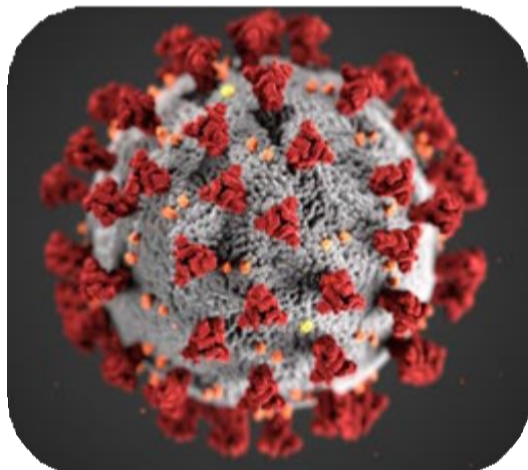


### COVID-19 Technical Innovation and Implementation (DIGITAL PLATFORMS)

“Necessity is the mother of invention”.

An individual must have heard this quote in his lifetime, the pandemic outbreak has forced us to practically implement this quote. Today we all have been trying to cope up with this deadly virus for the past 15 months. Our respected corona warriors have been trying their best to get all of us out of this situation. But life did not stop in these covid times and the credit for this goes to the IT industry as they took the challenge and brought us with some digital solutions to all problems. So, here are some digital platforms that IT industry provided us to solve our problems.



Source: fda.gov

### Aarogya Setu App

The first application developed by Indian government to help us stay safe from novel coronavirus- “ A a rogya S etu A pp” . Most of us must be aware about this application as it provides us with a platform which tells you about the covid patients in your locality, informs you about the symptoms and risks of COVID-19.



Source: timesofindia.com

### Technology driven vaccination drive

The effective treatment for COVID-19 is brought up as two-dose vaccines namely “Covaxin” and “Covishield”. The major challenge is to vaccinate dense population of India. So, the IT industry came up with a solution of creating a web-based platform for registration and allotment of vaccination centres to people who wish to get vaccinated. The web-based platform was named as “Cowin” and helped in maintaining a fully organized technology driven vaccination drive. This reform built an efficient way for everyone to get vaccine at the right time.



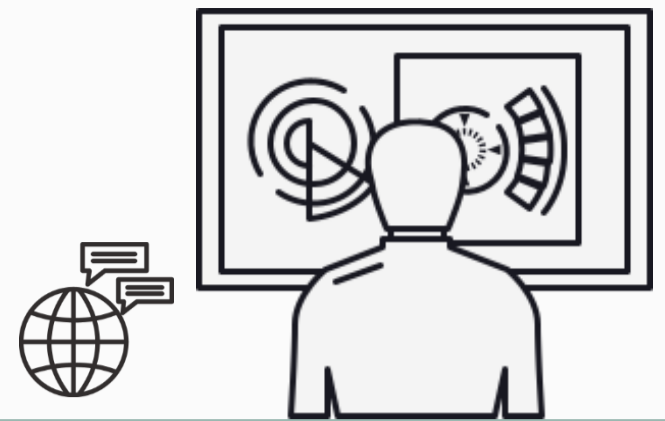
Source: play.google.com

### Digital reforms in Education and Jobs

The whole country went under strict lockdown to break the chain of COVID-19 virus from March 2020 to May 2020. After this everything started unlocking slowly except schools, colleges and offices. But all of these three are the vital aspects of a country's development and had to be continued. Then, some digital applications helped to keep classes and jobs at track. Applications like Zoom meetings, Google Meet and MS Teams helped schools and colleges to initiate online education with online teaching, assignments and projects. Also these apps allowed working professionals to do work from home and organize online meetings. Thus, causing less physical interaction and thus less number of covid cases.



eweek.com



**“ Covid-19 Technological Innovation and Implementation “**

**Cashless payments**

6 feet social distancing and less physical interaction are the key points to remember during these pandemic times. But there are things of daily use that are to be essentially bought. So, if you want to buy something then how can you pay without physical touch. Cash and card require physical touch. To solve this problem there are applications like Paytm, Phonepe, GPay and BHIM app which allowed us to be efficient in being-“less cash to cashless”. The applications enabled everyone to pay without physical touch. These reforms effectively helped us to be safe from COVID-19.



**Online medicine deliveries and consultations**

The first place in our respected corona warriors belongs to the doctors and medical staff. Doctors are spending their whole day in treating patients and thus have no time for routine medical check-ups or other consultations. Also people are afraid of moving out of their homes for doctor consultations. So, development of applications like Prato, Mine and Dhabhi apps provides online doctor consultations. Also, applications like 1mg, Pharm easy and Net meds provides quick and safe delivery of medicines which is a must required facility in these pandemic times.



**CURRENT INNOVATION**

Covid outbreak has caused a devastating economic and social disrupt among the countries around the globe. Whereas economic recession has negatively affected people mental health and created new barriers for people already suffering from mental illness. But out of all, Covid had also impacted positively in many ways as because of big technological evolution resulted in solving current and future problems. Some technologies have played a fundamental role in responding to the health emergencies, other helped in maintaining social functioning and business during lockdown. We believe that these technologies had strong influence during covid but some of them existed even before pandemic.

**Life and health improving technologies**

There are 4 technologies played Important role in pandemic: -

1. 3D-Printing:
  - Fast production of medical equipment for hospitals and medical organization including NGO's.
  - 3D printing became easy as there are new designs for healthcare devices.
2. Data Analytics :
  - Increased used of data and AI to understand the situation and also in distribution of vaccines.
  - To identify the best option for treatments
  - To study the no of medical organizations and equipment.
3. Flexible Production System
  - Fast adaptation to manufacture the urgently needed medical supplies and devices.
  - Reporting of the pharmaceutical laboratories and production.
4. Health care things:
  - Apps in the smart phones and many smart devices to give info of pandemic.
  - Distance treatments and monitoring of patients.



STATETECHMAGAZINE.COM

BY HARDIK MUDGAL BCA 1st Year (1st Shift)



Technologies which improve the life in this pandemic

To stop the Covid chain individuals were recommended to stay at home and make min contact with outside word and go outside for essential work like food and medical supply (if needed), which left people with limited choices to spend time at home. People were confined at their homes to follow a new behavior of living. This situation renews the opportunities in digital world.

**1. Internet Streaming:**

- New Movies were started to stream on platforms like Amazon Prime, Netflix, Zee, Apple etc.
- Closure of cinemas and theaters led the death of traditional entertainment.



WWW.SMARTDNSPROXY.COM

**2. E-commerce:**

- People can't go for physical shopping which promoted online shopping
- Online platforms such as Amazon, Flipkart, Mantra etc.



CYBER-NY.COM

**3. Home delivery:** Increased demand for e-commerce in all affected countries while physical stores are constrained or even shut.



WWW.ENGLISHSPECTRUM.COM

The impact on society of technological developments during the COVID-19 crisis.

Technological development

1. Vaccines
2. Artificially Intelligent ventilator
3. Respirators and sanitizers
4. Wearables, cashless payment, streaming, e-commerce
5. Videoconferencing, E-learning, E-gaming



s.abcnews.com

Innovation logic

1. Time-to-market
2. Cross-sectoral innovation
3. Flexible manufacturing systems
4. Big data
5. Technology acceptance
6. Digitization



brc.org.uk

Social impact

1. Crisis readiness
2. Innovation in ecosystems
3. Intellectual property
4. Citizen surveillance
5. Flexible work methods



s.yimg.com

Cross-Sectoral innovation has seen a significant surge as firms from a wide variety of industries find themselves with excess capacity due to reduced economic activity and decide to use this resource to help overcome the crisis. The convergence of ideas from different entities provides new energy for innovation. The previous unlike partnerships of IT firms, auto manufacturers, and hospitals in producing medical equipment is just one example of society uniting to tackle a common adversary. Such restructuring of capacity last occurred during World War- II, but what happened in months or years then now happens in hours due to today's communication structures.

BY VANSH SHARMA BCA 1st Year (1st Shift)



## IMPACT OF COVID ON IT SECTOR

No other crisis has changed the IT sector the maximum amount as Covid-19. Not even 2008 global financial crisis. Starting from changing its working model to re-purposing power lines, IT sector is undergoing a conversion.

Covid-19 has caused some severe changes in many industries and mainly in IT sectors. Effects of covid-19 has impacted many industries, raw material supply, productions, etc. The significant weakness IT sector is facing now is because of the great fall in the economy as many companies were forced to ask their employees/workers for remote work in keeping health as the main priority. Because of the remote work, companies or factories who does manufacturing/production are facing great loss. Also companies who have international dealers are having massive loss. For example: Apple is estimated to have 9% fall in their shares due to the lack of availability of iPhones in the market, parts that are used to build iPhones are supposed to come from China but due to the country relations or we can say due to the ongoing situation of pandemic the import/export has been stop for now. The spread of this deadly virus has caused a lot of technology meetings or conferences to get cancelled, which could have been a great opportunity for many multinational companies to come together and reach their horizons. A few meetings were Shifted to online conference and the attendees of the conference will not be able to have the networking opportunity as they would be attending actual conferences. We think that this year everything is going wrong, negative. Or some people think that negative impacts are more compared to the positive effects. But even in this situation some things are happening which is positive not for everyone but for those who didn't get a chance earlier to make it happen. So let's discuss some positives of this pandemic.

Even after all this, there is an increased demand for software and social media platforms such as Google

hangouts, WhatsApp video calls, Zoom, Microsoft teams, Skype, Google meet, etc. All these social media platforms and video chats apps help people who are in quarantine or who are infected to stay in touch with their family members or loved ones as well as conference meetings, work, school and college student's online classes at the same time. The majority interaction with customers is mainly online. The economy will also blossom because during this crisis people understood the importance of the Internet and this technology as this is helping us stay safe and helping in the communication between the doctors and public. This time if people want something like medicines, groceries, other necessary items, etc. then they can directly go to the online apps like amazon, fresh to home, Pharm Easy, etc. and can buy anything they wish to. Due to coronavirus a lot of opportunities opened up in IT industry such as growing need for the 5th generation technology. This will help increase connections that support the primed remote interactions. This has become the top most priority for many more organizations due to this pandemic. Also there is an industry named Telehealth, it could help people to get diagnosed and treated with the help of a physician. A lot of apps have been made during this crisis to help achieve this or for those who need special medical attention and guidance.

### ROLES & RESPOSIBILITIES

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