Post-COVID-19 era and Fourth Industrial Revolution: Contemporary trends in labor relations and organizational adaptation

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TRACK 5: DIGITIZATION OF WORK AND 4IR

Abstract

The outbreak of the COVID-19 pandemic seems to be structurally transforming the global economy. This article explores how these recent changes impact the different types of organizations and the ways these may adapt in this repositioned context. First, we present the central dimensions of the unfolding health crisis and the subsequent broader socioeconomic crisis. Then, it is argued that this global-scale emerging transformation has brought about fundamental changes in the working environment within the accelerated Fourth Industrial Revolution. The article concludes that all socioeconomic organizations (irrespectively of size and sectoral scope) are now required to grow as swiftly as possible their strategic, technological, and managerial potential to innovate and adapt in this emerging reality. This innovational adaptation to exit this

structural crisis seems to be requiring the structuration of corresponding change management mechanisms.

Keywords*: Change management, COVID-19, Fourth Industrial Revolution, Innovation, Labor relations, Organizational adaptation*

1. Introduction

In the wake of the COVID-19 crisis (from now on pandemic), a new structure for the global economy seems to progressively crystallize (Soto-Acosta, 2020; Syani et al., 2020). Simultaneously, saturated and older professions and industries are continually disrupted and profoundly restructured by the unfolding Fourth Industrial Revolution (4IR) (Bonilla-Molina, 2020; Tiwari et al., 2021). In these conditions, the survival and development in the face of such a significant underlying paradigm shift for all socioeconomic entities globally can only be challenging (Marinov & Marinova, 2021; World Bank, 2020b). It gradually becomes evident that the world is facing an unprecedented crisis in terms of "quality" and inclusion, which is about to irrevocably change the way we live, our societies, and our economies. It seems that this global crisis will be more severe compared to earlier ones concerning the velocity with which it spreads and its globalized scope (surpassing even the 1929 Great Depression). This reality raises the question of "how socioeconomic organizations strongly impacted by these subversive trends may adapt to this growing global mutation?".

It seems that further study into the worldwide pandemic is needed to address this concern. This conceptual essay will help compose a reframed theoretical insight on the subject via a semi-

systematic examination of relevant literature, including evaluations by international organizations on the pandemic and significant transformations occurring in labor relations (Jaakkola, 2020; Snyder, 2019). In the second part, relevant conclusions primarily by international organizations are presented, focusing on the near future of the global socioeconomic system during the pandemic. In the third part, the 4IR's fundamental characteristics are discussed. Based on structural changes detected in labor relations, the goal is to confirm whether the 4IR is accelerating nowadays. In the fourth part, due to these circumstances, we conclude that organizational adaptation (OA) is essential for the future growth of all socioeconomic organizations impacted by the crisis. The fifth part ends with a list of recommendations for further study.

2. The crisis and impact of COVID-19

From the early 2020 and beyond, the global socioeconomic system undergoes a period of unparalleled regression due to the pandemic. Guterres, the United Nations Secretary-General, believes that this pandemic catastrophe will force a global reassessment since the world's most vulnerable social groups and communities will become even more powerless (United Nations, 2020). Guterres also discusses the need for quick action to prevent the spread of other illnesses and to hold back violent political radicals to gain power.

The pandemic crisis has dealt the world economy its most severe blow since World War II, according to the World Bank (2020a), which anticipated just a moderate recovery for 2021. The World Bank suggested in this report that because this health crisis will have a lasting effect on investor and consumer confidence, government officials must develop comprehensive initiatives

that will stimulate and strengthen the primary drivers of economic growth additionally to short-term interventions.

Global production shrank by 3.5 percent in 2020, as noted in the World Bank's revised report for 2021 (World Bank, 2021). There was a 4.7 percent decline in the advanced economies and a 1.7 percent decline in the emerging market economies, while international commerce dropped by 8.3 percent. The report expected an unequal recovery for the different economies and socioeconomic stakeholders, particularly for developing nations; according to Pattenden et al. (2021), the pandemic's effect was mainly on the labor classes engaged in insecure casual labor and small businesses commodity manufacturing. To some degree, this uneven recovery is offset by the significant global growth forecast for 2021, which is expected to be 5.6 percent. Overall, according to the study, because growth inequalities are unprecedentedly magnified, the current global recession does not follow a usual cyclical recovery pattern.

Evaluating this crisis as unique, the International Monetary Fund (IMF, 2020) predicted a modest recovery in 2021, depending on particular circumstances. Also, according to the International Labor Organization (ILO, 2020), a staggering amount of four hundred million full-time jobs were lost amid the lockdown measures. Further, the World Trade Organization (Azevêdo, 2020) has predicted that the COVID-19 recession and social catastrophe would exceed the previous economic crisis of 2008-2009 in most indices, and one of the concerns spurred by the COVID-19 dynamics is the propagation and strengthening of underdevelopment trends (FAO, 2020; OECD, 2020b). Also, several industries and economic sectors appear to be forcefully readjusted in emerging nations because of substantial value-added losses (International Civil Aviation

Organization, 2020; International Energy Agency, 2020; Matthewman & Huppatz, 2020; WHO Director-General, 2020).

Within this reoriented global context, various experts are concerned about the future form of the global economy's recovery. When it comes to global GDP in 2021-2022, the OECD (2020a) predicted a V-shaped recovery following a sharp drop in 2020. Similarly, the European Central Bank (ECB, 2020) warned that the euro area would see only modest recovery. According to this forecast, the Eurozone's real GDP growth is expected to be no more than 1.3 percent in 2021 and 1.4 percent in 2022.

Therefore, several scholars have recently suggested a V-shaped rebound for the global economy, which would imply a rapid recovery after the crisis (Beech, 2020; Gómez-Pineda, 2020; Gregory et al., 2020; Lawrence & Homer-Dixon, 2020). However, due to the new, highly uncertain, and complex global and sectoral environment, an L-shaped recovery seems the most probable outcome for specific problematic cases (Arbolino & Caro, 2021). Unfortunately, an L-shaped recovery appears to be the most likely outcome for different communities since less-developed socioeconomic systems that lack resilience, flexibility, and innovation may not profit when international trade starts to recover. On the whole, it seems that the world is on an irreversible path of rebalancing.

3. Labor relations undergo significant transformation in the Fourth Industrial Revolution

The German government first proposed "Industry 4.0" in 2011 as a high-tech strategy initiative (BMBF-Internetredaktion, 2016). Then, in 2015, K. Schwab, the World Economic Forum's

founder and executive chairman, coined the phrase “Fourth Industrial Revolution” in a Foreign Affairs analysis and during a conference in Davos. According to Schwab (2015), our world faces a technology revolution that fundamentally alters how we live and work. The 4IR is a continuation of previous advances in human history (Perez, 2010). Production was mechanized during the first industrial revolution, thanks to the utilization of water and steam power. The second employed electricity to mass-produce goods, while the third used electronics and computer technology to automate manufacturing. The Fourth Industrial Revolution, which started in the late twentieth century, is now building on the Third Industrial Revolution, pushing the digital revolution ahead (Braña, 2019; Loureiro, 2018).

The most striking phenomena on this track, according to 4IR experts, are the “cyber-physical systems,” which are a fusion of elements that blurs the barriers between the physical, digital, and biological worlds (Gill, 2008; Schlick, 2012). In addition, Schwab (2016) points out that the 4IR is a chance to boost income and diffuse cost-efficient goods and services, along with the risk of manual labor being replaced by automation and the potential of escalating societal tensions and inequality. Schwab claims that it becomes increasingly difficult to anticipate the changes brought about by innovation, and therefore incumbents will be disrupted by new firms more quickly than in the past. Consumers now have additional choices, thanks to this change, which strengthens the demand side.

With these considerations in mind, new issues and challenges in labor relations can be outlined considering the global socioeconomic system’s shifting environment. Using such an approach, we might see how the worldwide pandemic crisis is causing the 4IR to accelerate.

Because of the growing usage of teleworking in response to the COVID-19 pandemic, according to the ILO (2021d), the labor market's restructuring was further stimulated. In Europe, over one-third of people work from home after COVID-19, while the US percentage is rapidly nearing half. A recent study by the ILO (2021b) estimates that COVID-19's effects on global labor income would include a 10.7 percent decrease in the first three quarters of 2020 compared to the same time in 2019. This report reveals that the COVID-19 pandemic did not impact all industries in the same way; retail trade, accommodation, food services, and other sectors in which women made up the majority of workers were the primary "victims" of this crisis.

As a result of fewer meetings and personal contact with colleagues, professional relationships have deteriorated over the past year (Ostrovskaia, 2020). Due to the financial instability, many companies have turned their employer-employee ties into business-to-business (B2B) agreements to cut down tax expenditures, regulations, and their employees' benefits (Mora Cortez & Johnston, 2020). As per the ILO (2021a), governments must promote emergency response plans through processes based on social discourse, supporting a world of work that is more inclusive, resilient, and sustainable. Apart from this, working from home has become typical for many workers, leaving trade unions in less good shape than businesses in the face of this new environment (ILO, 2021c).

After the big event of COVID-19, employers should accept the changes by handling employee stress outside of the workplace, paying attention to health and safety, watching out for how people are performing, modifying their working schedules, and having a centralized way of controlling employees without them being in the exact location. Additionally, employees who work in a

remote, lower-cost region yet live in higher-cost areas would be paid less than their co-workers who commute from outside the lower-cost region. Relocating to local low-cost offices or abroad is one option since it reduces the cost of production. In addition, the degree of "telemigration" is determined by the "teleworkability" of each profession (Sostero et al., 2020).

Employees who work from home have frequently expressed dissatisfaction with their work, feeling alienated. At the same time, some consider remote work to improve working and living conditions and increase leisure by cutting down unnecessary travel and cost. However, those in favor of the adverse side of remote working argue that it is challenging to separate the working environment from everyday activities, particularly when job and home duties co-exist in the exact location. It is possible that working outside the traditional office environment may result in longer working hours and unsociable and unpredictable schedules, which exacerbates stress, psychological risk, and uncertainty (Eurofound, 2020).

Moreover, nation-wide labor regulations and institutions have been built around specific workplaces, which is a development that must be addressed concerning the power and reach of trade unions, which must oppose employee dispersion since this may erode their rights in favor of the employer (Markey, 2020). Further, concerns are expressed that home-based employees are shouldering a portion of their working expenses (such as broadband availability and equipment costs). For the remainder of the workforce, better workplace safety and health measures are required, including reorganization and minimizing overcrowding (Schall & Chen, 2021). Concerning the reorganization aspect, this refers to methods corresponding to home-based work and online collaboration since, in the pressing health need for social distancing, different

businesses have been forced to decentralize their activities into regional business units. Because of problematic communication or a lack of face-to-face contacts, this digital transformation poses a challenge to employee commitment and engagement (Collings et al., 2021).

These teleworkability disparities (digital divide) have resulted in significant wage variations. The digital age may see the emergence of two main labor classes: a working poor and a rich labor force. A substantial gap between the classes could extend and make social integration more difficult (Calderón-Gómez et al., 2020; Sutherland et al., 2020). Furthermore, recent research shows that older workers are more likely to follow COVID-19 preventive measures and are better equipped for digital skills if they work from home (Kooij, 2020).

Overall, it seems that the 4IR is now moving much faster. Many businesses are combining face-to-face and virtual working spaces to adapt to the changing environment. However, it appears that a significant number of employees will find themselves in the foreseeable future in lower-paying jobs, a trend that will lead to even more significant inequities. The deficiencies in sophistication and intellectual capital are primarily responsible for this ill-wind arising in the workplace (Andrikopoulos, 2010). Many vulnerable people have little chance of finding new employment. Also, low-competitiveness sectors and less-adaptable local business ecosystems will face the most severe consequences. However, it is still unclear how socioeconomic organizations can deal with this problem and achieve higher performance. The next part discusses strategic concerns that affect the micro-level and the necessary reorganization for the post-COVID-19 period.

4. Organizational restructuration as the response to exit the crisis

In terms of economic policy, reinforcing the demand side with fiscal and monetary measures is a prerequisite, although not enough. Various industries all over the world have structural weaknesses that enhance their comparative development and competitiveness hysteresis. The current crisis will severely hit these already frail parts of global production, driving them to necrosis. Besides the macro-level (national and international policies) and meso-level (industries and local agglomerations) implications, all less developed economies will face direct challenges to the "cellular" micro-level, meaning the adaptiveness of firms and especially the small and medium ones. These firms will be tested on their ability to innovate and survive by designing new strategies, assimilating new technology, and using modern management methods (Chatzinikolaou et al., 2021; Vlados, 2021).

An investigation into the firms' micro level will indicate that the pandemic has led to more possibilities for employee involvement (Merone & Whitehead, 2021). Because of the large-scale spread of the health crisis, organizational improvements (innovations) or setbacks are now occurring rapidly. All socioeconomic actors must now focus on generating new ideas and bettering their performance to exit any crisis. However, innovation is always accompanied by change, which must be appropriately handled to provide efficient outcomes for the entire enterprise (Vlados et al., 2019).

Consequently, all organizational changes must be viewed through the prism of the required innovation before being implemented. Moreover, the "creative destruction" of older and aging

organizational structures as a result of “entrepreneurial aspirations” that lead to the introduction of new products and new production and marketing methods in the quest of profit is a neo-Schumpeterian viewpoint on innovation that must be further explored (Rahmeyer, 2016; Vlados & Chatzinikolaou, 2020). Cyber-physical systems and the innovations they drive are continually becoming more vital as they fuel increased demand for more complex production across different sectors, causing the desired digital transformation of our days (Hanelt et al., 2020).

While the spread of new production and labor systems brings change, the question remains how to accomplish this transformation (how to manage change). It is evident that a new organizational adaption framework is necessary, yet little attention has been given by the 4IR literature and the reorganized labor relations literature, and this attempt will be carried out in this part of the article. It is essential to realize that socioeconomic organizations change and adapt. Since Veblen (1898), it has been recognized that all people in economic life are subject to a cumulative process of adaptation, and Marshall (1890), although the father of neoclassical economics, has said that economic biology is the “Mecca” of the economist (Hodgson, 1993). Further, the research by Hrebiniak and Joyce (1985) is an essential source of knowledge for the organizational adaptation (OA) conceptualizations and practice. The interdisciplinary nature of OA is noted here since it is explored in disciplines including organizational behavior, management, and economics. Additionally, it would seem that evolutionary OA pertains to strategic choice and environmental determinism because organizations adapt to their surroundings, meaning that the environment picks out organizations and only lets those forms of organizations that have beneficial variations prevail (Hrebiniak & Joyce, 1985). Scholars have found more instances of these activities and

deliberate choices, culminating in apparent efforts to decrease the space between an organization and its surrounding environment (Sarta et al., 2021).

OA is being addressed in the light of this environmental selection as a new framework during the pandemic. According to Stanier and Nunan (2021), the challenge this situation presents is an opportunity for businesses to accelerate their transition to addressing various new challenges, including the safe and secure digital transfer of information, the ability to remotely access sensitive databases, and use online communication (including recruitment and tasking). Further, according to Khanal et al. (2021), the pandemic has caused a significant shift in the environment that requires now the reintegration of organizational procedures that predate the outbreak.

Though this research area is just beginning to grow, many articles address the phenomenon of changes in business organizations and can provide fresh insights on post-pandemic OA. For the post-COVID-19 age, some of the fundamental concepts in theory and practice of organizational adaptability and change must be updated and repositioned, such as the (a) learning organization, (b) the organization's reinvention, (c) the principle-centered leadership, (d) the organizational balancing, (e) the strategy in chaos conditions, and (f) the correlative SWOT analysis. These approaches are rooted in past decades, although they can offer valuable theoretical dynamics for the arising post-COVID-19 era. Their main attributes are presented below:

a. Learning organization: In this kind of organization, regardless of their position or experience, all members are accountable for finding, analyzing, and addressing practical issues. This allows the organization to experiment, learn, and develop through time. Senge (1990) coined

the term “learning organization” to refer to companies that are sensitive to their environment, flexible, and able to change (Caputo et al., 2019; Reese, 2020).

b. Organizational reinvention: As described by Goss et al. (1993), the path of reinvention is far from being linear. Several difficulties await anyone who chooses to ride the “roller coaster.” Companies that wish to reinvent themselves must first uncover and then alter their underlying biases since unacknowledged past truths determine what options are accessible for the upcoming years (De Smet et al., 2020; Osterwalder et al., 2020).

c. Principle-centered leadership: Diverse defensive mechanisms are activated throughout an organization’s change, according to Covey (1989). From a broader viewpoint, principle-centered leadership focuses on the understanding that leadership implies the capacity to accept the transformation and that changing involves uncovering and committing to the organization’s core values (Khuwaja et al., 2020; Lues, 2021).

d. Organizational balancing: Duck (1993) argues that traditional management models, suitable for day-to-day problems, do not effectively prepare for change management, which may overwhelm an organization like having five surgical procedures done at once, which can cause death out of shock. The ultimate difficulty is to raise ideas in the intellectual realm of work by managing the company’s many jigsaw pieces concurrently. To put it simply, the “art of balancing” refers to the need for all stakeholders to participate in change management (Gill et al., 2019; Touhidul & Sorooshian, 2019).

e. Strategy for chaos: Kotler and Caslione (2009) claim that the world has reached an irreversible chaotic condition. To respond to the new “chaos,” the authors propose building up a company-wide integrated cycle of implementation and reaction. This chaotics strategy stresses the

organization's constant re-strategizing to obtain an edge over the competition (Fiorini, 2019; Oswald et al., 2018).

f. Correlative SWOT analysis: In Vlados' view (2019), all companies must take advantage of the opportunities that present themselves throughout time by leveraging their comparative strengths. All companies need to remember that they face different problems and may have entirely different advantages and disadvantages in their organizational setting (Cheng et al., 2021; Pereira et al., 2021).

Today, all socioeconomic organizations, regardless of their size, must make adjustments. To get out of this (constant) crisis, everyone must agree that innovation is the way to go. On the other hand, innovation always brings about changes that must be handled in the most effective manner possible.

5. Conclusions and discussion

With the drastic transformations in the work environment now taking place, it is evident that the rise of the 4IR is speeding up. In this context, this discussion's core idea was that organizational adaptation and change management could help socioeconomic organizations (for instance, employers and trade unions). To move successfully into the post-COVID-19 age, workers and employers need to use new ways to foster change and bring the expected innovation within the company. Our proposal for getting out of this crisis involved the argument that innovation is needed; this innovation inevitably leads to change, which must be adequately handled. Based on this, organizational adaptation and change management approaches were evaluated as possible

treatments for all socioeconomic organizations undergoing significant transformation today. To sum up, the conclusions of this study are threefold:

1. Due to COVID-19, the global socioeconomic system has undergone significant changes since recent evidence indicates that COVID-19 and the accompanying socioeconomic crisis have resulted in an unprecedented recession and structural instability. Seemingly, the projected recovery will not lead to the anticipated pre-pandemic growth rates soon. In contrast, the probable growth result seems to be "L-type"—a stagflation crisis with a simultaneous rise in unemployment and inflation will cause various less developed business ecosystems to face prolonged diminished returns.

2. Since the 4IR has increased its pace, the way labor is performed has begun to change, forcing the working environment to undergo significant changes. The primary motor is the ongoing digital transformation, which appears to be a need for all socioeconomic systems, with the spread of "cyber-physical systems" forcing less adaptable workers and companies to acquire new skills and knowledge to keep up.

3. Finally, a particular focus must be placed on the need for micro-level organizational adaptability (and thus survival), produced and reproduced by the dynamics of innovation and the respective change management mechanisms. The emerging new environment also seems to require a significantly differentiated approach to human resources development. All socioeconomic organizations (irrespectively of size and sectoral scope) must improve their strategic,

technological, and managerial dynamic to innovate and adapt in this emerging global environment, and this organizational adaptation and innovation seem to require effective change management.

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