

Addaiyan Journal of Arts, Humanities and Social Sciences

© Addaiyan International Publishers

(An international Publisher of Research & Academic Resources)

Journal Homepage: <https://aipublisher.org/projects/ajahss/>

ISSN: 2581-8783 (Online)

DOI: 10.36099/ajahss.3.9.1

A Study of the Covid-19 Impact on Financial Services, Healthcare and Education Sector**Dr. Anupam Karmakar**

Assistant Professor of Commerce. New Alipore College, Kolkata, West Bengal

Corresponding Author*

Dr. Anupam Karmakar

Article History

Received: 02.09.2021

Accepted: 10.09.2021

Published: 16.09.2021



Abstract: Organizations have already gone through a major digital transformation with the advent of the internet before. For many years they are incorporating technology in almost every aspect. The outbreak of global pandemic COVID-19 in the year 2020, which again disturbed the equilibrium, and forced the semi-automated and semi-digital legacy system-oriented organizations to shift radically towards digital transformation. In this paper, three major sectors have been covered—healthcare, financial services, and education which have undergone digital revolution effectively due to this pandemic. Digital Revolution has replaced or removed old ways of operations in those sectors and helped to reduce redundancies and waste of resources of any kind. Companies also face tremendous challenges regarding the adaptation of everything digital. The objectives of this paper are – to examine the impact of Digital shift in those sectors due to the COVID-19 pandemic and to predict the future

prospect of the business with the current rate of incorporation with digital technology in these sectors, how managerial approaches when it comes to management functions like cost-effectiveness, leadership style, learning experiences have evolved to facilitate and incorporate this technology shift effectively. This research paper also studies the roadblocks faced by the organization on the way of digital transformation.

Keywords: EdTech, Arogya Setu, Digital Payments Index (DPI), FinTech

INTRODUCTION.

Digital Revolution – the third industrial revolution, which has changed almost every facet of an organization and individuals as well. It is the process of using technology which radically changes the operations and working procedure of a business organization. It has transformed the way, how information has been dispersed across the world. The Digital revolution has helped businesses to enable more distribution channels, reduce cost through effective and efficient use of information, and business process re-engineering through the improved process. There is also a vital role of managerial approaches in facilitating digital transformation in the organization. The management of an organization has the responsibility to lay the foundation of setting the formal context for digitalization. This in turn educates

and enables the employees towards the change. But prior to all these the top-level management of the organization needs to understand – what is digitalization and how to implement it correctly.

With the advent of the COVID-19 pandemic, the world has been led to various disruptions in operations, business models, and functioning of industries all over the world. Going digital is not new to the industries or businesses, but the pandemic accelerated the adoption of digital offerings. There has also been a radical shift in customer behaviour and increasing consumer's comfort and willingness to engage digitally. It has generated leadership and support in the organisations by highlighting the need for digital transformation in order to reach customers and maintain operational resilience.

The impact of digital evolution or transformation due to this pandemic is mainly classified into 5 sectors: healthcare, financial services, education, media and entertainment, retail. These sectors partially changed their ways of operations. Some have gone through the major digital shift – like retail and education sectors. Some have gone through partial but significant changes. This digital transformation also created some new challenges like IT infrastructure, data breach, fraud, etc. But it's needless to say that Indians gradually adapted to the new mode of online culture and tried their best to overcome the crisis owing to the Covid-19 pandemic.

OBJECTIVES

The objectives of this paper are:

- (i) To examine the impact of the digital shift in healthcare, financial services, and education sector due to COVID-19 pandemic.
- (ii) To predict the future prospect of the business with the current rate of incorporation with digital technology in these sectors.
- (iii) To analyse how managerial approaches in respect of management functions like cost-effectiveness, leadership style, learning experiences have evolved to facilitate and incorporate this technology shift effectively.
- (iv) To highlight the roadblocks faced by the organization on the way of digital transformation.

SURVEY OF LITERATURE

Healthcare Services -

Covid-19 accelerated the digital transformation in the healthcare sector of India hugely. Digital transformation was already started before Covid-19 but that was not fully accepted by the Indian citizen. But after March 2020 when Covid-19 hit India people were afraid to go to local hospitals and clinics as those were fully occupied with Covid-19 patients. Then people started to try online consultations and currently after one year of Covid times we are fully accustomed to this mode. Earlier in tier, 1 cities patients used to come in tier 2 and tier 3 cities for better treatment but now in this pandemic time patients from those are getting treatment online straight from tier 1 cities. Currently, India is having near about 11.5 lakh doctors, more than 25000 government hospitals, and more than 7 lakh beds present in these hospitals(12). If all these can be aligned in one single access point then the people of India would be very much helpful in using them. In the Covid-19 time Arogya Setu Application, Online Booking, Patient

Mapping, Telemedicine portal, Hospitals tracking, etc. have played an important role in the digital healthcare sector. Indian government understands the need of digitization in the healthcare sector and likewise, they are acting on it (13).

Financial Services—

As this pandemic restricted physical contact, this, in turn, has boosted the demand of online financial services and pushed financial institutions more towards digitalization. There's been a surge in digital payments especially in online grocery stores, retail outlets, vegetable and fruit vendors, online pharmacies, bill payments, EdTech players, and OTT platforms through QR Code, wallets, UPI, or contactless payments (6). Public sector banks usually have limited capacity to invest in digitalization due to poor asset quality and profitability and small private banks have resources constraints. In the Indian market, we can see SBI, Axis, ICICI, HDFC banks dominate digital payments. In order to check digital payments penetration, RBI launched Digital Payments Index (DPI) payment enablers, payment infrastructure — demand-supply aspects, payment performance, and consumer centricity (4). All banks are experiencing all-time the high number of mobile logins and internet banking and most surprisingly, a significant amount in this growth is shared by senior citizens who are traditionally perceived as slower in adopting digital channels. After the pandemic we can also see an upsurge in foreign investment in India's FinTech sector. Despite many challenges, different organizations are also changing in their policies and way of operations in order to respond to the sudden change in equilibrium caused by the pandemic.

Educational Sector –

With India being hit by the pandemic for over a year and a half there has been a drastic change in the education sector. Digitalization in the education sector was prevalent in abroad for a long time but this pandemic has accelerated the digitalization in this sector in India. This situation has broadly impacted students, teachers, institutions, administrations as well as suppliers. This digitalization has encouraged students to perceive their education hassle-free overcoming all the obstacles this pandemic has brought upon us. EdTech platforms are working very efficiently and effectively to cater to the crisis and they are also responding very well to address the emerging needs of their customer and market(19).

METHODOLOGY USED

Majorly secondary data has been used for this paper, all the references for which have been cited as data sources. These data have been processed as graphical representations in **Microsoft Excel**. Certain graphical plots have also been directly taken from some data sources which have also been mentioned respectively.

DATA FINDINGS AND ANALYSIS

Healthcare Sector -

The Healthcare sector is the most important sector largely exposed by Covid-19 after it entered in India on March 2020. In the time of lockdown when Covid-19 cases were surging highly, people remain untreated due to the unavailability of doctors. Online consultation applications were hardly present at

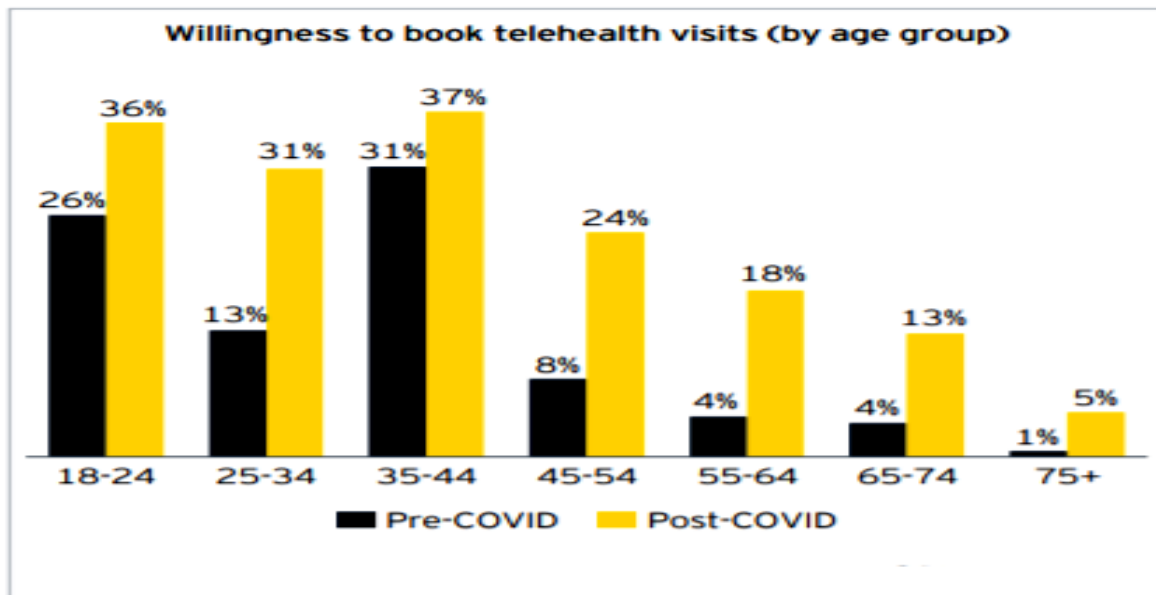
that time. Though few applications were available but people were reluctant to use them as we prefer physical check-ups over online consultations. But this pandemic changed the whole scenario of the healthcare sector.

Impacts -

- Several healthcare providers such as hospitals and e-pharmacies are rolling out their own online platform and doctors and patients are adopting them very quickly. Users of these tele-consultation users showed a steep growth during this pandemic situation as compared to the normal situation. For Example: During the Covid-19 Situation, Fortis healthcare has seen a considerable hike of 10% in Outpatient Department (OPD) consultation as compared to the pre-covid situations.

In the Covid time's willingness to book tele-health care visits has been increased as compared to pre-Covid times. In the below graph it is clearly seen that in every age bracket the percentage of online consultation has been increased which clearly means people of every age bracket are accepting this technology shift.

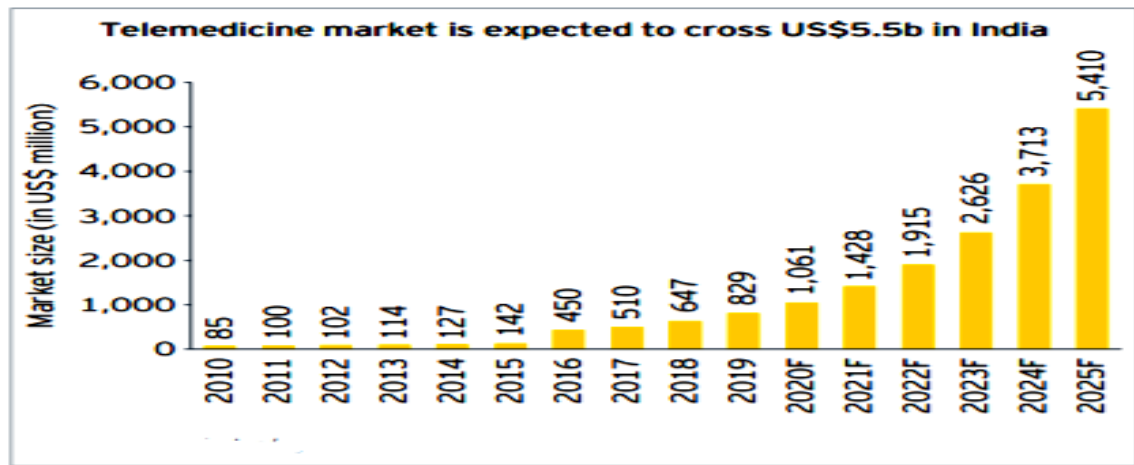
Figure 1:Willingness to book tele-health visits (by age group)



Source: EY Survey (September 2020)

- India is looking forward to see its telemedicine market to grow at a Compound Annual Growth Rate (CAGR) of 31% for the year 2020-2025 and India is expecting to reach a revenue of US\$5.5b.

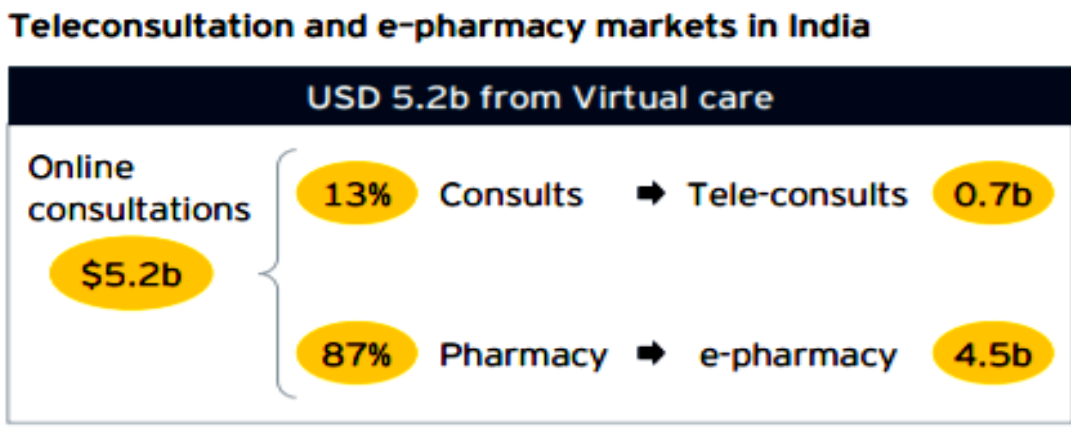
Figure 2: Growth of Telemedicine Market of India



Source: EY Survey (September,2020)

- If the trend goes same as shown in the above curve, then by 2025 India expects to achieve revenue of US\$5.2b in telemedicine market.

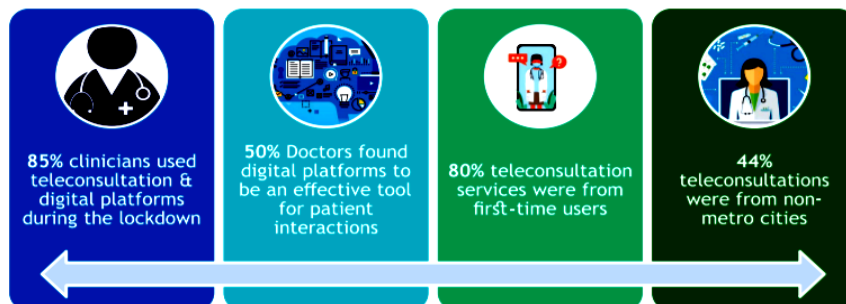
Figure 3: Tele-consultation and e-Pharmacy Markets in India



Source: EY Survey (September,2020)

- In the below figure 4 it is clearly seen how healthcare sector has fully transformed into digitalization in Covid-19 times.

Figure 4: Healthcare Sector’s full transformation into Digitization



Source: NITI Aayog Survey. (2021)

Managerial Approaches -

- In March 2020, the Ministry of Health and Family Welfare (MoHFW) and NITI ayog released new guidelines considering Telemedicine practice. All the instructions were coupled within the Government's tele-consultation services website e-Sanjeevani and e-Sanjeevani OPD. In the data released by e-Sanjeevani in early December 2020 over 1 Million tele-consultations had taken place through e-Sanjeevani across 550 districts in India(15).
- Ministry of Health and Family Welfare (MoHFW) has decided to make the vaccination drive digitally. They developed a portal called COWIN to digitally track the number of people vaccinated. This also tracks which dose (Dose 1 or Dose 2) a particular individual has taken, In which hospital which vaccine is available, etc.
- During this pandemic situation many private hospitals, State government, and central government rolled out many applications from their end to track the availability of beds in the nearest hospitals. This helped patients a lot to get information online sitting at home in this critical time.

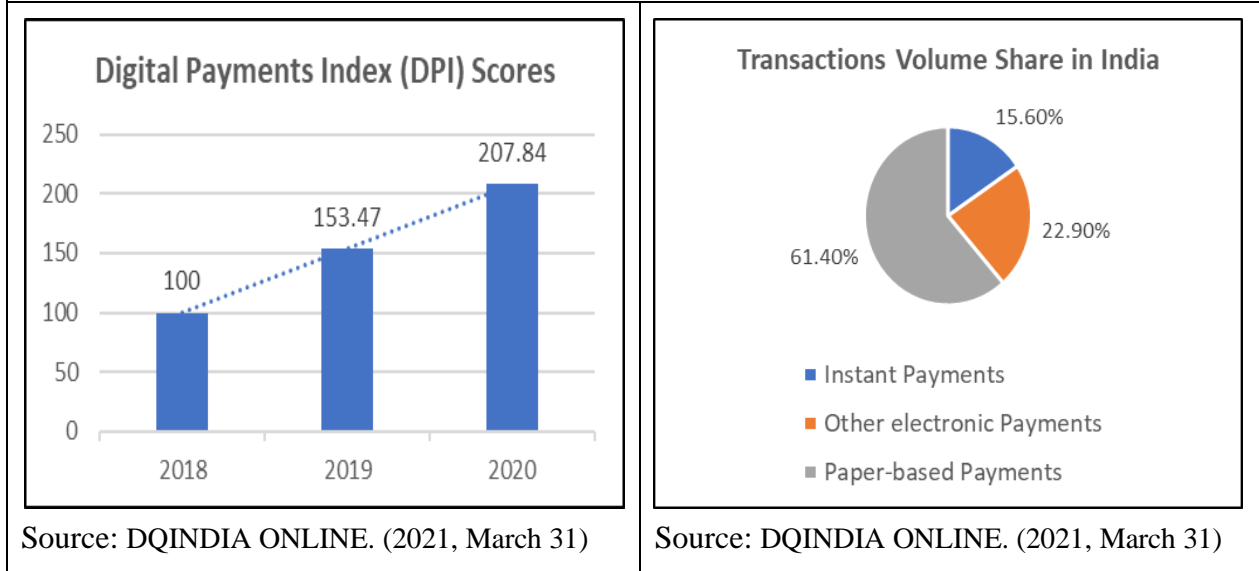
Challenges-

- 1) After the vaccination drive started via the COWIN portal many times COWIN server crashed due to multiple logins of the user. This majorly happened when the government started to roll out vaccinations for 18+ citizens.
- 2) Many hospitals started showing the status of the Covid-19 patients in their online portal as Covid-19 patients are not allowed to meet with their relatives. There is often much wrong information published online regarding the status of the patients which created confusion among the family members of the patient.
- 3) In this Covid-19 times, hospitals started taking booking of RTPCR tests (for Covid suspects) and other tests for the patients. Due to a huge surge in Covid cases patients are unable to get slots in proper time in the dedicated booking applications of the hospitals. Due to these, patients are facing problems in treating themselves.

Financial Services –

Since this pandemic, contactless payments are gaining popularity for their convenience, safety, security while maintaining a physical distance. In order to check digital payments penetration in India Reserve Bank of India on January 1, 2021, launched Digital Payments Index (DPI) with the base year set to March 2018 at a score 100. DPI in March 2020 had a score of 207.84 whereas in March 2019 it was 153.47(4). We can see there is a rapid growth in digital payments by 41% as compared to last year all over the world due to greater reliance on real-time and digital payments, as per ACI Worldwide and Global Data(9). According to the same report, India is at the top rank with 25.5 billion real-time payments in the world.

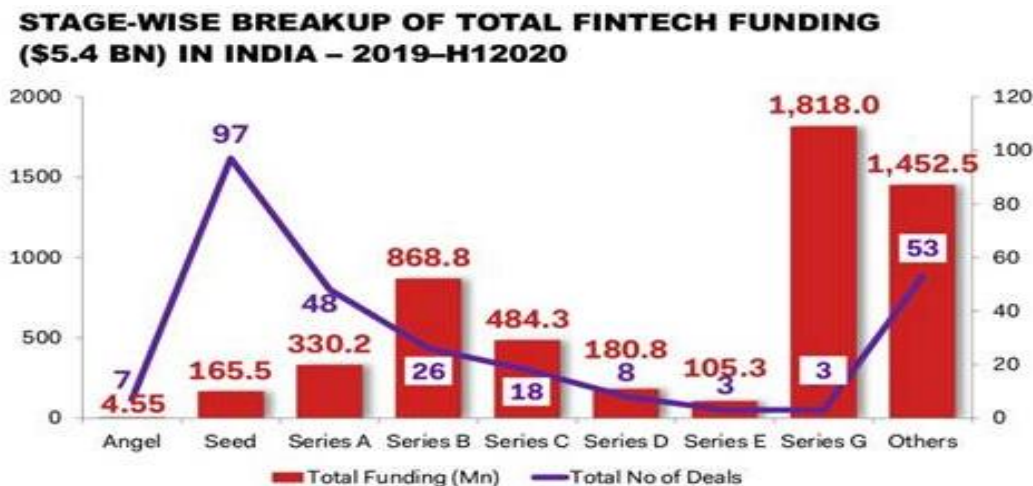
Figure 5: Digital Payments Index Scores and Transaction Volume Share in India



After the pandemic, we can also see a surge in the number of senior citizens using digital payment modes. As per 2020 data, in India the transaction volume shares are – 15.6% - instant payments, 22.9% - other electronic payments and 61.4% - paper-based payments. It is expected, India to grow its digital payments volume to 71.4% by 2025(9).

Given the government’s effort to boost financial inclusion and a favourable market like India with its large-growing middle-class population, well-established digital identification system (Aadhaar), foreign companies are finding it lucrative enough to invest in India’s Fintech sector. During Covid-19, India witnessed 60% increase in FinTech investments of \$1467 million in the first half of 2020 as compared to \$919 million in 2019’s first half (16). Although the FinTech sector in India is still in the early adoption stage, but it has well-positioned itself to witness long-term growth in the future. In the coming age, technology will offer the most convenient, flexible, and customized options for consumers.

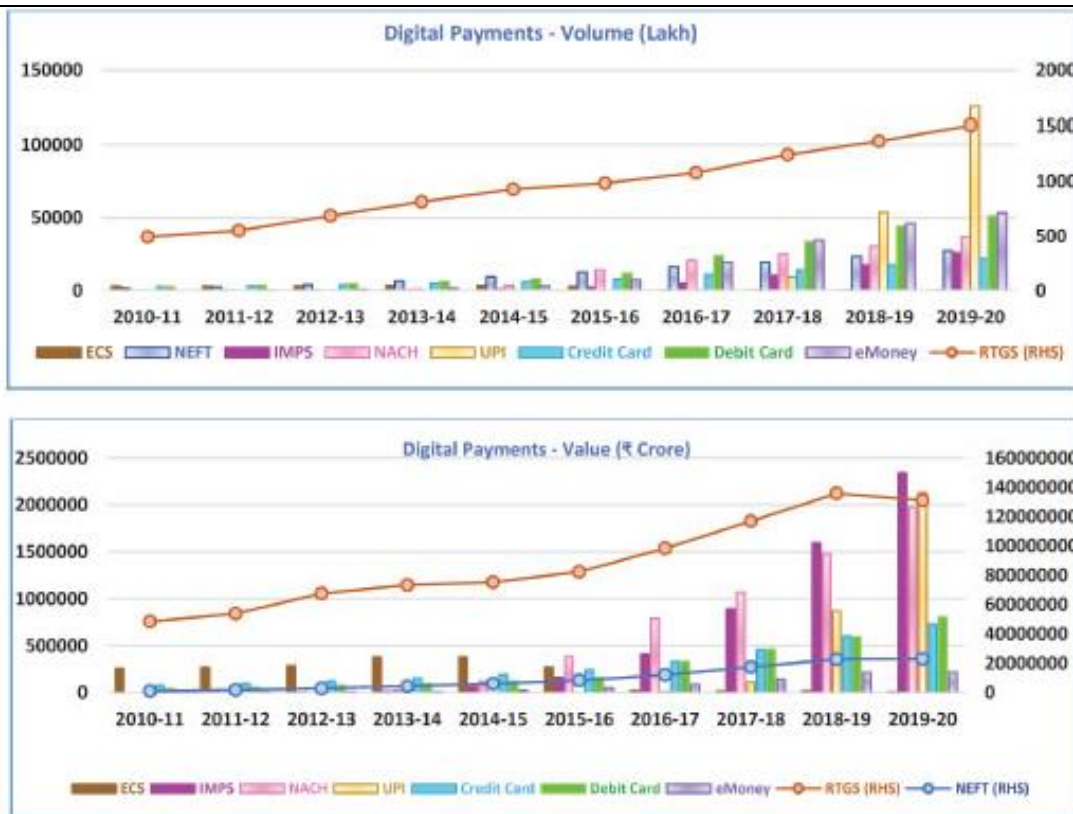
Figure 6: Fintech Funding in India during 2019-20



Source: OutlookMoney. (2021, February 17)

Managerial Approaches - During the pandemic, consumers moved dramatically toward online channels, and companies or industries have responded accordingly with greater agility in order to stay competitive in the market. Banks offered fee waiver on digital payments like- NEFT, RTGS, IMPS, and withdrawal of cash from third-party bank ATMs. During Lockdown, Reserve Bank of India (RBI) made NEFT available 24*7 and also advised authorized payment system operators to take up targeted multi-lingual campaigns for their users, in order to educate them about the use of digital payments (17).

Figure 7: Volume of Digital Payments for the period 2010-11 to 2019-20



Source: Reserve Bank of India. (2021, January 25)

Risks and Challenges -

- Despite efforts of Government and private players for financial inclusion of rural and semi-rural populations with digitized services including immediate payments and UPI systems, the adoption of Digital Financial Services (DFS) is injured by digital illiteracy and resistance on acceptance of digital products which includes the inability to use smart phones, lack of trust in technology and poor network connectivity. As a result, cash is still a preferred mode of transaction there(8).
- As a greater number of consumers are being connected digitally and less face-to-face interaction can increase the potential threat for fraud and identity theft. After the pandemic, frauds and cyber attacks in banking and financial sector are also heightening. As per VMware report from last year,

between February and April 2020, attacks targeting the financial sector had grown significantly by 238% globally. It is highly required for organizations to invest more in information security, and use advanced tech solutions like credential management, biometrics, restricted access, and incorporate data analytics, artificial intelligence to strengthen security infrastructure (2).

Educational Sector –

Findings:

- BYJU’S which is a Bangalore-based educational technology and online tutoring firm is now the world’s most highly valued firm since online enrollments have increased highly. In 2020, BYJU’S raised record funding acquired companies across segments and added 45 million new users. In April, BYJU’S grossed a record monthly revenue of Rs 350 crore(19).
- EdTech funding also grew — from \$522 million in 2019 to an all-time high of \$2.2 billion in 2020, according to the Indian Private Equity and Venture Capital Association (IVCA)(19).
- Noida-based EdTech startup ConveGenius went from offering tablet-based learning in budget schools to WhatsApp chatbot-assisted learning for the individual student. Since June 2020, it has scaled from 500,000 to 10 million users and is enabling education access for 100 million school students at the bottom of the pyramid(19).

Effects of digitalization on different classes of people:

a) Students:

Positive effects:

- Students are getting familiar with new technologies.
- Students can easily access online library instead of buying books.
- Students can devote more time to their studies as the time of transportation is saved.

Negative effects:

- Students are facing monotonous life as they are sitting all day in front of computer for classes and this is affecting their mental state.
- Their eyes are getting badly affected due to strenuous exposure to electronic items.
- As the classes are completely internet dependent, students who live in village side and do not have smartphones or smooth internet connectivity are facing huge difficulty in studying.
- Students are kept aloof from their disciplined school life

b) Teachers:

Positive effects:

- Teachers are getting more time to spend with their family as a lot of time is saved due to digitalization.
- Teachers can reach out to huge number of students at the same time in a single online class.

Negative effects:

- Teachers who are not that techsavvy, initially found it very difficult to access a lot through the internet.
- Teachers are unable to understand whether students properly understand them as it is impossible to deduce that across a screen.
- Subjects like math, physics which need boards to solve sums are very problematic to teach in a virtual classroom.

c) Institutions:

Positive effects:

- Institutions have shifted to online admission mode which made it easy for students who stay outside get admission easily without getting infected.
- Institutions have set up their own platform to cope up with online teaching.
- They have made provision for online attendance, digitalization of library, online inquiry.

Negative effects:

- Due to the online attendance system many times students just log in to class to give attendance instead of listening to the class.
- Due to improper connectivity in some areas students face issues logging into the institution's platform.

Modifications in managerial approaches

- Management has to change its admission system from offline to online mode.
- MBA institutes, colleges, schools are now adopting CRM systems to maintain the relationship between students, alumni, teachers.
- Management has shifted its offline library to massive open online courses which integrate different course materials, videos, tutorials.
- Due to the recent pandemic, institutions have to come to an arrangement with different companies to manage online internships for students.
- Institutions have collaborated with teachers for shifting examinations into the online mood.

Conclusion

In order to address this pandemic, organizations have shown efficiency, agility in re-imagining their business models and re-inventing the way of working to meet rapidly changing customer and market needs.

In the Healthcare sector, many online Doctor Consultation applications have been introduced where patients have started online consultations like Practo, Medibuddy, DocsApp, etc. Many famous hospitals also started rolling out their own applications like Apollo and some central and state government hospitals wherein people can track which hospitals are having empty beds are available, how many empty beds available, etc. Before this pandemic situation, people always preferred to buy medicines from their nearest stores but after Covid 19 people became more dependent on online medicine delivery

applications. Applications like Arogya Setu, assisted in syndromic mapping, contact tracing, and self-assessment is widely used throughout the country.

This crisis gave a unique opportunity for financial institutions to reconsider their operational excellence, how they can create value in the emerging ecosystems which is currently moving towards new normal. Financial institutions well responded towards the pandemic, ensuring financial inclusion. Also, the Fintech firms supported as a backbone in this crisis. India was fit to respond to the crisis well with robust, low-cost payments and Fintech infrastructure in place with wide adoption. Start-up companies have been productive in employing these infrastructures to innovate and scale.

Though the effectiveness of online learning varies in different age groups, to get the highest benefit we need to support and give efforts to replicate the physical class environment in online classes. As children use their senses to learn, it is very much needed to make online classes fun and effective. From long before, online educational platforms were researching on making online learning as effective as possible and cater to all the rising needs which are coming into existence. Due to this pandemic, their work got accelerated and also moving the world to a new normal.

From the above findings, it is clearly evident that the recent pandemic has provided a boost to the market of the OTT platforms. But unfortunately, it has come with the cost of a permanent detour of the platform of entertainment. In the future we won't be able to see big queues in front of theatres for booking tickets of a blockbuster. Everything will be just a click away and will be available from the comfort of one's home. How will the multiplex industry survive? - is a question which does not have any easy answer.

Due to lockdown as customers were bound to stay inside, this led to an increased usage of e-commerce platforms for buying basic necessities. This again led to changed consumer behaviour as they are expecting a more hassle-free and convenient shopping experience. Customers now are becoming more dependent on online reviews before buying and using the online channel for doing the research before purchasing. Retailers will now have to re-consider the store environment and their way of operations in order to cope up with changing consumer behaviour and market demand. They need to re-evaluate the digital environment they operate in and how consumers can be engaged in making an online purchase decision and influenced in product comparison and selection.

A new normal is taking shape, organizations must direct these transformational changes in digitization to their organizational culture to accelerate their digital transformation journeys. In a word, we can say Covid-19 is moving a significant portion of the economy online.

REFERENCES

1. 2020 E-commerce Payments Trends Report: India. (2020). Retrieved from <https://www.jpmorgan.com/merchant-services/insights/reports/india-2020>.
2. Abhik Sen. (2021, January 5). Rise of financial fraud in a Covid-19 world. Retrieved from <https://www.fortuneindia.com/ideas/rise-of-financial-fraud-in-a-covid-19-world/105003>
3. Abhinav Singh. (2021, April 6). Postponed films, reduced occupancy: Multiplexes could face tough times amid second wave of COVID-19. Retrieved from <https://www.theweek.in/news/biz->

- tech/2021/04/06/postponed-films-reduced-occupancy-multiplexes-could-face-tough-times-amid-second-wave-of-covid-19.html
4. Amit Raja Naik. (2021, January 5). RBI Launches Digital Payments Index To Track India's Cashless Economy Growth. Retrieved from <https://inc42.com/buzz/rbi-digital-payments-index-india/#:~:text=RBI%20Launches%20Digital%20Payments%20Index%20To%20Track%20India's%20Cashless%20Economy%20Growth,-Amit%20Raja%20Naik&text=To%20boost%20the%20adoption%20of,start%20of%20the%20new%20year.>
 5. BI INDIA TECH BUREAU. (2020, June 11). EY analyses COVID-19's impact on Media and Entertainment industry and how it can revive during unlock 1.0. Retrieved from <https://www.businessinsider.in/advertising/media/article/ey-analyses-covid-19s-impact-on-media-and-entertainment-industry-and-how-it-can-revive-during-unlock-1-0/articleshow/76317063.cms>
 6. BusinessLine. (2021, February 21). Covid-19 to boost digital financial services growth; SBI, large private banks to benefit: Moody's. Retrieved from <https://www.thehindubusinessline.com/money-and-banking/covid-19-to-boost-growth-of-digital-financial-services-sbi-large-private-banks-to-benefit-moodys/article33789724.ece>
 7. Business Standard. (2021, March 10). Indian e-commerce to grow 84% in 4 years, helped by Covid-19 impact: Study. Retrieved from https://www.business-standard.com/article/economy-policy/indian-e-commerce-to-grow-84-in-4-years-helped-by-covid-19-impact-study-121031000846_1.html
 8. Dilip Modi. (2021, February 7). Success of digital financial services rests on rural India's shift from cash to digital payments economy. Retrieved from <https://www.financialexpress.com/industry/sme/cafe-sme/success-of-digital-financial-services-rests-on-rural-indias-shift-from-cash-to-digital-payments-economy/2189985/>
 9. DQINDIA ONLINE. (2021, March 31). Digital payments' volume in India to grow to 71.7% of all payment transactions by 2025: Report. Retrieved from <https://www.dqindia.com/digital-payments-volume-india-grow-71-7-payment-transactions-2025-report/#:~:text=Share%20Twitter%20Linkedin-,Digital%20payments'%20volume%20in%20India%20to%20grow%20to%2071.7%25%20of,payment%20transactions%20by%202025%3A%20Report&text=In%202020%2C%20the%20transaction%20volume,considerable%20share%20of%2061.4%20percent.>
 10. Economic Times Retail. (2021, March 24). Lockdown proved inflection point for e-commerce in India. Retrieved from <https://retail.economictimes.indiatimes.com/news/e-commerce/lockdown-proved-inflection-point-for-e-commerce-in-india/81666294>
 11. EY Survey. (2020, September) Healthcare goes mobile: Evolution of teleconsultation and e-pharmacy in new Normal. Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_in/topics/health/2020/09/healthcare-goes-mobile-evolution-of-teleconsultation-and-e-pharmacy-in-new-normal.pdf

12. FINANCIAL EXPRESS, (2021, March, 12) Healthcare in India: Digitisation is the way forward. Retrieved from <https://www.financialexpress.com/opinion/healthcare-in-india-digitisation-is-the-way-forward/2210873/>
13. India News Republic. (2021, March, 19). Adoption of Digital Technology to Transform Indian Healthcare After COVID-19: Joti Arora, Special Secretary of MeitY. Retrieved from <https://indianewsrepublic.com/adoption-of-digital-technology-to-transform-indian-healthcare-after-covid-19-joti-arora-special-secretary-of-meity/239807/>
14. Lata Jha. (2020, October 22). India is the world's fastest growing OTT market: PwC report. Retrieved from <https://www.livemint.com/news/india/india-is-the-world-s-fastest-growing-ott-market-pwc-report-11603355739242.html>
15. NITI Aayog Survey. (2021). Investment Opportunities in India's Healthcare Sector. Retrieved from https://niti.gov.in/sites/default/files/2021-03/InvestmentOpportunities_HealthcareSector_0.pdf
16. OutlookMoney. (2021, February 17). Beginning Of A Phenomenal Growth In FinTech Market. Retrieved from <https://www.outlookindia.com/outlookmoney/fintech/beginning-of-a-phenomenal-growth-in-fintech-market-6197#:~:text=With%20around%2033%20deals%20valued,report%20released%20by%20RBSA%20Advisors>
17. Reserve Bank of India. (2021, January 25). Booklet on Payment Systems. Retrieved from <https://rbi.org.in/scripts/PublicationsView.aspx?Id=20315#CH7>
18. Sandhya Keelery. (2020, December 10). Media and entertainment in India - statistics & facts. Retrieved from <https://www.statista.com/topics/7243/media-and-entertainment-in-india/#dossierSummary>
19. Sohini Mitter. (2021, March 24). One year of lockdown: 10 Indian startups that rode edtech's hockey stick curve in the pandemic. Retrieved from <https://yourstory.com/2021/03/one-year-lockdown-indian-startups-edtech-hockey-stick-growth/amp>
20. Statista. (2020, July). Coronavirus impact on retail e-commerce website traffic worldwide as of June 2020, by average monthly visits. Retrieved from <https://www.statista.com/statistics/1112595/covid-19-impact-retail-e-commerce-site-traffic-global/>
21. WEEKLY TV VIEWERSHIP DATA. (2021). Sourced from: <https://barcindia.co.in/data-insights>