One of The Greatest Socio-Financial Innovations in Modern History

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Dedication

To my family who have proven time and again to support me in all my endeavors, their belief

and love have never wavered with the passage of time. I'm eternally grateful.

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Introduction

  The author will argue how COVID led to one of the greatest socio-financial innovations in modern history. Financiers have specific preferences or proclivities to assign monetary values to financial innovation yet fail to consider intangible values, which can be just as important. Because of that reason, the author's goal is to deviate from that one-dimensional vantage point and instead look at financial innovation from a lateral, holistic point of view to determine whether or not money is an ancillary benefit to financial innovation. Hence, socio-financial innovation can be roughly defined as the non-directly financial aspects of financial innovation. Values are quantifiable by intangible values that are not easily gauged through traditional datasets.

  In creating this concept, the author has been exploring what causes financial innovation, mainly the precursor to financial innovation. As a result, the author could deduce that a crisis can be an epicenter of financial innovation. In this regard, COVID was conducive to one of the most significant financial innovations in modern history, which the author has defined as socio-financial innovation. At its core, this innovation promotes greater productivity at work, which directly and indirectly leads to greater output due to work-life balance.

  Numerous articles and studies have shown that COVID drastically shifted the norms of where work is physically expected to occur. For example, Dr. Freeman stated, "one feels like working remotely has given them more quality time with family… [the mother] She could finally do both well, and without the benefit of small wins is that you gain confidence in your ability to control your world," (Pinho et al. 2012**, P. 11).**

Psychology established long ago that human beings have an affinity to stick with patterns in that we value predictability. Ironically, this might explain why human beings rarely question whether or not norms need to be redefined as if time is static.

Since the onset of a COVID recovery, employee turnover has significantly increased. Job Opening and Labor Turnover reports that during the Covid-19 period, 16.3 million people left their jobs due to reduced salaries and mass layoffs (Akinyooye and Eric, 2020, P. 1). In addition, the number of people quitting jobs has gone up, but mostly because workers are demanding better conditions and wages after assessing their worth, both purely financial-economic output *and* social individuals (Maclean 2013, P.747).

It increased hybrid working preferences across occupations, which drastically altered the traditional state of normalcy and redefined the work-life balance. For example, an article in the Wall St. Journal researched how individuals "feel about remote work and how they feel about getting called back to the office, with many responding that they did not like going back… Indeed, while some workers are excited to be returning to pre-pandemic normalcy, others see it as a loss. To some, they feel like their freedom has been stripped away from them. Yet, on the other hand, some feel like working remotely has given them more quality time with family." (Cooper and Anita 2016, P. 513). Thus, COVID reminded workers that what matters most in life for many individuals is not money, cars, houses, or luxurious vacations, but the people we care about, both immediate and extended family.

This thesis aims to shed light on the importance of socio-financial innovation and express how society embraces this change for the longer term, rather than society's traditional response to a crisis to forget it myopically. Indeed, this latter approach to culture encourages people to move

from one project to the next and fails to promote stability, leading us to assign the importance to the wrong things.

Chapter 1

Pareto Efficiency or Optimality in Terms of Socio-Financial Innovation

It's a widespread belief that if one wants to succeed in their careers, a great deal of their time must be devoted to their crafts at the cost of neglecting their family, whether it be emotionally or physically. There is always an opportunity cost. Socio-financial innovation inadvertently is Pareto efficient, redefining the paradigm of work-life balance. Economically speaking, Pareto optimality is a position where it is impossible to reallocate resources to make a person better minus jeopardizing another individual. Pareto efficiency focuses on financially efficient resource allocation. An economy is at the Pareto optimum if an economic change can improve one individual's life without worsening the living condition of at least one other person. It is mainly the building block for welfare economics (Tutor2u, n.d, pp. 1). The theoretical paradigm of perfect competition and neoclassical economics is the primary benchmark for judging the fundamental markets' efficiency. Phelan and Rustichini (2018, pp. 980) maintain that people have different preference orderings than resource allocations, specifically human capital.

Pareto has various roles in the financial world. One of the primary applications of the Pareto efficiency is the production possibility frontier (PPF). Figure 1 in the appendix illustrates Pareto efficiency in the PPF.

From graph 1, one can observe that points A and B reflect the potential of increasing the product outputs in both A and B, making them Pareto inefficient. It amounts to Pareto improvements as the economy's total output rises. However, the diagram also shows that C and D are efficient since Pareto advances are impossible. Here, increasing one product's output would result in a decline in the other one.

An individual can quickly notice that the Pareto efficiency concept ignores equality (Kevin, 2020, pp. 1). The economy can achieve Pareto efficiency even when fewer people enjoy the most available resources (Cornell University, 2015, pp. 1). For instance, if two people are supposed to share $100, the allocation would be considered Pareto efficient when every individual receives a sum amounting to 100, even if one person keeps the whole figure (Cornell University, 2015, pp. 1). In the example, any change to the allocation subject one person to a worse economic state than before, making it Pareto efficient. Besides, if low-income individuals remain stagnant while some wealthy people's incomes increase, there would be a Pareto improvement. The above example shows that the Pareto efficiency mainly focuses on stability while ignoring fairness. Pareto fails to recognize even the glaring evidence of inequality (Cornell University, 2015, pp. 1). Significantly, it does not offer the necessary motivations for challenging the economy's status quo and resource distribution. It fails to provide a healthy guide to allocating resources based on fairness (Farmer, 2015, pp. 1).

The same concept applies to the corporate culture in tilting the balance of dedication towards career achievements instead of family wellbeing. The corporate culture also focuses on maintaining stability while ignoring fairness. The concept of fairness is used here not from a moral standpoint but on the basic human understanding that there is more to life than devoting oneself to the pursuit of tangibles. Moreover, a Pareto inefficient allocation fails to use all the available resources in the economy. There are significant resources to be provided to people, but improvements are possible to ensure that all the stock is utilized (Popa, 2007, pp. 73). With most allocations involving scarce resources, the primary challenge in achieving equality is distribution, which entails choosing the best approach to allocating the fixed resources. For instance, given a group of voters willing to undertake collective choices through the majority

rule, one would have three voters make the distribution simple. Here, the preference order is given below

G: e favored to f, f preferred to h,

V: h favored to e, e favored to f

Z: f favored to h, h favored to e

The arrangement implies that: G and V prefer e to f, G and Z favor f to h, and Z and V prefer h to e (Popa, 2007, pp. 74). The above scenario shows that most people favor e to f and f to h. Considering the ordinal utilities, it is possible to compare various utilities of a similar person and generate a hierarchy. However, it would be impossible to aggregate different people's utilities because the implications of different values are not accurately clear. Here, the Pareto fails to provide an outright comparison point or the standard evaluation scale (Popa, 2007, pp. 74). Significantly, the preference order is insufficient for the consistent production of utilities.

The same concept also applies to the author's point that values are essentially given to us rather than self-incorporated. The norms of the workplace and what it takes to make it to the corporate world are a given; instead, we should unlearn and rethink the ways we go about handling our personal and professional life. Outright comparison or standard evaluation is essentially flawed. Below, we'll discuss the insidious norms affecting work-life balance and socio-financial innovation that intrinsically facilitate familial wellbeing.

Chapter 2

Socio-Financial innovation

The recent rise in popularity of remote and hybrid work has left many wondering what effect this change may have on the productivity of those organizations and workers involved. We can see how hybrid working has played a huge role in socio innovation. When we look at the benefits of hybrid working, we can see the effect of hybrid work and how it can increase productivity. Not all organizations and companies measure productivity the same. But if we look at productivity as a variable, it is usually dependent on the employee's positive behaviors and mental state health. In other words, the primary reason hybrid work situations may influence production is through work arrangements' effect on the employee or working staff. It includes adopting a hybrid work model. Dr. S Vasantha from Vels University did a conceptual study on the impact of stress on work-life balance. She asserted that

"Work alone is a key factor from which many people derive satisfaction in life; equally, they serve as a big source of stress. Work-related stress includes the effects on worker's satisfaction, productivity of organization, mental and physical health, absenteeism and its economic cost, greater impact on family and finally affects the employee's potential." (Vasantha, 2014)

Hybrid Working and Social Innovation

The invention and implementation of innovative social alternatives that imply intellectual, procedural, and business transformation, with the ultimate goal of improving the safety and wellbeing of people and communities, is referred to as social innovation (Maclean et al. 2013, P. 747). The various economic system and social movement initiatives have shown to be creative in addressing socio-economic and environmental issues resulting in economic
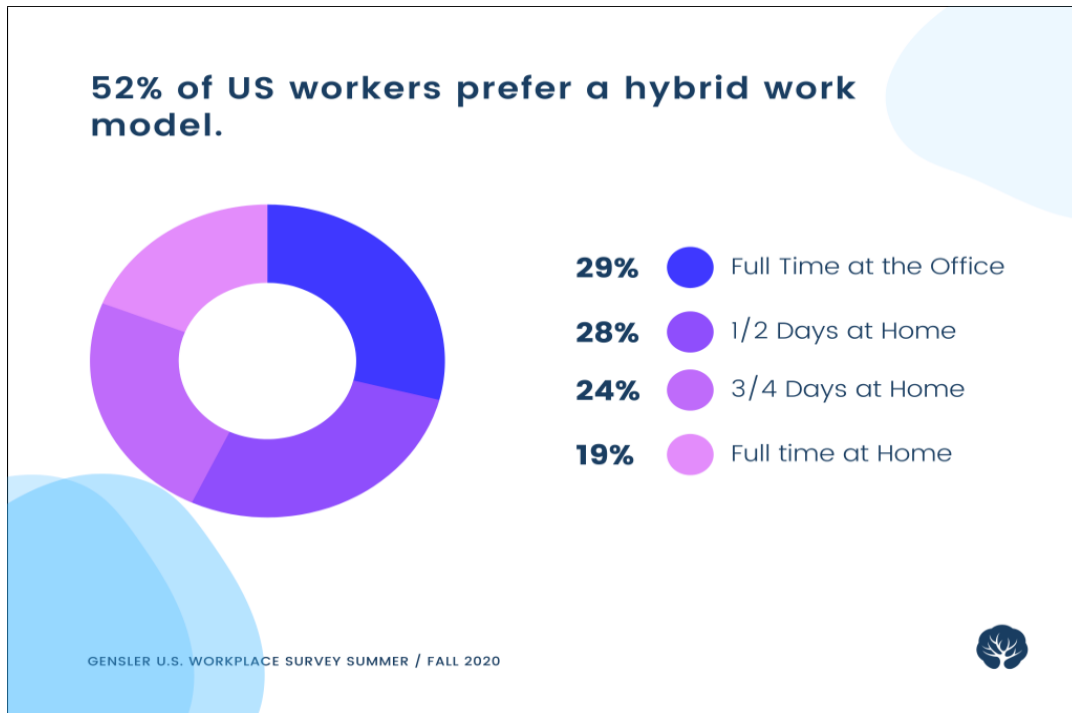
growth. However, to fully realize the potential of this revolutionary process, a facilitating policy framework is required to enable public, NGOs, and private entities to collaborate and execute socially creative solutions, thereby contributing to the resolution of socio-economic concerns, the strengthening of territorial adaptability, and the better response to future uncertainties (Phillips et al. 2015, P. 436).

The pressures on technology infrastructure are growing as these new workplace landscapes emerge (Munshi 2020, P. 265). It is not simply about the hardware, like decent cameras, mics, or lighting. Above all, personnel want equipment to access all operations and data irrespective of time or place. According to Phills et al. (2008), the cloud-based digitized workspace provides firms with this flexibility and work hours' ideas, which adds to existing employee happiness (P. 34). It is a strategy whereby well-trained IT professionals now expect. Mongelli and Francesco (2017) suggest that the company is helpless in recruiting prospective junior personnel (P. 446). Many businesses choose as-a-Service models because they avoid hefty upfront investments. Workplaces may be built in a scalable and reliable manner. Workplace-as-a-Service allows firms to be more flexible (Groot and Ben 2014). And because organizations are continually supplied with the newest systems and equipment as part of an update cycle, this strategy is a recurrent factor of success regarding the digitization and transformation of a company.

People will never forget Covid-19 as scary and deadly, but also they will remember it for the changes it bought to conventional life (Sabato et al., 2015). Victims who survived the pandemic were subjected to shock, which is likely to live with them for the rest of their lives. Nevertheless, the social isolation problems reduced the interaction of the people physically. Most people had to work from home, and offices were decongested. Before Covid-19, working from

home was not a serious consideration for many organizations, but now, that is the case (Chan et al. 2009, P. 903). With the internet being in almost every part of the world, the future of work is poised to be a hybrid. A good example of hybrid work is teleworking. Studies suggest that 40% of its citizens have been teleworking in the European Union since the onset of Covid-19. The world has found a way to flex the working environment (Babu and Per Pinstrup 2007). It's now not imaginable to have a home office and mobile working. People can now work together in a collaborative and more agile manner with all these flexible ways of working. Workers want new office solutions because the technological infrastructure is already in place for enhancement.

Telework refers to completing remote work using information science technology and telecommunications, software, and Connection to the internet (Lisetchi and Laura, 2014, P. 92). The technological improvements allow collaborators to carry out their tasks in various methods, settings, and schedules, necessitating a flexible model of activity execution by employees who are also working remotely. In addition, the work approach must be oriented to the worker's competence and life quality, including their relationship and shared proficiencies, to resolve problems that may prevent them from finishing their tasks (Carvalho 2017, P. 850).

52% of US workers prefer a hybrid work model.

29% — Full Time at the Office
28% — 1/2 Days at Home
24% — 3/4 Days at Home
19% — Full time at Home

GENSLER U.S. WORKPLACE SURVEY SUMMER / FALL 2020

The image above shows hybrid work preference in the USA. Source: (Hybrid Working Model as New Normal - LIVE, a complete omnichannel communication platform, 2022)

The ecology of a Flexible Work (FW) model's design, execution, and assessment must be defined. In addition, some assumptions must be negotiated so enterprises can stick to the model's magnitude (Shaw and Anne de Bruin, 2013, P. 737). The phases in this ecosystem are as follows: (i) Enhance the selection of collaborators; this selection includes the collaborator's qualities and the essence of their responsibilities; ii) Carry out the implemented activities; this varies depending on the legalities of the solution provided for activity management, and the technological capabilities for the implementation of tasks involving social relationships; and iii) Assess results; this includes how collaborators ca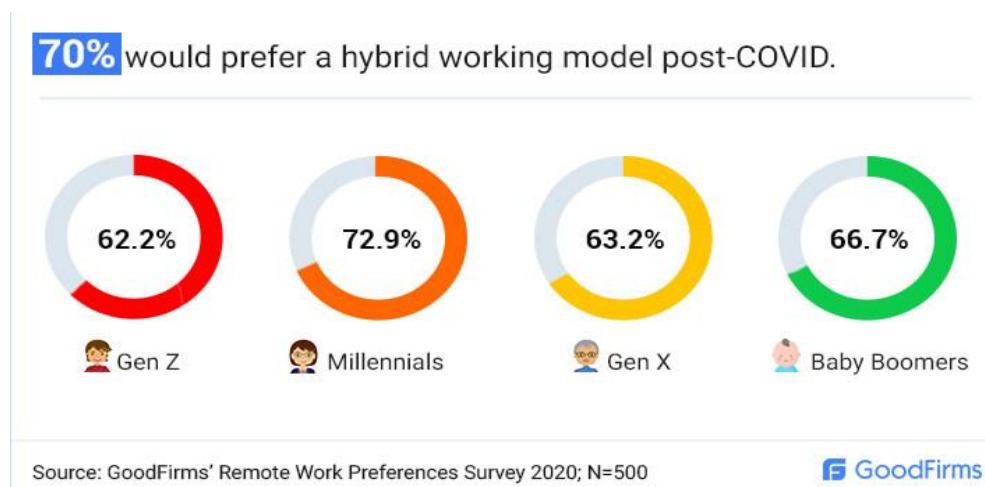rry out their work (Farinha et al. 2020, P. 96). Thus, work flexibility means that people have options and can work from different places and still produce the same results as those who work at the office.

During the early days of 2020, the world we know was abruptly halted, and governments, guided by science, were forced to take dramatic steps to preserve lives. The issue for governments is to maintain and protect human lives and health without causing lasting economic harm in the process (Jessop et al. 2013, P. 110). Stopping schools, grounding planes, halting mass events, and limiting people from going to their workplaces are simply the beginnings of the battle against the epidemic and serve as a framework to impede its spread. Managers and employees, as a result, had to behave differently and ensure that this hybrid working strategy (teleworking) was a success since people must isolate themselves but still make money (Geser et al. 2019, P. 60). As a result, institutions could be better ready to adjust their work schedule to protect employees and contribute to the government's attempts to flatten the pandemic curve of new cases. As a result, slow the transmission of the infection if they have an integrated plan in critical areas that affect employee wellness and effectiveness of both the individuals and teams.

Even though workers can telework to enhance work during the outbreak, several components of the work organization must be considered and implemented to protect workers' security and health (Széll 2012, P. 195). The teleworker's responsibilities and productivity criteria are similar to those of employees at the working facilities. It reminds teleworkers that they have a similar legal immunity as employees who work physically in the office (Hewel and Mathias 2016). It further outlines the significant areas requiring modification or special attention when working remotely. According to Ellis, data security, confidentiality, health and safety, work organization, and training access might be data. Employers' demands regarding company continuity and productivity must be reconciled with workers' expanding family and care duties, especially considering the current scenario. Employees who work remotely work longer hours than those who work at the company's location partly because work tasks substitute commuting

time, and in part, work habits have changed, and the lines between paid job and personal life have blurred (Sahn and Vasudeva, 2012). Generally, teleworking can result in longer hours of work and more time spent working in the afternoons and weekends.

Due to the Corona epidemic, reports on the working time of remote workers have revealed that they work longer, whereby 38 percent of respondents say they are more inclined to long working hours. One out of every four employees (27%) working remotely due to the epidemic say they perform their functions in their spare time to satisfy work needs (Yan et al.2019, P. 138426). Workers will also continue spending hours teleworking during and after the COVID-19 epidemic. About one latest report, employees tend to visit each other physically or conduct team check-ins because of the physical isolation of teams.

70% would prefer a hybrid working model post-COVID.

| 62.2% | 72.9% | 63.2% | 66.7% |
| Gen Z | Millennials | Gen X | Baby Boomers |

Source: GoodFirms' Remote Work Preferences Survey 2020; N=500   GoodFirms

The image above shows statistics on various generational preferences on hybrid working arrangements: Source: (Hybrid Working Model as New Normal - LIVE a complete omnichannel communication platform, 2022)

Before COVID-19, just less than 1% of the workers in a financial organization worked remotely regularly; during the outbreak, the whole staff (400 employees) shifted to remote

working, which took roughly 5-6 days (Villani 2007). When implementing full-scale remote working, the management team had to strike the correct balance between production efficiency and outputs. They used a coaching-based technique dubbed 'leaders talks' because, in such emergencies, managers and leaders team play a crucial role and set an example. Also, they urged executives to get input from their employees.

The hybrid workforce has also enhanced the digitalization of the working environment. Digitalization is a socio-technical, dynamic process that includes using cloud technology and planning tools, including web-based apps across several platforms to remote connections and collaborative efforts (Bourlard and Nelson 2012). Since the start of the outbreak, the digitalization pace has accelerated. Furthermore, corporate digital technology adoption has increased the number of people who can work from home. Moreover, digitalization was already causing enormous changes in the way jobs and business premises are organized, with far-reaching ramifications for skills needed, labor norms, and employee wellbeing (Malik et al. 2010, P. 1128). Nevertheless, digitalization is not fairly distributed worldwide, with certain regions suffering from a lack of bandwidth, internet access, and Technological tools to facilitate teleworking.

To put this in context, examine Cameroon's handling of Covid-19 for workers. By mid-May, the country had become the most affected by the pandemic in Central Africa. Although the policymakers did not implement a statewide lockdown, private businesses and government employees were advised to telework to minimize physical interactions (Pinter et al. 2020, P. 890). Cameroon's Ministry of Forestry and Fauna purchased the latest and most advanced software and USB sticks to implement this suggestion. In addition, the country's Postal Services

and Telecommunication ministry installed a revolutionary video-conferencing digital platform with complete integration messaging service.

When combined with digitization, mass teleworking provides several benefits while also posing various concerns. Before investing in and deploying new technological tools to the workforce, businesses must consider the risks of such opportunities. Many technologies and application programs measure and analyze worker activities, mainly working from distant locations or outside the typical workplace setting. Tools which track mouse clicks, mouse movements, and the actual position of employees are invasive and hence are not advised (Bourlard and Nelson, 2012). Furthermore, they ought not to be utilized to substitute leadership by performance and a clear statement of what specific job activities and deliverables are expected of employees and the time they must be done.

To develop cooperation, trust, and openness, teams where the most or all of the participants telework rely significantly on regular electronic contact. However, research shows that teams working remotely experience more communication issues than teams working face to face (Zivkovic et al. 2020, P. 102669). Such problems get more difficult as time goes on since as teammates spend much more time working separately, alienation and occupational isolation grow. Because workers communicate via electronic methods, they provide less data to their coworkers. In some situations, they have difficulties comprehending and digesting their information; team cooperation is steadily eroding. In teams that work together and on similar premises and in constant physical interaction, feedback is less formal.

Employees and managers must put in extra effort to guarantee that they have successful communication, that communications are clear, and that information flows continuously. Employers have increased their Connections with workers due to the COVID-19 outbreak.

According to a recent study, nearly nine out of ten people (88%) have boosted engagement regarding health and safety rules, while 84% have guided teleworking. Three-quarters of participants (76%) also offered advice on managing a remote staff (Castillo and Patricia 2020, P. 110242).

Given the actual risk of social exclusion prevalent in full-time remote working, every attempt should be taken to keep teleworkers in touch with their bosses, coworkers, and the company (Canada 2021, P. 111310). As a result, many businesses establish and expand informal networking opportunities. These events usually duplicate and expand on earlier traditions, such as online social connections, using online technologies to entertain workers' kids, or checking in to determine or understand the worker's whereabouts. These touch-points may make a significant difference for isolated or anxious employees. Still, it's vital to balance and keep social contacts mostly inside standard business hours to avoid further blurring the distinction between work and personal time.

The abrupt change by a significant number of firms from workplace to telework occurred without much regard for health and safety regulations that would apply at the workplace with clear duties and responsibilities to guarantee workers' physical and psychological wellbeing (Vlachokyriakos et al. 2018). The working and environmental qualities of the teleworking offices and associated work habits are crucial to the employees' ability to perform when working remotely.

Most legal provisions and collective bargaining agreements addressing Occupational Safety and Health (OSH) hold the employer accountable for preserving employees' occupational wellbeing and safety, including teleworking (Bayoudh et al. 2020, P. 1415). Companies have similar health and safety obligations to working from home to all other employees. One of them

is identifying and controlling the occupational dangers of working from home. Aside from the proven advantages to workers ' wellness, the two most generally acknowledged concerns for teleworkers regarding occupational health and safety problems are psychological hazards and ergonomics. Teleworking during the Corona pandemic differs from telecommuting under ordinary circumstances in that employees are working remotely for an extended time under adverse conditions (Castillo and Patricia, 2020, P. 110242). This circumstance is causing workers to experience higher levels of worry than usual, which is connected to anxiety caused by the crisis's physical, social, and economic consequences.

Studies have revealed that those who have been quarantined or worked from home due to the pandemic reported depression, anxiety, stress, insomnia, low mood, and irritability. As a result, many organizations have established dedicated global Covid-19 task forces and advisory groups, including people from many divisions and sections of the company, to effectively handle the OSH difficulties encountered by telecommuters in the COVID-19 pandemic (Pinter et al.2020, P. 890). They are responsible for updating established policy documents, identifying information and skill gaps, implementing training, information dissemination, and enhancing communication to ensure that all workers have access to information regarding their rights and obligations regarding organizational health and workforce wellbeing.

Chapter 3

Polices in the USA

       Different organizations in the USA have now developed various strategies to incorporate hybrid learning in their day-to-day activities. For instance, Microsoft is an organization whose working arrangements have changed since the onset of Covid-19. Microsoft is now allowing workers to take 50% of their work offsite. For most workers in the company, many workers take two days offsite working days. Further, the organization has shown interest in allowing their workers to ask for working arrangements that suit themselves. In other words, employees have an opportunity to use their manager's permission to telework for more than 50% of their time. Also, there is an option for one to be a remote worker for good. Microsoft has demonstrated that working in an office is still an essential aspect of working people, but people do not always need offices to offer 100% in their work and responsibilities. There is an option to work from anywhere, especially for tech organizations like Microsoft.

       Twitter is another organization that has allowed its workers to use flexible working arrangements. After the announcement that Covid-19 is in the USA in early 2020, many people went into a panic mode. The economy was on the verge of collapse. However, giant organizations like Twitter had other plans. The CEO of Twitter, Jack Dorsey, gained significant media attention since he was the first leader to announce that workers can work from home permanently even after the Covid-19 restrictions are lifted. Other companies followed suit as pressure mounted for other companies to find ways and policies to enhance the businesses without having employees at their designated working stations. For Twitter, workers will be allowed to work from wherever they are comfortable, and the organization will now hire people from anywhere. For those that wish to visit the company's premises, the office will still

accommodate them. Thus this is a top-level flexibility hybrid system that has now become a norm for many companies.

In 2021, Ford became the first motor vehicle organization to announce a hybrid working strategy. Consequently, the organization had settled for offsite work due to Covid-19 restrictions. According to the company's reports, 95% of their employees were happy to work from home. These are staffers who work full-time that opted for a flexible hybrid model. The official statement from Ford suggests that staffers will be indefinitely enabled to telecommute, coming to the office only when they feel like or wish or as required for office-centric work, specifically in-person meetings.

USA's department of state has also committed to supporting and institutionalizing flexible, hybrid working structures. The Department of State will build on the outcomes and lessons learned during the Covid-19 pandemic. Flexibility in the workplace is essential in attracting and retaining the talent required to modernize American diplomacy to enhance the USA's core missions. The department also intends to institutionalize hybrid workings structures and improve the operational flexibilities. As such, tools like laptops and other secure communications capabilities are being provided to help workers work from home. Furthermore, people are being trained to use different technological tools to work from home. For those willing to work from the office, everything is being done to enable them to work effectively.

Conclusion

Maintaining team performance and meeting promises to stakeholders, clients, and recipients are one of the most stressful aspects of managing a teleworking team. Teleworking must be founded on conversation and teamwork between management and staff to be successful. It's especially true when teleworking is required and done full-time. According to Cheng et al., the ideal way to manage telecommuting employees is to use a procedure known as Management by Results. Both the leader and the workers agree on a single productivity measuring system. It might involve setting objectives, responsibilities, and milestones and tracking and reviewing progress without overburdening reporting, giving employees the freedom and liberty to plan their work without management checking on them continuously.

The management by results requires that the manager takes specific actions to ensure productivity. The manager will communicate the specific outcomes expected from their team. Further, workers are expected to receive descriptive feedback from their manager emphasizing what they have done and then focus on the needed changes and improvements. As per the company's projections, a third of the employees will switch to a new flex model (infrequent teleworking) after the Covid-19; a third of the employees will utilize flexibility on a routine schedule; another one-third of employees will use teleworking for two or three days per week.

The hybrid system changes the way people interact or socialize in a working context. A highly flexible hybrid working strategy that is now the future as enhanced by Covid-19. Employees are empowered to work from anywhere and their strengths. Encourage a culture that perceives telecommuting as a positive thing to being in an organization's office. Those workers who need peace and want to work in a quiet place or an environment they are comfortable are provided with an opportunity with flexibility to improve their productivity. As a result, there is

increased productivity in an organization. To enhance the hybrid social innovation, digital tools like video conferencing are used to synchronize interactions between in-person and remote interactions between people.

Employee happiness hinges on autonomy: Job satisfaction will rise if your team member's complete independence and choice about how, where, and when they work. On-site personnel require freedom as well. Workers who return to the workplace after more than a year of determining their schedule must feel confident in their ability to complete tasks without a boss.

The survey conducted globally suggests that one in every five employers has no work-life balance. Since work and life can rarely be balanced, work-life-fit is an essential aspect of a healthy employee's working environment. As such, the hybrid working experience will help employees combine their work and life to work for them. As a result, stress is reduced, and employee burnout is prevented.

A hybrid working system has become common in many organizations, especially technologically sound companies. Even those organizations that were not privy or were ignorant when all these hybrid systems were being discussed have now appreciated its importance. Covid-19 has enhanced social innovation as many companies are now considering strengthening the hybrid system. During the pandemic, companies had to find ways to continue working since policymakers backed by science decided it was not suitable for people to interact physically. The government strategy aimed to reduce the spread of covid-19. However, they still needed companies to develop ways to enhance economic growth and prevent it from collapsing due to isolation. Now that people have started to interact once more, working has become more flexible as new employees can either work physically or work remotely. Such freedom to choose has

become very significant since people have become more reliant on multiple ways to complete their tasks. Either work from home or at work as long as they are comfortable. Thus, the organization has increased productivity, and the hybrid system is now essential.

Works Cited

Akinyooye, Larry, and Eric Nezamis. "As the COVID-19 pandemic affects the nation, hires and turnover reached record highs in 2020." *Monthly Lab. Rev.* 144 (2021): 1.

Babu, Suresh, and Per Pinstrup-Andersen. "Social innovation and entrepreneurship: Developing the capacity to reduce poverty and hunger." *Twenty-twenty (2020) focus brief on the world's poor and hungry people/International Food Policy Research Institute (IFPRI)* (2007).

Bayoudh, Khaled, Fayçal Hamdaoui, and Abdellatif Mtibaa. "Hybrid-COVID: a novel hybrid 2D/3D CNN based on cross-domain adaptation approach for COVID-19 screening from chest X-ray images." *Physical and engineering sciences in medicine* 43.4 (2020): 1415-1431

Bourlard, Herve A., and Nelson Morgan. *Connectionist speech recognition: a hybrid approach.* Vol. 247. Springer Science & Business Media, 2012.

Carvalho, João MS. "Social innovation and entrepreneurship: The case of Porto region." *Entrepreneurship: Concepts, methodologies, tools, and applications*. IGI Global, 2017. 850-887.

Castillo, Oscar, and Patricia Melin. "Forecasting of COVID-19-time series for countries in the world based on a hybrid approach combining the fractal dimension and fuzzy logic." *Chaos, Solitons & Fractals* 140 (2020): 110242.

Canada, Murat. "C+ EffxNet: A novel hybrid approach for COVID-19 diagnosis on CT images based on CBAM and EfficientNet." *Chaos, Solitons & Fractals* 151 (2021): 111310.

Cheng, Mei-I., Andrew RJ Dainty, and David R. Moore. "Towards a multidimensional competency-based managerial performance framework: A hybrid approach." *Journal of Managerial Psychology* (2005).

Chan, Chee Hon, et al. "The role of the social innovation and entrepreneurship development fund in fostering social entrepreneurship in Hong Kong: A study on public policy innovation." *Social Policy & Administration* 53.6 (2019): 903-919.

Cooper, Robert G., and Anita F. Sommer. "The agile–stage-gate hybrid model: a promising new approach and a new research opportunity." *Journal of Product Innovation Management* 33.5 (2016): 513-526.

Ellis, Tania. *The New Pioneers: Sustainable business success through social innovation and social entrepreneurship*. John Wiley & Sons, 2010.

Farinha, Luís, et al. "Social innovation and social entrepreneurship: discovering origins, exploring current and future trends." *International Review on Public and Nonprofit Marketing* 17.1 (2020): 77-96.

Geser, Guntram, et al. "Makerspaces as social innovation and entrepreneurship learning environments: The DOIT learning program." *Discourse and Communication for Sustainable Education* 10.2 (2019): 60-71.

Groot, Asceline, and Ben Dankbaar. "Does social innovation require social entrepreneurship?" *Technology Innovation Management Review* 4.12 (2014).

Hewelt, Marcin, and Mathias Weske. "A hybrid approach for flexible case modeling and execution." *International Conference on Business Process Management*. Springer, Cham, 2016.

Jessop, Bob, et al. "Social innovation research: a new stage in innovation analysis." *The international handbook on social innovation: Collective action, social learning and transdisciplinary research* (2013): 110-130.

Lisetchi, Mihai, and Laura Brancu. "The entrepreneurship concept as a subject of social innovation." *Procedia-Social and Behavioral Sciences* 124 (2014): 87-92.

Mongelli, Luca, and Francesco Rullani. "Inequality and marginalisation: social innovation, social entrepreneurship and business model innovation: The common thread of the DRUID Summer Conference 2015." *Industry and Innovation* 24.5 (2017): 446-467.

Munshi, Natasha Vijay. "Value creation, social innovation, and entrepreneurship in global economies." *Journal of Asia-Pacific Business* 11.3 (2010): 160-165.

Maclean, Mairi, Charles Harvey, and Jillian Gordon. "Social innovation, social entrepreneurship and the practice of contemporary entrepreneurial philanthropy." *International Small Business Journal* 31.7 (2013): 747-763.

Malik, Tahir Nadeem, et al. "A new hybrid approach for the solution of nonconvex economic dispatch problem with valve-point effects." *Electric Power Systems Research* 80.9 (2010): 1128-1136.

Phillips, Wendy, et al. "Social innovation and social entrepreneurship: A systematic review." *Group & Organization Management* 40.3 (2015): 428-461.

Phills, James A., Kriss Deiglmeier, and Dale T. Miller. "Rediscovering social innovation." *Stanford Social Innovation Review* 6.4 (2008): 34-43.

Pinter, Gergo, et al. "COVID-19 pandemic prediction for Hungary; a hybrid machine learning approach." *Mathematics* 8.6 (2020): 890.

Pinho, Isabel, Armenio Rego, and Miguel Pina e Cunha. "Improving knowledge management processes: a hybrid positive approach." *Journal of knowledge management* (2012).

Sabato, Sebastiano, Bart Vanhercke, and Gert Verschraegen. "The EU framework for social innovation: between entrepreneurship and policy experimentation." (2015).

Shaw, Eleanor, and Anne de Bruin. "Reconsidering capitalism: the promise of social innovation and social entrepreneurship?" *International Small Business Journal* 31.7 (2013): 737-746.

Széll, György. "Social innovation, social entrepreneurship and development." *Challenge social innovation*. Springer, Berlin, Heidelberg, 2012. 183-195.

Sahni, Shashank, and Vasudeva Varma. "A hybrid approach to live migration of virtual machines." *2012 IEEE international conference on cloud computing in emerging markets (CCEM)*. IEEE, 2012.

Tracey, Paul, and Neil Stott. "Social innovation: a window on alternative ways of organizing and innovating." *Innovation* 19.1 (2017): 51-60.

Villani, Emilia, Paulo Eigi Miyagi, and Robert Valette. *Modelling and analysis of hybrid supervisory systems: A Petri net approach*. London: Springer, 2007.

Vlachokyriakos, Vasilis, et al. "Infrastructuring the solidarity economy: Unpacking strategies and tactics in designing social innovation." *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*. 2018.

Yan, Xiaoan, et al. "A multi-stage hybrid fault diagnosis approach for rolling element bearing under various working conditions." *IEEE Access* 7 (2019): 138426-138441.

Zivkovic, Miodrag, et al. "COVID-19 cases prediction by using hybrid machine learning and beetle antennae search approach." *Sustainable Cities and Society* 66 (2021): 102669.