

**“AN ANALYTICAL STUDY OF IMPACT OF COVID-19 ON
INFORMATION TECHNOLOGY SECTOR AND SOME OTHER
IMPORTANT SECTORS OF INDIAN ECONOMY”**

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ABSTRACT

COVID-19 is a disease and doctors call it a respiratory tract infection. It can influence your upper respiratory tract (sinuses, nose, and throat) or lower respiratory tract (windpipe and lungs) and caused by a corona virus named SARS-COV-2 (severe acute respiratory syndrome corona virus 2).

In early 2020, after December 2019 outbreak in China, WHO (World health organization) recognized SARS-CoV-2 as a new type of corona virus, the virus, which is known as COVID-19 and was similar to SARS, was being identified primarily by fever, cough and respiratory symptoms. The virus was also highly contagious and infectious. By early 2020 it had covered various regions of China and extended to the US and Europe, having been carried by travelers from affected regions.

In March, 2020 the World Health Organization declared the outbreak a pandemic and travel to, from, and within many countries. One of them is India which was seriously affected and was doing effort to control its spread. Around the world many schools and many businesses closed and stay-at-home guidelines were implemented. According to a survey, COVID-19 is having a 'deep-rooted impact' on Indian economy.

Over the coming months and years jobs will be having at huge risk; firms have decided to reduce their manpower and trying to save their firms from shut down. Further, it is added that COVID-19 crisis has already caused an unusual collapse in economic activities in the last few months. The current situation is having a "high to very high" level impact on businesses and India economy.

Keywords: COVID-19, IT, WHO, SARS, SARS-COV-2

INTRODUCTION

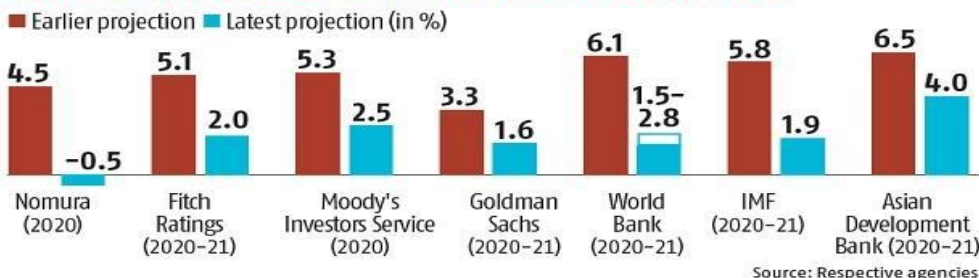
SARS-COV-2 is one among eight sorts of corona virus, that cause severe diseases like Middle East respiratory syndrome (MERS) and sudden acute respiratory syndrome (SARS).The other corona viruses cause most of the colds that affect us during the year but not a great threat for those people who have strong immunity.

Corona virus is a disease that might show India a stage of an economic downfall which our country has never seen in last few decades. Growth forecast of India has cut down by Research agencies in this financial year.

Earlier the growth rate forecasted by IMF was 5.8 per cent. Thereafter a revision was done to check the impact of the corona virus disease (Covid-19), and the subsequent nationwide lockdown imposed by the central government. Since last many decades (COVID-19) is that type of pandemic where technology, social media and, medical help are used on a large level so that people feel safe, productive and connected whereas following the rule of physical distant.

Covid casts a long shadow over growth prospects

GDP GROWTH FORECAST BY VARIOUS AGENCIES FOR INDIA



In the above figures IMF's has projected 1.9 per cent of growth rate for India in the current financial year which is 0.4 % higher than the lower range of forecasts by the World Bank, Whereas world bank is expected India's economy to grow in the range of 1.5-2.8 per cent in FY21, depending on when the lockdown is lifted. While Nomura has predicted the economy growth in negative or we can say contraction by 0.5 per cent during 2020 and the Asian Development Bank has expected highest one i.e to grow 4 per cent in FY21.

Health workers are using telemedicine for the proper treatment of patients. Hospitals are planning to being connected, to coordinate and to prioritize them. Strong and trustworthy telecommunication networks and services are there.

OBJECTIVES OF STUDY

The major objectives of this study are:

1. To understand the impact of Covid19 on overall Indian economy.
2. To understand the impact of Covid19 on others important sector of our Economy.
3. To understand the impact of Covid19 especially on Information Technology Sector.
4. Finding out the blooming opportunities and threats for Information Technology Sector.

IMPACT OF CORONA VIRUS ON THE INDIAN ECONOMY

Nearly 172 countries are slowly going into lockdown and businesses across the country are operating in fear of an upcoming collapse of global financial markets. This situation is clubbed with stagnant economic process within the previous year, especially in a developing country like India, and resulting in extremely turbulent market conditions.

While struggling with world economy, Indian economy was working on reducing the unemployment rate, interest rates, and fiscal deficit but this novel Corona virus has added fuel to this fire that is giving shock to Indian trade markets dependent on China for imports. China is

India's third largest export partner for export of raw materials like organic and inorganic chemicals, agricultural products, jute etc. Let us see how:

RAW MATERIALS AND SPARE PARTS

China is the hub center of electronics for world. Almost 65% of electronics that are utilized in India comes from China. Due to this pandemic and subsequent lockdown declared these imports have already moved down to 35%. So as to reduce the dependency on one market India is going to promote the local product and local production as a counteraction. With this government is also working to support medium scale and handicraft employees. To support them government have announced various types of loan scheme and fund scheme.

PHARMACEUTICALS

Pharmaceutical industry is that industry whose role is extremely significant for Indian economy. Active pharmaceutical ingredients (API) are the staple for pharmaceutical industry. Nearly 68% of API is imported from China. One among the foremost demanding medicine hydroxychloroquine raw materials is also imported from China.

As COVID-19 is speedily increasing throughout India so medication is the necessity for the whole world. There's already 50% hike within the prices of vitamins and penicillin alone.

TOURISM

India is that country which is famous worldwide for its culture and great history and attracting most of the domestic and foreign citizens throughout the year. One shouldn't be surprise by knowing that a large number of confirmed COVID-19 cases in India include foreign tourists. The Indian tourism and hospitality industry is expecting job loss around 38 million. As compare to the period of 2019, the hotel sector saw a decline of almost 65% in occupancy levels, in the third week of March 2020 itself.

Indian Association of Tour Operators (IATO) has estimated a loss of about \$85 billion for the hotel aviation and travel sector together considering the travel restrictions imposed on foreign tourists by Indian government.

AVIATION

With the spread of COVID-19 and announcement of lockdown government of India suddenly and indefinitely canceled tourist visas, airlines are said to be struggling and working. Nearly 650 international flights and 95 domestic flights are cancelled for various periods.

This suspension and cancellation of flights cause a reduction in airline fares, even on popular local routes. To hide the increased operating expense Private airport operators have requested the government for the permission of imposing a minimal passenger facilitation charge on airfares.

Cancellation of tickets, refunds of cash and low utilization rate of airlines have made situation worse for the already distressed aviation industry within the middle of a cash crisis.

FMCG and retail players on a war footing-

Since the imposition of the nationwide lockdown, FMCG (Fast moving consumer goods) companies and retailers are handling challenges primarily around four highly interconnected issues: rush in demand, depletion of inventory, reduction in workforce and provide chain

disruption.

Panic-induced stockpiling meant supermarket shelves were getting empty faster than they might be refill. Both traditional and modern retailers are bearing the burden, with the likes of D-Mart, Big Bazaar and Nature's Basket finally having to scale back working hours, put limits on the acquisition of essential items (like eggs, milk, flour, etc.), or in some cases, even close for a few days.

E-commerce operators of major brick & mortar retailers also as Amazon and Flipkart weren't spared either. As retailers want to deliver orders and innovate their delivery methods. One important reason for disruption of supply chain is the migration of workers to their homes in rural areas .Workers took this lockdown for a longer time and decided to migrate.

To cope up with his virus , some retailers (GROFERS and Spencer's Retail) are adopting reverse supply chain mechanism, i.e., sending own trucks and workers to pick goods from distribution centers, while others (D-Mart and Metro Cash & Carry) are offering additional incentives (INR400–500 per day) to their workers.

IMPACT OF CORONA VIRUS ON THE INFORMATION TECHNOLOGY SECTOR

The outbreak of COVID-19 has largely impacted the worldwide economy, with disrupting businesses across various sectors round the world. Impact of this virus on India is relatively low than others but features a larger impact on the country's businesses and economy. Technological firms in Bengaluru, Chennai, Gurugram, Noida have extended the work-from-home policy after directions of government for adopting precautionary measures to stop the spread of Covid-19. Google also asked its employees to work from home after one of its employees found COVID-19 positive earlier within the week.

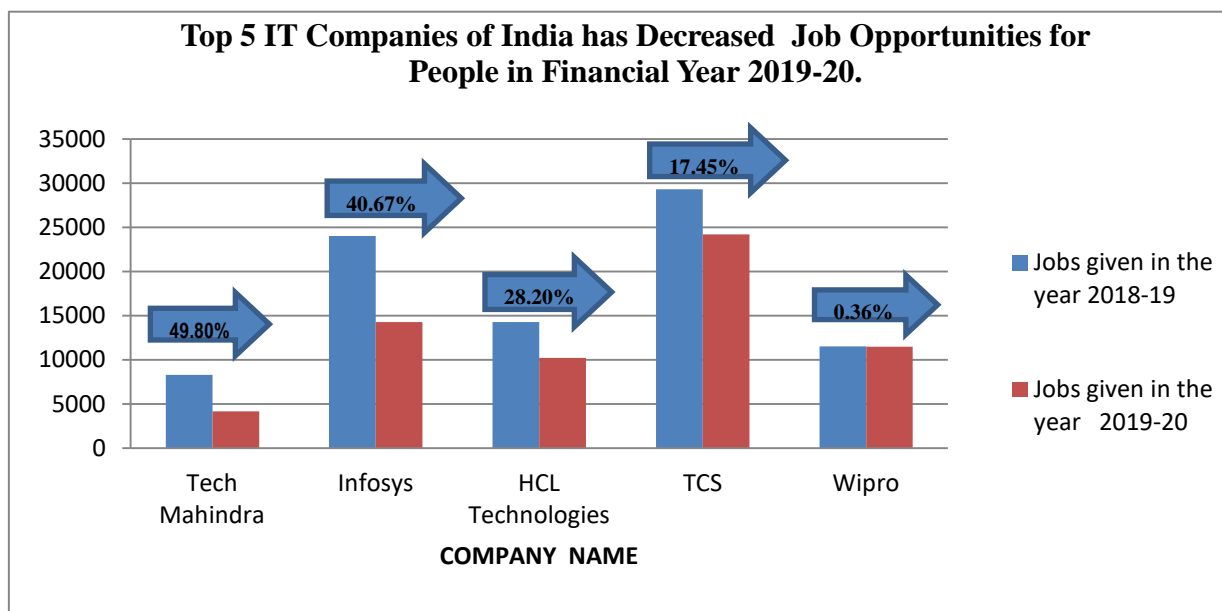
Walmart-owned Flipkart issued a handout to this effect, after the govt. laid out a thorough advisory. "After knowing the seriousness of corona disease and considering it as contagious one our workers will start work from home till there is any vaccine or remedy", Flipkart said during a statement. Considering that employees of IT majors often visit on-site locations, the likelihood of contracting the virus is high and therefore the possibility of the virus spreading among other employees.

EFFECT OF LOCKDOWN ON IT SECTOR

The serious weaknesses the IT industry is facing now's because of the decline within the economy, as tons of companies are sure to ask their employees to work from home keeping within the account of the general public health concerns. Technological conferences got cancelled or postponed because of this deadly virus; otherwise these companies could have been a great partnership opportunity for many companies .Companies will have an estimated loss of US\$1Billion due to the cancellation of those major tech conferences.

According to Data, Top 5 IT Companies of India has Decreased 27% Job Opportunities for People in Financial Year 2019-20.

Company	Jobs given in the year 2018-19	Jobs given in the year 2019-20	Falls in jobs (%)
Tech Mahindra	8275	4154	49.80
Infosys	24016	14248	40.67
HCL Technologies	14249	10218	28.20
TCS	29289	24179	17.45
Wipro	11502	11461	0.36



Source-Respective company data over the last two years

BLOOMING OPPORTUNITIES AND THREATS FOR THE IT INDUSTRY

Corona Virus has given many opportunities to the IT Sector such as need for the 5th generation (5G) technology is growing day by day.

This has become the first priority for many organizations due to the pandemic. One developing industry in this crisis is Tele-health. In Tele-health with the help of a doctor or physician (that should be ready to physically present) people can be diagnosed, can be treated or can be operated. There are lots of apps that have been launched in the last few months to help this.

This pandemic made the patients in self-quarantine and they need medical supervision and assistance every day so these applications could help them in achieving that. There are few other threats too, like when the pandemic is over what would happen to the IT sector??

FIVE SECTORS THAT WILL SHINE BRIGHTER POST-COVID-19

COVID-19 has given rise to unprecedented disruptions across sectors. However; some of the sectors are taking this hour of crisis not as an obstacle but as a chance to introduce their latest

business models and making solutions. Here's looking at the five sectors most likely to benefit from the current situation.

1. Education (Edtech)—online learning has come out as the most feasible tool for teachers who want to ensure that the pandemic impact on their learners and their academic progress should be minimum. Because of lockdown institutes are closed and regular classes are on hold. With closed institutes and holding the regular classes. There are more academic you tubers as compared before.

As this COVID is spreading and impacting us on a large scale there has been some rules and standards announced by Ministry of education that School and colleges can provide only online and Virtual Classes. This has become now compulsion for education as norms with novelty. Traditional and ordinary models are reshaped to make learning more personalized, engaging, and interactive. Even before the COVID-19 natural event, a study forecasted the Indian on-line education market to grow to \$18 billion by the year 2022. “Survive and thrive” is the new mantra for players in the Indian education sector.

2. E-retail—While most Indian households still rely on their neighborhood stores for grocery, many loyal customers are now switching to online retail platforms like Grofers, Milk basket and Big Basket.

The reason to make sure compliance is social distancing and players within the space is capitalizing on this trend to determine them as an integral part of the daily grocery fulfillment value chain. Big discounts are currently being offered on various items while, to make sure that the requirements of all are fulfilled, unit caps are imposed on the acquisition of essential goods.

Consumer mindset is changing slowly and lockdown is encouraging them for the online grocery shops. This shows that on-line grocery goes to be a sunrise sector within the long run, even once the COVID-19 chapter involves an in depth.

3. BFSI (Banking, Financial Services and Insurance)—The Indian banking industry observed unprecedented growth since the 2008 financial crisis up until about a couple of months before the COVID-19 outbreak. However this crisis also provides the BFSI space with an unparalleled opportunity to bring about a fundamental change in the way that it functions

“The time is perfect for players in the BFSI to reinvent them and test latest business models that are more digitally focused. By leveraging advanced technologies and digitizing their existing set of offerings, they can replace legacy processes with newer, more optimized workflows, and address inefficiencies that have plagued the Indian BFSI space since time immemorial.”

4. Medical- At present, products like disinfectants and sanitizers are recording the highest sales, even supply is less than demand at some places. There is a possibility of a trend to be continued and become deeply rooted in consumer behavior.

Firstly, essential and health care services will become more accessible, affordable and available for the mass client. Secondly and significantly, the number of employment opportunities can explode.

5. IT/ITeS — India's IT sector includes a serious dependence on business from the America and Europe – creating its fortunes integrally linked with the performance of these international markets. As prime purchasers from these regions reduce their IT spending in the wake of the COVID-19, Indian IT corporations ought to leverage their core value proposition and restructure their existing offerings at competitive price points. It is estimated that there might be heavy loss to IT companies and may feel the heat of pricing pressure because of lockdown.

It is one priority for IT companies to develop new technologies, skills, speed and advanced capabilities for youngsters to develop the core IT infrastructure and new-age capabilities to attract talents. As the economy slowly starts and tries to come at the normal level after lockdown lifts, it would be interesting to see how these transformations play out for the existing infrastructure and larger community.

FINDINGS

1. The economy will suffer in FY 2020-21 started from April 20 to Mar. 21, due to containment measures and lower external demand and growth projection for India to 1.8% from 5.7% projected in January, holding that the 'Extension of Lockdown' will impact the world economy into the worst situation .

2. There are 230 operational Special Economic Zone (SEZ) and around 358 SEZ that are noticed in India. COVID-19 pandemic may be good news for foreign investors that complement their business plans in India and for Indian competitiveness and capital inflows.

3. Due to the COVID-19 there is lockdown in India from March 24, 2020; which has adversely impacted Micro, Small and Medium Enterprises .On the other hand contribution of 31% of Indian GDP already gone down. Nearly 30 per cent of firms are on the way to permanently shut down, and more than 65% firms not have funds to pay salary.

4. With the reduction in demand, there is disruption in supply chain also at large scale because, some people are staying at home, some are going back to their villages due to financial crisis, and imports have been stopped.

5. Companies will face critical impact if soon any remedy not found by medical field. "Startups are feeling almost dead situation as they are unable to bear the losses. In India most of the business is of outsourcing especially in the IT sector highly from US and Europe, So immediate action is needed.

6. Like India most of the other international economies are becoming very cautious of the risk they face by being overly dependent on one market. This is like an opportunity for India that should work on converting potentially 40% of their competitor's market share by looking at local production of goods, furthering the country's Make in India campaign and taking the current situation as a learning opportunity

SUGGESIONS

1. Now there will be shift in Consumer demand patterns. Supply chains at global level will turn. Governments have to make more important interventions.

2. Government should provide incentives to employers to keep the workers on their jobs till the

corona virus problem tides over because there is a large number of workers from unorganized sector who might lose their jobs especially in the retail, tourism, Germany has done same in the year 2008 when employers were paid incentive to NOT fire workers.

3. Except some restriction on the manufacturing and movement of the food items and groceries across the state and district borders should be allowed .This will help in fulfilling consumers demand for food with helping the manufacturer to cover their production and operating cost. It will also reduce the panic among the population due to low availability of the products.

4. Govt. should provide relaxation in norms for existing loans which will get impaired due to COVID-19.Norms relaxation should be gives by government and regulator.

5. Government should, announce implementation of some major projects which are in clearance stage or stalled. It will result in business for stakeholders/suppliers say at least one year from now and will keep the sentiment positive.

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