

Immersive telework: a new hybrid organizational model

1. Introduction

Covid-19 led to an increase in the use of telework in the European Union from 4.7% to roughly 17% of the workforce. Both the public and the private sectors implemented telework to enable their operations to continue, with the result that a reorganization of work and an increase in digitalization have taken place.

This expansion occurred not only in sectors with a high penetration of technology and a highly skilled workforce but also in care-based sectors that require significant social interaction, such as social work, social services and all levels of education. Even labor-intensive activities incorporated telework (such as teleoperation) into their operations.

In this context, discussions on telework have become essential precisely because its use has extended to all sorts of activities. In some fields, such as caregiving (e.g. social services, care facilities and social work), one barrier to its expansion is associated with the digital rights of users and professionals.

Previous research on how remote working affects the behavior of organizations reported exhaustion due to a lack of social interaction (Windeler et al., 2017), the need for leadership to adapt, specially for control functions (Biron and Van Veldhoven 2016; Müller and Niessen, 2019) and job satisfaction (Golden, 2006). Telework significantly impacts the way work is performed, the interaction between individuals within the organization, and aspects that are crucial for the organization itself – such as the generation of new ideas, the fostering of creativity within the organization, organizational culture, and strategy. An organizational approach is therefore essential as the framework for developing telework experiences. It also plays a pivotal role in mitigating the adverse effects of telework, which include isolation, stress, technophobia and addiction to technology, etc., especially in situations where telework has been implemented as a mandatory measure of compliance.

During the pandemic, however, telework presented certain specific characteristics. First, since it was implemented without planning, telework spaces were not adapted and it was conducted from home. Second, because schools were shut down, work-life interaction was difficult as the children were also at home (Fana et al, 2020). Third, companies did not have enough technological resources to meet the challenges of working remotely (Belzunegui-Eraso and Erro-Garcés, 2020). While a large body of literature has

focused on the usefulness of telework (e.g. Bailey and Kurland, 2002; Baruch, 2000; Cooper and Kurland, 2002; Illegems et al., 2001; Ollo-López et al, 2020; Kowalski and Swanson, 2005), extended research is required on the use of telework and its implications since the pandemic (Belzunegui-Eraso and Erro-Garcés, 2020; Bojovic et al., 2020).

Improvements in technological platforms have also enabled the implementation of a more immersive telework experience that incorporates several advantages of in-person work while overcoming several disadvantages of traditional telework.

To expand the theoretical knowledge base and provide a better understanding of telework since the pandemic, we launched a special call for papers on “Organizational behavior since Covid-19: teleworking and organizational challenges since the pandemic”.

2. Factors that influence telework

2.1. Reluctance in the chain of command

Analysis of telework experiences in both the private and the public sector reveals a resistance to telework in intermediate positions of chains of command that has varied over time. In the 1990s, for example, resistance was much greater than it is today. Reluctance to telework has become less intense over time because:

- a) middle managers have progressively improved their digital and computer skills, and
- b) organizations have been seen to remain just as efficient and effective in their operations, or even to improve their efficiency and effectiveness – an observation in line with the fact that the managerial skills of middle managers have improved in general.

In some organizations, the hierarchical position of middle managers is justified by their supervising and monitoring roles. However, the automation and technologization of administrative procedures in both public and private organizations have called into question vertical chains of command that are legitimized by the need for direct supervision. A higher degree of digitization in administrative operations could help to change the role of the supervisor whose role is based on controlling procedures to one whose work focuses more on evaluating the quality of performance. A vertical chain of command in which those who hold such positions justify their work by controlling

procedures is no longer sufficiently justified. Applying digital procedures to production and sales or the supervision of activities disrupts this traditional approach to management. Paradoxically, classical management is now using human relations as an argument to justify the need for a form of supervision that, though based on technological developments, also relies on social interaction, thereby endorsing the new roles of these types of professions. The rejection of telework, or the reluctance to engage with it, displayed by traditional middle managers stems from the questions telework poses about their existence. If face-to-face control is replaced as a *modus operandi* of performance evaluation by, for example, evaluation by objectives, the chain of command has to be conceived differently, thus leading to alterations in traditional profiles. The key lies in replacing the traditional form of management based on physical supervision (even if this supervision is technology-based) with an evaluation of performance quality based on planned objectives. For this to take place, there needs to be a shift towards a culture that evaluates performance and values different job positions. Telework does not produce this paradigm shift by itself but it can be a contributing force for this type of modernization. Incorporating telework as another feature of organizational change challenges the role of intermediate-level managers. Telework requires continuous learning about workflow management and continuous testing of new forms of staff coordination and management. New times need new approaches.

This transformation leads to more adhocratic teams (to use the term employed by Gareth Morgan, 2011) in which the traditional role of the supervisor acquires less significance and less prominence. Telework can lead to a more streamlined organizational structure in its intermediate environment, i.e. in the positions that connect the strategic apex with the operating core. In fact, this could be one reason why telework has not been adopted by certain organizations.

2.2. Information security

Many organizations work with personal data that need to be protected for reasons of privacy and confidentiality. One objection that has been raised to question telework is the potential loss of traceability in the handling and management of protected information. This objection is less defensible nowadays, however, since a) information encryption capabilities and electronic data protection systems have improved considerably, and b) examples have been successfully provided by entities and organizations such as banks,

which are pioneers in the “electronic self-management” of private deposits. Indeed, financial institutions have significantly reduced their number of branches and thus their number of staff as they have transitioned from a model based on face-to-face customer interactions to one of online management.

In any case, the confidentiality of the personal data handled by an organization should not impede the organization’s implementation of a telework project. The continuous developments with regard to cybersecurity should ensure that telework is not a threat to data protection – or at least they should ensure that the threat is not dissimilar from when service is provided at terminals located in their offices.

2.3. The questioning of telework by trade unions

Telework has been questioned by trade unions firstly because there are no clear, protective regulations governing the rights of workers who transition towards this mode of working. Resistance to telework from some areas of the trade union movement also stems from the traditional view of labor representation based on direct contact between workers and their representatives and on the physical presence that ensures interaction between them. Trade unions fear they will lose presence and influence over employees and become less effective in defending the interests of those they represent – in other words, they will have less collective ability to respond effectively to work-related demands. This highlights a perception of representation based on position that identifies with the physical workplace and collective decision-making (the traditional trade union) and is resistant to the growing trend towards the individualized negotiation of certain working conditions required by better-trained employees who are more able to negotiate their own employment conditions.

Another reasons why telework is rejected by trade unions is the impact it would have on work-life balance, especially for female teleworkers. It has been suggested that telework has negative effects especially for female employees because 1) it takes women back to the home environment, and 2) it increases their reproductive workload, thereby intensifying what is known as the double burden of work. While the first of these effects is obvious, since telework at home means everyone performs their duties from their own home, the second effect has been clearly observed in the few studies that have analyzed the differential impact of telework from the gender perspective (Sánchez-Aragón *et al.* 2022).

Telework is not intended to solve the unequal distribution of reproductive work, partly because it is an organizational strategy for business or administration. The fact that telework has a negative effect such as an increase in the burden of domestic work cannot be attributed to this form of working but to factors such as the equal or unequal distribution of household chores between couples. In certain professional contexts and profiles, telework can even help to balance the share of the reproductive workload.

2.4. Organizational culture

Another key to understanding the restrictions imposed on telework is the negative impact it can have on organizational culture. It has been suggested that remote work distances the worker from corporate culture or, more broadly, from organizational culture. Physical contact and face-to-face presence in the workplace, on the other hand, are said to promote interaction and the bonding of workers with their organization. From this perspective, telework is viewed as having the potential to weaken social bonds. This argument has been used even by high-tech companies such as Google, which asked its workers to return physically to their offices¹ once the most serious effects of the pandemic had passed. A hybrid mode of telework (2+3 and 3+2 are two examples of this), however, could help to alter the perception that telework necessarily entails a weakening of the bond between company and worker.

In both the public and the private sector, organizational culture is largely related to the type of leadership involved (Erro-Garcés and Belzunegui-Eraso, 2021). Transformational leadership can be a good ally of telework since it places ample trust in employees and facilitates their autonomy. According to Kerfoot (2010), the fundamental challenges faced by remote leadership are basically the same as those faced by in-person leadership. Telework alone is not synonymous with organizational change since it is a means rather than a rigid organizational scheme. Telework cannot bring about a new organizational culture if it is applied within the same mental framework as traditional administrative management, where vertical hierarchy and standardized procedures predominate.

The topics we have outlined briefly above are among those discussed in this special issue by researchers from several disciplines.

¹ INFOBAE. “Adiós al trabajo remoto: Google y Amazon les piden a sus empleados que vuelvan a las oficinas”, 2 April 2021. <https://www.infobae.com/america/tecno/2021/04/02/adios-al-trabajo-remoto-google-y-amazon-les-piden-a-sus-empleados-que-vuelvan-a-las-oficinas/>

3. Overview of this special issue

To contextualize this field of research, this Special Issue contains a systematic review² of telework developed by Urmila Jagadeeswari and Uma Warriar. Their main findings encompass the key trends with regard to the Covid-19 pandemic, well-being, and productivity. This Special Issue is in close alignment with these developments and places special emphasis on examining how telework affects well-being and productivity and how organizations are evolving in the post-Covid-19 landscape. The characteristics of the new post-Covid-19 organization emerging from the pandemic are also addressed here.

Numerous papers in this Special Issue focus on the implications of telework on well-being and place particular emphasis on its effects in the context of the Covid-19 pandemic. Specifically, Akanksha Jaiswal, Santoshi Sengupta, Madhusmita Panda, Lopamudra Hati, Verma Prikshat, Parth Patel and Syed M Mohyuddin examine the impact of telework on employee performance. These authors investigate how, taking into account the moderating role of technostress, trust in management, mediated by psychological well-being, affects performance in telework and show that trust in management significantly influences the performance of employees engaged in telework. Psychological well-being acts as mediator, while technostress moderates the trust-performance relationship. The impact of psychological well-being on this relationship is more pronounced when technostress is low and less pronounced when it is high. This research extends the person-environment misfit theory to telework and highlights the role of technostress in shaping the relationship between trust, well-being and performance.

In line with the above, Swati Alok, Navya Kumar and Sudatta Banerjee analyze the well- and ill-being of employees who work from home. Employers are increasingly considering the long-term continuation of telework for potential business benefits. However, those benefits are closely tied to the well-being of employees, which is in turn influenced by the satisfaction of their psychological needs. This study focuses on satisfaction of the psychological need for structure or routine, which is an especially relevant factor in the context of remote work, and how this satisfaction is affected by the personal and job attributes of employees.

² Although the IJM no longer publishes bibliometric reviews, an exception is made in the current case because of the centrality of the paper to the overall theme of this special issue

Ana Junça Silva, Patrícia Neves and António Caetano analyze how telework impacts the well-being of workers in the IT sector and demonstrate that daily micro-events mediate the positive relationship between telework and well-being. However, this relationship is contingent upon levels of procrastination among workers, i.e. it is weaker for individuals who exhibit procrastination tendencies.

Mariam Anil Ciby and Shikha Sahai focus on a crucial area that has a significant impact on well-being: cyberbullying. Their findings reveal that workplace cyberbullying has a detrimental effect on employees' intention to remain in the company and that affective commitment acts as mediator in this relationship. They also show that workplace social capital has a moderating role in mitigating the negative impact of workplace cyberbullying on affective commitment and that it moderates the indirect effects of cyberbullying on employees' intention to remain, which is mediated through affective commitment.

Covid-19 disrupted work and family life in unprecedented ways and therefore affected numerous aspects of society. Among those impacted were academics, who had to grapple with workplace isolation owing to university closures and the shift to online classes. Shameem Shagirbasha, Juman Iqbal, Kumar Madhan, Swati Chaudhary and Rosy Dhall investigate the direct relationship between workplace isolation during Covid-19 and the work-family conflict. Their findings suggest a significant positive relationship between workplace isolation during Covid-19 and both psychological stress and work-family conflict. They also suggest that psychological stress partially mediated the relationship between workplace isolation during Covid-19 and work-family conflict. Organizational identification emerges as a potential moderator in this context.

How telework contributes to productivity is a significant and relevant field of research. Covid-19 has led to growing interest in exploring whether companies can derive benefits from improved employee well-being and enhanced results through the adoption of telework. This research seeks to understand the multifaceted impact of telework not only on the work-life balance and satisfaction of employees but also on the overall performance and outcomes of organizations. Pilar Ficapal-Cusí, Joan Torrent-Sellens, Pedro Palos-Sanchez and Inés González-González shed light on the intricate dynamics of telework performance. Specifically, they empirically examine the direct connection between trust and telework performance and scrutinize potential mediators in this relationship, including social isolation and fatigue. Their research goes beyond theoretical exploration to provide practical insights for enhancing telework practices. They suggest

actionable strategies for bolstering trust, mitigating feelings of social isolation, and alleviating fatigue among remote workers. These recommendations serve as valuable tools for organizations seeking to optimize their telework arrangements. Their study also introduces a practical evaluation tool that is tailored to the implementation of telework.

In the backdrop of Covid-19-induced remote work challenges for organizations and their employees, Mohd Tariq Jamal, Imran Anwar, Nawab Ali Khan and Gayas Ahmad analyze the pressing issue of teleworker burnout and potential mitigation strategies for it. They address the negative repercussions of this work arrangement, which could potentially impact the future of work significantly. In doing so, they reveal the crucial role of perceived organizational task support in mitigating the adverse impact of job demands on burnout and the part played by employee resilience in buffering the relationship between burnout and turnover intention.

Maribel Labrado Antolín, Óscar Rodríguez-Ruiz and José Fernández Menéndez examine the impact of experience and the frequency of telework on the acceptance and self-reported productivity of this form of work, especially in the context of the remote work induced by the pandemic. Their results challenge the conventional wisdom that occasional telework leads to the best outcomes and instead support the notion of a ‘time after time’ effect, while emphasizing the significance of telework-specific experience and the frequency of telework for its development and success.

Remya Lathabhavan and Mark D. Griffiths focus on the antecedents and job outcomes from a self-efficacy perspective among professionals working from home during Covid-19. Their research reveals positive relationships between ease of technology use, manager support and peer support on the one hand and self-efficacy on the other, extending the self-efficacy theory into the work-from-home context while taking into account influential factors such as technology, managerial support and peer support. It showcases the effectiveness of remote work and online training while considering potential antecedents when working from home.

Along similar lines, Megan M. Walsh, Erica L. Carleton, Julie Ziemer and Mikaila Ortynsky examine the impact of remote leadership on follower self-control and work-life balance to determine whether remote work acts as a moderator in the relationship between leadership behavior (specifically, transformational leadership and leader incivility), follower self-control, and work-life balance. These authors found that remote work strengthens the connections between leadership behavior, follower self-control and work-life balance. In short, they showed the pivotal role played by leadership behaviors in

shaping follower self-control and work-life balance in the context of remote work, thus making a significant contribution to our understanding of modern work dynamics.

In response to the transformative changes brought about by the Covid-19 pandemic, a novel type of organization is emerging that is actively adapting to the 'new normal' that has evolved from the experiences of lockdown. These adaptations include embracing telework for a multitude of tasks and operations. The unique characteristics of the 'post-Covid' organization are a key focus of the explorations conducted in this Special Issue. Studies have examined how organizations are reshaping their structures, operations and strategies to thrive in this altered landscape while taking on board lessons and opportunities that emerged during the pandemic.

In this context, Anushree Karani Mehta, Heena Thanki, Rasananda Panda and Payal Trivedi embarked on a study to explore the psychological contract. These authors constructed and validated the Revised Psychological Contract Scale, which divides the psychological contract into two dimensions: i.e. the 'new' and the 'traditional'. These dimensions pertain to the contents and breach or fulfillment of the psychological contract. In the current era of the 'new normal', where workstyles and patterns have undergone substantial transformations, it has become essential to grasp these shifts in perceived obligations and understand how employees perceive the ability of their organizations to meet them. This study holds practical implications for practitioners as the Revised Psychological Contract Scale outlines the obligations that are perceived by employees and the extent to which employers fulfill them. It can also help develop human resource policies and practices tailored to the 'new normal' work environment.

Seng-Su Tsang, Zhih Lin Liu and Thi Vinh Tran Nguyen propose a model that integrates inclusive leadership and protection motivation theory to predict the intentions of employees to work from home in emergencies, as during the Covid-19 pandemic. They conclude that the combination of inclusive leadership and protection motivation theory reveals what drives the intention of employees to work from home in emergencies. Indeed, Thi Vinh Tran Nguyen and Seng-Su Tsang found that inclusive leadership has both direct and indirect effects on the work-from-home engagement. This influence occurs through separate and sequential mediating roles played by perceived organizational support and employee motivation. They also found that the impact of this support and motivation on work-from-home engagement is intensified by employee risk perception.

Specific industries, countries and collectives are also considered in this Special Issue. Garima Saini, Sanket Sunand Dash and Anurag Tiwari, for example, studied the behavior of healthcare workers, explored how healthcare workers' exposure to the virus engendered fear, and predicted that this fear will lead to negative psychological outcomes (psychological distress) and negative behavioral outcomes (withdrawal intentions).

Rezart Hoxhaj and Florian Miti analyzed the level of participation in and length of time devoted to telework among several ethnic and racial groups in the USA and identified variations in the pandemic's impact on telework among those groups. For example, they found that Asians increased their participation in telework but that White Americans did not. Within the Asian ethnic group, they also observed differences between genders, as Asian men increased their participation in telework while Asian women increased not only their participation but also the number of hours they worked remotely, surpassing that of White American women. The reasons for these disparities may be linked to previous research that suggests that Asians possess a higher capacity to perform work tasks remotely. However, the authors also raised the possibility that discrimination against Asian individuals increased during Covid-19.

With regard to particular countries, Jorge de Andres-Sanchez, Angel Belzunegui-Eraso and Amaya Erro-Garcés examined the factors behind employers' and employees' perceptions of telework and how these perceptions impact the acceptance or rejection of this practice in Spain. These authors found that, although the global perception of home telework is generally positive, factors including demographic variables such as gender, age and childcare responsibilities nuance this perception.

Javier de Esteban Curiel, Arta Antonovica and Maria del Rosario Sánchez Morales also focused on telework in Spain. These authors conducted an inductive open data study of dissatisfaction with telework in Spain during Covid-19 by developing three models: one for the sociodemographic profile of a dissatisfied telework employee; one for advantages and disadvantages as perceived by dissatisfied telework employees; and one for the overall benefits for dissatisfied telework employees. In line with findings by Jorge de Andres-Sanchez, Angel Belzunegui-Eraso and Amaya Erro-Garcés, their results reveal that dissatisfied teleworking employees in Spain tend to be middle- to high-level managers or employees, are aged roughly 45 years old, and live with a partner.

Lastly, Ana Junça Silva, Alexandra Almeida and Carla Rebelo present a framework to explain the dynamics between telework, emotional exhaustion, and task performance, with work overload as a mediator and self-leadership as a moderator.

Conducting two studies with teleworking participants, their findings reveal that telework dimensions are linked to reduced work overload, decreasing emotional exhaustion and enhancing task performance. Moreover, self-leadership moderates the indirect effect of work overload on the relationship between telework and emotional exhaustion, highlighting its significance as a personal resource in mitigating negative effects of telework. This research contributes to understanding telework's impact on employee mental health and performance, particularly during lockdown.

4. "A new hybrid organizational model" after the pandemic

As we have mentioned, during the pandemic telework challenged companies' organizational and management practices. The presenteeism culture, for example, had to be replaced by other forms of control, such as digital check-ins, though many organizations that returned to a traditional office-based model after lockdown reverted to traditional forms of control owing to procedural inertia or a form of bureaucratic ritual. Although telework has been partially maintained in some cases, there are few instances in which most of a company's activity is now conducted remotely (Aropah and Sumertajaya, 2020).

As well as the challenges arising from the perspective of organizational culture, the demands of users and professionals and the digital rights in these new areas of activity bring future challenges for telework because they involve an extension of the range of issues associated with this form of work.

Telework poses significant challenges for evaluating work performed. Unlike the traditional organizational model, where physical presence in the workplace was the main indicator of the activity carried out, remote work requires other approaches that are more in line with quality of work and value added. These approaches may include, for example, management by objectives and an organizational climate based on trust and co-responsibility.

In this respect, the expansion of telework could provide an opportunity to replace these inertia with objective-based management. More than two decades ago, Lewis (1998) advocated evaluating productivity based on the results tied to telework. This is hugely important for overcoming one of the barriers to telework, i.e. the visibility of the work performed. People often turn down the chance to work remotely because they believe it will have a negative impact on their careers (Richardson, 2010), assuming that informal face-to-face relationships still play a key role in the promotion of company

employees. However, if remote work is accompanied by a planned training program that is related to professional careers, i.e. if the careers are also planned in accordance with the credentialist principle, then performing the service in telework mode should not pose a problem. On the other hand, if career promotion is governed by unclear criteria and implemented with no proper planning, telework could present a further obstacle or even reinforce the notion that it is arbitrary in nature.

Managing people remotely undoubtedly adds complexity to task coordination in general and to communications with the team in particular (Hägglom, 2020). During lockdown, many managers experienced the challenge of managing remotely. Non-verbal communication is reduced when one is working remotely and specific actions must be implemented to maintain teamwork. Team management must therefore be based on management by objectives in the context of an integrated strategy of cross-functional competencies in which evaluation focuses on the quality and added value of the work performed. Telework in its hybrid or mixed mode can provide a good opportunity to promote a shift in the traditional model, i.e. it can help to move away from old routines and become another instrument that contributes to organizational change. From this non-finalist perspective, telework is not the ultimate goal of this shift in the traditional model but another instrument for transitioning from a traditional organizational model to a more flexible one that incorporates management by objectives. Remote work should therefore also be an internal flexibility mechanism that helps the company to adapt to the current requirements of productive activity.

To achieve this we should be aware that, beyond the style of management, what determines performance is the style of leadership. In this respect, transformational leadership can be a good ally of telework since it places ample trust in employees and facilitates their autonomy. Fana et al. (2020) defended the need for remote supervision and control. Indeed, since the pandemic, numerous organizations have developed systems that provide the competences needed to manage people remotely.

Despite this perspective, Kerfoot (2010) suggested that the main challenges facing remote leadership are essentially the same as those involved in face-to-face leadership. Transferring the same management strategies used for face-to-face work to remote work essentially means maintaining the same practice. In other words, but more specifically, replacing the traditional physical check-in and check-out process with a similar electronic method, or counting keystrokes on a computer, still reflect management schemes that are based on mistrust and time control rather than on results and quality of service. Telework

is not a new organizational culture if it is applied under the same mental framework of traditional administrative management in which vertical hierarchy and standardized procedures prevail.

Telework is better suited to management formulas that are constantly evolving. Or rather, if telework is to add value to an activity, it must be developed in a context that is open to change and experimentation in organizational innovation. This does not mean that remote work is the only solution, or the best one, for all types of organizations but that it is sufficient to be considered an instrument that enables organizational change. Telework is relevant if it leads to organizational change because otherwise it would offer little incentive to study it as a driver of change and would be viewed with reluctance by the actors involved.

This adaptive instrument known as telework, which is flexible like the information and communication technologies themselves, has demonstrated its power (and potential) in situations that require rapid adaptation. The pandemic abruptly changed the daily lives of us all, and companies and public entities were no exception. As Dorda and Shtëmbari (2020) reported, Covid-19 showed that, in extreme conditions, relatively short periods of time lead to changes in organizational culture. According to these authors, the pandemic can result in a major change in organizational culture. Moreover, Covid-19 also affected all the elements that influence organizational culture. Just as in other critical situations, new opportunities have been created – especially for organizations with flexible cultures.

All the above has led to a new post-Covid organization driven by telework and characterized by more sensitivity for employee well-being (which is especially valued by the younger generations) since it provides greater flexibility in the time and space that are dedicated to work. Moreover, as was described above, the post-Covid organization is more horizontal, promotes greater autonomy for workers, and achieves a higher level of engagement. In short, it is an organization adapted to the new times.

4.1 New horizons, new organizations and immersive telework

While the post-Covid scenario is having an impact on organizations, a whole family of new sciences (the NBICs, i.e. nanotechnology, biotechnology, the internet of things and cognitive sciences, which are essentially artificial intelligence) is opening up new horizons for the development of products and applications that, without doubt, are already being demanded by new organizations. We are witnessing a new and unprecedented

acceleration of knowledge – more specifically, the acceleration of that knowledge to human activity. This is embodied in new products and new solutions which, for the first time, can tackle the pressing problems of humanity, such as global warming, with a certain guarantee of success. However, these applications are intended not only to be applied in industry, agriculture and services but directly to humans in what some authors have termed ‘human improvement’. These state-of-the-art technologies are possible partly because collaborative networking has extended universally (from scientific works to the exchange and commercialization of prototypes). Without the concurrence of telework, this collaborative networking would not have developed to the extent that it has.

If we look at the bigger picture, we therefore see that telework is now essential to ensuring the development of prototypes at research centers in companies and universities. One example is the speed with which the Covid-19 vaccine based on messenger RNA technology was developed by Pfizer-BioNTech, an achievement only possible thanks to concurrent telework viewed from the global perspective of knowledge exchange.

Telework has had a significant impact on mobilizing global talent by enabling organizations to recruit and retain employees regardless of their geographical location. New organizations are open to the mobilization of talent across the world as a defining feature of their identity. Telework plays a crucial role in this mobilization since: a) it provides organizations with a vast source of talent, knowledge and innovation based on so-called *spontaneous ideas*. Telework eliminates geographical barriers to mobility, providing organizations with greater possibilities for incorporating qualified professionals; b) thanks to telework and the elimination of geographical barriers, teams in the new organizations will become more diverse, thus encouraging greater creativity, innovation and problem solving in those organizations; c) it makes organizations better able to adapt their human resources to new production or service requirements, making their staff even more flexible through the recruitment of temporary or part-time talent from different locations as needed; d) work teams can be distributed globally and can incorporate new perspectives as well as their own unique characteristics and local knowledge; e) organizations can continue functioning when they are affected by severe external events or inherent disruptions typical of the social contexts in which they are located, such as social and political instability, since telework enables them to continue operating in other geographical locations without interrupting their operations; f) it can enable companies to recruit workers without the need for a work-related migration project, thus overcoming immigration barriers and contributing to the socio-economic

development of different geographical areas; g) global teams can help organizations to decentralize decision-making and become more agile by allowing local teams to take decisions that are relevant to their markets or specific situations; h) online collaboration technologies enable global teams to work together efficiently, share information and communicate ideas, all of which are essential for ensuring the success of global talent mobilization.

All these characteristics will become structural in a world of new global organizations (ranging from productive companies to educational, health and leisure organizations, to name a few examples). Telework will also become a crucial mechanism for ensuring the success of this type of organization. However, these new organizations will not be immune to the new problems and challenges that will result precisely on account of their transformation, such as managing the diversity of their work teams, coordinating those teams, fixing work schedules, and creating horizontal business cultures.

In any case, telework will be immersive and hybrid, which means it will be employed in combination with a degree of physical presence that must be properly designed by the organization. Moreover, novel platforms will allow telework to become more immersive and to create experiences that are similar to personal ones. To some extent, this will help organizations to overcome several of the disadvantages to telework we have discussed and to incorporate some of the advantages of working in face-to-face mode.

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