

Impact of Coronavirus (COVID-19) on Information Technology (IT) Sector

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Abstract— COVID-19 is one of the worst crisis humankind is facing today. It has been a long time since the last human disaster, and we are still unsure how long this pandemic will last. Innumerable people are losing lives around the world every minute. Its impact on organizations and people across the world has been significant. This impact has been different across industries and far reaching. While the impact of Covid-19 has been severe in many advanced countries, including America, India, UK, Italy, Spain, Russia, France, and Germany, it has also been devastating to the rest of Europe. Reports claim that top software exporters, including Tata Consultancy Services, Infosys, and HCL Technologies, will be impacted most by the lessened technology spending from clients in the US and Europe following lockdowns across the globe. The crisis raises a number of unique challenges. The study investigates the impact of COVID-19 on IT sector. Data required for this research was collected through structured questionnaire administered to 45 respondents that consists of employees from various IT companies. The collected data was analyzed and the results shows that COVID-19 has less effect on IT sector

Key words: COVID-19, IT Sector, Work from home, Workforce, Lockdown

I. INTRODUCTION

The information technology industry has been the hallmark of the Indian growth story since the 1980s. The IT and enabled services has been one of the key driving forces fuelling the world's economic growth. The IT sector includes IT services, Business Process Management, Software products & engineering services and hardware. Companies in the technology industry are facing numerous challenges due to COVID-19. While business continuity and crisis management are the need of the hour, they should use this opportunity to discover their true source of value and become purpose-driven organizations. The information technology industry has been the hallmark of the Indian growth story since the 1980s. The Coronavirus (COVID-19) has affected most of the companies in India, either directly or indirectly. It has increased economic uncertainty and risk to significant financial reporting implications. However, due to coronavirus Covid-19 outbreak, players in India's IT services, according to industry analysts, will see a significant slowdown in growth during this financial year. In just a few months of time, the COVID-19 crisis has brought about years of change in the way companies in all sectors and regions do business.

According to a new McKinsey Global Survey of executives, their companies have accelerated the digitization of their customer and supply-chain interactions and of their internal operations by three to four years. The share of

digital or digitally enabled products in their portfolios has accelerated by a shocking seven year. According to the National Association of Software and Services Companies (NASSCOM), India's software and services exports grew 8.1 percent to US\$147 billion in the fiscal year 2020.

II. OBJECTIVES OF THE STUDY

The main objective of the study is to examine the impact of covid-19 on IT sector consequently this study also investigated various challenges faced by people from IT industry while working from home.

III. OVERVIEW OF CORONAVIRUS (COVID-19) DISEASE

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Most people infected with the COVID-19 virus will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease, and cancer are more likely to develop serious illness.

The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads. Protect yourself and others from infection by washing your hands or using an alcohol-based rub frequently and not touching your face.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes, so it's important that you also practice respiratory etiquette (for example, by coughing into a flexed elbow).

IV. EFFECT OF LOCKDOWN ON IT SECTOR

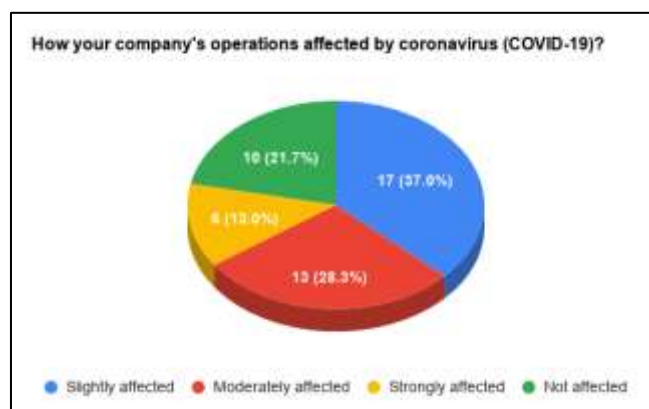


Fig. 1: Summary of Effect of COVID-19 on companies

The significant weaknesses the IT industry is facing now is due to the fall in the economy, as a lot of companies are forced to ask their employees to work from home (remotely)

keeping in the account of the public health concerns. Due to this, there is a massive loss in opportunity for many companies who have international dealers. For example, Apple Inc. is estimated to have at least 10% fall in its shares because of the lack of availability of iPhones in the market. The parts that are required to build the iPhones are supposed to come from China, and it is facing a major lockdown.

The spread of this deadly virus has caused a lot of tech conferences to get cancelled, which could have been a great partnership opportunity for many companies to expand their horizons. A few of the meetings were shifted to teleconferences, but this won't have the same reach, and the conference attendees will not be able to have the networking opportunity as they would be attending the actual conference. Due to the cancellation of these major tech conferences, there is an estimated loss of USD 1 Billion.

A. Reduction in Workforce

Global IT companies have gradually reduced their headcount in last two years as they embark on automation and related technologies. The COVID-19 crisis may have accelerated these process as newer challenges have emerged for these firms. Global IT firms have reduced staff amid shift to automation, COVID-19-related challenges. A slowdown in recruiting resulting from the crisis could affect a future pipeline of skilled workers. According to the online survey held by me 43.5% of 45 respondents says that there is a reduction in the workforce.

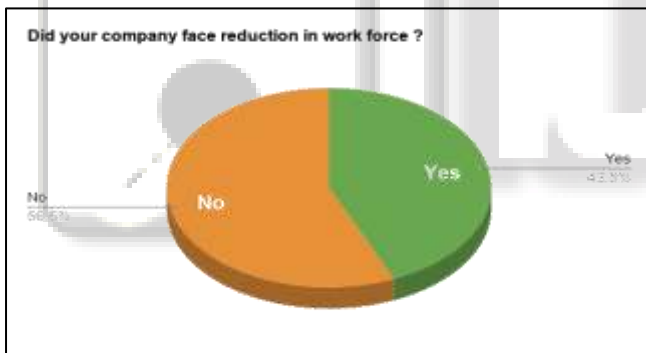


Fig. 2: Response of Reduction in workforce

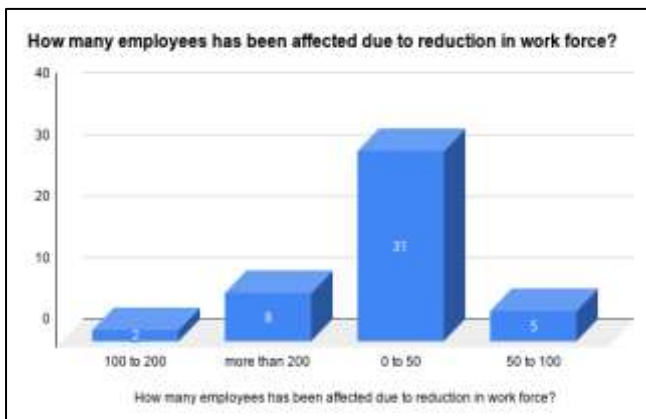


Fig. 3: Response of Amount of Reduction in workforce

B. Salary Deduction

Many companies try to ensure their survival by cutting costs, many have resorted to slashing salaries. Others have put employees on indefinite leave without pay or put freshly

hired staff on hold. Industry sources said that bonuses and salary hikes have been put on hold in the IT sector. Hiring across several companies has been put on hold, and budgets for CXO hires have been halved. IT sector analysts have estimated that the sector will see an impact on revenue for the March quarter and the first quarter of the next fiscal.

According to an online survey conducted by me on the impact of COVID-19 on IT Sector, as many as 15.2% of the 45 respondents who took the survey are facing a salary cut.



Fig. 4: Impact on the salary due to COVID-19

C. Work from Home

As cases of coronavirus continue to increase exponentially, a large percentage of India Inc. has been working from home. They are leveraging video-conferencing platforms, workflow & communications tools like Google Meet, Slack, Skype, Zoom, Microsoft Teams Cisco WebEx etc., to remotely collaborate with their co-workers, host meetings, and even participate in informal brainstorming sessions in real-time. In fact, productivity among employees has gone up significantly in the times of lockdown. Major tech giants like Google, Facebook and Amazon have already extended their work from policy until the foreseeable future. In a WFH environment, it is not possible to measure the productivity of employees by the number of hours. However, there are software solutions like Team Viewer, project management tools such as Jira, as well as communications tools such as Slack & Microsoft Teams that allows the company management to keep a track of the employees' daily work progress and ensure that each task is getting completed on time.

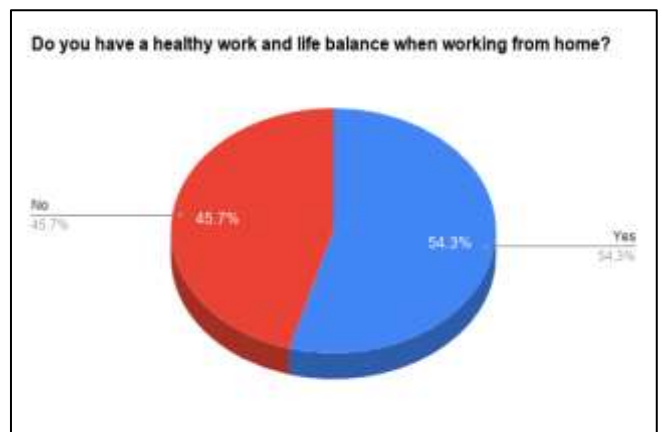


Fig. 4: Impact on the work life balance due to COVID-19

Similarly, companies can use tech-based platforms to measure the time it takes an employee to complete tasks. This enables them to not only maintain but also improve the turnaround time for achieving better productivity.

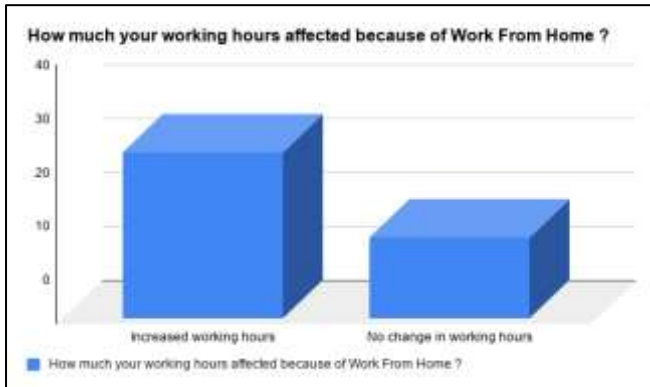


Fig. 4: Impact on the working hours due to WFH

Twitter has also announced that it plans to give its employees an option to work from home permanently. While the concept of remote working is far from novel, advanced technologies have made it a seamless transition from working from office to working from home.

D. Remote Working

The concept of remote working is far from novel. In fact, it has been quite popular among creative professionals, gig workers, and freelancers. The COVID-19 outbreak has now necessitated its large-scale implantation, regardless of the industry and sector an organization operates in. The benefits of remote work have been discussed extensively, including the scope for higher productivity and improved employee morale, but it may not be a viable option in the long run. The work-from-home movement brings forth several challenges, especially for SMEs and start-ups, which may lack the technology infrastructure and/or adaptability to the remote working procedures.

Organizations face difficulty in maintaining company culture as people tend to lose the sense of common identity, especially if they have been employed recently. This leads to lower employee engagement and eventually a higher attrition rate. Also, distractions at home lead to procrastinating employees who sooner or later end up in a vicious cycle of low morale, as the peer influence factor disappears. To deal with such issues, companies can conduct virtual induction sessions as well as training programs to personally guide new joiners who struggle to acclimatize with a remote working environment.

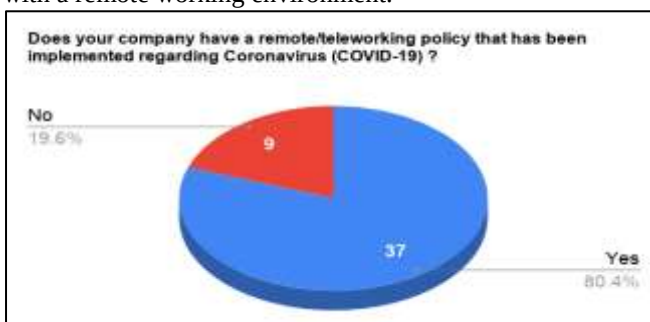


Fig. 5: Summary of Remote working policy adapted by companies

E. Employee up-skilling

Retaining the staff has been one of the major challenges for companies during this pandemic. With revenues being cut, thousands of employees have been fired or furloughed. Against this backdrop, technology has emerged as a savior for employees to up skill and reskill themselves. Many AI-based personalized platforms are offering courses in AI and machine learning, data analytics, digital marketing, etc. for professionals. Curated by experts, these courses are set across different difficulty levels. This is also enabling companies to optimize the skillsets of their existing base of employees without having to resort to firing someone.

While technology has been redefining and reinventing the corporate sector since a while now, the COVID-19 crisis has forced companies to take a hard look at their existing practices and adopt new technologies to tackle unprecedented challenges, train the workforce with new skillsets, and optimize time as well as resources. Some of the current technology trends observed in the corporate space may not be permanent, but it goes without saying that technology is changing the face of enterprises as we know it. Remote work has in a way demonstrated how tech-reliant the post-pandemic times are going to be. As a result, today businesses are willing to invest more readily to future-proof their employee's skillsets and keep up with the rapid tread of technology.

F. Disguised benefits in this pandemic

Even after all this, compared to many other industries, the IT industry is expected to have an enormous market boom from US\$ 131 Billion in 2020 to US\$ 295 in the next five years by 2025. The main reason for this increase in the economy for this industry is the increased demand for software and social media platforms such as Google Hangouts, WhatsApp Video call, Zoom, and Microsoft Teams. All these teleconferencing tools help the people who are in quarantine to stay in touch with their family members as well as have conference meetings and work at the same time. The economy will also blossom because, during these crises, people understood the importance of internet and technology as this is helping us stay safe and in the communication between the doctors and public. According to the survey conducted by me almost 70% people from 45 respondents think that IT sector will recover from this pandemic quickly as compared to the other sector.

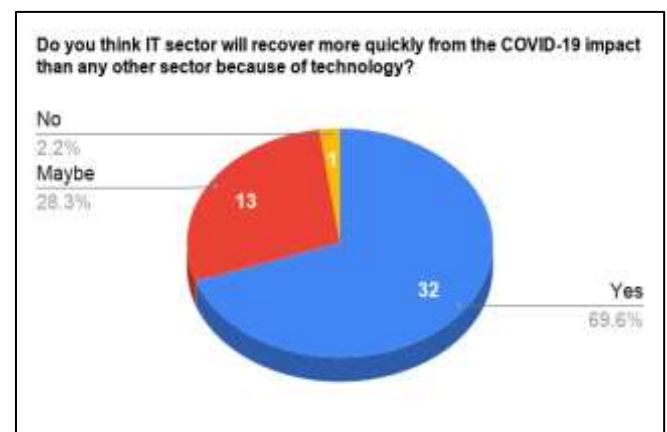


Fig. 6: Recovery potential of IT Sector

V. CONCLUSION

The coronavirus pandemic has changed the ways people interact and economies function by impelling populations to reduce their direct, in-person interactions with others, a shift that has been facilitated by the IT sector. COVID-19 has put an enormous stress on the workforce. Under these difficult conditions, companies need to care for and nurture talent by developing policies that support their people, such as flexible work arrangements, and by supplying technology solutions that allow employees to connect with one another. The pandemic-triggered move to digitization has accelerated, putting many companies' years ahead of where they expected to be earlier this year. The key moving forward will be to make sure that the benefits of these accelerations remain permanent. This will require understanding the end goals of digital transformation, effective change management and disciplined approach to project implementation.

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