

# Impact of Enhanced Business Models on Technology Companies in the Pandemic: A Case Study about the Revolutionary Change in Management Styles

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**Abstract**—Since the dawn of modern corporations, almost every single employee has been working in the same loop, which contains three basic steps: going to work, providing the needs for the work, and getting back home. Only a small amount of people was able to break that standard and live outside the box. As the 2019 pandemic hit the Earth and most companies shut down their physical offices, that loop had to change for everyone. This means that the old management styles had to be significantly re-arranged to the "work from home" type of business methods. The methods include online conferences and meetings, time and task tracking using algorithms, globalization of the work, and, most importantly, remote working. After the global epidemic started, even the tech giants were concerned. Now, it can be seen that those technology companies have an incredible step-up in their shares compared to the other companies because they know how to manage such situations even better than every other industry. This study aims to take the old traditional management styles in big companies and compare them with the post-Covid methods (2019-2022). As a result of this comparison made using the annual reports and shared statistics, this study aims to explain why the winners of this crisis are the technology companies.

**Keywords**—COVID-19, technology companies, business models, remote work.

## I. INTRODUCTION

**D**IRECT sales, enterprises, agency-based, and franchising models are all different traditional business models that corporations have been utilizing for over seven decades to establish profitable ventures [1]. These models serve as fundamental frameworks that enable managers and analysts to gain insights into the company's operations, recruitment strategies, and investor attraction techniques. Hence, it becomes imperative to have a well-defined and effective business model as it forms the nucleus of any successful enterprise.

However, the onset of the COVID-19 pandemic brought about unprecedented disruptions, demanding a reassessment and modification of these conventional business models to cater to the evolving needs of clients [2]. With governments worldwide imposing lockdowns and restrictions starting from January 1, 2020 [3], companies were compelled to reevaluate their strategies in response to the crisis. Varying in their

response to these regulations, businesses underwent significant transformations in their pre-pandemic management approaches and business models. While the majority shifted to fully remote operations, a considerable percentage opted for partial remote operations, reduced capacity at physical work locations, or temporary business shutdowns [4]. Amidst the challenges faced by businesses, technology giants witnessed remarkable growth during this period.

The reconfiguration of business models in response to the pandemic ushered in an "out-of-the-box" economy, primarily benefiting technology companies. In 2021, the combined yearly revenue of Amazon, Apple, Alphabet, Microsoft, and Facebook surged by approximately 25% compared to the onset of the pandemic in 2020 [5]. The success of these technology companies can be attributed to their inherent adaptability and proficiency in managing unconventional work environments. Employees seamlessly transitioned to working from bedrooms, coffee shops, or backyard hammocks. Instead of retreating due to the uncertainty of the situation and conserving budgets, technology companies proactively sought innovative solutions, such as remote work opportunities, online meetings, and work-from-home models, revolutionizing the landscape of management practices.

These new methods and models implemented by technology companies resulted in a significant boost in productivity. A survey conducted on 2,500 full-time workers in the United States who worked from home during the pandemic revealed that 67% of respondents found remote work to be more productive than working in an office setting. Additionally, 24% reported no significant difference in productivity between the two settings, while only 1% considered remote work to be less productive [6]. Thus, it can be concluded that companies that embraced remote work witnessed improved employee productivity, contributing to their overall success [6].

In this study, our objective is to evaluate the outcomes of the new methods and models adopted by technology companies following the global pandemic in 2019. By analyzing annual reports, statistical data, and expert insights, we seek to answer pivotal questions: "Why did technology companies emerge as the winners of this crisis?" and "How did technology companies effectively manage the challenges posed by the pandemic?"

The significance of this research lies in understanding the strategies and approaches employed by technology companies to not only survive but thrive during a time of immense uncertainty and disruption. By unraveling the factors that

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contributed to their success, we can derive valuable lessons that can guide other industries and companies in their journey towards resilience and growth. Additionally, this study serves as a testament to the power of innovation and adaptability in overcoming adversity, highlighting the crucial role played by technology companies in shaping the future of work.

## II. NEW METHODS, STRATEGIES, AND MODELS

### A. Work from Home (WFH)

After the obligatory lockdowns in most countries in 2020, a significant shift was observed in the way companies approached remote work. While approximately 16% of global companies transitioned to a fully remote model, allowing employees to work from wherever they wanted, many organizations opted for a hybrid model, combining onsite and remote work arrangements [7].

One study conducted by *Coann Labitoria* in 2021 shed light on the prevalence of the hybrid model among companies with a strong technological background. For instance, Apple announced in June 2021 that their employees would be expected to work in a physical office three times a week, with the option to work from home twice a week [7]. Similarly, Microsoft implemented a hybrid system that allowed employees to work from anywhere for half of their workdays, and even offered the possibility of transitioning to a fully remote work model with approval from the management department. Twitter was another company quick to adapt, allowing remote work for roles that enabled it, while Spotify provided its employees the freedom to choose between full-time office work, remote work, or a hybrid model [8].

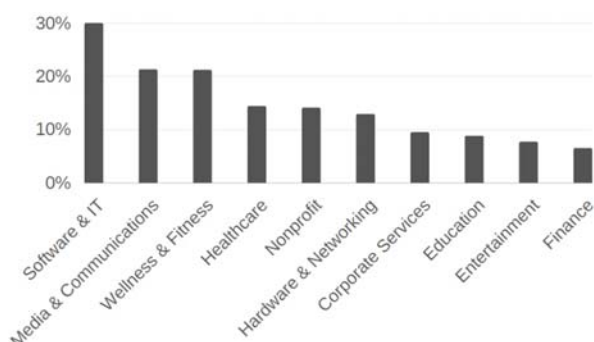


Fig 1 Percentage Remote Work Embraced by Industries [9]

The implementation of remote work options in business strategies resulted in a significant increase in employee productivity levels. In fact, a survey revealed that 77% of remote workers reported being more productive when working remotely and were 52% less likely to take time off. This surge in productivity can be attributed to the elimination of various distractions typically encountered in an office environment [10]. Moreover, the adoption of remote work had a positive impact on the well-being and mental health of employees. A considerable number of remote workers reported experiencing benefits such as improved sleep quality (45%), increased physical exercise (35%), and an overall healthier lifestyle

(42%). Additionally, nearly half of remote workers reported feeling more positive and less stressed compared to their office counterparts [10]. This leads us to a critical question: Does the mental well-being and positive mindset of employees contribute to their overall success? Research suggests that there is a strong correlation between well-being, happiness, and success. A study conducted on one million US citizens revealed that individuals' well-being and happiness significantly affect their levels of achievement [11]. Considering that three out of four remote workers agreed that working from home is better for their mental health, it can be concluded that companies that embraced remote work not only created happier and less stressed employees but also contributed to their own success [6], [12].

### 1. Benefits of the WFM Model in Summary

The benefits of the WFH model extend beyond employee well-being and productivity. Remote workers are often found to be less distracted compared to their office counterparts. According to a survey by *Airtasker Blog* in 2019, employees who worked remotely reported working an additional 1.4 days per month or approximately 16.8 more days per year compared to office workers. Furthermore, remote workers were found to be more focused and accomplished more work within their designated work hours. The survey revealed that office workers spent an additional 10 minutes engaged in non-work-related activities, while only 39% of remote workers found ways to avoid work during their work time [13].



Fig 2 Percentage of Employees Found Ways to Avoid Work During Working Hours [13]

In addition to increased productivity, the WFH model also positively impacts the work-life balance of employees. Full-time office workers often struggle to find a balance between work and family responsibilities. A significant percentage of working parents (56%) find it difficult to manage their work and family commitments [14]. However, after the pandemic, employees who transitioned to full-remote or hybrid models reported a dramatic improvement in their work-life balance. They were able to spend more quality time with their partners, pets, and family members [15].

The WFH model also presents cost-saving opportunities for both employees and companies. According to Indeed, 50% of remote workers were able to save on optional costs [16]. Similarly, companies that transitioned to remote work models were able to reduce expenses by up to 25% by cutting costs associated with equipment, office space, parking, transportation, and stationary [17]. Furthermore, remote and hybrid companies also contributed to environmental sustainability by reducing energy consumption and

minimizing the use of physical resources such as paper, printers, and cooling systems.

In conclusion, the work-from-home model and the hybrid approach adopted by technology companies during the 2019 pandemic marked a significant turning point. These companies seized the opportunity to develop and implement new methods and strategies, resulting in remarkable progress. The success of these organizations can be attributed to the management's understanding that a significant portion of work can be effectively accomplished outside the traditional workplace. By providing employees with flexibility and freedom, these companies fostered a positive work environment that led to increased productivity, innovation, and overall success. It is evident that the pandemic acted as a catalyst for change, and technology companies were quick to adapt, setting the stage for a new era of work and management practices.

### III. NEW RECRUITMENT STRATEGIES IN PANDEMIC

The COVID-19 pandemic and subsequent lockdowns forced companies to reevaluate their recruitment strategies in addition to adopting remote work models. During this time, online platforms such as LinkedIn emerged as the preferred choice for hiring, boasting a membership of 810 million individuals since 2015. In fact, statistics from LinkedIn indicate that four individuals are hired every minute on the platform, amounting to a staggering 5,760 people recruited daily [18]. The growing popularity and reach of online recruitment platforms have undoubtedly influenced the direction of recruitment models.

One significant advantage of online recruitment is the elimination of geographical barriers. Companies can now access a much larger pool of talent from around the globe, leading to a more diverse and skilled workforce. This expansion in talent acquisition has proven to be advantageous, as organizations that embraced remote recruitment witnessed a remarkable 47.6% increase in their yearly revenues, as exemplified by the success of Apple Inc. [19].

Interestingly, the adoption of remote recruitment has seen greater acceptance among younger generations. Statistics indicate that 48% of Gen Z and 38% of Millennials applied for jobs using mobile devices. Furthermore, a survey by DELL revealed that a staggering 90% of Gen Z job seekers believe that remote recruitment is the future of hiring [20], [21].

The pandemic has undoubtedly accelerated the adoption of remote recruitment strategies, with companies recognizing the potential and convenience offered by online platforms. As the world becomes increasingly interconnected, organizations are leveraging technology to create efficient and streamlined recruitment processes that transcend physical boundaries. By embracing remote recruitment, companies can tap into a wider talent pool, ensuring they find the best-suited candidates for their respective positions.

### IV. HOW TECHNOLOGY COMPANIES MANAGED

The unprecedented circumstances brought about by the pandemic prompted technology companies to take decisive

action and adapt their operations accordingly. As the world faced lockdown measures and social distancing guidelines, the demand for technological products skyrocketed. In a report released by IDC in 2021, it was revealed that there has been an exceptional surge in customer demand for personal computers, reaching levels not seen since 2014. Sales of laptops and desktops surpassed 302 million units in 2020, representing an impressive 13% increase compared to the previous year. This surge in demand was not limited to personal computers alone; tablet and smartphone sales also experienced significant growth. According to Statista, tablet sales witnessed a rise from 144.5 million units in 2019 to 164.1 million units in 2020, indicating a remarkable 13.5% increase [22].

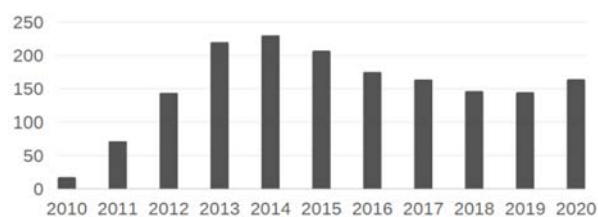


Fig. 3 Estimated Worldwide Tablet Shipments (in Millions) Since 2010 [22]

While the revenue generated from product sales played a crucial role, the true key to the success of technology companies during the pandemic lies in their forward-thinking strategies and investments. Recognizing the changing landscape and the growing significance of remote work, these companies prioritized cost-saving measures and made strategic investments to support the future of remote work. Notably, Google managed to save over \$1 billion annually through expense reduction initiatives [23]. Furthermore, companies like Amazon allocated approximately \$50 billion towards enhancing their logistics operations, data centers, and cloud computing services. Cloud computing, a technology that enables users to access and utilize the computing power of remote machines via the internet, became an indispensable tool in facilitating remote work. These strategic investments demonstrate the confidence of technology companies in the remote work model and their commitment to its long-term success [24], [25].

### V. CONCLUSION

The 2019 pandemic presented a turning point for technology companies, enabling them to leverage the crisis as an opportunity for growth and innovation. Their remarkable progress can be attributed to a simple yet powerful insight—they embraced the crisis and applied novel methods and strategies to adapt. By empowering their employees with freedom and flexible work options, technology companies created a workforce that thrived in the remote work environment. These empowered employees utilized their saved commuting time, minimized distractions, and customized workspaces to generate new ideas and drive business improvements.

Technology companies swiftly recognized the potential of

remote work and had already adopted hybrid work systems even before the pandemic struck. Companies such as Facebook, Twitter, Amazon, and Microsoft had successfully integrated hybrid models, allowing employees to seamlessly transition between remote and on-site work. Consequently, when the pandemic forced other industries to halt or struggle, technology companies continued their operations with minimal disruption. The inherent flexibility and adaptability of their work models enabled them to maintain productivity levels and stay ahead of the curve.

The success of technology companies during the pandemic can be attributed to their visionary management strategies. Their strategic actions demonstrated a deep understanding of the nature of their industry and the ability to capitalize on the shifting work dynamics. While traditional management models faltered, technology companies swiftly adjusted and modified their systems, ensuring that the production process remained uninterrupted. By fostering a flexible work environment and empowering their employees, these companies created a culture that nurtured happy and motivated workers.

It is well-established that happy and less stressed employees are more likely to contribute to the success of a company. Remote work options provided by technology companies significantly improved employees' work-life balance and mental well-being. Surveys have indicated that remote workers experienced increased productivity, higher levels of job satisfaction, and reduced stress levels. Additionally, remote work allowed employees to prioritize their family responsibilities and spend quality time with their loved ones. By supporting a healthier work-life balance, technology companies not only enhanced employee well-being but also fostered a more positive and productive work culture.

Furthermore, technology companies also reaped cost-saving benefits from their remote work initiatives. Remote work reduced overhead costs related to office spaces, equipment, and transportation. Companies saved significant amounts of money by transitioning to digital processes, reducing the need for paper, and optimizing resource utilization. Moreover, technology companies demonstrated their commitment to environmental sustainability by reducing energy consumption and minimizing waste. The shift to remote and hybrid work models resulted in a tangible positive impact on the environment.

In conclusion, technology companies seized the opportunity presented by the pandemic and took immediate action to adapt their systems and strategies. Their success was not solely driven by the products they sold during the lockdown period but rather by their ingenious management approach. By embracing remote work, empowering their employees, and fostering a culture of innovation, technology companies demonstrated their ability to navigate through unprecedented challenges. The lessons learned during this transformative period will likely shape the future of work, as more industries explore the potential of remote and hybrid work models. The resilience, agility, and forward-thinking mindset displayed by technology companies during the pandemic have positioned

them as trailblazers in redefining the modern workplace.

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