

POST COVID-19 WORK STRATEGIES AND IMPLICATIONS: INSIGHT ON INDIAN IT SECTOR

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ABSTRACT

The purpose of this paper is to examine the work strategies adopted by leading Indian IT companies post COVID-19 and their institutional and individual level implications. Following the exploratory sequential mixed-method approach, in the first phase, the data were collected from 8 leading IT companies in India to understand the work strategies implemented post COVID -19 to ensure employees' safety without disrupting client deliverables. In the second phase, the primary qualitative interviews were conducted and selected IT companies' financial statements with a systematic analysis of financial indicators were used to gauge the impact of new work strategies. The study reveals the selected IT companies were embracing Work-From-Home or Work-From-Anywhere as their work strategies by ensuring little to no disruption, were armed with a host of technology tools that allowed employees' swaths to new work-norm within hours. The study findings manifold implications of the new work-norm are that it has no negative impact on the companies' client deliverables and profitability. The paper confirms that the remote-working approach has resulted in reduced carbon footprint, work-life balance, and de-urbanization while identifying the flip side of this approach as the negative impact on team cohesiveness and employee emotional wellbeing. This research confirms the critical lesson learned from COVID-19 is agile companies must plan for a range of incomprehensible contingencies to ensure business continuity and growth. The research findings contribute towards understanding the Indian IT sector experiences in adopting the remote-work strategies and taken as lessons that can be useful for other global IT sectors.

Keywords: Post COVID-19; Work-From-Home; Work-From-Anywhere; work strategies; India, IT sector, remote working; emerging economy; agile; restructuring.

INTRODUCTION

The world has witnessed many turbulences and four significant recessions over the last seven decades. Each recession of 1975, 1982, 1991, and 2009 has resulted in global GDP contraction, economic activity, employment, and consumer spending disruptions. The Pandemic has a profound impact on global economic growth and can be worse than the Great Recession of 2008-2009. The tentacles of the Pandemic will not leave any nation unscathed. All sections of society, all sectors, and all developed, emerging, and underdeveloped economies will bear the brunt of unemployment, lowered revenues, and grave disruptions in education, health, and leisure. Due to the Pandemic's gravity, most industries are forced to shut down or grapple with alternative ways to work and

generate revenue. While the sectors like the airline, tourism, and retail are hit the hardest, there are sectors like Information Technology (IT) and education and some other industries which can look towards alternative working strategies like remote working. The outbreak of novel coronavirus (COVID 19) made the world face an unexpected challenge that it had never encountered before. In December 2019, the highly contagious corona virus surfaced in Wuhan, China. Later in the year 2020, the novel coronavirus had a faster spread in countries worldwide, where the World Health Organisation (WHO) had declared the outbreak as a global pandemic on March 11, 2020. Many countries, including India, went on complete lockdown to limit the alarming spread and severity during the first and second quarters of 2020. The announcement had created an unexpected drift on employees' work patterns, allowing many knowledge workers to adapt to the remote work strategy. The government of India's announcement of 21 days nationwide lockdown on March 25, 2020, had significantly impacted the Indian IT sector companies' work strategies. The News Minute (2021) states that the IT sector is one of the pillars of modern India, contributing around 8% relative share to national GDP and providing more than 4 million direct and 10 million indirect employments. The COVID 19 pandemic and the continuous lockdown had created a new normal situation for the IT companies to allow their employees to Work-From-Home (WFH). The IT companies such as TCS, Infosys, Wipro, and Tech Mahindra had allowed their employees working at their overseas offices to fly back to India and allowed them to Work-From-Home (WFH). Even though there were initial hiccups, the government's support by easing the policies to facilitate the remote working conditions enabled many IT sector companies to accelerate their digital transformation due to the sudden lockdown situation. Mint (2020), The IT companies showed their resilience by embracing the new normal, allowing almost 98 percent of the IT workforce to Work-From-Home or select a hybrid work environment. The pandemic has stimulated the Indian information technology (IT) industry to accept a hybrid workforce strategy that offers the radical flexibility required to build organizational resilience. Simultaneously, the Indian IT Industry society National Association of Software and Service Companies (NASSCOM) is working on a framework to address the hybrid workforce and its implications on several aspects of the industry. Various industry players have taken the first step towards embracing this paradigm shift from Work-From-Office to Work-From-Home. The taste of remote working during the lockdown period allowed most IT companies to rethink a permanent change in their work strategies. Mishra & Ishwar, (2020) state that the one large player of the sector, Tata Consultancy Services (TCS), had decided on a permanent shift of 75% of their 450,000 employees to Work-From-Home at any given time by introducing a 25/25 model for remote work. Another IT giant, Infosys, had informed that their future workplace is hybrid, allowing flexibility for their workforce to Work-From-Home (WFH) or Work-From-Anywhere (WFA). Work strategies such as Work-From-Home (WFH), Work-From-Anywhere (WFA), home office, hybrid work are common among knowledge workers today, especially in the IT industry. There is no doubt that companies' remote working models had brought about significant benefits to the companies and employees during COVID 19 crisis. However, there are negative impacts also felt by both companies and employees due to a high degree of isolation and work flexibility. Against such a potent backdrop, this research paper explores the experiences and nuances of the Work-From-Home (WFH) approach adopted by Indian Information Technology (IT) sector companies. Despite the challenging circumstances, infrastructural impediments, and lack of advanced technological and digital capabilities, most of the Indian Information Technology (IT) sector companies have been able to adopt variations of remote working and ensure uninterrupted client deliverables. India had made remote working a possibility. Yet, there are many issues regarding employee welfare, enhanced digital readiness that poses bottlenecks in the years ahead.

1. LITERATURE REVIEW

The COVID-19 Pandemic, which started in Wuhan, China, has forced organizations and individuals

worldwide to rethink, re-strategize, and remodel their organizations to grapple with the unexpected. The novel coronavirus has impacted society, economy, and business. To provide uninterrupted client deliverables, many sectors of the economy have devised innovative work strategies. A further look into the studies related to workplace approaches and techniques will provide more insights. Choudhury (2020) traces that in 1970 OPEC oil embargo caused the gasoline prices to soar, which made commuting very expensive. This led to the Work-From-Home policies coming into effect. The policies favored other locations like homes, co-working spaces, coffee shops, and public libraries as places to work. Employees were given control over their schedules. The development of Work-From-Home saved time due to reduced commuting time and the sick leave in offices reduced. With the invention of computers, the internet, broadband connectivity, mobiles, and cloud computing, Work-From-Home (WFH) adoption increased in the 2000s. The author further stated that in 2015 there was an increase in productivity by 13% due to the adoption of WFH policies. When employees were given the freedom to choose between office and Work-From-Home, the productivity increased to 22 percent. These findings suggest that the employees should be given a free hand in determining which work option best fits their situation. According to Lewis & Hsu (2020) millions of workers have suddenly found themselves out of work, and many businesses are struggling to make payments. Keogh-Brown et al., (2020) state that the pandemic is far from over, and the full impact of the pandemic in terms of economic, social, environmental are yet to be determined. A recent report by Deloitte (2020) states that employees across the globe are implementing remote Work-From-Home. 82% of CEOs express the importance of this approach. Company leaders should align management practices and organizational culture to handle the risks and stress associated with the hybrid work strategy. In another report by Gartner (2020) survey results show that other than the COVID-19 push, other factors like attracting more talent to improve productivity fuel the need for a strategic shift to the Work-From-Home model. Almost three-quarters of CFOs surveyed by Gartner intend to shift at least 5 percent of employees from on-site locations to permanent remote working, and nearly a quarter of CFOs plan to change at least 20 percent. Economic times (2020) writes about a Boston consulting group's global survey results spanning over 12,000 employees across the USA, Germany, and India. This global survey reveals an exciting employee mind-shift. Employees have developed a keen appetite for flexible working hours. Their studies show that employees believe that this hybrid work strategy will sustain and even enhance their productivity. The survey is indicative of a significant preference shift among employees globally. Business line (2020) writes about Cisco employees' experience with the Work-From-Home (WFH) model. Professionals from India feel that there are primarily two benefits of the hybrid work model: increased autonomy and a dispersed team. The survey results show that most employees felt organizations should provide the same technologies at the office, even at home. 84% of the staff state that they want to upskill and become digitally skilled to perform effectively in the new workspace. According to [Business Insider, \(2020\)](#), many of India's top IT companies, like Tech Mahindra, Infosys, and Wipro, are thinking of adopting the Work-From-Home (WFH) approach. On the other hand, Tata Consultancy Services (TCS) announced its plans to make Work-From-Home (WFH) a permanent part of its operating model last quarter with the 25/25 model. HCL Technologies has a 50/50 long-term vision for Work-From-Home. According to Economic Times (2020) the government announced simplified guidelines for BPOs and ITES companies to reduce the compliance burden to successfully continue permanently as the sector moves towards a blended working model in the post-COVID-19 era. The current practices for Other Service Providers (OSPs) seek to build friendly management for "Work-From-Home" and "Work-From-Anywhere" while removing frequent reporting obligations for such companies. [Lund et al, \(2020\)](#) states that in many emerging economies, the occupations are inclined towards agriculture and manufacturing. Their remote working potential drops 12 to 26 percent. Although India is known globally for its high-tech and financial services industries, many of its workforce of 464 million are employed in professions like retail services and agriculture that cannot work remotely. In India, the

workforce could spend just 12 percent of the time working remotely without losing effectiveness. The report further states that developing economies will not support remote working due to a lack of developed digital infrastructural capabilities. Business Standard (2020) states that IBM is one of India's largest IT service sector employers. They have a sizeable employee population in India and have adopted the Work-From-Home (WFH) for 99 percent of their workforce. One of the significant challenges that stare them in the face is an infrastructural capacity expansion to match the great need for online traffic and empowering employees to be more productive in the new distributed way of working. Powell (2020) describes how individuals' work-family interface has been affected by the pandemic. The article covers areas of gender, work, and family and their implications for post-pandemic research. The report elaborates on the meaning of essential workers, virtual workers, workers with enhanced family demands, single employed parents, social supports, and issues of gender associated with these populations. Howcroft and Taylor (2014) write that a considerable number of people have been forced to Work-From-Home throughout the crisis. The people will experience new challenges which do not relate to the confines of the traditional workplace challenges. Bryant (2000) states that popular descriptions of Work-From-Home (WFH) models associate with words like flexibility, friendly, technological feasibility. Still, there are many pressures associated with this work model, leading to isolation and deprivation of leisure. The studies of Taskin & Edwards (2007), Mann & Holdsworth (2003), Valsecchi (2006), Limburg & Jackson (2007), Lai & Burchell (2008) all affirm that online work intensification can leave employees with a feeling that they have to be available online all the time as the traditional style of management control dogma is based on the presence and visibility of employees. The present COVID-19 situation has brought to surface the online work intensification, which will also mirror the challenges discussed by previous scholars. Researchers like Townsend and Batchelor (2005), Cavazotte et al., (2014) and Dén-Nagy (2014) state that the accessibility to resources like utilities, caring responsibilities, shared living space, and organizational resources influences the employees' capacity to work. The works of Donnelly and Proctor-Thomson (2015) assert that an increase in the Work-From-Home (WFH) approach will impact individuals' health due to continuous exposure to digital devices. Headache, eye strain, muscular pains in the neck and the shoulder region will surface due to the Work-From-Home approach. The studies done by Randolph (2017) go further to discuss the implications of adhoc workstations, which will have severe ergonomics deficiencies as they were not initially designed as formal workstations. The research done by Mann and Holdsworth (2003) discusses some more challenges of the remote working concept. He states that involuntary changes to working lives can result in the disappearance of fine lines between work and personal life, resulting in an emotional state of irritation, loneliness, worry and, guilt. The research of Bryant (2000), Wilson and Greenhill (2004), Panteli & Stack (2004) and Fonner & Stache (2012) reveal that the structural shift in homeworking could reinforce gender inequality further. According to Sharma (2020), the Indian information Technology sector employs at least four million people. The lockdown has a tangible impact on India's Information Technology sector. Overnight the new normal working situation for all those employees became 'Work-From-Home (WFH)'. Tata Consultancy Services, India's largest IT employer in India, has asked nearly ninety percent of its 450,000 employees to work remotely. The author further states that working professionals enter an era where homes are turning into mini office culture. Remote working will save office administration costs like electricity, phone, and infrastructure maintenance will significantly reduce due to strong emphasis on Work-From-Home. Several studies by scholars, articles by leading magazines like Harvard Business Review, reports by consulting agencies, and many articles by newspapers both national and international have discussed the prospects and risks of the Work-From-Home approach. The literature review covers studies before COVID-19 and research up to 2020. Despite the large volume of research, there is a gap that has been identified. There is no single comprehensive piece of literature on the Indian Information Technology (IT) sector experiences of Work-From-Home approach. This present study has two objectives; the first objective is to explore leading

Indian Information Technology Companies' work strategies. The second objective brings to light the implications of adopting the Work-From-Home approach for employees, organization, environment, and society. The research adds to the existing body of knowledge by sharing experiences of the Indian Information Technology (IT) sector in Work and employment in COVID-19.

2. METHODOLOGY

This study aims to explore the workplace strategies that have resulted in the wake of the COVID-19 Pandemic. As the hybrid work model is in the nascent stage of implementation, it involves an exhaustive review of periodical articles, seminar papers, books, and edited volumes. The hybrid work strategy is a significant innovation, so a comprehensive literature review on work strategies adopted by countries in general and India in specific was conducted employing search engines. In addition to systematic reviews, other methodologies were primary qualitative interviews with 30 Information Technology sector administrators and experts, professionals from Bangalore region and qualitative case studies with a traditional qualitative approach. The qualitative interviews with conducted probed into the critical implications and consequences resulting from adopting the hybrid work strategies. The talks involved a discussion on the operational opportunities; implementation potential; organizational impact; the environmental, economic, and social options or outcomes of the hybrid model. Several reports and companies' financial statements with a systematic analysis of financial indicators was another method to gauge the impact of new work strategies. The study also examined the latest edition of the reports published by The National Association of Software and Service Companies (NASSCOM) and Electronics & Computer Software Export Promotion Council (ESC). As the adoption of the novel hybrid work model results from the COVID -19 Pandemic, limited data is available for research. Also, relevant companies' financial reports, and influential consultancy institutions, such as Boston Consulting Group, Deloitte, and McKinsey, were incorporated in the study. According to Johnston (2014), Secondary analysis is also a systematic process with procedural and evaluative steps. Many scholars agree that secondary data's notable advantage is the cost-effectiveness and accessibility (Dale et al., 1988; Glaser, 1963; Smith, 2008). Secondary data research allows a methodological benefit and can also contribute to research by enriching its knowledge resource. The methodological framework's empirical focus investigates the implementation and nuances of hybrid work strategy across India's eight top Information Technology companies.

3. RESULTS

3.1. OVERVIEW OF INDIAN INFORMATION TECHNOLOGY (IT) SECTOR

According to the Business line Hindu (2020), the Indian Information Technology sector has grown to become one of the pillars of India. It contributes 10% to the country's GDP. India's competency in information technology, specifically in computer software and IT-enabled services, is recognized globally. The Indian Information Technology (IT) sector has contributed to Indian IT exports over the last 20 years. With the industry's consolidation over the previous decade, the industry has witnessed growth in revenue and employee base. The Indian IT-BPM industry has an estimated value of US\$ 191 billion in FY2021, with a growth rate of 7% year to year. The digital economy is expected to reach US\$ one trillion by 2025. According to NASSCOM's (2020) report, the domestic Information Technology (IT) sector has a value of US\$ 147 billion in FY2020. The industry has created 4 million direct employment and 10 million indirect employment. NASSCOM (2019) states that the employee base has also grown to 1.02 million cumulatively for four leading Indian Information Technology (IT) majors, namely TCS, Infosys, Wipro, and HCL Tech. According

to the [The Hindu BusinessLine \(2020\)](#) the Indian government is actively involved in propelling the growth of the Information Technology (IT) sector. The government has identified Information Technology (IT) as one of the 12 champion service sectors.

Table 1. The market size of Indian IT sector (FY 2020).

Components	Value (Billion USD)
IT services	99
BPM	38
ER&d	31
Software	92
E-commerce	57

Source: Nasscom strategic report-2020.

The IT service component dominates the Indian Information Technology (IT) market for the fiscal year 2020. The total market size is US\$235 billion. The market has grown 2% as compared to 2019.

Table 2. Share of revenue of the Indian Information Technology (IT) (FY 2020).

Components	Percentage
IT services	50.7
Software products & engineering services	21.1
Business Process Management	19.8
Hardware	8.4

Source: Nasscom strategic report-2020.

In terms of contribution the Information Technology (IT) sector has the highest contribution with 50%, followed by software products at 21%. Hardware component contributes the least 8.4% to the overall sectoral revenue generation.

Table 3. Total export and domestic revenue generated by the Indian IT sector (2010-2021).

Financial Year	Export	Domestic
2010	50	24
2011	59	29
2012	69	32
2013	76	32
2014	86	32
2015	99	34
2016	108	35
2017	117	37
2018	126	41
2019	136	41
2020	147	41

Source: Nasscom strategic report-2020.

The Indian Information Technology (IT) sector's export revenue stood at 136 billion in 2019 and rose to 147 billion in 2020. The export market revenue is higher than the domestic revenue. Over the decade, the gap between domestic and export revenue has widened.

The Indian Information Technology sector has contributed significantly to the Indian growth story. The industry has grown exponentially and moved up in the value chain. It has transformed from providing initial staffing to software development to integration and IT business consulting. But COVID-19 is expected to make international travel riskier and costlier. This paradigm shift will widen the distance between clients and impact the Indian Information Technology (IT) global competitiveness.

3.2. TELEPHONIC INTERVIEW ANALYSIS

Thirty Information Technology (IT) sector administrators, experts, and professionals from the Bangalore region of India, were interviewed over the telephone. The analysis of the interviews are presented below.

Question: Has your organization adopted Work-From-Home or Work-From-Anywhere approach?

Table 4. Organizations Work approach.

Approach	Frequency	Percentage
Work-From-Home	21	70
Work-From-Anywhere approach	9	30
Total	30	100

Source: Compiled by authors.

Analysis: Most of the organizations have shown a preference for the Work-From-Home (WFH) compared to the Work-From-Anywhere (WEA) approach. The respondents stated that since the outbreak of COVID-19, many Information Technology (IT) professionals had shown an

inclination to remote working. The initial perception was motivated by health and safety reasons, but organizations supported the necessary technology tools and flexible work arrangements. They were more convinced that remote working, be it the Work-From-Home or Work-From-Anywhere approach, is the appropriate work strategy moving forward.

Question: How are organizations able to adapt to remote working?

Analysis: The leadership of the organizations was not comfortable with the concept of remote working. The organization's stated concerns were employee productivity, communication interruptions, project timelines, and cybersecurity issues. But with time, organizations have embraced the digital work environment and have developed efficient HR processes to manage remote employee working. The Indian government supported the organizations by applying key regulations to remove hurdles that blocked business processing outsourcing and IT-enabled services firms from implementing long-term Work-From-Home (WFH) compared to the Work-From-Anywhere (WFA) approach.

Question: Do employees have access to the right technological tools to support remote working?

Analysis: Though the COVID-19 has created short-term challenges for organizations, it has proved to be a catalyst for companies to adopt various technological tools to support the remote working concept. Most of the employees have access to corporate communication and collaboration tools. Some employees who have adopted the Work-From-Anywhere (WFA) approach are facing challenges of working in interior geographical locations.

Question: Specify the software application used in remote working and benefits derived from the application.

Analysis: Since the beginning of the Pandemic, there are many existing and new software applications that have enabled virtual and client interactions. Organizations are working with Microsoft Teams which has integration capabilities. Other software applications that are popular are Zoom, Google meet, and many more.

Table 5. Technological tools utilized in remote working.

Software tools	Application	Benefits
Zoom	Virtual meetings	Availability of recording option
		High user threshold
		Less data consumption
		Screen share
		Break out room
Skype	Virtual meetings, communication	Integrates with google calendar
		Compatible with all operating systems
		Robust security
Microsoft Teams	Virtual meetings, daily communication, remote collaboration tool	Availability of recording option
		Break out room
		Screen share
		Integration with other Microsoft applications
Google Meet	Virtual meetings	Integrates with google calendar
		User friendly
Google Drive	Document management	Integrates with google calendar
		High storage
		Multiple document authors can work simultaneously

Source - Compiled by authors.

Question: What is the communication strategy deployed to monitor remote working?

Analysis: Communication is the lifeline for all organizations. Establishing an efficient communication channel is vital in this digital environment. Most of the organizations prefer to use Microsoft Teams. Some organizations prefer technological tools like Prohance and SAPIENCE.

Question: How are employees managing professional life in less formalized environments?

Analysis: There is a mixed response from organizations. Many employees are facing challenges to balance household management and childcare. As most educational institutions have also adopted online learning, this only adds to employees' pressures. However, some employees have a better work-life balance as they have more time to spend with family and no commute time.

Question: What budgets have IT companies provided for remote working?

Analysis: COVID-19 has impacted organizations' ability to spend. Some organizations do not have the potential to invest in new technology. Few organizations provide laptops and gadgets and have tried to improve connectivity by using virtual private networks (VPNs) and allowed concessions in periods of extremely slow Wi-Fi. Some organizations are providing INR.15,000 to each employee to make their homes into mini offices.

Question: How are the challenges of network security addressed?

Analysis: With many people working from home, hackers, and cybercriminals, phishing attacks, security breaches have increased. Organizations are conducting security audits to access the vulnerabilities in the system. Many organizations are providing employee training on proper security protocols.

Question: What are the specific difficulties encountered by employees in remote working?

Analysis: Most common difficulties stated by the respondents are:

Network and connectivity issues

Power supply issues

Challenges due to improper setup

Increase in work during Work-From-Home (WFH)

Physical and emotional health issue

3.3. WORKPLACE STRATEGIES

During the financial crisis of 2008, technology and economic turmoil were intertwined, and technology spending took a downturn. Still, with the beginning of the pandemic, technology adoption has grown much faster than businesses and the economy. Strangely the COVID-19 pandemic has accelerated digital transformation. With the acceleration of digital technologies, digital offerings have found their way across sales, customer service, and operations. The developments on the technology front have given rise to a revolution in workplace strategies across the globe. One of the most common approaches in the 'new normal' is the Work-From-Home Strategy (WFH). Major Indian IT giants like Tata Consultancy Services, Infosys, and Wipro have adopted this model or variations. Though 15% to 50% of the staff report to work the new corporate strategy for many IT companies are Work-From-Home (WFH) or Work- From- Anywhere. From the selected eight IT companies in India 75% had informed its novel work strategy as Work- From-Home and 25%

stated as Work-From-Anywhere (Table 6.).

Table 6. Remote work strategy adopted by the 8 selected IT companies in India.

Work strategy	Per centage
Work – From – Home	75%
Work – From – Anywhere	25%

Source: Compiled by authors.

The Indian IT sector is growing by leaps and bounds and continues to be the global leader in computer software and information communication technology-enabled services provider by transforming India as the world's outsourcing capital. It is vital as more than half of the Fortune 500 companies had outsourced their software requirement to Indian IT companies. Like other industries due to COVID 19 pandemic, the digital industry also faced several challenges. India IT companies' resilient and proactive nature had brought upon more success stories by making structural changes to the paradigm shift. Top eight Indian IT companies were selected to explore work strategies adopted to move forward. The selected companies and their past five years revenues were presented in Table 7.

Table 7. Revenues from operations of selected IT companies.

	Year ended 31st March (INR Billion)				
	2016	2017	2018	2019	2020
Tata Consultancy Services	1,086.46	1,179.66	1,231.04	1,464.63	1,569.49
Infosys	539.83	592.89	619.41	731.07	790.47
Wipro	512.48	550.40	544.87	585.85	610.23
Tech Mahindra	264.94	291.41	307.73	347.42	368.68
HCL Technologies	311.36	475.68	505.69	604.27	706.76
Redington India Ltd	354.30	411.15	434.59	465.36	514.65
Larsen & Toubro Infotech Ltd	58.46	65.01	73.07	94.46	108.79
Mindtree Ltd	46.73	52.36	54.63	70.22	77.64

Source: Compiled by authors based on companies' annual reports.

TCS was one of the IT companies taking proactive measures at the Pandemic's initial stage by immediately announcing travel restrictions and canceling physical international meetings to ensure their workforce's safety. The sudden disruption created by the COVID-19 Pandemic was a significant challenge for a company like TCS with 448,464 employees. However, TCS embraced the change successfully as they have already deployed the hybrid work model for the past 50 years (Mishra and Ishwar, 2020). They were equipped with the necessary infrastructure to respond to the uncertainty proactively using a collaboration platform, cloud services, and robust security practices. Therefore, TCS immediately launched the 'Secured borderless workplaces (SBWS)' model to ensure business continuity by allowing their workforce to Work-From-Home (Tata Consultancy Services, 2020). The SBWS model facilitated TCS to relocate 95% of their workforce to Work-From-Home (WFH) and ensure the projects' quality and delivery time met as intended. The success of SBWS had led TCS to announce the 25 by 25 model. The company expects to make a permanent

shift in its work strategy by allowing only 25% of its workforce to work at office premises at a given time by the year 2025. Infosys transformed its work strategy within three weeks of office closedown by letting 90% of the 242,373 employees spread around 40 countries to Work-From-Home. This trend has increased by 98% now as the company invested in updated IT tools and IT infrastructure to seal the cracks to avoid cyberattacks and strengthen cyber-security. Robust training programs are in place to elevate employees' best practices for preventing cyberattacks and data breaches. Eradication of fixed cost and less office space maintenance had positively impacted the company's financial performance, allowing Infosys to think about moving to a flexible working model ([Business Today, 2020](#)). The company had decided to move 33% of the workforce to Work-From-Home permanently, and 66% of the staff will be adapting the flexible work model ([Khetarpal, 2020](#)). Wipro prolonged Work-From-Home for 98% of the workforce till April 2021. The company has implemented plans for adapting flexible work models by re-skilling their workforce by accelerating remote learning, new reality learning such as gig economy and crowdsourcing, and self-driven learning. Having a robust set of technology helped Wipro jump immediately into hyperdrive during the pandemic, enabling the workforce to work remotely. They believe that 100% work from the office will not be a reality in the future in any circumstances and affirms a hybrid work mode for the future by creating a next-generation workplace through Wipro Virtuadesk ([Business Today, 2020](#)). HCL Technologies have developed a Management Framework to lessen the impact of the Covid-19 outbreak on its employees and clients. They have developed a structured pandemic policy to ensure employee safety & health, and client commitments. They have successfully implemented the Work-From-Home approach. 76% of their India-based employees and 92% of their employees in other geographies can Work-From-Home (WFH). In specific geographies, a limited set of their employees are working from our offices. The company has redesigned the digital workplaces by executing organizational strategies, concentrating on user-experience parameters, productivity measurement metrics, office locations, employee gains, user devices, and IT assistance that are enablement to assure continuous business growth ([Sharma, 2020](#)). They have designed a fluid digital workplace that provides flexibility, scalability, and on-demand availability ([Chatterjee, 2020](#)). The company has asked the employees to report to the office at least once a week. At HCL, HR department has decided that employees who have young (1-5 years) children, or aged (50 years) parents can continue to Work-From-Home. Employees in the age group of 50 to 55 are also exempt. They have also decided that on no specific day will any of the company's development centers exceed 20% capacity ([Gill, 2020](#)). Redington India tackled the pandemic with their "De-risking the continuum" strategy. It was a well-articulated and coordinated application of enabling Work-From-Home (WFH) for all employees with IT Communication, Collaboration & Connectivity tools. Redington's investment in digitalizing the entire organization proved to be critical towards ensuring business continuity. To provide continuous support to employees and meet consumer demands, they adopted a tactical risk mitigation playbook, focusing on important "7Cs" developed and immediately deployed. The seven Cs' are Cash flow, Collection, Cost, Customers, Contracts, Control, and Communication. The company adopted a measured and practical approach by putting in place a systematic Work-From-Home (WFH) routine involving total partial & by-rotation attendance to office-based roles, responsibilities, and job-content. The company also accelerated its transition towards a fully Digitalized Organization by digitizing most functions, processes, and systems ([Business Standard, 2020](#)). Tech Mahindra is another IT giant which was proactive in the uncertain situation arisen by COVID-19 with well ahead planned IT infrastructure. Immediately the firm was able to shift its work environment without any hassle to remote working by sending 93% of the employees to Work-From-Home ([Arora, 2020](#)). Tech Mahindra sees the current situation as an excellent opportunity to continuously monitor programs' health by combining all its work premises and Work-From-Home (WFH) facilities. In the long run, the firm is deciding to have 25 - 35 percent of the workforce to Work-From-Anywhere (WFA), providing them the liberty to choose between Work-From-Anywhere (WFA) and Work-From-Office (WFO). The concept to Work-From-Anywhere (WFA) has seen as

a future benefit by Tech Mahindra to impact their margins positively (Gill, 2020). Larsen and Toubro Intech is the IT arm of India's largest conglomerate. They started to deal with the crisis with a 'beginner's mind' approach that will benefit the company in the mid to long-term. During the pandemic for employee communications, they leveraged collaboration platforms such as Facebook Workplace, Microsoft Teams, Cisco WebEx, and emails to keep them committed and productive as they Work-From-Home. Thousands of Larsen and Toubro Intech employees across 30 countries and clients work remotely. The support staff provided essential infrastructure and organizational support to enable the employees to Work-From-Home (WFH). Their pandemic approach's building blocks were agility, transparency, honesty, and passion for solving are the basic tenets of Larsen and Toubro Intech. They adopted the Work-From-Home (WFH) approach only during the pandemic. In 2021, Larsen & Toubro Infotech has launched its return-to-work app LTI Safe Radius. This app helps enterprises maintain a safe work environment as employees return to work in a phased manner amid Covid-19. LTI Safe Radius is a technology solution that approaches these critical requirements of employee safety and business continuity. This data-driven platform will be valid for enterprises to manage operations most efficiently and assure employees about their safety & wellbeing. The employees can analyze information across office locations on LTI's self-serve analytics platform Mosaic Lens. The tool provides analytics, comprehensive reports, and visualization for day-to-day decisions (Abhishek, 2020). Mindtree, a leading Global Technology consulting and services company, devised a plan which covered four essential areas - health and safety, business continuity, client support, and communications. The entire workforce in non-India locations and 70% of employees in India work remotely. For Mindtree employees, WFH was not new as this practice has been instilled for a few years. The employees have been 100% productive and connected whenever they have worked from home. The crisis management team at Mindtree developed a war zone anchor team for all verticals, and they used the hub and spoke method to handle communications. A global contact center, 24/7 medical buddy to address employee emotional issues, was established. Their agile methodologies, collaborative tools, and learning platforms ensure that their employees will meet client requirements (Table 8.).

Table 8. IT communication, collaboration and connectivity tools used to implement the remote work model.

Selected IT companies in India	IT communication & collaboration tools used
Tata Consultancy Services	SBWS Model; Microsoft 365
Infosys	InfyMe app;
Wipro	Virtuadesk; Microsoft 365
Tech Mahindra	Facebook Workplace, Microsoft Teams, Cisco WebEx
HCL Technologies	HCL Sametime; HCL connections
Redington India Ltd	Remote monitoring and device Agnostic, Encrypted data communication, MS Teams
Larsen & Toubro Infotech Ltd	xFH model; WebEx, MS Teams, Workplace
Mindtree Ltd	MS Teams; BYOD with virtual desktop infrastructure; Cloud-based web proxy solution

Source: Compiled by authors.

3.4. IMPLICATIONS

The birth of remote work culture to place during the COVID-19, when India went for complete lockdown, the line between office and home began to blur. Now flexible workspaces, decentralized offices, Work-From-Home (WFH), Work-From-Anywhere (WFA) are the new workplace strategies that have created a seismic change in employees and organizations globally. India is emerging as the second-largest market for flexible workspaces in the region. Globally, many organizations, including tech giants Facebook and Twitter, have already given their staff the option to permanently WFH. The accelerating remote work culture has eliminated travel times. It has added hours to the day, enhancing organizational productivity as many employers are looking at remote working as a long-term practice.

The hybrid work model helps the organizations acquire a better talent pool, accomplish innovation, and create more value for stakeholders. It is more flexible, digital and is enhancing employee productivity and satisfaction. This is the beginning of a new change, but the difference comes with its ramifications. On one side, it has increased productivity, but the flip side has holistically impacted the employees' life schedules and has brought mental health issues to the surface.

3.4.1. ORGANIZATIONAL IMPLICATIONS

The selected companies last five years revenue from operations were studied by the authors to understand the trend of revenue growth during COVID 19 pandemic and the last three quarter of post pandemic situation.

Table 9. Revenue growth percentage YoY analysis.

	Year ended 31st March				
	2016	2017	2018	2019	2020
Tata Consultancy Services	15%	9%	4%	19%	7%
Infosys	14%	10%	4%	18%	8%
Wipro	9%	7%	-1%	8%	4%
Tech Mahindra	17%	10%	6%	13%	6%
HCL Technologies	-15%	53%	6%	19%	17%
Redington India Ltd	12%	16%	6%	7%	11%
Larsen & Toubro Infotech Ltd		11%	12%	29%	15%
Mindtree Ltd	31%	12%	4%	29%	11%

Source: Compiled by authors based on companies' annual reports.

3.4.1.1. STEADY REVENUE GROWTH

The IT bellwether TCS is one of the pioneers during the pandemic to announce the Work-From-Home (WFH) strategy they successfully implemented. The company believes during the lockdown; the company came out more robust than ever before by allowing over 90% of its works force in India to Work-From-Home. For the financial year 2020, the company's resilient nature allowed the company to show growth of 7% in its sales revenue, compared to the previous year's performance (Table 9.). Further, the company's revenue for the last three quarters (from April 2020 to December 2020) reaches 77% of the previous financial year revenue ensures TCS's financial performances bouncing back to pre-COVID level growth (Table 10.). Infosys invested enormous

amounts for repatriation flights to get down their employees from various destinations and reunite them safely with their families. Further, the company assured its employees that no one would be laid-off due to the pandemic situation giving the employees the confidence to react positively to the changes made on their work strategy. The employees accepted the novel hybrid work model without any hesitations and improved its revenue on operations by 8% for FY 2020. Infosys has achieved 94% of the previous year's revenue on operations by the end of the third quarter of FY 2021 (Table 9.). The improvement in financial figures of the company depicts the success of the hybrid work strategy implemented by the company. HCL Technologies rally ardently towards responding to the uncertainties created by the pandemic and proved to be the fastest-growing large technology company for the fourth consecutive year with an income growth of 17% for FY 2020 (Table 10.). Also, Larsen & Turbo Infotech limited, Redington India Limited, Mindtree Ltd, succeeded in maintaining their revenue growth at 15%, 11%, and 11%, respectively, for FY 2020. According to Table 2. the selected companies' revenue growth for FY 2020 is not impressive as for the previous year. However, Table 9. proves that the companies' resilient nature enabled them to face the uncertainty proactively and allow the companies to bounce back to the pre-COVID-19 performances in the last three quarters completed.

Table 10. Revenue comparison - FY ended 2020 & First three quarters of FY 2021.

	Year ended 31/03/2020	Financial year 2021			Total of last 3 quarters	% of revenue of first 3 QTR of 2021 compared to revenue of FY 2020
		1st QTR	2nd QTR	3rd QTR		
Tata Consultancy Services	1,569	383	401	420	1,205	77%
Infosys	790	237	246	259	742	94%
Wipro	610	149	151	157	457	75%
Tech Mahindra	369	91	94	96	281	76%
HCL Technologies	707	0	186	193	379	54%
Redington India Ltd	515	107	138	170	414	81%
Larsen & Toubro Infotech Ltd	109	29	30	32	91	84%
Mindtree Ltd	78	19	19	20	59	75%

Source: Compiled by authors based on companies' annual reports.

3.4.1.2. POTENTIAL HARD SAVINGS

Companies are designing office-work spaces to align with developments in the business landscape. The WFH approach has lessened the real estate requirement, thus significantly reducing the cost cut. Encouraging Work-From-Home TCS expects to save cost on office spaces. The company had decided to use its large vacant offices to house its research and development facilities and as a modern-day workplace for its employees. TCS's potential hard savings by implementing 25-25 models is to have approximately \$ 50 million annual savings in its general and administrative costs. A study by [Global Workplace Analytics \(2021\)](#) identified that a remote working employee could save \$11000 per annum for an employer. This study shows that TCS, with approximately 440,000 employees implementing the 25-25 model, can lower a significant amount of its overhead

cost (Table 11.). The decrease in employees' commuting time and distributed workforce coming together unleashing from the conference rooms and walls expected to increase TCS productivity. Borderless workspace is expected to increase the company's productivity by discovering the right talents and creating cohesive teams to discover and cater to the rising business opportunities. The improved work-life balance and healthy habits developed among employees while working from home reduces the healthcare costs. The Table 11. displays the estimated cost savings per annum for the companies based on the expected cost savings per remote working employee \$11,000 ([Global Workplace Analytics, 2021](#)).

Table 11. Estimated cost savings per annum for selected IT companies by implementing WFH / WFA models.

Selected IT companies in India	Total number of Employees	Post Pandemic WFH/ WFA		Estimated cost saving per annum (US\$ Million)
		Per centage	No. of employee	
Tata Consultancy Services	448,464	75%	336,348	3,700
Infosys	242,373	35%	84,831	933
Wipro	188,270	25%	47,068	518
Tech Mahindra	106,400	25%	26,600	293
HCL Technologies	150,423	30%	45,127	496
Redington India Ltd	1,561	50%	781	9
Larsen & Toubro Infotech Ltd	31,437	50%	15,719	173
Mindtree Ltd	21,991	50%	10,996	121

Source: Author based on the study by Global Workplace Analytics (2021).

3.4.1.3. INCREASE IN EMPLOYEE SATISFACTION AND EMPLOYEE RETENTION

The employee retention level is forecasted to increase due to the greater flexibility the employee experiences from WFH. The survey conducted by HCL technologies showed that their employees' satisfaction level has increased after the employees could relocate to Work-From-Home. Higher job satisfaction level of employees expected to stimulate the institution and individual fit and glue the employee to the organization. TCS states that losing an employee costs the company from \$10000 to \$30000, which will be another significant cost-saver ([Gopal, 2021](#)).

3.4.1.4. REDUCTION OF CARBON FOOTPRINT

The novel work from the home model will bring greater agility by catering to the business needs via employees from anywhere at any time. The reduction in commuting of TCS staff will positively impact the environment by reducing carbon emissions. Tech Mahindra had set targets to reduce greenhouse gas emissions by 22% in 2030 and 50% by 2050 ([Tech Mahindra, 2019](#)). The shift toward the company's remote work model paves the way for the company to achieve its targets well in advance by reducing employees' commuting and the use of larger campuses.

3.4.1.5. REACH OF GLOBAL TALENT MARKETPLACE

The pandemic has unleashed opportunities to recruit talents without geographical limitations. TCS expects the 25-25 model to attract more talents worldwide, increase job opportunities in rural areas, and allow the employees to live and work from their hometowns. HCL Nagpur's 'come back home' campaign is another talent hunt to bring the local talents closer to their homes. By doing this, HCL believes in recruiting highly satisfied talents into their workforce (Basu, 2021). Table 12. validate that post pandemic work strategies of the selected organizations will not be 100% working from the office, instead will be shifting into a hybrid model with higher percentage shifting their employees permanently for WFH or WFA models.

Table 12. Total Number of employees and the remote work model.

Selected IT companies in India	Total number of Employees	% of remote working (During Pandemic)	Number of employees working remotely	Post Pandemic WFH/ WFA %
Tata Consultancy Services	448,464	96%	430,525	75%
Infosys	242,373	98%	237,526	35% - 50%
Wipro	188,270	98%	184,505	25%
Tech Mahindra	106,400	88%	93,632	25%
HCL Technologies	150,423	96%	144,406	30%
Redington India Ltd	1,561	90%	1,405	50%
Larsen & Toubro Infotech Ltd	31,437	80%	25,150	50%
Mindtree Ltd	21,991	99%	21,771	50%

Source: Compiled by authors based on companies' annual reports for FY 2019-20.

3.4.2. EMPLOYEE IMPLICATIONS

3.4.2.1. NEW CORPORATE CULTURE

The new work strategy is having a positive development on the employees. As the workplace and home have integrated, the employees have deepened their relationships with their colleagues. A corporate culture of inclusivity and concern for everyone in the company has emerged. The employee survey shows that there is an increase in employee satisfaction. The employees are constructively and productively utilizing their time. The employees' cash is freed up as transport, car fuel, and maintenance have come to a minimum in the financial dimension.

3.4.2.2. INTERNET CONNECTIVITY

There is another side to it also, which is that networking has become difficult. Network security is another issue in remote working. As the Work-From-Home approach uses home internet connections, cybersecurity is another challenge. The sudden transition of employees' Work-From-Home (WFH) has blurred the boundary between their personal and professional lives by creating an unbalance between family and work life. The economic downturn, companies' opportunity to

global accessibility of talents has made the workforce experience massive salary cuts and layoffs.

3.4.3. ECONOMY IMPLICATION

The structural shift to remote working will significantly impact urban economies (Lundet al., 2020). Everyday travel, few people commuting will have economic ramifications that will affect transport, gas and car sales, eateries and retail in urban markets, demand for office real estate, and other consumption patterns. Companies are planning to reduce office space to reduce the real estate cost. The impact will vibrate to the restaurants and cafes, stores, and services businesses that cater to office workers. There is also going to be a shift in consumption patterns in the coming years. Instead of spending the money on transportation, lunch, and wardrobes, now the need for home office equipment, digital tools, and enhanced connectivity gear has boomed. The remote working trend is also translating to prosperity in smaller cities. Remote working has opened more doors for women and enabled flexible working hours. In the future there could be an increase in women participation. The research shows that Infosys has the highest participation of women in their workforce (Table 13.).

Table 13. Percentage of women workforces.

Selected IT companies in India	Total number of Employees	Women employees
Tata Consultancy Services	448,464	36%
Infosys	242,373	38%
Wipro	188,270	35%
Tech Mahindra	106,400	31%
HCL Technologies	150,423	27%
Redington India Ltd	1,561	24%
Larsen & Toubro Infotech Ltd	31,437	26%
Mindtree Ltd	21,991	32%

Source: Compiled by Authors based on companies' annual reports for FY 2019-20.

4. DISCUSSION

The current Pandemic has pushed everyone to deploy resources to the remote working environment quickly. Despite some challenges related to IT infrastructure in some parts of India, the paradigm forceful shift of Work-From-Home or Work-From-Anywhere has rapidly been adopted by most Indian companies. IT sector is one of India's main sectors that nurture resilience during the initial stages of the Pandemic by pioneering the implementation of work strategies during COVID-19. The study explores the work strategies adopted by top Indian IT companies and the overall implications. Work-From-Home and Work-From-Anywhere are the two main hybrid work strategies adopted by the selected major IT companies for this study. The interviews conducted for 30 IT sector administrators, experts, and professionals revealed around 70% of the companies limit themselves to the Work-From-Home model. The findings demonstrate that the Hybrid work strategy has both positive and negative implications. The implications are further explored by delineating organizational, employee, and overall economic ramifications.

The in-depth literature review indicated that this Work-From-Home is not a new concept in the IT

sector. The research highlights companies' technological readiness in various digital platforms like Secured Borderless Workplaces, Wipro Virtuadesk, Managed Framework, and other collaboration platforms was the backbone for the swift shift to hybrid work strategies. The explicit hybrid model like the 25 by 25 strategy by TCS and De-risking the continuum by Redington, is elaborated. Further, the study indicates the companies can enjoy potential hard savings by implementing the hybrid model. For instance, by implementing the 25 by 25 model, TCS estimates cost savings of USD 3.7 billion per annum. This article also touches upon some of the employees' ergonomics and psychological aspects with the hybrid work approach. According to Table 11., TCS shows a growth of 7% in 2020 as compared to the previous year; this finding is in line with the work of [Choudhury \(2020\)](#). Similarly, the results reveal impressive growth for companies who adopted the Work-From-Home / Work-From- Anywhere models resulting from increased employee motivation led to higher productivity. Another interesting finding is that some employee surveys reveal increased employee satisfaction levels, which mirror the impression that employees are not facing many challenges with the new model. Still, this finding is not in line with the results of [Powell \(2020\)](#) and [Howcroft and Taylor \(2014\)](#). The research paper also touches upon insights into how the novel approach will impact urban economics and upset demand for retail space, transport, gas, and consumption patterns. The Indian IT companies have protected their client's interests and ensured the employees' well-being. The experiences of the novel hybrid model by Indian IT companies demonstrate that the approach is possible, and it has many positive implications for the organizations and the employees. The Indian IT Companies are upskilling their staff and enhancing their digital competence to overcome the challenges posed at the governmental, infrastructural, and organizational cultural levels.

CONCLUSION

The qualitative study of vast literature and interactive interviews with Information Technology (IT) sector experts and the selected top Indian IT companies' financial statement analysis indicates the work strategies and implications of these work strategies in response to Covid-19. The study explicitly describes that the Indian IT sector has rekindled a Work-From-Home (WFH) strategy and applied it to survive, grow, and sustain the present volatile, uncertain, complex, and ambiguous business landscape. The Indian IT sector is leveraging the trend that "The office concept is giving way to a new concept that is taking the workplace anywhere." The findings of the study describe the organizational and employee implication. The environmental and Economic impact of adopting the hybrid model is explicitly spelled. Most of the top IT companies have taken these changes in their stride as long-term methodology changes. Our study also concludes that IT companies have embraced this new norm of doing client deliverables through Work-From-Home (WFH) despite the various infrastructural and socio-cultural challenges. However, our study has some limitations. The first is that the Pandemic is an ongoing phenomenon, and the hybrid work model is still in its nascent stage of application. The study focused only on Indian IT sector. Therefore, applying the outcome of the study on various other geographical contexts could be a limitation. Due to time and resource limitations, the study's sample size had to be limited to eight main IT companies from the Indian IT sector. Another limitation is that it is a qualitative study of extensive literature review and expert interviews. To reinforce and expand the findings of this study, an empirical analysis of employees and top management would reveal more insightful observations. Additional research could explore the hybrid work strategy experiences in other countries and sectors. Further, the study is limited for a short period, which is not enough to fully evaluate the trend of companies implementing work strategies and their financial implications. In the future, research can be expanded to observe the change in the indicator.

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