals of FinTech worldwide were the same for India, i.e., 39% for Digital lending, 18% for digital capital raising, and 17% for digital payments. While seeing the adoption and growth of fintech among people, Ziegler states, "The higher the stringency of Covid-19 or lockdown, the higher the adoption of financial technology." The increase in adoption is not only due to the pandemic but also because of the correlation between stricter lockdowns and increased adoption of FinTech services.

We have considered some Research Objectives for the analysis of the study:

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- To know the exact situation of India's fintech Services.
- To analyze and examine the impact of Covid-19 on Fintech Services in India.
- Study the fintech challenges and opportunities that arise with the onset of COVID-19.

2. Literature review

Reserve Bank Governor C Rangarajan said the COVID-19 pandemic has become a serious challenge for humanity in the 21st century; it has become a severe threat to the entire global economy. As a result, the growth of the Indian economy would remain the same that was before expected to become a USD five trillion strong economy by 2025. That becomes impossible due to COVID-19. It was analyzed that India's economy was USD 2.7 trillion in 2019, the same as at the end of March 22. From a financial point of view, the undesirable role is played in the number of infected persons and the consequences of the actions taken against it (Rangarajan, 2021). In their study, Malik Mustafa identifies the significant factors that influence its users' adoption of M-banking in the Gulf region. The study contributed to focus on a deep understanding of the aspects that support and promote the use of mobile banking in some developing countries. The study concluded that the research endorses several factors for using M-banking in the Gulf areas (Mustafa et al., 2021). The article draws some equivalence with the past crisis of the Great Depression of the 1930s. It displays that the present crisis has significant differences, making applying whichever proven public financial policy models to alleviate the crisis's consequences hard. The COVID-19 pandemic has a new, unparalleled element of unpredictability to the world economy. A country has tried its best to fight the pandemic economic and social consequences by captivating severe actions (Denysov et al., 2021). In their study, Dakshta Nair et al. (2021) displayed a brief insight into what changes and how the Fintech Industry has transformed due to the impact of COVID-19 in India. The research paper discussed the sectors of the fintech industry and the changes made by COVID-19 to help the sector flourish after COVID-19 in India (Nair et al., 2021). This paper examines the economic impact of COVID-19 on some sectors, specifically the tourism, oil, aviation, financial, and healthcare sectors. Here, the author analyzes the economic data of every industry and graphically signifies the positive and negative effects on each industry as an outcome of the COVID-19 pandemic (Roy, 2020). Hundal & Zinakova's study aims to discover the role and relevance of FinTech in Finland's commercial banking sector and the shifting dynamics of investors in the banking industry in the nimble of FinTech. An important impact of FinTech has been experienced in some banking sectors. However, it was found that ongoing COVID-19 can influence Fintech's future revolution and implementation (Hundal & Zinakova, 2021). The paper inspects how the digital financial arrangement that arose in the 2008 Global Financial Crisis is being additionally leveraged to overcome the instant challenges faced due to the pandemic and accomplish the impending economic fallout. The study exhibits that the 2008 crisis is different from the present crises. A COVID crisis is a health and geopolitical crisis, falling over concurrently into financial markets and the real economy. As a result of both, this crisis needs different approaches (Arner, et al., 2020). This research paper studies the consequences of coronavirus on diverse sectors of the Indian economy and highlights the causes for which India can be aided after a pandemic period and primarily to stipulate the business survival tactics that are crucial to conquer this harsh situation (Rakshit & Paul, 2020).

3. Research Methodology

This study used a literature review of various research papers on the COVID-19 pandemic and its impact on financial technology services in India from 2020 to 2022, and research data was collected from national and international journals. Based on previous studies, the results and opinions of researchers try to bring in more detail, references, and ideas.

4. Results and Discussion

4.1. Fintech landscape in India

Besides the definition we provided of fintech in the introduction section, here are more definitions. (Freedman, 2006) in his book Introduction to Financial Technology, he explains that financial technology's existence is connected with building systems that model value besides this process, financial products, for instance, stocks, bonds, money, and contracts. (Schueffel, 2016) Fintech is a "new financial industry that relates technology to advances in financial activities." He also explains that this is a newly coined term that can be related to foundations and companies that deliver extremely pioneering financial services and products through the combination of information technology aiding ventures or by consuming modern, accessible technology. Fintech holds digital novelties and technology-enabled business-modeled inventions in the financial sector. As per his study, he expresses that this technology can interrupt prevailing industry structures and diminish industry boundaries, simplify strategic disintermediation, transform the way how present firms generate and deliver products and services, and democratize reach to financial services; however, it also deals with substantial privacy, regulatory and law enforcement challenges (Philippon, 2017). Financial technology (fintech) is a new technology that works to improve and mechanize the delivery and practice of financial services. The key purpose of fintech is to assist companies, business owners, and customers in accomplishing their financial operations and procedures and living well by applying dedicated software and algorithms that are used on computers progressively in smartphones. It combines the words "finance" and "Technology" (Goyal & Parekh, 2022). Barasch also defines Fintech as a mixture of the words "financial" and "technology," it is a comparatively new and frequently nebulous term that relates to any developing technology to aid customers or financial institutions to supply financial services in a newer, faster, and better way than was traditionally provided (Barasch, 2019). In India, RBI is one of the prime regulators of FinTech. However, RBI controls most fintech companies dealing with account aggregation, peer-to-peer (P2P) lending, crypto -currencies, payments, etc. There are two important reasons for the advent of fintech companies. Mainly, the universal financial crisis of 2008, the basis of the crisis was the scarcity of traditional banking systems. Secondly, the arrival of fresh technologies that support mobility allows ease of use (visualization information), fast speed, and lower cost of financial services. (Saksonova & Kuzmina-Merlino, 2017) In India, everything from raising money for new startups, a person getting a loan, seeking information, transferring money, and finances is undergoing a radical shift. Now, Fintech has developed greatly, and it is further divided into Payments, Mobile Payments, Insurance, Crowdfunding, Alternative Lending, etc. As a segment, fintech is around half a decade old, but it has made speedy progress. We cannot realize it, but fintech is swiftly having a permanent and profound influence on our lives (Gandhi, 2022).

India's Payments and Alternative Finance segments held more than 90 percent of the sector's investment flows in 2015; there has been a major shift in the direction of impartial distribution of investment across sectors that comprise Insurtechs, Wealthtechs, etc. India has over

17 Fintechs, which has extended vastly. India reports remarkable growth in Digital Payments, with an estimated monthly volume of over 5.7 Bn transactions worth $2 Tn on September 21. India has become the home for the highest number of real-time online transactions, with 25.5 Bn in 2020, and it is ahead of the US, UK, and China combined. Here are the few reasons behind the speedy growth of fintech in the past few years, and this is possible with the only key enablers the important initiatives: Jan Dhan Yojana, Financial Literacy, E-RUPI, India Stack, etc. (National Investment Promotion and Facilitation Agency, 2022).

4.2. Fintech adoption in India

Fintech implementation in India has augmented significantly over the past two years. As per the EY FinTech Adoption Index of 2017, India has reached second place with a high Fintech adoption rate of (52%) across 20 markets worldwide. In other categories, services with digitally active Indian consumers display 50% -100% higher adoption rates than global averages (Vijai, 2019). However, The Winds of Change Trends Shaping India's Fintech Sector: Edition II cited that financial technology, driven by new technologies and innovative solutions, has significantly transformed the global financial services industry. India is dominant in adopting FinTech, with 87% of individuals using these services, much greater than the global average of 64%. The promising FinTech market in India is probable to grow to $1 trillion in assets and generate $200 billion in revenue by 2030 (Surya & Naker, 2022).

Table 1: Fintech Adoption Among Digitally Active Consumers

	Money transfer and payments	Financial Planning	Savings And Investments	Borrowing	Insurance
India	72%	20%	39%	20%	47%
Global	50%	10%	20%	10%	24%

Source: EY FinTech Adoption Index 2017 Country Dashboard.

4.3. Impact of Covid-19 Pandemic on Fintech

4.3.1. Covid-19 Pandemic

As per the WHO, the COVID-19 pandemic is a unique respiratory disease that spread worldwide and started at the end of 2019. "Coronavirus disease (Covid-19) is a communicable disease instigated by a afresh exposed coronavirus. Those infected with this disease will experience mild to moderate respiratory ailment and can improve without special treatment." WHO also stated that this pandemic is a global health outbreak crisis (WHO, 2020).

As per the (NHP, 2020), "A cluster of pneumonia of unknown etiology was reported in Wuhan City, Hubei Province of China on 31 December 2019. On 7 January, the Chinese authorities identified a new variety of coronavirus as a cause of the pneumonia outbreak. It is different from any other human coronaviruses discovered so far, and the new strain is named 2019-nCoV. Afterward, on 11 February 2020, this virus is named severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) under the disease name Covid-19."

Furthermore, "the coronavirus Covid-19 pandemic is the defining global health crisis of our time and the greatest challenge we have faced since World War Two." Since its initiation into the Asian economy, COVID-19 has reached each part of the globe. "In the Asia Pacific region, which enjoys a high population of young people, we are harnessing the creativity and vision of young startups so that they can both, whether these hard times or come up with creative ways to solve the new problems we face." (UNDP, 2020)

4.3.2. Impact of Pandemic on Fintech

From April to June 2020, India's GDP dropped by 24.4%. According to the latest national income estimates, in the second quarter of the 2020/21 financial year (July to September 2020), the economy contracted by a further 7.4%. The recovery in the third and fourth quarters (October 2020 to March 2021) was still weak, with GDP rising 0.5% and 1.6%, respectively. This means that India's overall rate of contraction was (in real terms) 7.3% for the whole 2020/21 financial year. During the 2020/21 financial year, the rates of decline in GDP for the world were 3.3% and 2.2% for emerging markets and developing economies. The fact that India's growth rate in 2019 was among the highest makes the drop due to COVID-19 even more noticeable (Swathi & Maithreesh, 2021). The ongoing spread of COVID-19 has become one of the biggest threats to the global economy and financial markets. To contain the impact of the coronavirus outbreak, India, like many countries across the globe, is taking several measures." The measures are needed to overcome the impact posed by the pandemic on the Indian financial markets. Also, "The adverse effects of the Covid-19 pandemic are trickling down to major sectors of the Indian economy, with manufacturing, auto, retail, aviation, and hospitality bearing the brunt of the lockdown", and the FinTech Industry isn't an exceptional one (Gupta & Agrawal, 2021). PWC conveys the harsh reality that "The Fintech sector finds itself at an inflection point as the world continues to tackle the socioeconomic fallout of the Covid-19 crisis." Fintechs can gain opportunities to redefine financial business models in a dynamic environment. "The consistent growth of the FinTech sector is reflected in investor sentiments. Before the COVID-19 outbreak, the Indian FinTech ecosystem witnessed a positive trend in FinTech funding activity" and followed the same pattern amidst and after the pandemic or in the recovery period (PWC, 2020).

As COVID-19 has diversely affected the whole world, it still changed retail behavior as remote work, e-commerce, and digital payments greatly increased. That led businesses to expand their digital activities, and consumers increasingly rely on online channels to handle their day-to-day activities. As businesses invest in their online channels and people increase their digital activities, these changes may become structural in the longer term. Continuing these trends after the pandemic could lead to more far-reaching structural changes in the financial sector.

Three potential scenarios stand out for their financial stability effects:

i) More Fintechs entering financial services, taking over market share in niche services where incumbent financial institutions are less able to innovate and meet customer demands
ii) Potentially fewer large incumbents through consolidation driven by lower margins and the need to invest more in technology;
iii) Greater Bigtech entry or partnership with incumbents. (FSB, 2022)

After the pandemic, RBI stated that India's rightful place in the global economy will be built on a sound, stable, and resilient financial system. Banks and NBFCs, the power engines of our economy, must undergo continual metamorphosis to accelerate this transformational journey and become possible due to the latest technology. (Das, 2021)

4.4. Challenges and opportunities of fintech in India

4.4.1. The Rise of Fintech in India

India has the world's fastest-growing economy, and undoubtedly, it appeared as one of the speediest-progressing Fintech in current years. Paperless lending, mobile banking, protected payment gateways, mobile wallets, and additional concepts have already been implemented in India. For the past two years, there has been an immense espousal of digital payment systems in India, making it further appropriate for simple financial services. In the past few years, India's payments framework has been in considerable progression as new payment mechanisms have arisen, for example, Immediate Payments Service (IMPS), Unified Payments Interface (UPI), Bharat Interface for Money (BHIM), and many more. The government's new initiatives, "Make in India" and "Digital India" missions, have also played a great role in speeding up the espousal of Fintech. The Reserve Bank of India (RBI) has also pushed the rise. (Times, 2022).

4.4.2. Opportunities of Fintech

Two main factors that led to changes in the Indian financial system are Demonetization and the Covid-19 pandemic. Demonization has resulted in a proportion of activities, particularly among the collective folk, and it is the key reason for shifting towards a paper-based, cash-based economy to digital, electronic, technology-driven platforms that advanced the nation's Fintech revolt. On the other hand, the COVID-19 pandemic has accelerated this digitalization across the innumerable sectors, with contactless and cashless payments, and it is also endorsed to inspire social distancing. Many of the business activities faced some market opportunities along with challenges. (Times, 2022) This advancement and growth of the Fintech ecosystem in India have been assisted by several factors, such as increasing smartphone availability, internet access, and high-speed connectivity. The main opportunities that arise due to these factors are as follows: 1. Digital Payment Services 2. Big Data and Analytics 3. Blockchain Technology 4. Personalization, and 5. Robotic Process Automation. (Sharma, 2022).

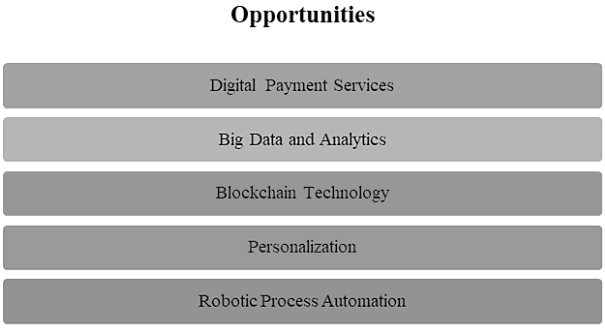


Fig. 1: Fintech Opportunities.

4.4.3. Challenges of Fintech

For several reasons, some companies and stakeholders didn't implement fintech services for their professional and private chaos. Moreover, they do not fully trust this new technology due to the absence of financial knowledge, or they may not have proper services that need to be implemented these services. Certain challenges restrict businesses and others from adopting fintech technologies. Some are mentioned: 1. Data Privacy and Application Security Challenges 2. Regulatory and Compliance Laws 3. Focusing on the Customer Experience 4. Financial Illiteracy, 5. Changing Revenue and Business Models 6. Personalized Services etc.

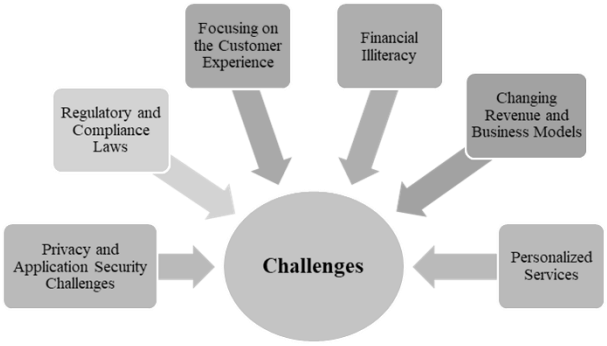


Fig. 2: Fintech Challenges.

5. Conclusion

After reviewing different literature, it was found that the world is in the grasp of the brutal coronavirus pandemic. It affects the global health system along with social and economic crises, unleashing extraordinary downfall of financial activities and business operations. In this study, we try to know the potential effects of coronavirus on Indian Fintech. The Indian economy has benefited from this pandemic crisis period. Nonetheless, throughout this pandemic, every organization and person was affected by uncertainties and challenges that cropped up due to the coronavirus. This captures possible imminent changes in a business environment and should recognize the opportunities to strive and thrive. Fintech can fundamentally restructure the financial services and financial inclusion landscape in India. Fintech has reduced the rates and improved the access and quality of financial services. By allowing technologies and handling risks, we can generate a new financial system that is more comprehensive, cost-effective, and strong. Covid-19 has also positively affected the adoption of financial technology in India. It has a further caliber to grow and provide better services than the traditional service providers.

References

[1] Arner, W., Barberis, W., Buckley, D., M., & Zetzsche, A. (2020). Digital Finance & the COVID-19 Crisis. *SSRN*. https://doi.org/10.2139/ssrn.3558889.
[2] Barasch, R. (2019). What is FinTech? Retrieved from Envestnet Yodlee.
[3] Arner, W., Barberis, W., Buckley, D., M., & Zetzsche, A. (2020). Digital Finance & the COVID-19 Crisis. *SSRN*. https://doi.org/10.2139/ssrn.3558889.
[4] Barasch, R. (2019). *What is FinTech?* Retrieved from Envestnet Yodlee.
[5] Das. (2021). *Contours of Economic Recovery.* RBI.
[6] Das, S. S. (2019). *Opportunities and Challenges of Fintech.* Reserve Bank of India.
[7] Denysov, Litvin, Lotariev, Yegorova-Gudkova, & Oleksandr. (2021). Management of state financial policy in the context of the COVID-19 pandemic. *Journal of Interdisciplinary Research*.
[8] Freedman, R. (2006). *Introduction to Financial Technology.* https://doi.org/10.1057/9780230601901_1.
[9] FSB. (2022). *FinTech and Market Structure in the COVID-19.* Financial Stability Board.
[10] Fu, J., & Mishra, M. (2020). The Global Impact of COVID-19 on Fintech Adoption. *Swiss Finance Institute*. https://doi.org/10.2139/ssrn.3588453.
[11] Gandhi, R. (2022). What aspects of our life has fintech touched? *The Economic Times*.
[12] Goyal , A., & Parekh, D. (2022, 2). *Investing in Fintech: A look into 2022*. Retrieved from Insight Partners.
[13] Gupta, & Agrawal. (2021). Analytical Study of Fintech in India: Pre and Post-Pandemic Covid. *Indian Journal of Economics and Business*.
[14] Gupta, S., & Gupta, A. (2021). Analytical study of fintech in India: pre & post pandemic covid- 19. *Indian Journal of Economics and Business*.
[15] Hundal, S., & Zinakova, T. (2021). Financial technology in the Finnish banking sector and its impact on stakeholders in the wake of COVID-19. *Risk Governance & Control: Financial Markets & Institutions*. https://doi.org/10.22495/rgcv11i1p1.
[16] Mustafa, M., Shawer, M. A., & Hamouche, S. (2021). The Technology of Mobile Banking and Its Impact on the Financial Growth during the Covid-19 Pandemic in the Gulf Region. *Turkish Journal of Computer and Mathematics Education*.
[17] Nair, D., Veeragandham, M., Pamnani, P., Prasad, S., & Guruprasad, M. (2021). Impact of COVID-19 On Fintech Industry. *International Journal of Research in Engineering, Science and Management*. https://doi.org/10.47607/ijresm.2021.496.
[18] Nair, D., Veeragandham, M., Pamnani, P., Prasad, S., & Guruprasad, M. (2021). Impact of COVID-19 On Fintech Industry. *International Journal of Research in Engineering, Science and Management*. https://doi.org/10.47607/ijresm.2021.496.
[19] *National Investment Promotion and Facilitation Agency.* (2022, 4). Retrieved from National Investment Promotion and Facilitation Agency.
[20] NHP. (2020). *Annaul Report on Covid.* National Health Policy.
[21] Paul, D. R. (2020). Impact of COVID-19 on Sectors of Indian Economy and Business. *International Journal of Engineering and Management Research*.
[22] Philippon, T. (2017). The FinTech Opportunity. *Bank for International Settlements 2017*. https://doi.org/10.3386/w22476.
[23] PWC. (2020). *Responding to the potential business impacts of COVID-19.* PricewaterhouseCoopers International Limited.
[24] Rakshit, D., & Paul, A. (2020). Impact of Covid-19 on Sectors of Indian Economy and Business Survival Strategies. *International Journal of Engineering and Management Research*. https://doi.org/10.31033/ijemr.10.3.8.
[25] Rangarajan. (2021). India will have a $5 trillion economy by 2025, which is 'impossible' due to Covid. *Business Standard*.
[26] Roy, S. (2020). The economic impact of the COVID-19 pandemic. *Researchgate*.
[27] Saksonova, S., & Kuzmina-Merlino, I. (2017). Fintech as Financial Innovation – The Possibilities and Problems of Implementations. *European Research Studies Journal*. https://doi.org/10.35808/ersj/757.
[28] Schueffel, P. (2016). Taming the Beast: A Scientific Definition of Fintech. *Journal of Innovation Management*. https://doi.org/10.2139/ssrn.3097312.
[29] Sharma, I. (2022). *Fintech Challenges and Opportunities*. Retrieved from Tatva Soft Sculping Thoughts.
[30] Sharma, I. (n.d.). *Fintech Challenges and Opportunities.* Retrieved from Tatva Soft Sculpting Thoughts.
[31] Suhail, R. (2021). Discerning The Impact of COVID-19 on Global and Indian FinTech. *BW DISTRUP*.
[32] Surya, N., & Naker, N. (2022). *The winds of change: Trends shaping India's Fintech Sector.* EY: Building a better working World.
[33] Swathi, & Maithreesh. (2021, 6 30). *How has Covid-19 affected India's economy?* Retrieved from Economics Observatory.
[34] Times, T. E. (2022). Why India is at the forefront of fintech. *The Economics Times*.
[35] Tripalupi, R. I., & Anggahegari, P. (2020). The impact of the COVID-19 pandemic: Challenges and opportunities of Syariah. *International Journal of Nusantara Islam*. https://doi.org/10.15575/ijni.v8i1.10207.
[36] UNDP. (2020). *UNDP launches new COVID-19 Data Futures Platform.* United Nations Development Programme.
[37] Upadhayay, A. (2021, July 24). Impact of Covid-19 on Indian economy. *Impact of Covid-19 on Indian economy*.
[38] Vijai, C. (2019). Fintech in India: Opportunities and Challenges. *South Asian Academic Research Journals*. https://doi.org/10.2139/ssrn.3354094.
[39] WHO. (2020). *Covid -19 Situation Update Report-37.* World Health Organisation.