A study to examine work from home as panacea for industries in the midst of the covid-19 outbreak

P. Gupta* and P. Gandhi1

1&2Jagan Institute of Management Studies, Rohini, New Delhi.

ABSTRACT
Covid-19 had wreaked havoc on many industries, with some businesses unable to thrive in the market and being forced to close permanently, while others were able to manage and operate their operations through the employment of remote working concept which was new to them. They have to face certain challenges while adopting this concept but this was the only viable option left that bolstered them to resurrect again in the market. Initially, employees find it quite difficult to work from home but after considering its benefits including flexibility, having more time for them as well for family, no expenses of commuting, easily managing work-life balance and many other they were at ease to work from home and some employees find it very convenient and less hectic. The main objective of this study is to explore evolution of work from home, to study the pros and cons of remote working, to assess the role played by the work from home in sustaining the businesses after COVID-19 outbreak and find out the future of work from home. The study's key finding is that the hotel, transportation, construction, and manufacturing businesses were the most affected during the Covid-19 pandemic, but banking, finance, real estate, and the IT industry were able to survive because of remote working. Many organisations have equipped their staff with the necessary tools to work from home comfortably, and many companies have made the decision to work from home permanently.


1. INTRODUCTION
The covid-19 has upended various industries including the media industry, healthcare industry, education industry, etc., and scathed the overall economy. The production, sales, profit of organization has slumped as employees are returning to their hometown because of health concern so there is a paucity of workers to continue the production activity and many organizations have temporarily shut down because of this situation. For these industries, Covid- 19 has proven a bottleneck. Therefore, the organizations have to find a solution to
resume the work so they resort to the concept of work from home. The idea of working from home or remote work gave many industries a big Fillip in continuing their business successfully. But this concept is not something new it’s been around us from the past decades, but has gained popularity and has become a new normal in today's scenario for maintaining social or physical distancing to assuage the spread of the virus. The idea of remote work bolstered many industries in continuing their work activity after the pandemic outbreak.

Many organizations are new to this experience but they are rapidly shifting to work from home to remain safe and to follow the guidelines of the government. Employees now have to follow different codes of conduct to meet the organization's objective while working online. Although working from home has helped the industries tremendously but they also faced a lot of challenges while adapting this concept. The organizations where it is impossible to perform the job from home have to shut down their operation and thus many employees have lost their jobs during this pandemic. In this research paper, we will illustrate some facts and findings of how working from home has supported industry after coronavirus outbreak, the pros and cons of remote work, its origin, and future.

2. OBJECTIVES OF THE STUDY

The main purpose or objective of conducting this research is:
1. To explore the Evolution of “Work from Home” through Research Review.
2. To do industries wise analysis of work from home covering the benefits and challenges.
3. To study the role played by the work from home in sustaining the businesses after COVID-19 outbreak.
4. To study the pros and cons of the remote working concept.
5. To investigate the future of work from home and how it will affect business operations

3. REVIEW OF LITERATURE

Varied comprehensive researches have been executed by many researchers which will give us a detailed insight into the concept of working from home has been summarized:
In Alexander Brick, Adam, and Karel's (2020) research, an online survey (Real-Time Population Survey) has been conducted to find out how many US workers have shifted to remote work after coronavirus pandemic and the survey was conducted on nearly 5,000 working-age adults. The main findings of the research are “The percentage of the workforce that works from home in February was 8.2 that upsurge to 35.2 in May 2020” and “Of all workers commuting daily in February, only 43.7 percent continued doing so in May, while 28.6 percent report working from home at least once per week and 27.7 percent were no longer employed in May”. They concluded that the impact of covid-19 on remote work varied among different socio-economic groups and low-education and low-income groups are more likely to be unemployed or forced to be inactive because of physical-distancing.

According to another research done by Fernando Saltiel (2020), for “examining the feasibility of remote work in developing countries” based on the Skill towards Employability and Productivity (STEP) survey. He observed which workers are less likely to work from home and find out characteristics like educational attainment, gender, age, and an asset index that affect the ability to work from home and point out the cross-country differences in the percentage of people working from home evident by the number of workers using laptop at work is “58% in Macedonia compared to just 14% of their counterparts in Laos” and likely there is variation in the percentage of individual of working from home in Yunnan and Ghana which is 23% and 5.5% respectively.

According to the study of Lena Waizenegger, Brad, Wenjie, and Taino (2020), Covid-19 has posed serious issues and unpredictable challenges on knowledge workers which forced them to stay at home and to shift from on-site to virtual collaborations. They interviewed 29 knowledge workers about their experience and introduced the term “enforced work from
home”. They discussed how knowledge workers deal with technological challenges and discover new affordances of technology or redesign existing technologies in new and creative ways to achieve their team collaboration goals. Some of the benefits from working from home to knowledge workers are increased job satisfaction, increased work autonomy and the negative impacts are that “Information and communication technologies make it difficult to knowledge workers to switch off and results in work intensification as well as distractions from home environment”, the threat from cybercriminals, communications and duty arrangement problems.

On the other hand, Marissa G. Baker, in his research emphasizes that the workers that are employed in the occupation which includes (healthcare, manufacturing, retail and food services, etc.) where working from home is not possible “are not only exposed to getting an infectious disease but also to job disruption, job insecurity, and job displacement” during covid-19 and 75% of the workforce in the U.S. was employed in this sectors and only about a quarter are in occupations which can be done from home. He utilizes the O*NET database to measure the workers who are doing their job at home, “using metrics characterizing the importance of interacting 94 with the public at work, and importance of computer use at work”.

Abi-Adams, Teodora, Marta, Christopher (2020), in their research highlighted the variation in workers' ability to work from home within and across different occupations and industries because of different background characteristics like gender or occupation by conducting 6 surveys in the UK and US. They study the heterogeneity in the share of a task that can be done from home like some can do 100% task from their home while others cannot do any task from home like a waiter. This research will help in doing proper investment to facilitate workers to work from home.

According to another study by Sahu Gayatri (2020) focusing on work from home strategy during pandemic that has supported many organizations to deal with this situation in a defensive way and the impact of remote work on the performance of firms in a different sector.

Adding to this, another research by Eric Brynjolfsson, John, Daniel, by conducted two waves of survey one in April another in May of US population concluded that only “over one-third of workers have responded to the pandemic by shifting to remote work, while another 10% have been laid-off” and there is variation across states in the share of people who are shifting to remote work and those who still continue to commute.

Dobric Savic, (2020) in his research pointed out the importance of digital transformation because of the radical shift to work from home due to the outbreak of Covid-19. Another research by Eliza Forsythe, Lisa, Fabian, and David (2020), examines the impact of Covid-19 on the labor market by collecting data on job vacancies, unemployment insurance initial claims, and Bureau of Labor Statistics (BLS).

4. RESEARCH METHODOLOGY AND DISCUSSION

The researchers used secondary data analysis, i.e., review techniques, for this study on impact of COVID-19 on businesses. The researchers have reviewed nearly twenty academic and influential research papers as part of this phase in order to frame the study's objectives and present discussions on the established objectives. The aim of the study is to add to the current literature on impact on businesses post COVID-19 times.

To explore the evolution of “work from home” through research review.

Work from home is not a new notion; it has been used for a few years, but due to technology advancements and the emergence of Covid-19, it is now becoming a new trend. Telecommuting is another term for it. "It has a considerably longer history than the history of office labor." Carpenters, potters, leather workers, craftspersons, blacksmiths, bakers, and others worked in their homes before the industrial revolution, and some opened shops to conduct business. Many families worked together from their homes before the introduction of technology and the internet, integrating work and living space, utilizing family resources, and
sustaining the family. However, following the industrial revolution, people began to experience significant changes and began to labor in locations that were far from their homes. However, with the advent of the Internet, the invention of Wi-Fi, technological advancements, and computer advancements, a modern remote work concept emerged, allowing employees to work outside of the organisation via smartphone, laptop, and other devices. Many people are still doing jobs from home without these devices, such as doing laundry for outside customers, providing food and baked goods to factory workers, sewing, and so on. So, this concept has been around for a while and has been used by a variety of organisations. However, since the incursion of the coronavirus, all workers and employees have been required to work from home in sectors where it is allowed, and firms are creating new and innovative techniques to make it simpler for employees to work from home. As a result, remote work is gaining popularity and becoming the new normal in today’s world.

But through the survey, We have found out that only 22% of the employees have worked from home before Covid-19 and 78% of the employees have never worked from home before.

Have you ever worked from home before Covid-19?
50 responses

78% No
22% Yes

FIGURE 1: Depicts the usage of remote working before covid-19 Source: Author’s Own Composition

To do industries wise analysis of work from home covering the benefits and challenges.

Based on the data of the Bureau of Labor Statistics, the percentage of total workers who can work from home by industry has been shown.

These Are the Industries That Work From Home
% of total workers who can work from home by industry, 2017-2018

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial activities</td>
<td>57%</td>
</tr>
<tr>
<td>Professional and business services</td>
<td>53%</td>
</tr>
<tr>
<td>Information</td>
<td>53%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>30%</td>
</tr>
<tr>
<td>Public administration</td>
<td>30%</td>
</tr>
<tr>
<td>Other services</td>
<td>28%</td>
</tr>
<tr>
<td>Education and health services</td>
<td>26%</td>
</tr>
<tr>
<td>Construction</td>
<td>17%</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>17%</td>
</tr>
<tr>
<td>Transportation and utilities</td>
<td>14%</td>
</tr>
</tbody>
</table>

Source: https://cdn.statcdn.com/Infographic/images/normal/19492.jpeg

Figure 2: depicting industries working from home
This figure depicts the industries where working from home is possible. In the financial sector, 57 percent of workers can work from home, and in professional, information, and business services, it is nearly half. Other industries, such as education and health services, construction, hospitality sector, transportation sector, wholesale and retail commerce, find it difficult to complete jobs from home, yet they do so because they are unable to finish their work in offices.

Knowledge and Information and Communication Technology (ICT)-intensive sectors have a higher frequency of telework or remote work because they have highly skilled, knowledge and wisdom people who do the majority of their work from laptops. Teleworkers are underrepresented in industries that require heavy machinery and equipment to make items, such as manufacturing, and industries that demand physical presence, such as health care, where it is hard for a doctor to treat a patient online.

However, since the Covid-19 epidemic, the situation has altered, and firms must now allow employees to work from home in order to keep their staff safe and continue to provide services. "Capgemini has provided additional laptops; Tech Mahindra has relaxed the work from home policies for its associates, FMCG major ITC has also advised offices in some locations to put in place and execute "contingency plans" at the earliest possible including work-from-home arrangements," according to the organisation. While some areas, such as transportation, retail, and manufacturing, are experiencing employment losses, implementing work from home is tough. Some other jobs which can be done from home are virtual job centers, writing, and editing, Insurance, art, and design, etc.

To study the role played by the work from home in sustaining the businesses after covid-19 outbreak

Work from home has become a pillar for many organizations to survive and thrive in the covid-19 pandemic. It assures the situation to a great extent when people have to maintain social distancing and evacuate for their safety. Remote work concepts emerge as morale boosters and a basic requirement for firms to maintain their activities and tasks when they have reached their lowest. It became critical for businesses to address the tools and skills that employees require when working from home. As a result, "a remote work survey is designed to assist firms in surveying their workforce and gauging critical characteristics such as resource availability, organizational support, clarity from their supervisors on their position and job, and so on."

Google and Microsoft, for example, have upgraded their teleconferencing technologies to make working from home more comfortable. Work-from-home policies are always changing to meet the needs of the business. Workers are given new tools and platforms to help them be more productive. Employees in the tech services business can now permanently switch from working in an office to working from anyplace.

"Companies like WNS, which works with Virgin Atlantic Airways Ltd., Tesco Plc, and Avon Products Inc., envision a hybrid office and home model, with satellite offices in small cities and a mix of full-time and freelance workers." A gig worker is someone who works on a contract basis. OMD, a media company, asked everyone to work from home and closed its office for the time being. To combat the spread of the virus, NTT, a Japanese system integration business, urged 200,000 workers to work from home.

According to the Rockefeller Institute of Government, the public policy research department of the State University of New York, federal and state governments have provided grants and loans to businesses looking to enhance their remote-work equipment. E-commerce and other virtual transactions are expanding two to five times faster than they were before the pandemic.

According to the 2019 National Compensation Survey (NCS), just 7% of workers (approximately 9.8 million people) in the United States have the choice to work from home, including executives, IT managers, financial analysts, and accountants. By June 2020, the number of people working full-time from home will have risen to 42 percent.
Almost all employees are provided required equipment and the skills to work from home comfortably.

Figure 3: Depicting employees having access to all equipment to work from home
Source: Author’s own composition

To study the pros and cons of the remote working concept.
Some of the benefits of the work from home are:
- Flexibility- Remote working is much more flexible while managing work and personal life. You can do multi task at a time and do daily chores easily.
- Convenience- It is really convenient to work from home.
- Proper utilization of time as work from home saves travel time, helps in reducing congestion in cities and causing ruckus and also travelling cost.
- Employees can spend more time with their families.
- Improved productivity- Work from home improves the productivity of employees because they enjoy more autonomy and have less pressure.
- Get more time to invest in them and can spend the time saved to pursue their hobbies.
- This can help employees relax while working at home.
- Less interference from top managers or boss.
- Technical skills of some employees get upgraded while working at home.
- Improvement in the quality of work-life morale.
- Less hectic and employees don’t feel over pressured.
- Eco-friendly – Working from home is good for the environment because people don’t have to travel which reduces air pollution and that further helps in reducing global warming.
- Reduces employee turnover rate- Remote work reduces absenteeism as employees enjoy greater comfort and flexibility.

There are some major impediments that people come across with while working at home which are:
- Distractions are a bigger problem for employees working at home because they have to take care of their child, get disrupted by background noises and reminder of chores which makes it difficult to manage time and concentrate.
- Poor network or internet connectivity due to lack of technological infrastructure can hamper the progress of work done through laptop, phones, etc. It can be bottleneck for employees.
• Social Isolation- Employees like to work and interact with their colleagues while performing task but while working at home they feel isolated.
• Managing the time is also a biggest challenge for them while working from home.
• Physical constraints - sitting for 9-10 hours a day is quite difficult for them.
• Lack of technical knowledge- Some employees face challenges who are not tech-savvy.
• Communication Gap- It is a lot harder to communicate over calls, messages, and video conferences to clarify the doubts and discuss something. Employers face problems in conveying the task and responsibilities to employees.
• Security Concerns- There is a risk of data theft when working on laptops or cellphones, therefore they must guarantee that data is protected. In Covid-19, cybercriminals are employing new ways to steal employees' personal data, and there is a lack of cyber and data security.

To investigate the future of work from home and how it will affect business operations.
Covid-19 has left an indelible mark on the world that will last long after the epidemic is over. It has accelerated automation and impacted the overall economy of the world and businesses since it resulted in some major changes in firm’s work culture.

Corporate offices have dissolved many of their office spaces in the post-pandemic world, and employees are being requested to work from home on a permanent basis, while others have resorted to hybrid work cultures.

Because many firms are increasingly turning to remote work, some companies are seeing remote work as the future of work and allowing employees to work from home on a permanent basis. Some businesses have decided to switch to long-term telecommuting which includes: Atlassian an American software company, brex a fintech company, Facebook, Shopify, Twitter, and many more.

Also, the employees have found out the bright spot in staying away from offices because the pandemic prompted everyone to physically shut themselves up in their houses. Employees are noticing positive improvements such as shorter commutes, more time with friends and family, and increased productivity.

Even after vaccines are fully rolled out and workplaces return to the new normal, the McKinsey Global Institute's Future of Work after Covid-19 report estimates that 22 percent of U.S. jobs could be done remotely for 3–5 days a week and 17 percent of jobs could be done remotely 1–3 days a week—all without losing productivity. The other 61 percent of jobs could be completed remotely for little more than one day every week.

Following favourable experiences with remote work during the epidemic, some organisations are already preparing to convert to flexible workspaces, reducing overall space requirements and bringing fewer workers into offices each day. According to a McKinsey poll of 278 CEOs conducted in August 2020, they planned to reduce office space by 30% on average. As a result, demand for restaurants and shopping in downtown districts, as well as public transit, may fall. E-commerce has surged by two to five times since the outbreak because of accelerating use of digital channels and increase in digital transactions. Investment in automation and artificial intelligence has escalated. According to Mckinsey Global institute post-pandemic research they discovered that not only will a bigger percentage of workers be required to transition out of the lowest two wage brackets, but that over half of them will require new, more advanced skills in order to move to occupations one or even two wage brackets higher. In the next months, ideas like a hybrid workspace paradigm may acquire traction.

5. CONCLUSION
Organizations face a plethora of challenges and complexities in earlier stages while adopting the concept of remote work but they shifted radically to work from home because working from home becomes the only viable option to resume their operation and to fight
against Covid-19. So remote work is growing its popularity since before and many workers who are skilled and tech-savvy are taking advantage of online tools and platforms and finding working from home more comfortable and flexible and some of them want to continue working remotely after the pandemic also while lower-income workers are not satisfied and find it challenging. If the companies want to adopt remote working as permanent working mode, they need to make certain enhancement to make it more effective and beneficial like Availability of required and suitable infrastructure for proper network connection, better benefits from companies like Work from Home allowances, and fixed shift timings, better collaboration tools and some activities that could reduce social isolation, to ensure that all the employees have access to better internet services, separate place of work so they can concentrate better and avoid the disruptions and there should be proper coordination between employees and managers of the company. Management should understand that working from home does not imply working around the clock. Working from office once or twice a week to gain networking possibilities and avoid making employees feels desolated. It's also crucial to keep staff motivated by celebrating events from time to time, even if they're working from home in some way. The epidemic has resulted in irreversible alterations. Companies and executives' thought processes have evolved, and the elimination of the commute has added hours to the day and increased production. Several companies, notably Facebook and Twitter, have already given their employees the option to work with WFH on a permanent basis. We need to provide training to employees to build up their skills and to provide technical knowledge of handling things digitally since the future will demand more highly skilled workers. Covid-19 have also left negative impact on many industries like airline and hotel because the business travel has plummeted by 20% than before considering some meetings, conferences, and conventions have been cancelled or are being held remotely. But work from home has become a panacea in this crisis, without it the economy would have been crumpled and slumped and organizations would have suffered huge losses.

6. BIBLIOGRAPHY

- Fernando Saltiel, Duke University, Department of Economics (2020), Who can Work from home in Developing Countries.
- Jain, P., & Gandhi, P. EMPLOYEE ENGAGEMENT: THE SECRET TO SUCCESS. DR. DY PATIL B-SCHOOL, PUNE, INDIA, 784.


Marissa G. Baker, who cannot work from home? Characterizing occupations facing increased risk during the 3 COVID-19 pandemics using 2018 BLS data, bakermg@uw.edu
