

► How the COVID-19 pandemic is changing business: A Literature Review



► How the COVID-19 pandemic is changing business: A Literature Review

Copyright © International Labour Organization 2021 First published 2021

Publications of the International Labour Office enjoy copyright under Protocol 2 of the Universal Copyright Convention. Nevertheless, short excerpts from them may be reproduced without authorization, on condition that the source is indicated. For rights of reproduction or translation, application should be made to ILO Publications (Rights and Licensing), International Labour Office, CH-1211 Geneva 22, Switzerland, or by email: rights@ilo.org. The International Labour Office welcomes such applications.

Libraries, institutions and other users registered with a reproduction rights organization may make copies in accordance with the licences issued to them for this purpose. Visit www.ifrro.org to find the reproduction rights organization in your country.

How the COVID-19 pandemic is changing business: A Literature Review. Internation Labour Organization – Geneva: ILO, 2021.

ISBN: 978-92-2-035881-8 (web PDF)

Also available in French and Spanish: Comment la pandémie de COVID-19 change les entreprises: Analyse de la littérature ISBN 978-92-2-036442-0 (pdf web); Efectos de la pandemia de COVID-19 en la transformación de las empresas: Una revisión bibliográfica, ISBN 978-92-2-036300-3 (web pdf).

The designations employed in ILO publications, which are in conformity with United Nations practice, and the presentation of material therein do not imply the expression of any opinion whatsoever on the part of the International Labour Office concerning the legal status of any country, area or territory or of its authorities, or concerning the delimitation of its frontiers.

The responsibility for opinions expressed in signed articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them.

Reference to names of firms and commercial products and processes does not imply their endorsement by the International Labour Office, and any failure to mention a particular firm, commercial product or process is not a sign of disapproval.

Information on ILO publications and digital products can be found at: www.ilo.org/publns.

Produced by the Publications Production Unit (PRODOC) of the ILO.

Graphic and typographic design, layout and composition,
printing, electronic publishing and distribution.

The ILO endeavours to use paper sourced from forests managed in an environmentally sustainable and socially responsible manner.

Code: JMB-REP

▶ Contents

	Foreword Acknowledgements		
		vi 	
E	xecutive summary	viii	
> A	acronyms	xiv	
1	. Introduction	1	
▶ 2	. Methodology	3	
> 3	. Prominent issues for business	6	
	Workforce	6	
	The great experiment: overnight transition to remote work	6	
	Emergence of the hybrid workforce	8	
	Impact of remote work on performance and productivity	9	
	Remote work and the risks of increased inequality and polarization	11	
	How COVID-19 is redefining the nature and content of jobs	14	
	Workspace	21	
	How the pandemic is reconfiguring the workspace	21	
	Emerging vaccination policies: issues and challenges for employers	22	
	Well-being	27	
	Benefits and challenges of remote work	27	
	Threat of a global mental-health crisis	28	
	Employee monitoring and tracking raises key questions	29	
	Societal impacts	30	
	Remote work and the "urban-rural flight"	30	
	Effect of remote work on climate change	31	
> 4	. Considerations for businesses and their representative organizations	34	
► R	References	37	

List of boxes

▶ Box 1.	Defining remote work	6
▶ Box 2.	Factors influencing the productivity of workers	10
▶ Box 3.	The shecession: negative impacts of the pandemic on women	13
▶ Box 4.	Effects of the pandemic on micro, small and medium-sized enterprises (MSMEs)	16
▶ Box 5.	Impact of the pandemic on youth employment	19
▶ Box 6.	Business Partners to CONVINCE: vaccination for a healthy planet	24
▶ Box 7.	Business for South Africa	26
▶ Box 8.	The shadow pandemic: violence against women during COVID-19	27
List of tables		
► Table 1.	Inclusion/exclusion criteria for the literature review	4
► Table 2.	Countries/areas where at least half of workers lost their jobs or businesses	12

Foreword

When the COVID-19 virus began spreading through the world at the beginning of 2020, nobody imagined that at the end of the 2021 its devastating effects would still be taking lives and disrupting economies, livelihoods and businesses. Almost two years on, as new variants of the virus emerge, the global pandemic continues to test the limits of human health, the strength of public services and the resilience of production systems.

People, businesses and governments have shown a remarkable capacity to adapt and recover. However, the human and economic cost of this unprecedented crisis has yet to be fully assessed and understood. One thing is clear – the pandemic is having a profound, if not seismic, impact on the way businesses operate and employ people. Years, if not decades, of change have been imposed on people and businesses within mere months. While some countermeasures have been temporary, others are likely to stay. The global experiment of shifting to remote work almost overnight alone will have long-lasting effects on both current and future business strategies. Traditional concepts of workplaces and workspaces have been called into question. New challenges to the safety and wellbeing of workers have emerged, together with new measures to respond to these.

In the light of these observations, this paper is structured around three main elements:

► Workforce: Managing people

Workspace: Rethinking working space

▶ Wellbeing: Supporting and protecting people

We need to understand the on-going changes to better support our constituents – that is to say employer and business membership organizations as well as individual businesses – in achieving stronger recoveries, greater resilience and growth. This literature review is intended to be of use to employers and their representative organizations, as well as to policymakers. Meanwhile, it aims to help the general public appreciate current challenges from the perspective of business.

In conducting this review, we have provided an overview of the literature referring mainly to business and management sources – sources which are robust in their knowledge of and reaction to issues of concern to businesses and employers.

As with any knowledge products, the more we research the more we recognize the need to delve deeper. Many of the issues are unfolding as the pandemic continues to evolve, and more remains to be explored and understood. Nevertheless, we hope that this review will be of practical use for those who need to adjust to the present while planning for the future.

Deborah France-Massin

Director

Bureau for Employers' Activities

adrance Mas:

November 2021

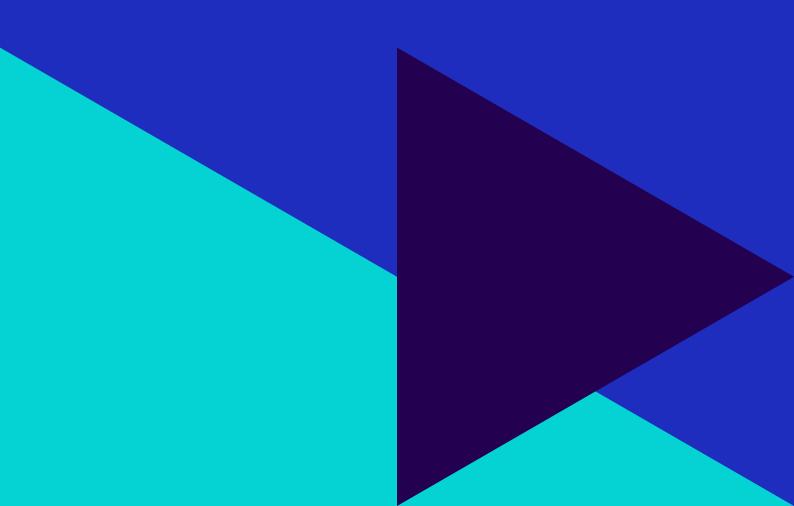
Acknowledgements

This research project, including the development of the concept, technical contributions and several reviews, was undertaken by a team of colleagues from the Bureau for Employers' Activities (ACT/EMP). The team consisted of Wade Bromley, Jae-Hee Chang and Gary Rynhart under the overall management and coordination of Tugschimeg Sanchir.

Claudia Pompa undertook the research, including an earlier rapid literature review which informed the current version, and wrote the paper

The paper was peer reviewed by Roberto Villamil and Magdalena Bober (ACT/EMP), and Bernd Brandl (Durham University Business School), who provided valuable comments. Maria Angeles Palmi-Reig, Chantal Dufresne and Natascha Begue provided helpful support. The team thanks Collin Piprell for editing the paper.

Executive summary



Executive summary

The COVID-19 pandemic has swept through the world with devastating effects on millions of lives and livelihoods. For more than a year, it brought many economies and societies to a near standstill. Prolonged official restrictions imposed in response had profound impacts not only on jobs and the workplace, but also on businesses and entire economies. As of this writing, the full cost of these impacts on global well-being remains impossible to calculate.

Work patterns have been shaped by the pandemic, and these effects have lasted much longer than initially anticipated. Indeed, many companies and governments might incorporate some of the changes permanently. The disruption of "normal" workplace operations has affected employment and contractual relationships; the nature and content of jobs; time and performance management; remuneration and benefits; productivity; worker well-being; and safety and health.

Questions are now being asked not only about the new rules for safe physical workspaces, but also the impact of the pandemic on a range of issues from corporate vaccination policies to real-estate management.

Going forward, it is essential to better understand how profound and lasting these changes are going to prove; what challenges businesses may need to consider in the future; and wider societal implications of the pandemic.

Successful industry adaptation and innovation will depend upon informed consideration of these important issues.

From a business perspective, and according to the categories of workforce, workspace and well-being, this literature review addresses the following questions:

- ▶ How is the pandemic affecting the workforce, workspace and well-being of people?
- ▶ How are companies adapting?
- ▶ Which pandemic-induced changes will be transformative? What workplace issues for business will present themselves in the "new normal"? What will be the most likely scenarios?
- ► How are the key drivers of change for businesses that were identified before the pandemic impacting current workplace changes?
- ▶ What will be the most significant societal implications of the changes in the workplace?

Workforce

Both the spread of COVID-19 and related pandemic counter-measures caused massive disruptions in the workforce. Among other things, they brought to the fore considerations of physical proximity in the workplace. One consequence of this has been a widespread adoption of remote work.¹ The overnight transition to remote work – mostly among white-collar professional workers – was made possible by the rapid development of such digital solutions as videoconferencing, document-sharing tools, and the expansion of cloud-based capacities (Lund et al. 2021; Oxford Martin School and Citi 2020).

¹ We define remote work as situations where the work is fully or partly carried out on an alternative worksite other than the default place of work. Remote work can be performed in a variety of possible locations, all of which can be viewed as an alternative to the location where the work could typically be expected to be carried out, taking into account the profession and the status in employment. Telework is work that is fully or partly carried out at an alternative location other than the default place of work and uses use of personal electronic devices such as a computer, tablet or telephone (mobile or landline) to perform the work. Telework is a subcategory of the broader concept of remote work (ILO, 2020)

In countries with significant industrial operations that for technical or physical reasons cannot take full advantage of these new developments, however, fewer people will be working remotely. Jobs that cannot be conducted remotely are usually those where the worker either needs to be at a specific location (such as care work, hospitality, agriculture, construction and transport workers) or where the worker needs to be physically close to his work unit (such as assembly lines, factory workers, retail businesses). Unsurprisingly, skilled jobs that require higher levels of education are easier to conduct remotely (Oxford Martin School and Citi 2020).

As economies start to recover and businesses welcome workers back to the office, many observers expect hybrid remote work to become the "new normal", where the option of working from home is combined with that of working in the office (Narayan et al. 2021). To avoid a backlash that encourages inequalities in the world of work and slows efforts to develop a more diverse and inclusive workforce, companies need guidance in avoiding mismanagement of the hybrid workforce model (Williams and Boginsky 2021).

As the pandemic developed and workers around the world transitioned to remote work, company leaders have found that their prior concerns about productivity losses were often unfounded. Yet, questions remain about the impact of remote work on long-term productivity and the effectiveness of prevailing systems to measure performance. Remote work has highlighted the shortcomings of current management systems. Organizations must now learn, where possible, how to manage a more autonomous and less workplace-centred workforce. Furthermore, many companies are focusing perhaps too narrowly on job redesign for efficiency and cost savings, rather than on redefining work. This may only get them so far. When work is redefined, the workforce's focus shifts from pre-defined and standardized tasks to creating new values around expanded work outcomes (Hagel et al. 2019a). Redefining work leads to increasing returns because of its significant potential for long-term value creation (Hagel et al. 2019b).

The pandemic caused millions of people to lose their jobs. Beyond that, the kinds of jobs emerging from the crisis differ from those that were lost. Furthermore, people with limited skills and income have been most affected by the situation, raising concerns about social and economic inequality.

The abrupt transition to remote work and the rapid increase of digitization has translated into both new business priorities and new demands for workers and, consequently, for different skills to support how work is performed. Workers across industries were forced to adapt quickly to rapidly changing conditions, while companies had to quickly learn how to best match workers to new roles and activities. The situation has also meant that managers had to quickly learn how to lead teams virtually while maintaining worker and project cohesion.

Rapid levels of digitization and automation, much of it aiming to reduce physical interactions, have changed the way in which many of these jobs were performed. As workers return to the workplace, the pandemic has highlighted the need for organizations to re-deploy, up-skill and re-skill the workforce to deliver results in a post-pandemic era (Agrawal et al. 2020).

Workspace

How one defines the workspace remains a central question. More than just a location and part of a corporate strategy, it serves as an important factor in attracting and retaining talent (Florida 2020). Thus, as restrictions loosen and offices re-open, some organizations are planning aggressive optimization of workspaces. While some companies evince a strong appetite for a hybrid and flexible workforce, in any given case its configuration will depend greatly on the particular company, sector and overall context.

At the same time, the transition to a hybrid workforce presents important challenges to companies. One is to decide the role of the workspace itself, traditionally the centre for

creating company culture and a sense of belonging. Companies will have to make decisions on issues ranging from real estate (Do we need this building, office, or floor?) to workplace design (How much space between desks? Are pantries safe?) to the role of facilities management (Do we need more facilities management staff? Does it work?). Returning to the workspace is not simply about opening a door, but rather constitutes part of a bigger and systematic reconsideration of what exactly the office brings to the organization (Lund et al. 2020).

As workers return to the workspace, organizations need to ensure that safety regulations are in place. Workplaces will also need to be redesigned with a greater emphasis on physical distancing and crowd-control measures, which is likely to be an ongoing process, since regulations continue to change over time. This section also highlights the importance for employers of workforce health and safety. Vaccinations, now being rolled out across the world at different paces, offer employers the opportunity to bring workers back to the workplace with greater protection and, ultimately, to reassess physical distancing and other safety measures. However, the topic presents many logistical and ethical challenges, and raises a number of new issues that employers will need to assess with care.

With vaccination programmes being implemented, a question looms regarding the role of businesses in promoting vaccination uptake among their employees. The discussion about the role of businesses in vaccination programmes has focused mainly on developed economies, where such programmes are widely available. Unfortunately, availability of vaccines in developing economies continues to be limited, and regional differences in vaccination access are staggering. Employers have taken different approaches in dealing with the issue, with profoundly different outcomes across regions.

Worksite safety remains a key concern for employers, one that becomes even more complex when dealing with a mixed population of unvaccinated and vaccinated employees. In these circumstances, some employees might have concerns about coming into daily contact with unvaccinated co-workers, clients and the public, while others worry about being judged for their choice or inability to receive the vaccine. As some workplaces move to tighten restrictions on unvaccinated employees (for example testing them weekly at their own expense or requiring them to wear a mask at all times), the monitoring burden falls on the employers.

Well-being

Remote work provides many benefits for both workers and employers.

For workers, these benefits include greater flexibility, improved productivity, more job autonomy, improved work-life balance, and reduced commuting time and costs. Remote work can also provide more and better work opportunities for populations that have been generally excluded, including people with disabilities, older workers, workers with care responsibilities and workers living in rural or isolated areas. The arrangement can also have positive effects for employers, including greater levels of employee satisfaction and improved worker productivity; lower real-estate and production costs; and reduced costs of accessing a broader range of talent (Galanti et al. 2021; Sneader et al. 2020; ILO 2021c; Oakman et al. 2020; Chung 2020). Furthermore, savings in office space and operational costs could indirectly help businesses improve performance by freeing up additional resources for productive investments (OECD 2021b).

Despite its many advantages, however, remote work also presents a series of challenges and disadvantages.

On the worker side, greater flexibility and autonomy are often accompanied by such negative effects as increased levels of work intensity and longer working hours; lack of clear distinctions between work and home that affect the work-life balance and the well-being of employees, who find the long hours and the inability to disconnect negatively impact their lives; social

isolation from colleagues and the organization, as well as increased levels of monitoring and surveillance which can also have detrimental effects on the mental health of workers, at the same time raising privacy issues; limited access to appropriate space and tools, particularly during the pandemic as workers have been forced to work from home full time; and lack of proper office equipment and furniture, which can affect the physical health of workers (ILO 2021c; Policy Department for Economic, Scientific and Quality of Life Policies 2021; Oakman et al. 2021; Chung et al. 2021).

On the other side, employers are concerned that extended periods of remote work can lead to impaired team cohesion; decreased loyalty to the firm; and reduced training, with concerns the latter could affect knowledge flows at the firm level and lead to long-term productivity losses (OECD 2021b).

Concerns about a global mental health crisis have also been looming for employers. While those who were able to work during the pandemic were less likely to report depression and anxiety, the pandemic exacerbated burnout and chronic stress (Moss 2021). To help workers cope with the situation, some companies have started to provide mental-health tools as part of their support programmes. While the corporate agenda had already been increasingly focused on employee health and well-being, the pandemic forced these issues into greater focus for some companies.

Another emerging issue is monitoring and surveillance. While such developments are not new, the significant increase in remote working during the pandemic has seen a dramatic increase in the demand for workplace surveillance tools (Policy Department for Economic, Scientific and Quality of Life Policies 2021). The topic highlights questions regarding the invasion of remote workers' privacy and their right to disconnect. Regular surveillance can induce increased levels of stress and anxiety. As companies embrace new ways of working, it should be with growing recognition that the shift will need to be complemented by a greater focus on health and wellness, as well as concern for the rights of workers to both privacy and the ability to disconnect.

Societal impacts

Remote work remains an imperfect substitute for face-to-face collaboration. But it can lead to significant economic and environmental benefits.

One effect of the pandemic in developed economies has been widespread relocation from urban centres to rural areas, providing opportunities to revitalize regions that have been hitherto neglected. Remote work can promote a redistribution of workers and companies from urban centres towards suburban and rural areas, creating demand for new services and bringing a much-needed revitalization to these regions (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Developing economies have also experienced widespread relocation from urban centres to rural areas, in part due to people moving home to their rural villages after facing job losses or wage reductions as a way to cut costs in the face of significant income reductions. This trend has placed additional pressures on rural communities as a result of increased immigration. In comparison to urban areas, rural areas have been more resilient during the pandemic due to their lesser exposure to COVID-19 and their ability to depend on agriculture for income. Whether this will prove to be a lasting phenomenon is uncertain, especially as more people moving home increases the stress on rural areas (FAO 2021).

However, it is important to note that the choice of where to live depends on a number of factors beyond employment, among them closeness to family and friends; availability, quality, and cost of services such as education, health and transportation; and availability of recreation and leisure activities (FAO 2021).

While it remains unclear whether the shift to suburban and rural areas is a short-term trend or is here to stay, the situation provides a number of opportunities for economies to redress long-standing issues of the urban–rural divide.

Given pandemic-related changes such as remote work, the pandemic has also led to declines in air pollution levels, energy consumption, and transportation-related climate impacts all resulting from pandemic-related changes such as remote work. Research conducted by the International Energy Agency (IEA) showed that countries under full lockdown experienced an average 25 per cent decline in energy demand per week, while countries in partial lockdown realized an average 18 per cent decline (IEA 2020). At the global level, studies have estimated that, if all those who can do remote work do so for just one day a week, this would help save 1 per cent of global oil consumption for road passenger transport per year (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Considerations for businesses and their representative organizations

Since the outbreak of COVID-19, employers have been on the frontline of the pandemic response, managing unprecedented levels of change to their businesses while ensuring the well-being of their workforce and the safety of the workspace.

As the different elements of the pandemic continue to unfold, employers are being asked to consider the types of workforce management policies needed for businesses to recover and then continue growing.

To help provide much-needed guidance and predictability to workers, and to help offset some of the negative effects of remote work, employers need to be clear where and how businesses work, while determining the potential level of flexibility in light of a given sector, industry and overall context. Conducting regular skills-mapping among workers can help identify redeployment opportunities in their workforce. Focusing on most-needed and most-relevant skills, including on socio-emotional and advanced cognitive skills, can help businesses gain a competitive advantage while establishing a strong talent pipeline.

As the pandemic evolves and the situation across countries and regions continues to change, employers have had to continuously revise and update their responsibilities when it comes to the protection of workers and issues related to occupational safety and health (OSH).

When it comes to vaccination policies – which vary between countries or even states within them – employers need to consider national, federal and provincial health guidelines applicable to the workplace as well as to data privacy and employment law.

The legal duty of the employers is to ensure the health and safety of workers and others who may be affected by their business. The legal duty of employees is to take reasonable care for the health and safety of themselves and others who may be affected by their acts or omissions at work (IOE 2021a, 2021b).

Obtaining details of vaccination status, whether as part of a mandatory vaccination policy or otherwise, raises data privacy considerations (IOE 2021). In terms of employment law, most jurisdictions globally have at least some employment laws that impact vaccination policy considerations. These include discrimination protection, unfair treatment, pay protection, consultation obligations and unfair dismissal (IOE 2021). For those employers who choose to implement a vaccination policy, key measures to minimize legal risks associated with employment, privacy and human rights include a clear policy along with local risk assessments; constant monitoring of policies and staff engagement; and consultation and training (Schofer and Sie-Mah 2021; IOE 2021).

As the mental health crisis takes centre stage, many employers have chosen to provide new or expanded options for psychological support to workers, among them access to helplines, counselling, and employee assistance programmes. Businesses also need to consider the type of support that needs to be in place for workers with care responsibilities – in particular women – to encourage them to return to work.

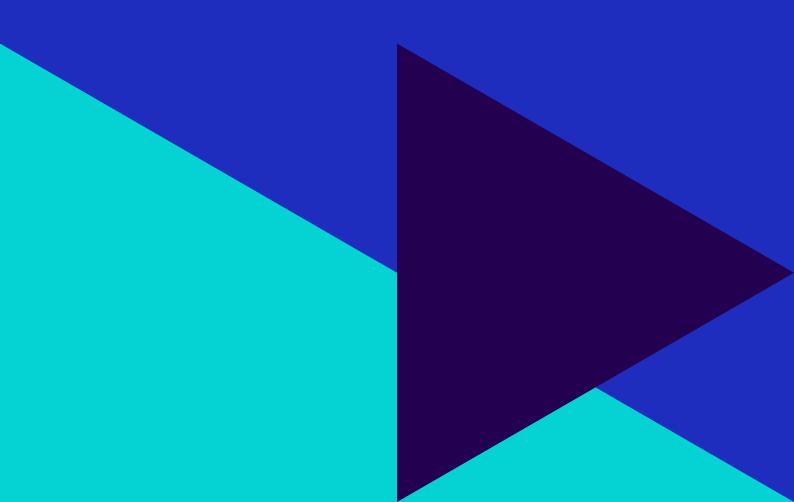
Finally, as employee monitoring and surveillance tools and software become more common, it is important that employers consider the complex ethical questions such measures present. Use of such technology without appropriate understanding and consent can have significant impacts on the employee-employer relationship, reducing trust and promoting negative attitudes and behaviour (ILO 2020c).

Acronyms

A CT/514D	
ACT/EMP	Bureau for Employers' Activities of the International Labour Organization
ADB	Asian Development Bank
AI	Artificial intelligence
B2B	Business-to-business
B4SA	Business for South Africa
BBC	British Broadcasting Corporation
BPSD	Business Partners for Sustainable Development
CAGR	Compound annual growth rate
CEO	Chief executive officer
CEPR	Centre for Economic Policy Research
CIPD	Chartered Institute of Personnel and Development
CMAJ	Canadian Medical Association Journal
CNP	Conseil National du Patronat du Sénégal
CONVINCE	COVID-19 New Vaccine Information, Communication, and Engagement
ЕВМО	Employer and business membership organizations
ECLAC	Economic Commission for Latin America and the Caribbean
FAO	Food and Agriculture Organization
GDPR	General Data Protection Regulation (Europe)
HR	Human resource
ICT	Information and communication technologies
IDC	International Data Corporation
IEA	International Energy Agency
ILO	International Labour Organization
IWPR	Institute for Women's Policy Research
KNBS	Kenya National Bureau of Statistics
LABRRI	Laboratoire de recherche en relations interculturelles
MENA	Middle East and North Africa
MSMEs	Micro, small and medium-sized enterprises
NASA	National Aeronautical and Space Administration (USA)
OECD	Organisation for Economic Co-operation and Development
OSH	Occupational safety and health
РАНО	Pan American Health Organization

SMEs	Small and medium-sized enterprises
STEM	Science, technology, engineering and mathematics
USCIB	United States Council for International Business
UN DESA	United Nations Department of Economic and Social Affairs
WEF	World Economic Forum

1 Introduction



▶ 1. Introduction

The COVID-19 pandemic has swept through the world with devastating effects on millions of lives and livelihoods. It brought economies and societies to a near standstill for more than a year. What started as a health crisis soon became an economic crisis, testing human resilience, the robustness of institutions and the strength of economic, production, and organizational systems. Significant and prolonged restrictions had a profound impact not only on jobs and the workplace but also on businesses and entire economies. As of October 2021, the International Labour Organization (ILO) estimated that 125 million jobs were lost in 2021 alone. Ninety per cent of the world's workers live in countries with some form of workplace restrictions (ILO 2021a). The full cost of the impact on well-being is impossible to calculate.

While progress with mass immunization has allowed some economies to recover, the World Bank warns that the recovery is uneven, with moderate growth prospects at 6 per cent, and will have significant lasting legacies (World Bank 2021a). In the longer term, the outlook for emerging markets and developing economies will likely be dampened by the lasting erosion of skills from lost work and schooling, a sharp drop in investment, higher debt burdens, and greater financial vulnerabilities. Meanwhile, the current discourse has remained focused mainly on job recovery and economic activity, and will likely do so for the foreseeable future.

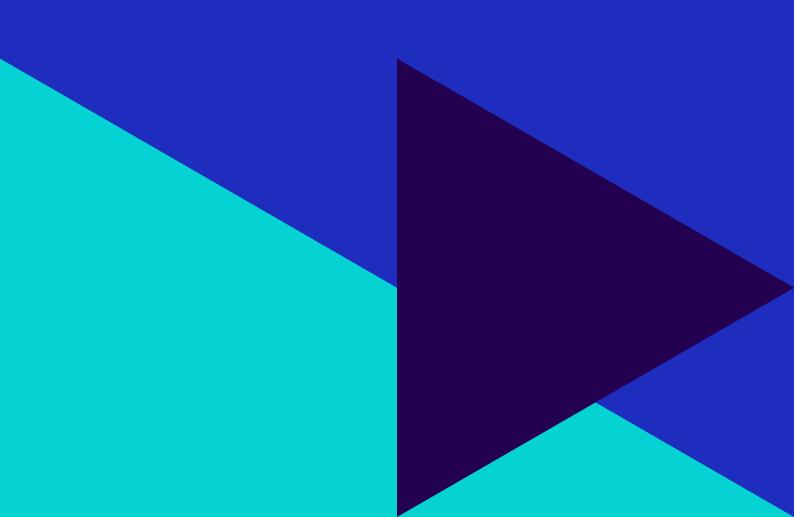
At the same time, the workplace has been transformed in an unprecedented way, creating major issues for businesses. As the pandemic progressed and new work arrangements lasted much longer than initially anticipated, many companies and governments had to adapt their operations to official restrictions designed to counter the pandemic. A growing number of enterprises have been considering incorporating such changes permanently, which is already the case for remote work in many situations. The disruption of "normal" workplace functions has affected other aspects of work, such as employment and contractual relationships, nature and content of jobs, time and performance management, remuneration and benefits, well-being, safety and health.

The mass shift to remote working and concerns about safety and health in onsite work locations are prompting companies to rethink workspaces. Questions are being asked not only about the new rules for safe physical workspaces – especially if populations have to learn to live with the virus for longer than expected – but also about the impact on a range of issues from corporate vaccination policies and new office culture to real-estate management, technological preparedness and changes in customer services.

The shift to the new ways of working and concerns about safety, security, and the unpredictability of the effects of the pandemic have moved concerns about well-being and mental health to the top of the list. Work-life balance, which was strongly tested during the lockdowns, directly impacted performance, productivity and overall employee satisfaction. Women have been particularly affected by having to balance work with childcare and greater responsibilities at home. Emerging features and corporate strategies of monitoring employee performance during remote working have also raised concerns about privacy and surveillance, all of which need to be carefully considered.

Going forward, it is essential to better understand how profound and lasting these changes are, what employers are experiencing, what businesses need to consider in the future, and their wider societal implications of the pandemic. These issues are particularly important for employer and business membership organizations (EBMOs), as they have to provide value-adding service and leadership on current challenges and foresight with respect to emerging trends. Their own adaptation and innovation depend on the knowledge and understanding of issues important for business.

2 Methodology



▶ 2. Methodology

Objectives and scope of the review

Since the pandemic started, management literature has extensively addressed the apparent trends and developments, covering key aspects of business operations, including changing workplace practices and issues. An initial rapid literature review revealed that workplace issues largely revolved around three broad areas: workforce, workspace and well-being.

As a result, the ILO Bureau for Employers' Activities (ACT/EMP) sought to conduct a more detailed and in-depth literature, aiming to analyse the existing knowledge, data, and evidence to determine trends and developments in these key areas, seeking to understand how they affect EBMOs.

This literature review is intended to answer the following questions from the business perspective:

- ► How is the pandemic impacting the workforce, workspace and well-being of people? How have companies adapted and how are they continuing to adapt?
- ▶ Which pandemic-induced changes are likely to be transformative? What workplace issues for business will the "new normal" entail? What related scenarios might be expected?
- ▶ How are the key drivers of change for businesses that were identified before the pandemic impacting the current workplace changes?
- ▶ What wider societal implications might be expected from the workplace changes?

For coherence and focus, the following framework will guide exploration of changes in the workplace:

- ▶ Workforce managing people
- ▶ Workspace rethinking the working space for health and safety
- Well-being supporting and protecting people

These issues will be explored to identify key issues for business, with possible scenarios and wider societal implications. This approach will be further informed by examination of the cross-cutting issue of technological impact.

The issues and scenarios identified by the literature review will help to create a basis for further research, possibly on a regional basis, to better capture region-specific issues.

Research methodology

The literature review explored pertinent documentation relating to how trends and developments in workforce, workspace, and well-being emerging from the pandemic are impacting businesses; how businesses are responding and adapting to these changes; and how these trends are affecting the work of EBMOs. The review included both global and regional papers and case studies. The documentation at the global level helped to structure a general framework for findings; the documentation at the regional level helped to identify specific ways in which businesses have been responding, and to propose areas that merit further exploration.

The review covered the academic literature, management magazines, research and technical papers, government reports, and working papers, all of which proved useful in addressing the main research questions. The list of documents reviewed is by no means exhaustive.

The selection of this material, which is available online or through databases, has attempted to strike a balance between quantitative and qualitative literature, aiming to present a comprehensive and current review of the situation at both regional and local levels.

► Table 1. Inclusion/exclusion criteria for the literature review

Criteria	Include	Exclude
Publication date	01/04/2020 to 15/10/2021	Any publication date before or after that range.
Research design	Empirical research using primary data. Literature reviews and overview documents.	Advocacy positions not based on original fieldwork or survey data.
Research methodology	Papers that have a methodology section and specify data sources used.	Papers that do not set out a clear research methodology. Papers that do not specify data used.
Publication type	Peer-reviewed journals, specialized management magazines, academic, consultancy, donor or NGO reports.	General magazine articles.
Languages	All searches in English, Spanish, Portuguese, and French.	Reports written in any language other than those specified.

The research paid particular attention to existing sources and evidence from developed economies (particularly those from the Organisation for Economic Co-operation and Development (OECD) countries) and the developing (non-OECD) countries in Africa, Central Asia, Asia and the Pacific, and Latin America.

The literature review was conducted in English, French, Spanish, and Portuguese.

Research limitations

While evidence continues to mount regarding the economic impact of the pandemic, robust and comprehensive studies are still in progress. Of the studies that do exist, information is typically provided at the level of outputs and outcomes but lacking details on the impact. Data and research from different economies is limited or simply unavailable. To support the study, we relied on publicly available information.

Availability of data remains an important constraint in understanding the effects of the pandemic on business. Beyond high-income economies, mainly in Europe and the United States, there is little to no available data to track the many impacts at the pace they have been occurring. In low- and middle-income countries, there are few information sources. Furthermore, despite the rapidly expanding literature, there is limited systematic cross-country evidence regarding the impact of the pandemic on firms, particularly on small and medium-sized enterprises (SMEs). Some cross-country evidence exists, but it tends to focus on small and relatively selective samples of firms or sectors.

Overall, all outcomes and findings come from a best-effort analysis of the information provided, and therefore may not be fully representative of any one economy or industry. In addition, due to the constantly evolving situation and the inherently complex nature of a global pandemic, large-scale issues such as vaccination policies may change significantly in the time between the analysis and publication of this report.

Prominent issues for business

3. Prominent issues for business

Workforce

The great experiment: overnight transition to remote work

The spread of COVID-19 and related restrictions brought massive disruptions to the workforce and highlighted the importance of physical proximity in the workplace. The disruptions caused changes not only in business models but also in consumer behaviour, some of which may well prove long lasting.

The increase in remote work has been one of the most obvious impacts of the pandemic on the workforce.

Box 1. Defining remote work

For the purposes of this report, we define **remote work** as situations where the work is fully or partly carried out at an alternative worksite, one other than the default place of work. Remote work can be performed in a variety of possible locations, all of which can be viewed as an alternative to the location where the work would typically be expected to be conducted, taking into account the worker's profession and employment status. **Telework** is work that is fully or partly carried out at an alternative location other than the default place of work, and uses personal electronic devices such as computers, tablets or telephones (mobile or landline) to perform the work. Telework is a subcategory of the broader concept of remote work (ILO 2020c).

Prior to the pandemic, the largest disruptions to work were related to the introduction of new technological development and changes in production systems. Little to no attention was given to physical proximity and the physical nature of work. The pandemic dramatically altered this approach. While telework had been an option offered by certain companies for some time, the arrangements were largely voluntary and only affected a small portion of the workforce. According to ILO data, 7.9 per cent of the global workforce – approximately 260 million workers - worked from home on a permanent basis prior to the pandemic. Employees accounted for 18.8 per cent of the total number of home-based workers worldwide. However, in high-income countries this number was as high as 55.1 per cent (ILO 2020b). Before the pandemic, the percentage of people who were regularly or occasionally teleworking varied from 30 per cent or more in Denmark, the Netherlands, and Sweden to 10 per cent or less in the Czech Republic, Greece, Italy, and Poland. Different studies indicate that close to 20 per cent of the United States workforce were regularly or occasionally working from home or another alternative location, 16 per cent in Japan, and just 1.6 per cent in Argentina (ILO 2020c). In regions such as Latin America, fewer than 3 per cent of the population were working remotely prior to the pandemic (Maurizio 2021). Companies adopting this flexible way of working often required a period of design, preparation and adaptation to be able to support employees effectively and ensure productivity and work-life balance (Galanti et al. 2021). The COVID-19 outbreak marked the first time in modern history in which workers from around the world were forced to work from home every day through government-enforced lockdowns (Waizenegger et al. 2020), forcing businesses to adopt telework with no time to plan and unable to provide workers with the skills required for remote work (Galanti et al. 2021).

The overnight transition to remote work – mostly for white-collar professional workers – was made possible by the fast development of new digital solutions including videoconferencing, document-sharing tools and the expansion of cloud-based storage and processing capacity (Lund et al. 2020; Oxford Martin School and Citi 2020). Despite the push for remote work, it is important to note that this shift is not expected to happen uniformly across countries. Countries with significant industries operating in activities that do not technically or physically lend themselves to being conducted remotely will obviously have fewer people working remotely. Jobs that cannot be conducted remotely are usually those where the worker either needs to be at a specific location (such as childcare, agriculture, construction and transport workers) or where the worker needs to be physically close to the work unit (such as assembly lines, factory workers). Unsurprisingly, skilled jobs that require higher levels of education are easier to conduct remotely (Oxford Martin School and Citi 2020).

Recent research assessing the potential for remote work in countries at different levels of economic development established that factors such as economic and occupational structure, access to broadband internet, and likelihood of owning a personal computer were important determinants of working from home. The findings indicate that the likelihood of jobs switching to working from home increased with the level of economic development of the country. This means that countries with a higher proportion of jobs in sectors such as information communication technology (ICT), professional services, finance and insurance, and public administration were more likely to have a greater percentage of the workforce working remotely. On the other hand, countries where sectors such as manufacturing, agriculture, construction and tourism made up most of the economy were less able to introduce remote work (ILO 2020c).

To better understand the likelihood of remote work persisting, McKinsey analysed more than 2,000 tasks used in 800 occupations in eight key countries.² As the pandemic demonstrated, they found that a lot more work could be done remotely than previously estimated. This included sales calls, legal arbitration and trials, doctor's visits, and real-estate tours. Similarly, research conducted by the Oxford Martin School examining 483 occupations in the United States found that 113 of these could be performed remotely. These occupations employ the bulk of the US workforce, with 52 per cent of workers in occupations that could be performed at distance in a time of crisis (Oxford Martin School and Citi 2020).

However, the McKinsey research also found that, while some work could technically be performed remotely, it was better done in person. Online schooling presented an ideal example, where both parents and teachers reported a loss of effectiveness when instruction was done remotely, particularly for young children and students with special needs. Tasks such as negotiations, critical business decisions, brainstorming sessions, providing sensitive feedback, and on-boarding new employees were other examples of activities that might lose some effectiveness when conducted remotely (Lund et al. 2020).

Policy and regulatory barriers also played an important role in terms of how rapidly and permanently companies across countries changed to flexible work arrangements. The ability to conduct remote work is highly correlated to with political and regulatory factors. Even before the pandemic, Nordic countries such as Denmark and Sweden had regulatory frameworks and working cultures that allowed for flexible coordination between paid work and private life (Gschwind and Vargas 2019). Similarly, the United Kingdom had been promoting remote work for several years. Since 2014, workers in the United Kingdom have had the right to request flexible working arrangements (including working from home), subject to a qualification period of two years (Oxford Martin School and Citi 2020). As the

² The survey was conducted in China, France, Germany, India, Japan, the Kingdom of Spain, the United Kingdom, and the United States. At the time of writing, these eight countries accounted for almost half the global population and 62 per cent of global GDP.

pandemic and its effects continue to evolve, we can expect to see more countries will likely develop and implement similar policies at the national level.

Emergence of the hybrid workforce

As economies start to recover and businesses welcome workers back to the office, many expect hybrid remote work – combining the option of working from home with the option to work in the office – to become the new normal (Narayan et al. 2021). Most reports cite that organizations in developed economies had already adopted or were planning to adopt a "hybrid workforce" that allowed employees to work either from the corporate office, their home or an alternate third space (Kropp 2021; Florida 2020; Bernstein et al. 2020; Lund et al. 2021). According to Harvard Business Review, 90 per cent of large companies are embracing the hybrid model. Furthermore, the issue has become a key demand for workers, with more than half saying they will not return to jobs that do not offer remote work (Williams et al. 2021). However, it is important to note that the mix of office-based, remote, non-office, and field workers is expected to vary from region to region (IDC 2021).

Harvard Business Review reports that the shift to remote work is becoming a permanent feature of the workplace. A 2020 survey showed that one fifth (20 per cent) of the workforce was likely to continue working remotely on a full-time basis after the pandemic, with another third doing so part-time (Florida 2020). Similarly, results of research conducted by McKinsey in eight countries accounting for half of the global population³ estimate that 20–25 per cent of workers in advanced economies and about 10 per cent in emerging economies could work from home three to five days a week, mainly in the computer-based office work sectors. This represents a four- to five-fold increase compared to before the pandemic, and is expected to have significant implications for real state, business travel and urban centres (Lund et al. 2021).

The stability of the situation (in terms of case numbers and waves) and geography will likely influence future work strategies. Research conducted by Gallup found that 23 per cent of United States workers, nearly a quarter of the entire workforce, wanted to maintain their remote work arrangement post-pandemic (Saad and Hickman 2021). A survey of more than 375 companies with operations in Latin America showed that more than 54 per cent of companies were working remotely full time and would continue to do so over the next 12 months, with several companies adopting a "work from anywhere" policy (Runa 2020). Survey data from International Data Corporation (IDC) showed that workers in the Asia-Pacific region were more likely to return to the physical office space than those in Africa, Europe, the Middle East, and the United States (IDC 2021). However, the region has still experienced a push towards more remote work. A survey of 3,500 human resource (HR) professionals across seven countries in the region showed that 41 per cent of companies were open to hiring remote staff in their own country, while 24 per cent were open to hiring staff in another country (LinkedIn 2021b). Flexible work and better work-life balance were seen as the top advantages in Australia, China, and Malaysia. Respondents in the Philippines were most inclined to see a range of benefits and advantages associated with a remote workforce, while respondents in Japan were more comfortable with employees continuing to work from the office (LinkedIn 2021a).

Another survey conducted by the OECD reports that both managers and workers agreed that, in the future, the share of the workforce doing remote work would be higher compared to the pre-COVID-19 period, but lower than the extreme levels observed during the height of the pandemic. Both workers and employers expressed a preference for the "sweet spot" of two to three remote working days per week. Surveys in the United Kingdom show the same results. This arrangement could potentially optimize the advantages of remote work

³ The survey was conducted in China, France, Germany, India, Japan, Spain, the United Kingdom, and the United States. At the time of writing, these eight countries accounted for almost half the global population and 62 per cent of global GDP.

while minimizing its disadvantages (OECD 2021a). However, the challenges associated with managing hybrid teams and a hybrid workforce remain.

The hybrid workforce also raises important issues such as whether employees should be able to choose their work arrangement or if the company ought to determine these arrangements. How do the type of work, employee preferences and business needs factor into decisions about who is a good fit for a particular work arrangement? And, perhaps most importantly, what impact will these changes have on the employer-employee relationship and contractual arrangements? According to *Harvard Business Review*, there are several reports that companies are reversing the right to work remotely for low-paid workers, while at the same time creating work-from-anywhere positions for high-paid positions. In the United States, white workers are seven times more likely than black employees to be interested in returning to the office. This is related to the fact that black workers face a more negative in-person work environment.⁴ Women, many of whom were forced to leave the workforce due to childcare duties, are being called back to work with only a few days' notice, leaving them with no time to arrange childcare. The mismanagement of the hybrid workforce model can lead companies to reinforce social inequalities and threatens efforts to develop a more diverse and inclusive workforce (Williams et al. 2021).

The abrupt introduction of remote working and flexible work arrangements during the pandemic also raised questions about the preparedness of businesses to support their employees and their critical digital infrastructure. Company experiences varied markedly across countries, depending on available national infrastructure, and this can be expected to influence the decision to adopt remote work as a policy going forward, with studies showing a strong correlation between the readiness of a country's digital infrastructure and the share of its population engaged in remote work (Oxford Martin School and Citi 2020).

As companies continue to manage their transition to a hybrid work model, important regulatory questions also arise regarding overtime, time and day of work, scheduling, and worker classification (for example, which workers can legally be classified as independent contractors as opposed to regular employees) and associated implications in terms of wages, benefits and job satisfaction. It is still too early to establish whether the effects of the pandemic will lead to a significant restructuring of the workforce and the workplace, or if they represent a transitory change. However, it is important to gain a better understanding of these regulatory issues and their implications in terms of alternatives for workers and companies to establish whether a hybrid model will have welfare-enhancing or market-distorting effects (Mas and Pallais 2020, pp. 631–658).

Although there are plenty of benefits in implementing a hybrid model, the jury is still out when it comes to the long-term implications of remote work. Questions remain concerning the impact of remote work in terms of on-boarding new employees, developing a corporate culture, and fostering relations (Bernstein et al. 2020; Fayard et al. 2021). A hybrid workforce will require understanding when onsite work is better compared with remote interaction or independent work. Perhaps more importantly, hybrid organizations must adopt new ways of working that help build a strong company culture, cohesion and trust even when many employees are working remotely (Sneader et al. 2020).

Impact of remote work on performance and productivity

As the pandemic developed and workers around the world transitioned to remote work, company leaders found that, in many cases, their prior concerns about productivity losses were unfounded. In the April 2020 *PwC CFO Pulse*, nearly half of the surveyed financial executives expected productivity losses because of a lack of remote work capabilities.

⁴ This report employs the terms originally used in the research.

Two months later, when asked again, just 26 per cent of financial executives anticipated productivity loss in the month ahead (PwC 2020). Similarly, other studies found that workers adjusted to working virtually more quickly than management expected.

Despite the good news in terms of workforce adaptation and resilience, questions remain about the impact of remote work on long-term productivity and the systems in place to measure performance. Overall, quantitative evidence on remote work productivity during the pandemic remains limited and inconclusive. Results from a survey of individuals conducted in the United Kingdom showed that productivity working remotely did not differ greatly from productivity in the workplace. Studies in the US showed that most respondents who started working remotely reported higher productivity than pre-pandemic expectations. However, survey data from small and medium enterprises reported a productivity decrease of about 20 per cent on average. In Japan, surveys showed that productivity was on average lower by 30-40 per cent for individuals adopting remote work arrangements, compared to workplace productivity (Morikawa 2021). Similarly, an enterprise survey conducted in the Montenegro showed that more than half of enterprises that resorted to teleworking arrangements experienced a decrease in productivity, of which nearly 60 per cent reported that the decrease was significant or very significant (ILO 2021b). In Denmark, 55 per cent of workers reported completing the same amount of work while working from home as in the office. They also reported working fewer hours, suggesting that remote work might be more efficient and productive on a per hour basis (Kitagawa et al. 2021).

According to research conducted by the OECD, remote work in the long term has the potential to improve productivity and other social and economic factors. However, its overall impact remains unclear, with potential risks in terms of innovation and worker satisfaction. For firm productivity to increase with remote work it is important that worker satisfaction also increases enough to offset the potentially negative effects on communication, knowledge flows and managerial oversight. The evidence seems to suggest that worker efficiency tends to improve with low levels of remote work and tends to decrease with high levels of remote work (such as those seen during the pandemic). The implication here is that efficiency and productivity is maximized at intermediate levels of remote work (OECD 2020a).

A study conducted in Japan was able to identify possible factors affecting productivity losses during the pandemic. This research related factors contributing to deteriorating productivity to poor remote work setups and poor communication in the workplace and with clients (Kitagawa et al. 2021).

Box 2. Factors influencing the productivity of workers

Studies show that factors influencing the productivity of workers during remote work include conditions of the remote work set-up (e.g., digital equipment, home-based ergonomics, speed and quality of broadband/connectivity, training for both workers and their managers regarding communication and remote management of virtual teams); work organization and management style, (degree of employee autonomy, flexibility, output vs. input/attendance-based management expectations, management's ability to adapt); and the nature of the job/occupation (degree of interdependence of workers' tasks with other tasks, the extent to which teleworkers' tasks can be performed independently, scope for creativity) (Batut, C. and Tabet, Y. 2020; Conseil National du Patronat du Senegal 2021). These are of particular importance to employers who can improve workers' productivity by investing in appropriate remote work setups and trainings.

Remote work has also highlighted shortcomings in current management systems. Data collected by McKinsey & Company shows that business leaders did not believe that their

performance-management systems accurately identified top performers - and most employees did not feel that the performance-management process accurately reflected their contributions (Sneader et al. 2020). The dispersed workforce will force organizations to reconsider how they manage performance and learn how to conceptualize, monitor and appraise output and outcomes based on what is delivered. It is important to note that how these considerations are managed can significantly influence productivity levels. However, a survey of 10,000 workers across seven European countries conducted by Deloitte showed that few respondents expected performance evaluation to become more focused on results and achievements. Learning how to manage a more autonomous and less workplace-centred workforce presents a new and important challenge for organizations. It will involve moving away from old schemes of remuneration and appraisal, which tend to evaluate performance based partly on presence and hours worked. Failing to adapt performance evaluation to the increased autonomy and flexibility of workers could restrict the positive impact that moreflexible work arrangements can have. Indeed, fear of having to work more hours for the same pay was one of the respondents' biggest concerns about the post-COVID-19 working environment, second only to an increase in job insecurity (Deloitte 2020).

Furthermore, rather than at redefining work, many companies are narrowly targeting their efforts at job redesign for efficiency and cost savings, which will only get them so far. From the limited perspective of job redesign, workers represent cost savings rather than the capacity to create new value for the business and the customer. When most companies redesign jobs, they focus on productivity – the same work outputs, only faster and cheaper, with fewer errors. The challenge is not only to redesign jobs but to expand the focus to redefining work, including product strategies and business models (Schwartz 2021). When work is redefined, the workforce's focus shifts from pre-defined and standardized tasks to creating new values around expanded work outcomes (Hagel et al. 2019). Redefining work leads to increasing returns because of its significant potential for long-term value creation (Hagel et al. 2019).

Remote work and the risks of increased inequality and polarization

Government-enforced lockdowns, border closures and supply chain disruptions have highlighted the inequalities of the labour market. The ability to work remotely was mainly a privilege limited to those in the knowledge economy and in high-income jobs. Mandates to remain indoors meant millions of other workers – particularly those employed in low-paid services or in the informal economy – simply saw their jobs vanish as people stayed home and stopped travelling and eating out. Younger workers, female workers, people with lower levels of formal education, and people in service-related sectors (hospitality, gastronomy, tourism, retail) were more likely to experience layoffs and, if they kept their jobs, were often more likely to remain in-person at their jobs (Lambert et al. 2020; Alberio and Tremblay 2021). Furthermore, many businesses, particularly micro and small enterprises, were forced to close down or face an uncertain future.

Data from the World Employment and Social Outlook Trends report indicate that in 2020, an estimated 8.8 per cent of total working hours were lost – the equivalent of the hours worked in one year by 255 million full-time workers. Approximately half of the working-hour losses were due to the reduced hours of those who remained employed, and the remaining half were due to outright employment losses. The successive pandemic waves that have affected countries around the world have also caused working-hour losses to remain high in 2021. Working-hours losses were equivalent to 140 million fulltime jobs in the first quarter of the year and 127 million full-time jobs in the second quarter – indicating that the crisis, as of this writing, is far from over. The two worst-affected regions are Latin America and the Caribbean, and Europe and Central Asia, with estimated working-hour losses in each case exceeding 8 per cent in the first quarter and 6 per cent in the second quarter of 2021 (ILO 2021d).

A survey of 300,000 people in 117 countries shows that, globally, nearly one in three people said they lost their job or business because of the pandemic -- translating into just over 1 billion adults. Worldwide, the percentages of people who lost their jobs or businesses ranged from a high of 64 per cent in the Philippines and Kenya to a low of 3 per cent in Switzerland. India was one of the worst-affected countries in the world in terms of the number of people who lost their livelihoods. It is estimated that 400 million workers, 53 per cent of workers, lost their jobs or businesses in the country. By comparison, in the United States 13 per cent of workers said they lost their job or business, approximately 30 million people (Ray 2021).

▶ Table 2. Countries/areas where at least half of workers lost their jobs or businesses

Country	% Yes, lost job
Philippines	64
Kenya	64
Zimbabwe	62
Zambia	56
Thailand	56
Peru	54
India	53
Honduras	50

Source: Gallup World Poll 2020 (Ray 2021).

More than half of workers (53 per cent) worldwide said they temporarily stopped working at their job or business because of the COVID-19 pandemic, while nearly two billion workers reduced their hours and saw their incomes cut. The number of workers who stopped working temporarily ranged from a high of 79 per cent of workers in Zimbabwe to a low of 6 per cent in Germany (Ray 2021).

The situation reflects what economists call "skill-biased technological change", which shows how new technology increases the demand for higher-skilled workers and increases their wages. These jobs were more easily conducted remotely and less likely to suffer from physical distancing and lockdown measures. Overall, the highest proportion of jobs that can be performed remotely tend to be in management, business, and financial operations, which also report the highest earnings. Looking at industries, over 80 per cent of finance jobs, and over 60 per cent of jobs in information, education, and professional and business services can be conducted remotely. On the other hand, in-person type of services such as waiters, receptionists and cleaners, which also tend to be less well paid, were more affected. According to research by the Oxford Martin School, less than one in ten of those in the bottom half of earners say they can work from home, whereas at the higher end one in two say they can work from home. Without adequate policies to support those workers at the lower end of the wage distribution, the pandemic risks aggravating inequality in labour markets with long-lasting social consequences.

Furthermore, remote work risks further increase of regional polarization. High-income cities usually also have the highest share of jobs that can be done remotely, with income from people in these areas being protected. Due to the high costs and technical challenges of developing digital infrastructure in rural areas, citizens in these regions risk being left behind, exacerbating existing regional inequalities (Oxford Martin School and Citi 2020). In addition,

those in so-called "essential" professions such as agriculture were in some cases subject to the most vulnerable forms of work (Côté et al. 2020).

Box 3. The shecession: negative impacts of the pandemic on women

Women across the world are disproportionately experiencing the negative effects of the pandemic, which will likely have long-term effects on labour markets. The term "shecession" refers to an economic downturn where job and income losses are disproportionately affecting women more than men (Gupta 2020).⁵

Unlike in other recent recessions, the COVID-19 pandemic created larger job losses among women than among men (Alon et al. 2020). Some calculations estimate that, in this crisis, women's jobs have been 1.8 times more vulnerable than men's jobs. According to ILO data, women's employment declined by 5 per cent in 2020, compared with 3.9 per cent for men. Furthermore, 90 per cent of women who lost their jobs in 2020 exited the labour force, with significant long-term consequences to their livelihoods (ILO 2021d). Overall, women make up 39 per cent of global employment but account for 54 per cent of overall job losses (Madgavkar et al. 2020). In the United States, women's unemployment had risen by 2.9 percentage points more than men's unemployment (Alon et al. 2020). In India, women represented 20 per cent of the workforce before the pandemic, with recent unemployment surveys showing they account for more than 23 per cent of the overall job losses (Madgavka et al. 2020). The pandemic has disproportionately affected women due to the burden of care responsibilities and because jobs in female-dominated sectors were more likely to be lost (Nagaraj 2021). Given their greater share of not only childcare, but also care for aging parents, women often have less autonomy, and the question remains how to reconcile work demands with family obligations (Alberio and Tremblay 2021). Women represent 54 per cent of the global workforce in accommodation and food service – one of the worst-affected sectors. Figures show that women hold 43 per cent of jobs in retail and wholesale trade and 46 per cent in other services (Madgavkar et al. 2020). Women are also concerned about the risk of reduced opportunities and a lack of visibility and advice from co-workers due to remote work (Policy Department for Economic, Scientific and Quality of Life Policies 2021). Remote work, moreover, poses challenges in terms of perception bias. Reports cite that managers often tend to better reward in-office workers. The data also shows that men are more likely to return to the workplace than are women. Therefore, if men are more likely to work from the office, and managers retain a bias towards in-office workers, managers are likely to over-reward male employees at the expense of female employees, worsening the gender-wage gap at a time when the pandemic has already had a disproportionately harmful impact on women (Kropp 2021). Existing gender inequalities worsened during the pandemic, with the closure of schools and childcare facilities placing a disproportionate share of the care burden on women's shoulders (ILO 2021c). According to estimates, women do an average of 75 per cent of the world's total unpaid-care work, which includes childcare, elder care, cooking, and cleaning. In certain regions the share is even higher, with women in South Asia and the Middle East and North Africa (MENA) doing as much as 80 to 90 per cent of the work (ILO 2018). Research shows there is a negative correlation between the share of women in unpaid-care work and female labour-force participation (Madgavkar 2020).

(Box 3 continued on page 14)

⁵ The term was coined by C. Nicole Mason, President and Chief Executive of the Institute for Women's Policy Research (IWPR), a think tank.

(Box 3 continued from page 13)

Challenges related to childcare have also been among the biggest impediments to the availability and productivity of essential workers during the pandemic. Childcare is therefore a major focus area for both employers and local authorities. To help alleviate the situation, some companies and local governments started offering childcare subsidies or reimbursing workers for virtual babysitting services. A few governments also granted emergency licenses for day-care facilities. The licenses allow day-care centres, subject to specific safety measures, to care for the children of essential workers during the pandemic (McKinsey 2021c). However, significant issues remain in terms of provision and access to quality childcare services across economies.

The pandemic has also affected women-owned business, particularly in developing economies, restricting access to financial capital and digital devices, as these often had to be shared with children attending online schooling. Access to capital and to tools such as mobile banking is related to the presence of women in the labour market (Madgavkar et al. 2020). In Kenya, businesses with a large proportion of female personnel have been disproportionally affected, and they are 18 per cent less likely to be open than firms with lower female employment (World Bank 2020).

The situation is likely to lead to long-term consequences for women. One of the major impacts will be on the future earning possibilities of women who cannot work, and an increased gender pay gap. Research from previous recessions shows that workers who lose their jobs during an economic downturn tend to suffer from persistent earning losses. In previous recessions, women have also been able to act as a "shock absorber" at the family level – if the husband lost his job, the wife was often able to keep working or even increase her work, helping stabilize the family income. This often helped lessen the impact on income and consumption. During this recession, as women lose their ability to absorb the economic shock, the situation is likely to lead to increased vulnerability for women and their families, further reducing opportunities available to them (Alon et al. 2020).

How COVID-19 is redefining the nature and content of jobs

The pandemic has affected the livelihoods of millions of people around the world. The issue is not only that millions of people lost their jobs – the kinds of jobs emerging from the crisis are different from those that were lost. Jobs that were retained throughout the pandemic are changing in nature. Low-skill, low-income people have been most affected by the situation, raising concerns about social and economic inequality. At the same time, SMEs have also been disproportionally affected and remain vulnerable to the disruptions ahead.

A panel survey of chief executive officers (CEOs) conducted by PwC⁶ reports that respondents believed shifts towards remote collaboration, automation, low-density workplaces, and supply chain safety would have a lasting impact. More than half of respondents (54 per cent) believed the trend away from traditional employment and towards the gig economy is here to stay (PwC 2020). McKinsey Global Institute conducted another survey of 800 executives, which showed similar results, with 70 per cent of executives saying they expect to use more temporary workers and contractors on site than they did before the pandemic. Uncertainty about economic recovery and cost pressures were some of the main reasons cited for

⁶ PwC's CEO Panel Survey, conducted in June and July of 2020, reflected the views of 699 CEOs on emerging business models and key trends resulting from the COVID-19 pandemic. The surveyed CEOs were leaders of private businesses and public companies, of small firms and US\$1bn-plus enterprises, and represented a diverse cross section of industries, countries and regions.

Half of the respondents were based in the United States, and the rest worked in Australia, Canada, China, France, Germany, India, Spain, and the United Kingdom. The respondents represented businesses of different sizes, with a quarter from companies with less than \$1 billion in revenues, and the remainder split between companies with revenues of US\$1 billion to US\$10 billion and those with revenues over US\$10 billion.

increasing the number of contractors (Lund et al. 2020). The reported trend is at odds with what some workers want and need (flexibility with job security), especially amid a global health emergency and economic recession (PwC 2020).

This preference to shift towards temporary workers has also been propelled by the growth of the e-commerce and delivery economy, which has grown two to five times faster than pre-pandemic levels, and which shows no signs of abating (Lund et al. 2021). E-commerce and other virtual transactions are booming. In China, e-commerce, delivery, and social media jobs grew by more than 5.1 million during the first half of 2020, propelling growth in delivery, transportation and warehouse jobs (Lund et al. 2021). The trend is particularly strong in the hospitality, food services, and retail sectors, accelerating the decline of low-wage jobs in brick-and-mortar stores and restaurants, while increasing jobs in distribution and last-mile delivery centres (Lund et al. 2021). These trends are in line with predictions suggesting that more than 100 million workers in eight countries may need to switch occupations by 2030, a 12 per cent increase from before the start of the pandemic and as much as 25 per cent more than in advanced economies. Workers without a college degree, women, ethnic minorities and young people may be most affected. According to McKinsey Global Institute, by 2030 the share of employment in low-wage occupations may decline for the first time, even as highwage occupations in healthcare and the science, technology, engineering and mathematics (STEM) professions continue to expand (Lund et al. 2021).

For many CEOs, the need to continue to serve clients and to minimize disruption to operations amid workforce and resource constraints has reinforced the value of digitalization and automation (PwC 2020). The pandemic accelerated the digital transformation of businesses, which were forced to implement technological changes in weeks in what in other circumstances would have taken months or years. A survey of 800 executives from around the world reports 85 per cent of businesses somewhat or greatly accelerated the implementation of technologies that allowed for employee interaction and collaboration (for example videoconferencing and file sharing). Approximately half of those surveyed reported increased digitization of customer channels (ecommerce, mobile apps, or chatbots) and 35 per cent mentioned further digitizing their supply chains, for example connecting their suppliers with digital platforms in supply chain management (Lund et al. 2020).

The implementation of automation technology – including robotics, autonomous vehicles and artificial intelligence (AI) supported software - also increased during the pandemic. Companies have turned to automation and AI to help cope with the disruptions created by the pandemic, and will likely accelerate adoption in the future. The increased interest in automation not only reflects the cost pressures of the economic slowdown but also the technology's ability to facilitate contactless interaction at a time of social distancing measures. Implementation of automation included the use of robots in warehouses to help meet online orders or to clean retail space, self-service customer kiosks, and the use of AI-driven chatbots and customer service tools. Research on the topic found that 67 per cent of consumers were using AIpowered conversational technology for customer service in 2020, up from 46 per cent in 2019. Furthermore, the global chatbot market is predicted to grow from US\$2.9 billion in 2020 to US\$10.5 billion by 2026, at a compound annual growth rate (CAGR) of 23.5 per cent during the forecast period. Some of the factors contributing to the growth of the chatbot market include a growing need for 24/7 customer support at a lower operational cost, increased focus on customer engagement through various channels, and advancements in technology coupled with rising customer demand for self-service operations, thus offering a competitive advantage to businesses (Markets and Markets 2021). Almost half of executives reported a moderately accelerated adoption of automation, and approximately 20 per cent reported significantly increasing automation. When analysed by country, the United States and India stand out, with 83 per cent of executives surveyed in the United States and 70 per cent of executives surveyed in India reporting faster adoption of automation (Lund et al. 2020).

Executives across sectors have reported the increased use of automation, but the uptake has been greater for logistics and distribution companies and the financial and technological sector. Eighty-eight per cent of finance and insurance executives and 76 per cent of information and technology executives reported increased implementation of automation and AI since the start of the pandemic (Lund et al. 2020). These sectors were already leading the way in terms of digitization and automation, with the pandemic further showcasing such benefits of the technology as digital payment and digital banking. In this regard, perhaps one of the key takeaways is that companies have been able to adopt new technologies much faster than previously thought likely.

Overall, the adoption and spread of automation has increased. But it is important to note that the degree of technology adoption varies between regions.

In Latin America, for example, even before the pandemic adoption of new technologies had been relatively slower due to the abundance of low-skilled labour and high level of informality. In countries such as Bolivia, Nicaragua, Paraguay, and Peru, two thirds of workers are informal. Employment in the region is highly concentrated in high-contact work that cannot be undertaken remotely, a jobs sector that was hardest hit during the pandemic. This helps explain why the region has seen higher rates of job losses than other regions. In developed economies, automation and digitization are expected to create new jobs in high-skill occupations and decrease demand in less-skilled service work such as hospitality, food and janitorial services. In Latin America, the situation is likely to look different due to the same factors that already made the region more vulnerable to job losses. Instead, the pandemic will likely result in wage reductions and an increase in the number of low-skilled workers seeking jobs. In turn, this situation is expected to further reduce incentives for companies to invest in automation (Escobari and Yeyati 2020). Regional and national differences are important when designing policies aimed at addressing some of the challenges that the pandemic has imposed on labour markets.

A similar case could be made for Asian countries with high levels of informality and migration.

COVID-19 has significantly changed the nature of many jobs, with employers trying to better adapt and benefit from these changes. Increases in digitization and automation, a shift towards temporary workers, and a hybrid workforce have the potential to improve productivity, lower costs and enhance resilience. At the same time, concerns about social and economic inequality persist, particularly among low-skilled workers. The question is how to ensure that companies of all sizes and across geographies benefit from these changes while preparing workers for these shifts, ensuring a prosperous future for all.

Box 4. Effects of the pandemic on micro, small and medium-sized enterprises (MSMEs)

Due to the pandemic, many businesses across the world faced periods of closure. Unfortunately, not all businesses will reopen. While firms of all sizes were affected by lockdowns and mandates to stay home, smaller firms have faced disproportionately severe impacts

MSMEs – one of the largest generators of employment – tend to be more prevalent in sectors worst affected by the crisis.

The sector in which a firm operates matters: many businesses in the tourism, hospitality, and transportation sectors were adversely affected by the crisis and many did not survive. Beyond the nature of the industry, company size also matters. According to World Bank Enterprise Surveys conducted in 13 countries, SMEs were 8 per cent more likely than larger firms to have temporarily shut down due to COVID-19, across

(Box 4 continued from page 16)

all countries and sectors in their sample (Adian et al. 2020). Research in Asia found small firms, female-led firms, and those in vulnerable sectors suffered higher rates of closures (Brucal et al. 2021). In Latin America, estimates showed that more than 2.7 million formal businesses would close, including 2.6 million microenterprises (ECLAC 2020). ILO ACT/EMP research has shown similar results with the share of enterprises considering closing temporarily or permanently being significantly higher for small and microenterprises (6 per cent for small enterprises and 12 per cent for microenterprises) when compared to medium-sized businesses and large enterprises, 3 per cent and 2 per cent, respectively (ILO 2020d).

Smaller firms were more susceptible to supply and demand shocks and uncertainty. They were also more likely to face financial constraints than larger firms, even in advanced economies. In the United States, 50 per cent of small businesses had less than 15 days' operating costs available in buffer cash, and even healthy SMEs had less that two months of cash reserves (Adian et al. 2020). The OECD also found a risk of otherwise solvent SMEs going bankrupt while pandemic containment measures were in force (OECD 2020c). The situation was even more dire in non-OECD regions. Research conducted by the World Bank found that the bottom 10th percentile of firms in Côte d'Ivoire could cover only 14 days of liquidity, while the top 10th percentile could cover as much as 112 days of costs. Likewise, in Kenya, Senegal, and Tanzania the bottom 10th percentile of firms could cover zero days, while the top 10th percentile of the firms could cover about a year of costs (Adian et al. 2020).

Despite the large amount of resources designated for support to businesses, these did not seem to be reaching SMEs. A survey of more than 120,000 companies in 60 countries reported that only one in ten companies surveyed in low-income economies had received some sort of public support, compared with half of all businesses in high-income countries (World Bank 2021b). There were also substantial disparities by firm size, with the probability of accessing policy support ranging from 25 per cent for micro firms to 43 per cent for large firms (World Bank 2021b). This meant that the businesses most affected by the pandemic – particularly small firms in poorer countries – were also those least likely to receive government support. Furthermore, loan support did not appear to be effective in alleviating SMEs' cash constraints or encouraging the reopening of small businesses. This could have been due to difficulties in accessing policy-oriented loans and misallocation of credit (Chen et al. 2020). Making more information available concerning support programmes and targeting its dissemination to those firms that have been affected can help alleviate the situation.

SMEs continue to be an important source of employment and economic prosperity for millions of communities around the world. Supporting their recovery, and introducing changes to help address some of the structural barriers that SMEs face, could help SMEs become an engine of sustained economic recovery.

Skills building: a top priority for employers

Skills challenges, already a prominent issue before the pandemic, continue to be a top priority for businesses. A global survey conducted before the pandemic reported that 87 per cent of executives were dealing with a skills gap in the workforce or were expecting to do so in a few years (McKinsey 2021a). The pandemic rapidly accelerated businesses' need for new workforce skills. A PwC Global CEO Survey conducted in 2020 found that three quarters of all respondents said the challenge of finding the right skills was a threat to their businesses (PwC 2020).

The abrupt transition to remote work and the rapid increase of digitization has translated into new demands for workers, and thus the need for different skills to support how work is done as well as for new business priorities. Workers across industries were forced to quickly adapt to rapidly changing conditions, while companies had to quickly learn how to best match workers to new roles and activities. The situation also meant that managers had to learn how to lead teams virtually while maintaining cohesion.

Rapid levels of digitization and automation, mostly aiming to reduce physical interactions, changed the way in which many of these jobs were done. Within the United Kingdom healthcare system, the sector saw years of digital changes happen in a matter of weeks. In 2019, fewer than 1 per cent of doctors' appointments were conducted remotely (either via phone or video), with the large majority of them being conducted in person. During the pandemic, doctors conducted 100 per cent of initial consultations remotely, with only 7 per cent of those consultations proceeding to face-to-face consultations. Clinicians had to quickly adapt to the new challenge and learn how to effectively and safely diagnose while working remotely (Agrawal et al. 2020).

As workers return to the workplace, the pandemic has highlighted the need for organizations to reskill and up-skill the workforce to deliver results in a post-pandemic era (Agrawal et al. 2020). According to the World Economic Forum (WEF) *Future of Jobs Report 2020*, companies estimated that, by 2024, around 40 per cent of workers would require up to six months of reskilling, and 94 per cent of business leaders reported they expect employees to pick up new skills on the job – a sharp uptick from 65 per cent in 2018 (WEF 2020). A McKinsey survey also found that most companies were focusing on reskilling rather than hiring, contracting or redeploying employees. Respondents reported they found skill building to be the best way to close skill gaps, and that they had doubled down on their efforts to reskill or up-skill employees since the pandemic began. In fact, 69 per cent of respondents stated that their organizations did more skill building than prior to the pandemic (McKinsey 2021b).

Executives are also redeploying talent to new roles as a strategy to combat skill shortages. Forty-six per cent of respondents mentioned an increase in redeployment – which also requires skill building – as a key intervention for closing skill gaps. Overall, more than half of respondents said their companies would increase spending on learning and skills building over the following year (McKinsey 2021b).

The pandemic has also led to significant changes in industries and consumer habits that will require large-scale efforts to reskill workers. As consumers moved towards e-commerce, companies needed to quickly identify, train and on-board workers to meet demand. In the United States, sectors such as groceries sales hired two to three million additional workers (Agrawal et al. 2020). The disruption of global supply chains means that sourcing and production is moving closer to the end consumer. This is expected to trigger a restructuring of supply chains and a shift in skills demands (McKinsey 2021a).

Many employers are devising hybrid remote working strategies for the long term. Doing so will require careful analysis to determine which activities can be done remotely without a loss of productivity and devising an intentional approach for teams of workers when they are remote and when they are in the office together. Other possible measures include changes in hiring practices to put the focus on skills rather than academic degrees. This can expand the pool of available candidates and increase diversity for companies while helping to ease the broad workforce transitions that will play out across all countries (Lund et al. 2021). Other companies might instead expand their use of contingent and contract hiring or expand their partnerships with organizations to "rent" employees for a short period of time to meet the skill needs that they are facing (Kropp 2021). Digital platforms have played an important role in helping meet skill demands. Meanwhile, remote working for all employees places remote and online freelancers on a more equal footing with full-time employees (Sneader et al. 2020).

Remote work means companies can now access global talent pools, easing some critical skill demands (Agrawal et al. 2020).

Employers are also finding that sought-after new skill sets are in short supply, such as digital sales skills in Business-to-Business (B2B) field sales forces, productivity-based management techniques at a time when productivity is tougher to measure, and others. Digital skills remain in short supply, with basic digital skills becoming a top priority for employers since the pandemic began.

Top skills that employers anticipate will continue to be in demand include critical thinking and analysis as well as problem-solving, and self-management skills such as active learning, resilience, stress tolerance, and flexibility (WEF 2020). Companies have also reported an increased focus on developing social and emotional skills (such as empathy, adaptability, and leadership) as well as advanced cognitive skills (such as project management and quantitative skills) (McKinley 2021b). Consumer banks, for example, had to train employees to develop empathy as they helped clients used new digital tools and services (Agrawal et al. 2020).

The pandemic disrupted not only the type of skills employers needed, but also the ways in which they taught those skills to employees. The pandemic accelerated the adoption and use of digital approaches to learning, providing organizations with an opportunity to scale efforts in cost-effective ways (Agrawal et al. 2020).

Box 5. Impact of the pandemic on youth employment

Globally, the pandemic has impacted young workers more than other age groups, with 178 million young workers around the world working in hard-hit sectors when the pandemic started (ILO 2021a, 8th edition). The ILO estimates that one in six youth have ceased work because of the pandemic (UN DESA 2020). Globally, youth employment dropped by 8.7 per cent, compared with an adult employment decline of 3.7 per cent. The figures illustrate the severe consequences the pandemic has had for young people (Fleming 2021).

Young people are disproportionately employed in diverse forms of work such as temporary or part-time work, which increases their risk of losing income and work (OECD 2020b). Globally, 77 per cent of young workers are informal workers, with youth informal employment reaching 93.4 per cent in Africa (ILO 2020a). Industries that have been the hardest hit by the pandemic, such as hospitality and tourism, transportation, and food services employ an outsized proportion of young workers, especially in developing economies. Mid-size and small businesses also employ a higher proportion of young workers, and have experienced greater challenges during the pandemic. Youth, especially females, are also likely to work informally. Informal employment and/or employment by a small business means that young people are often unable to benefit from relief programmes and other safety net resources.

Past economic crises have also shown that young people tend to suffer the most, often being both the last to be hired and the first to be dismissed. Other impacts have included the loss of many work-based and apprenticeship opportunities, which are important to young people to help smooth the school-to-work transition. The pandemic has also significantly reduced young people's access to decent work, which can lead in the long term to more consequential effects, including lower pay, further unemployment, and declining overall health levels (McQuaid 2017). Research conducted on the topic shows that, for young workers, one month of unemployment at age 18–20 years could cause a permanent income loss of 2 per cent in the future (De Fraja et al. 2017). Long-term unemployment also leads to overall poorer job prospects, more limited career development, and lower earnings.

(Box 5 continued from page 19)

All this is likely to exacerbate hurdles and difficulties in the labour market that youth already encounter. The world's youth are experiencing their second major financial crisis in a decade, which – compounded with environmental degradation, rising inequality, and changes in the nature of work – poses serious challenges to their education, economic prospects and mental health. Young people are currently more vulnerable to unemployment, career instability and limited promotion opportunities. This can translate to reduced access to social safety benefits, job protection, and re-skilling opportunities.

More importantly, limiting employment opportunities for young people also compromises their ability to build economic capital and develop social mobility (WEF 2021). This, combined with limited access to financial assets, increases the likelihood of youth sinking into poverty upon any sudden stop or decline in income, erasing decades of progress against poverty and increasing the risk that the situation will cascade further down to their children.

Workspace

How the pandemic is reconfiguring the workspace

What the workspace represents and how it should be defined remains a central question. An office is not just a location and part of a corporate strategy; it is also an important factor in attracting and retaining talent (Florida 2020). As restrictions loosen and offices re-open, some organizations are planning aggressive optimization of office space. While for some companies there is a strong appetite for a hybrid and flexible workforce, the configuration of this highly depends on the company, the sector, and the context. At the same time, the transition to a hybrid workforce presents important challenges to companies. One issue is deciding the role of the office itself, which is seen as the traditional centre for creating a company culture and a sense of belonging. Companies will have to make decisions on other issues ranging from real estate (Do we need this building, office, or floor?) to workplace design (How much space between desks? Are pantries safe?) to the role of facilities management (Do we need more facilities management staff? Does it work?). Returning to the office is not simply about opening a door. It is rather part of a larger, systematic reconsideration of what exactly the office brings to the organization (Lund et al. 2021).

As workers return to the workspace, organizations need to ensure that safety regulations are in place. A 2021 global survey showed that in the short term, 70 per cent of corporate-centre executives planned to reconfigure office space, versus 54 per cent in business units. Additionally, over the mid-term, 30 per cent of corporate centres wanted to terminate existing leases early, compared with 14 per cent of business units. As they looked to the longer term, 55 per cent of corporate centres planned to shift towards fewer and lower-cost locations, a step reported among only 28 per cent of business unit respondents (Bernauer et al. 2021). Some reports predicted a likely outcome of the reconfiguration was a more distributed "hub and spoke system" of corporate location, with major headquarters facilities in urban centres surrounded by satellite complexes to service remote workers (Florida 2020).

Workplaces will also need to be redesigned with a greater emphasis on physical distancing and crowd-control measures. This is likely to be an ongoing process, since regulations change over time. Businesses with operations in multiple countries will face the additional challenge of complying with multiple sets of regulations. McKinsey created a framework of six types of work environments based on the proximity of exposure (how closely and how long people interact with each other in person) and the extent of exposure (how many other people an individual tends to encounter in a typical workday), and developed a series of actions for businesses to consider. They acknowledged that some businesses might operate in more than one of these work environments. For instance, a retail chain has stores but might also have warehouses and offer delivery services. Businesses must adjust safety measures to fit the specific environments in which they operate (Rivera et al. 2020). Some of these actions include at-scale testing, symptom assessment, temperature checks, cleaning protocols, staggered entry and exit, provision of protective equipment, enhanced hygiene protocols, workspace redesign, working in consistent teams, contact tracing, and policies for returning to work (McKinsey 2021c). McKinsey also highlighted the importance of airflow considerations and provided guidance on how to design and implement contactless experiences for customers and employees by industry (McKinsey 2020). Again, the actions to be taken will depend greatly on the company, the space, the sector and the overall context in which they operate.

This topic also highlights the importance for employers of workforce health and safety. When asked about hiring more people for health and safety roles, 83 per cent of executives said they would do so, with 73 per cent saying they expect to hire more people to manage onsite physical distancing and sanitation. As workplaces continue their redesign companies are more likely to add new roles in facilities management to handle such issues as temperature stations and ventilation, and to manage people's flow. Increased space between workstations

and designated work zones might also require ushers to help ensure compliance with workplace rules and regulations (Lund et al. 2020). In addition, this is an area where automation can help businesses ensure the health and safety of their staff. Robotics are being increasingly deployed for cleaning floors, windows and ducts, with some robots also able to disinfect surfaces.

The increased use of automated services in the workspace will also require workers with skills in automation. Several big companies have already started re-training employees at risk of losing jobs in new skills that complement automation. This helps ensure companies have access to the skills they need while also making considerable savings, since retraining is usually less costly than laying people off (Lund et al. 2020).

Emerging vaccination policies: issues and challenges for employers

The topic highlights the importance for employers of workforce health and safety. Vaccinations, now being rolled out across the world at different paces, offer employers the opportunity to bring workers back to the workplace with greater protection and, ultimately, to reassess physical distancing and other safety measures. However, such policies entail many logistical and ethical challenges, and raise a number of new issues that employers need to assess with care.

With vaccination programmes being implemented, questions arise about the role of businesses in promoting vaccination uptake among their employees. Employers remain at the forefront of the pandemic response, and the most recent developments in terms of vaccination programmes have caught them in the middle of the debate between calls to require vaccination in the workplace and demands to respect privacy and leave the decision to the individual. Furthermore, vaccine inequity in developing economies and a raise in vaccine hesitancy complicate the scenario even more (IOE 2021a).

Discussions of the role of businesses in vaccination programmes have largely focused on developed economies, where such programmes are widely available. Unfortunately, vaccine availability in developing economies continues to be limited and, while 48.7 per cent of the world population has received at least one dose of a COVID-19 vaccine, only 3.1 per cent of people in low-income countries have done so (Our World in Data 2021).

Regional differences in vaccination access are staggering. South America, which has 5 per cent of the global population, accounts for a quarter of all COVID-19 deaths (Malta et al. 2021). According to the Pan American Health Organization (PAHO), 75 per cent of the population in Latin American and the Caribbean are yet to be fully vaccinated. While vaccination coverage rates in the low double digits in some countries, in some Central American countries coverage is still in the single digits. In the Caribbean, Puerto Rico and Saint Lucia have reported high rates of new infections, while Jamaica is experiencing its highest-ever COVID-19 death rate (PAHO 2021). In Africa, experts forecast that most countries will not achieve widespread vaccination until 2023, while the United States is expected to achieve the same goal this year. According to data at the time of this writing, fewer than 2 per cent of Africa's more than 1 billion people have been fully vaccinated (Brookings 2021a). The continent continues to face a series of challenges including supply, costs, poor infrastructure and lack of storage facilities, all of which further complicate the situation (Brookings 2021b).

Employers have taken various approaches to dealing with the topic, with profound differences across regions. While in the United States employers have the ability to consider mandatory vaccination to mitigate workplace risk (subject to exceptions), in most of Asia and South America there are currently no legal provisions for mandatory vaccination. In Europe, with the exception of France, the United Kingdom, and Italy (see below), mandatory vaccination is unlikely to be considered a reasonable health and safety policy (IOE 2021a). However, it is

important to note that there is no international labour standard that directly addresses the question of mandatory vaccinations as a condition for work. The legal basis for such measures still largely depends on national regulatory frameworks.

A recent survey of employers in the United States showed that 14 per cent of 372 respondents required (or planned to require) all employees returning to the workplace to be vaccinated, with another 15 per cent requiring vaccinations for certain job functions such as business travel or customer contact. This represented a stark increase from a survey conducted three months earlier, where only 3 per cent of respondents planned to require employees to be vaccinated and only 8 per cent were even considering it (Umland 2021). Tyson Foods, which employs 120,000 people in their slaughterhouses and poultry plants across the United States, told employees they would need to be vaccinated by 1 November 2021 as "a condition of employment". Similarly, Microsoft, which employs approximately 100,000 people in the United States, has said it would require proof of vaccination from all employees, vendors and guests for access its offices. Disney's mandate includes all those salaried and non-union hourly workers who work on site (Corkery et al. 2021).

While vaccine mandates are legal in the United States, they raise legal, administrative and compliance questions. They also risk alienating workers, a special concern for companies due to prevailing labour shortages. Although employers have tried communication campaigns, cash incentives and providing time off to encourage workers to get vaccinated, these policies have failed to boost vaccination rates significantly. According to Mercer, 10 per cent of employer survey respondents said they offered employees cash or a gift card as an incentive to get vaccinated; 16 per cent offered additional time off (Umland 2021).

With the Delta variant increasing the number of cases and hospitalizations, companies are starting to think about alternatives to vaccine mandates. Health coverage surcharges are one alternative. Delta Airlines became the first large US employer to adopt this policy. The company recently announced that, beginning in November 2021, employees who had not been vaccinated would have to pay an extra US\$200 per month to remain on the company's health plan. While 75 per cent of Delta's employees and 80 per cent of their pilots were fully vaccinated, data from the company showed that employees who had recently been hospitalized with COVID-19 were not yet fully vaccinated, with hospitalizations costing the company roughly US\$50,000. Similar to most large employers in the US, Delta insures its own workers and pays for health costs directly (Corkery et al. 2021). The logic behind a health coverage surcharge is similar to the tobacco-use surcharge. If an unvaccinated employee contracts COVID-19, the claim costs are higher, which have an impact on the company's bottom line, and can also mean higher future contributions for other employees. Beyond workplace safety, there are wider public health benefits of greater vaccination rates. The surcharge is intended to encourage employees to change their behaviour voluntarily. However, questions remain as to whether the surcharge will lead to increased vaccination rates, and what their effect will be on lower-wage workers and on those who waive the coverage (Symons 2021).

Other employers, among them Walmart, Lyft, and Uber, have decided to take a less stringent approach, requiring vaccines for office workers but not for frontline workers. This draws a further division between white-collar workers and those with direct client interaction, who have overall proven more reluctant to get vaccinated (Corkery et al. 2021).

Despite the push for employers to get workers vaccinated, most United States businesses, including some of the largest private sector employers, as of this writing had not issued mandates. Companies which are already experiencing a shortage of workers, worry that immunization mandates would make the shortage more acute. Worker unions in the United States have been reluctant to support vaccination mandates, saying they are concerned about potential health side effects and interference in what is seen as a personal health choice (Corkery et al. 2021).

Worksite safety remains a key concern for employers, one that becomes even more complex when dealing with a mixed population of unvaccinated and vaccinated employees. In these circumstances, some employees might have concerns about coming into daily contact with unvaccinated co-workers, while others worry about being judged for their choice or inability to receive the vaccine. As some workplaces are moving to increase restrictions for unvaccinated employees (such as being tested weekly at their own expense or wearing a mask at all times), the monitoring burden falls on the employers. A survey conducted by Mercer also showed that, while most employers would require masks at the worksite, 36 per cent would only require unvaccinated people to be masked. Approximately half of respondents, 54 per cent, said they still had physical distancing measures in place, and 35 per cent were still limiting the number of employees on site (Umland 2021).

As United States employers wrestle with strategies on how to restore operations and bring workers back to the workplace, they face the challenges of dealing with conflicting goals: keeping employees safe; retaining staff during a high turnover period; and showing customers they take the pandemic seriously (Corkery et al. 2021).

Box 6. Business Partners to CONVINCE: vaccination for a healthy planet

The private sector, with its extensive reach and the high level of trust placed in employers by their employees, can play a pivotal role in addressing vaccine hesitancy. Based on this belief, the United States Council for International Business (USCIB), the USCIB Foundation, and Business Partners for Sustainable Development (BPSD) have launched Business Partners to CONVINCE, a global communication and education initiative to promote COVID-19 vaccine acceptance among private sector employers and employees. Business Partners to CONVINCE (COVID-19 New Vaccine Information, Communication, and Engagement) seeks to build a global movement of employers of every size to promote vaccine uptake among their workers by addressing vaccine hesitancy from a position of facts, trust and the ability to address potential barriers with practical actions. The initiative is the private sector arm of the global, multi-sector CONVINCE initiative that advances vaccine literacy and promotes vaccine acceptance (Business Partners to CONVINCE 2021).

In Europe, the situation has been rather different. Most mandates mainly target health and home care workers. In March 2021, Italian authorities introduced a requirement that all health workers, including pharmacists, should be vaccinated before treating patients. Workers refusing to get vaccinated face suspension without pay for the rest of the year. The policy was introduced by the Italian Government after the discovery of hospital infections linked to unvaccinated staff, and aimed to curb the anti-vaccination movement (Stokel-Walker 2021). Italy has also become the first country in Europe to require all employees to prove they have been vaccinated against COVID-19, have recovered from the infection, or have recently tested negative for the virus. Any worker who fails to present a valid COVID-19 health certificate will be suspended without pay after five days, but cannot be fired. Those who are unvaccinated could also be fined up to €1,500 (Euronews 2021). In the United Kingdom, the Government has made COVID-19 vaccination mandatory for nursing and personal care staff in care homes starting in November 2021, and is considering extending the policy to those working in hospitals (CIPD 2021). France and Greece have introduced similar mandates for healthcare workers, care home employees, and those who work with vulnerable and frail patients (Wise 2021). However, managing these mandates requires tactful strategies to avoid potential backlash. Related research shows that pressure from

bosses had a negative effect on the likelihood of healthcare workers getting vaccinated (Bell et al. 2021).

Thanks to the low levels of vaccine hesitancy in the country, a large majority of United Kingdom employers have managed to avoid imposing vaccine requirements. Many companies have decided not to get involved in what they see as a matter of personal choice. Others, in light of the fact that office workers have yet to return to the workplace, have delayed implementing policies. A few companies, among them Pimlico Plumbers, introduced a "no-jab, no-job" policy; Bloomsbury Publishing told their United Kingdom staff they needed to be double-jabbed before being able to return to the office. However, companies looking to introduce such policies will have to carefully consider if they are making a reasonable request or might face accusations of discrimination and unfair dismissal (*Guardian* 2021).

Unlike in the United States, employers in Europe cannot make vaccination a condition of employment, and General Data Protection Regulation (GDPR) privacy laws limit employers' access to personal information related to vaccination. However, as the pandemic, with its multiple variants, continues to wreak havoc across countries, employers are getting more flexibility in requesting proof of vaccination or COVID-19 test results, especially among those in high-risk sectors. Increasingly, employers in European Union countries and the United Kingdom are encouraging employees to get vaccinated and help create awareness of the impact of immunization on workplace safety (Jones Day 2021).

Canada has a history of potentially relevant influenza-related case law, with individual healthcare employees and healthcare personnel unions having brought suits against entities such as hospitals who have mandated vaccines. The COVID-19 situation does not make for a perfect parallel, given that transmission rates and mechanisms are different, masks have not played a major role in previous flu-related employer mandates, and the flu shot must be administered every year, whereas to date there has been almost no discussion or administration of COVID-19 booster vaccines on any prescribed schedule. However, under the Canadian Charter of Rights and Freedoms, individual employers have much more freedom than government entities to mandate that their employees wear masks or get vaccinated. They are not entirely free, though, to enact and enforce mandates at will, as previous cases have found that employers cannot exercise unreasonable, unilateral force and disregard employees' right to privacy (Flood et al. 2021).

Other countries are going further. Turkmenistan became the first country to legally require all residents over the age of 18 years to be vaccinated (Reuters 2021). The Kingdom of Saudi Arabia has implemented a no jab, no job policy, with the Government stipulating that employees in public, private and non-profit sectors must be inoculated before returning to work. In the Russia, after a spike in cases, the mayor of Moscow mandated that people in public-facing jobs were to get vaccinated. As part of the mandate, businesses were monitored to ensure, at the risk of being fined, that they complied (Stokel-Walker 2021).

In the Asia-Pacific region, many countries struggled, at first, to get their vaccination programmes up and running. At the time of this writing, however, they were speeding ahead, making significant progress in terms of vaccination rates and hoping to avoid further lockdowns and restrictions. According to reports, countries such as Japan, Korea, and Malaysia had even pulled ahead of the United States in the number of vaccine doses administered per 100 people (Wee et al. 2021). In South-East Asia, on the other hand, progress in terms of vaccination had been slow and unequal, affecting economic growth. The Asian Development Bank (ADB), in part over vaccination issues, recently lowered its 2021 growth outlook for developing Asia to 7.2 per cent from 7.3 per cent (ADB 2021). However, unlike in other regions, vaccine hesitancy does not seem to be an issue in most Asian countries, with citizens trusting governments to make the right decision about vaccines.

Box 7. Business for South Africa

Business for South Africa (B4SA) is an alliance of South African volunteers working with the South African Government and other social partners, as well as various stakeholders, to mobilize business resources and capacity to combat the COVID-19 pandemic. Aiming to return to a fully functional economy, reducing and where possible eliminating the impacts of the pandemic, B4SA is focused on supporting the government-led national vaccine programme. To this end, B4SA has established numerous working groups that complement government workstreams with the primary objective of ensuring the efficient rollout of vaccines to the people of South Africa. This is being accomplished by providing additional capacity to jointly solve problems and remove bottlenecks that obstruct the vaccine rollout. B4SA also communicates, in a timely and transparent manner, relevant information and critical decisions to its constituencies (B4SA 2021).

Many countries with a Muslim majority population as well as Muslim populations in countries with high vaccination rates overall had general lower immunization rates. This has been widely credited to disinformation about the components of the vaccine (including whether they are *halal* or not⁸) as well as mistrust of political systems. In the Middle East and North Africa (MENA), only 12 per cent of the total population has received at least one dose of the vaccine. While wealthier countries such as the United Arab Emirates, Qatar, and Bahrain have led the inoculation efforts, vaccination outcomes in the region's low- and middle-income countries, and particularly those mired in conflict, lag well behind (Dyer et al. 2021). To tackle the issue, the Indonesian government has made vaccination mandatory, publicly declared approved vaccines halal and engaged with social media influencers to change public opinion. The issue of trust is a particular difficult one to tackle, particularly in those cases where the same system that people are asked to trust is the one excluding them (Stokel-Walker 2021). Overall, employers are put in a hard spot, having to manage responsibility in addition to political and religious beliefs that influence workers' decisions.

A global survey of 13,426 people in 19 countries to determine potential acceptance rates and factors influencing acceptance of a COVID-19 vaccine found that all respondents, regardless of nationality, reported they would be less likely to accept a COVID-19 vaccine if it were mandated by employers. This finding seems to suggest that the employers' best option is promoting voluntary vaccination (Lazarus et al. 2021).

Well-being

Benefits and challenges of remote work

Remote work has many benefits for both workers and employers. For workers some of the benefits of remote work include greater flexibility, improved productivity, more job autonomy, improved work-life balance, and a reduction in commuting time and costs. Remote work can also provide more and better work opportunities for populations that have been generally excluded such as people with disabilities, older workers, women with care responsibilities and workers living in rural or isolated areas. The arrangement can also have positive effects for employers, such as higher levels of employee satisfaction and improved worker productivity, lower real estate and production costs, and reductions in the costs of accessing a broader range of talent (Policy Department for Economic, Scientific and Quality of Life Policies 2021; Sneader et al. 2020; ILO 2021c; Oakman et al. 2020; Chung et al. 2020). Furthermore, savings in office space and operational costs could indirectly help businesses improve productivity by freeing up additional resources for productive investments (OECD 2021b).

The focus on greater flexibility is not just a crisis response. It reflects an evolution of thinking about how, when and where work gets done. The pandemic proved to many businesses that employees do not need to be physically on site to be productive. Moreover, approaching work as something the organization does, rather than somewhere it goes, can help businesses adopt new ways to serve clients, reduce costs, and gain access to new talent markets (PwC 2020).

However, as the reviewed literature demonstrates, despite its many advantages, remote work also presents a series of challenges and disadvantages. On the worker side, greater flexibility and autonomy are often accompanied by increased levels of work intensity and longer working hours. The lack of clear distinctions between work and home also affect the work-life balance and the well-being of employees, who find the long hours and the inability to disconnect negatively impact their lives. Social isolation from colleagues and the organization as well as increased levels of monitoring and surveillance can also have detrimental effects on the mental health of workers while raising privacy issues. Access to appropriate space and tools has also become a key concern, particularly during the pandemic as workers were forced to worked from home full time; the lack of proper office equipment and furniture can affect the physical health of workers (ILO 2021c; Policy Department for Economic, Scientific and Quality of Life Policies 2021; Oakman et al. 2020; Chung et al. 2020).

On the other side, employers are also concern that extended periods of remote work could lead to difficulties in team cohesion, decreased loyalty to the firm, and reduced training with concerns this could affect knowledge flows at the firm level and lead to long-term productivity losses (OECD 2021b). Research conducted by the Committee on Employment and Social Affairs of the European Parliament also notes that remote work can lead to greater workforce fragmentation, individualisation of the employment relationship, and shifting the costs of working from home to workers. The situation can lead to new forms of employment and social inequalities between those who work remotely and those who do not (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Box 8. The shadow pandemic: violence against women during COVID-19

Even before the pandemic, gender-based violence was a prominent issue, with one in three women experiencing physical or sexual violence, in most cases by an intimate partner. As a result of associated lockdowns, the pandemic saw a sharp increase in domestic violence reports, by as much as 25 per cent in some countries (UN Global Compact 2020). Restrictions on movement, social isolation, and economic insecurity

(Box 8 continued from page 27)

increased women's vulnerability to violence at home (UN Women 2021). At the same time, quarantine measures reduced women's access to protective services.

In the past, employers argued that domestic violence was primarily a domestic matter, not a workplace issue. COVID-19 and mandates in many countries to work remotely forced employers to revisit this assumption. When the home becomes the workplace, as it has during the pandemic, employers' liabilities/responsibilities can be extended to providing preventive/response measures when domestic violence occurs. As of this writing, countries such as Australia had already begun to incorporate these changes (ILO 2019). Given the circumstances, many employers have decided to take decisive action to address domestic violence, as keeping remote workplaces safe is increasingly seen as a priority (Smith 2020; ILO 2019).

Threat of a global mental-health crisis

The United Nations has warned that lockdowns, while necessary, could bring on a global mental-health crisis. Impacts such as higher rates of depression, anxiety and substance abuse could last for years. Research conducted in Ethiopia showed a three-fold increase in people reporting depression symptoms. In Iran, 60 per cent of the population reported distress symptoms (Bartuska and Marques 2020). According to the OECD, from March 2020 onwards the prevalence of anxiety and depression in countries like Belgium, France, Mexico, the United Kingdom, and the United States has doubled or more than doubled compared to levels observed during previous years (OECD 2021a). Overall, the periods of greatest distress were associated with times of increasing numbers of COVID-related deaths and strict lockdowns. Across countries, young people, those living alone, people with lower socio-economic status, and the unemployed were more severely affected (OECD 2021a).

Those able to work during the pandemic were less likely to report depression and anxiety, but the pandemic did exacerbate burnout and chronic stress (Moss 2021). The lack of separation between home and work made stepping away difficult. Longer working hours and increased work intensity both mean the digital workday never ended. Because of a distributed workforce, workers were not only working more hours but also working odd hours, often in isolation. To help workers cope with the situation, certain companies started to provide mental-health tools such as free subscriptions to meditation apps. Many universities and businesses offered on-demand video counselling to employees and constituents (McKinsey 2021c). However, greater attention should also be paid to time off in lieu programmes. Although the hybrid workforce make such programmes more challenging to implement (Narayan et al. 2021). Establishing norms regarding working hours, team overlap and work expectations can help offset some of the negative effects an endless digital workday can have on workers (Narayan et al. 2021).

While the corporate agenda had increasingly focused on employee health and well-being issues, the pandemic forced the issue into focus for some companies. In a recent survey of United State employers, 80 per cent of employers expressed some level of concern about employees' mental health, and two thirds expressed concern about substance use disorders. Approximately half of respondents indicated that mental health was a top priority for the organization. Employers were not only concerned about the topic, but also about acting on the issue, with over 70 per cent of respondents saying they planned to invest in mental health resources by starting, continuing or expanding benefits (Coe et al. 2021). Similar surveys in the United Kingdom showed that 75 per cent of senior leaders mentioned employee well-being as part of the corporate agenda, with 67 per cent of them acknowledging the importance of the topic. Close to 60 per cent of employers provided well-being support and benefits to employees, but only 26 per cent reported that their allocated budgets had increased as a consequence of the pandemic (CIPD 2021).

Employee monitoring and tracking raises key questions

Another emerging issue was been monitoring and surveillance. While the issue is not new - a survey of 239 large corporations prior to the pandemic showed that more than 50 per cent were using some type of non-traditional employee tracking or monitoring tool - the significant increase in remote working during the pandemic saw a dramatic increase in the demand for workplace surveillance tools (Policy Department for Economic, Scientific and Quality of Life Policies 2021). During the pandemic, more than one out of four companies made their first purchase of technology to routinely track and monitor their employees. However, many of these same companies have not determined how to balance employee privacy with this technology, and employees are increasingly frustrated (Kropp 2021). The sharp increase in remote work as a result of the pandemic and the development of moresophisticated monitoring and surveillance tools can potentially lead to digitally enabled employee monitoring practice becoming not only more widespread but also widely accepted (Policy Department for Economic, Scientific and Quality of Life Policies 2021). The topic brings to the forefront questions regarding the invasion of remote workers' privacy and their right to disconnect. Employees and workers' unions are increasingly concerned that remote work along with the increased use of algorithmic systems at work could lead to a shift in the balance of power between management and labour regarding the collection and exploitation of employee data (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Close and/or constant surveillance can lead to increased levels of stress and anxiety. When the surveillance is excessive and intrusive, it can have a negative impact in terms of worker motivation and commitment, leading to lower levels of engagement and productivity and higher absenteeism. Perhaps more worryingly, the practice can also undermine workers' rights to privacy and equal treatment and can lead to discrimination (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Companies are embracing new ways of working. At the same time, they are coming to more surely recognize that this shift needs to include an increased focus on health and wellness, and take into account the rights of workers to privacy and the ability to disconnect. It is increasingly clear that supporting employees in their personal lives more effectively enables employees to not only have better lives, but also to perform at a higher level.

Societal impacts

While the full scale of societal impacts has yet to be fully assessed, some emerging and increasingly well documented trends can be observed. Most notably, these include the impact of remote work, the "urban-rural flight" and the impact on the environment.

Remote work and the "urban-rural flight"

In recent years, urban innovation hubs such as Silicon Valley have seen the cost of operations increase significantly due to an influx of high-skilled workers driving up the cost of housing. The same technology these firms pioneered now allows them to work both remotely and productively across cities and time zones (Oxford Martin School and Citi 2020). The increase in remote work will likely affect cities and metropolitan areas, raising questions about office space, food services, transportation, and the role of smaller cities, which were experiencing a decline prior to the pandemic (Lund et al. 2021).

One result of the pandemic in developing economies has been widespread relocation from urban centres to rural areas. In part, this has been due to people moving home to their rural villages as a way of cutting costs in the face of significant income reductions following job losses or reduced wages. A survey by Kenya's National Bureau of Statistics (KNBS) found that 30.5 per cent of renters were unable to pay rent in April 2020, with many respondents pointing to lost jobs and lost wages as a major reason (KNBS 2020).

This trend of increased return migration has placed additional pressures on rural communities. At the same time, it has resulted in urban areas – beyond being more exposed to the virus in part because of higher population densities – feeling the economic effects of a declining workforce. In comparison, rural areas have been more resilient due to their lower exposure and ability to depend on agriculture for income, though it is unknown if this will prove a lasting phenomenon, especially with stress on rural areas increasing as more people move home (FAO 2021).

In more developed economies, the urban-to-rural relocation is providing opportunities to revitalize regions that have been neglected in the past. Data emerging from the US indicates a significant number of workers have been relocating from urban and metropolitan areas to less-densely populated regions. As of the end of 2020, this had led to a 75 per cent reduction in large cities in the use of office space compared to pre-COVID-19 levels. In places like New York, the decline in office usage has been even more dramatic, with figures indicating a 90 per cent reduction. Similarly, in the first three quarters of 2020 demand for office space in the European Union was down by 40 per cent. In many cases, companies have reconfigured their office space, limiting the number of staff that could come into the office (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Remote work can promote a redistribution of workers and companies from urban centres towards suburban and rural areas, creating demand for new services and bringing a much-needed revitalization to these regions (Policy Department for Economic, Scientific and Quality of Life Policies 2021). While demand for office space declined, housing prices – particularly in suburban and rural areas – rose considerably. According to the Resolution Foundation, housing prices in the least densely populated areas rose by 10 per cent. Cities across the United Kingdom have seen slower growth in housing prices than in rural areas, indicating declining interest in urban living (Judge and Pacitti 2021). Governments have been paying close attention to changes in work habits to shift people from urban centres to rural locations. In March 2021, the Irish Government unveiled their "Our rural future" strategy. The plan envisions the creation of a network of 400 remote working hubs, and provides financial incentives for people to move to rural areas. These incentives include tax breaks to individuals and companies that support remote working as well as an accelerated broadband rollout

(Financial Times 2021). Across countries, the demand for suburban living might have led to an increased demand for co-working space and improved telecommunications infrastructure.

It is worth noting, however, that a strong digital infrastructure is needed if the potential of remote work is to be fulfilled. The pandemic has highlighted the importance of access to quality internet and telephony to maintain social resilience and business continuity.

Digital connectivity has played a crucial role at many levels. Individuals have relied on digital connectivity to work, attend classes, receive medical support and communicate with family and friends. For their part, governments have relied on digital connectivity to deliver critical public services such as healthcare and social transfers. During the pandemic, however, economies across the world have experienced a significant increase in the use of digital infrastructure during the pandemic, leading to issues with respect to the strength of this infrastructure and to the levels of investment needed to maintain and upgrade it. The debate has also reached policy circles, questioning the types of policies needed to support regions characterised by low levels of Internet penetration, large gaps in coverage between urban and rural areas, and high affordability barriers, especially for mobile Internet. Public policies that are supportive of investments in digital infrastructure can help this sector become a priority, ensuring the rollout of digital infrastructure in hard-to-reach areas (Strusani and Houngbonon 2020; ITU 2020).

The pandemic has also affected how we look at cities in ways that could lead to significant changes in urban design. In Paris, the city government recently unveiled plans to introduce the "15-minute city". This concept involves improving quality of life by creating cities where everything residents need can is accessible within a 15-minute walk or bike ride. The 15-minute city requires minimal travel among housing, offices, restaurants, parks, hospitals and cultural venues. The idea is that each neighbourhood should fulfil six social functions: living, working, supplying, caring, learning and recreation. The proposal seeks to present responses to the climate change crisis, the pandemic and globalization (BBC 2021).

However, it is important to note that the choice of where to live depends on a series of factors beyond employment such as closeness to family and friends; availability, quality, and cost of services such as education, health, and transportation; and recreation and leisure activities (Policy Department for Economic, Scientific and Quality of Life Policies 2021). It remains unclear whether the shift to suburban and rural areas is a short-term trend or whether it is here to stay. In any case, the situation provides opportunities for economies to redress long-standing issues of the urban-rural divide.

Effect of remote work on climate change

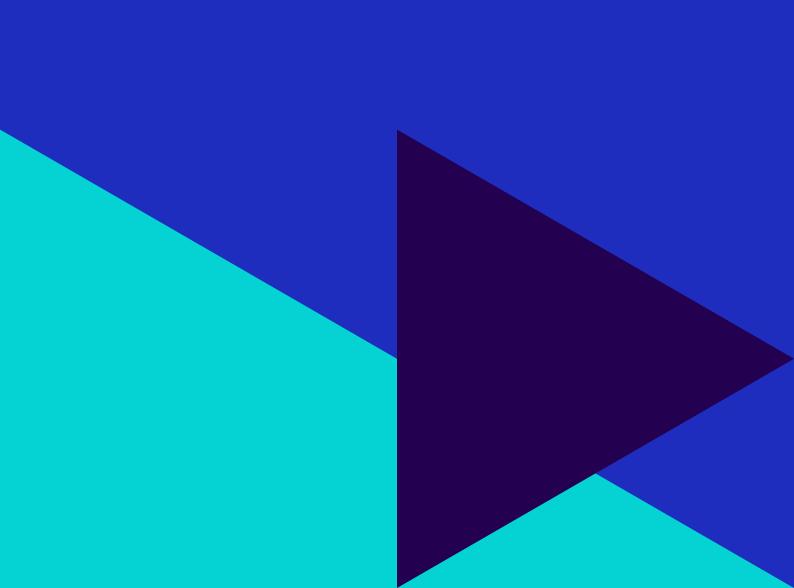
Research conducted at Massachusetts Institute of Technology estimates that declines in air pollution related to the pandemic saved the lives of 4,000 kids under 5 and 73,000 adults over 70 in China. In the United States, NASA reported a 30 per cent decline in nitrogen dioxide levels in the I-95 corridor from Washington, DC, to Boston (McMahon 2020). In Italy, the industrial belt across the northern part of the country often experiences high levels of air pollution, but estimates show a stark decline in 2020 (Hernandez 2020). The pandemic has also affected energy consumption. Research conducted by the International Energy Agency shows that countries under full lockdowns experienced an average 25 per cent decline in energy demand per week and countries in partial lockdown an average 18 per cent decline (IEA 2020).

Transportation accounts for 21 per cent of carbon dioxide emissions globally. In the European Union, the daily commuting to work generates approximately 25 per cent of carbon dioxide emissions. A recent study in France shows that an average of 2.9 days of remote work per week would reduce the environmental impact of commuting by 30 per cent, representing 3.7 per cent reduction in greenhouse gas emissions. Research conducted in the United States

indicates that working remotely 50 per cent of the time would reduce carbon emissions by 51 million metric tonnes a year. This is 'the equivalent of taking all of New York's commuters off the road'. At the global level, studies have estimated that if all those who can do remote work do so for just one day a week, this would help save 1 per cent of global oil consumption for road passenger transport per year (Policy Department for Economic, Scientific and Quality of Life Policies 2021).

Despite these promising figures, it is important to remember that calculating the environmental impact of remote working can be a complex matter. Recent research found that 20 per cent of remote workers ran shopping errands that would otherwise be associated with their commutes, with a further 10 per cent driving children to and from school. Overall, the number of non-work-related trips increased, totalling the equivalent of about 25 per cent of the distance saved by remote work. Furthermore, home energy consumption might offset the benefits of remote work (Policy Department for Economic, Scientific and Quality of Life Policies 2021). In general, understanding the impact of remote work and virtual offices on the carbon footprint is important and requires further and more-nuanced analysis (Oxford Martin School and Citti 2020).

Considerations for businesses and their representative organizations



▶ 4. Considerations for businesses and their representative organizations

Since the outbreak of the COVID-19 pandemic, employers have been on the front line of the pandemic response. They have had to manage unprecedented levels of change to their businesses while ensuring the well-being of their workforce and the safety of the workspace.

Workforce

Since the beginning of the pandemic employers have had to manage an overnight transition to remote work and its subsequent impact on performance and productivity, consider the implications of a hybrid workforce, and ensure business models and the workforce can face the challenges of a redefinition of the nature and content of jobs.

This situation has tested the resilience as well as the creativity and innovative capacity of businesses around the world.

The various facets of the pandemic continue to unfold, and employers need to consider the types of policies regarding workforce management that can help businesses to recover and then to continue growing. These include policies regarding remote work that accommodate both the needs of the business and those of the workforce. Defining where and how businesses work, as well as establishing effective levels of flexibility, in light of the relevant sector, industry, and overall context, can provide much-needed guidance and predictability for workers, and can offset some of the negative effects of remote work.

Conducting regular skills-mapping among workers can also help employers identify redeployment opportunities among their workforce. A focus on the skills that are most needed and relevant at the moment, including socio-emotional and advanced cognitive skills, can also help businesses gain a competitive advantage while ensuring a strong talent pipeline.

Workspace

As the pandemic evolves and the situation across countries and regions continues to change, employers have had to constantly revise and update both their OSH measures and their individual privacy responsibilities with respect to the protection of workers.

When it comes to vaccination policies – which differ between countries or even states – employers need to consider national, federal, and provincial health guidelines applicable to the workplace as well as data privacy and employment law. In terms of health and safety, in most jurisdictions both employers and employees have some core duties. The legal duty of the employers is to protect the health and safety of workers and others who may be affected by their business. On the other hand, the legal duty of employees is to take reasonable care for the health and safety of themselves and others who may be affected by their acts or omissions at work (IOE 2021b).

In terms of data privacy, all European jurisdictions and many global jurisdictions now have data privacy laws that stipulate if and how personal data can be processed. Obtaining details of vaccination status, whether as part of a mandatory vaccination policy or otherwise, raises data privacy considerations (IOE 2021b).

In terms of employment law, most jurisdictions globally have at least some employment laws that impact vaccination policy considerations. These include discrimination protection, unfair treatment, pay protection, consultation obligations and unfair dismissal (IOE 2021b).

As discussed earlier, different regions have been taking different approaches to vaccination policies in the workplace. In a growing number of jurisdictions, governments have made vaccination mandatory for certain employees. However, the general position in most countries so far has still been to encourage rather than mandate. For those employers who choose to implement a vaccination policy, a clear policy along with local risk assessments, constant monitoring of policies and staff engagement, consultation and training have been key to minimizing legal risks associated with employment, privacy and human rights (Schofer and Sie-Mah 2021; IOE 2021b).

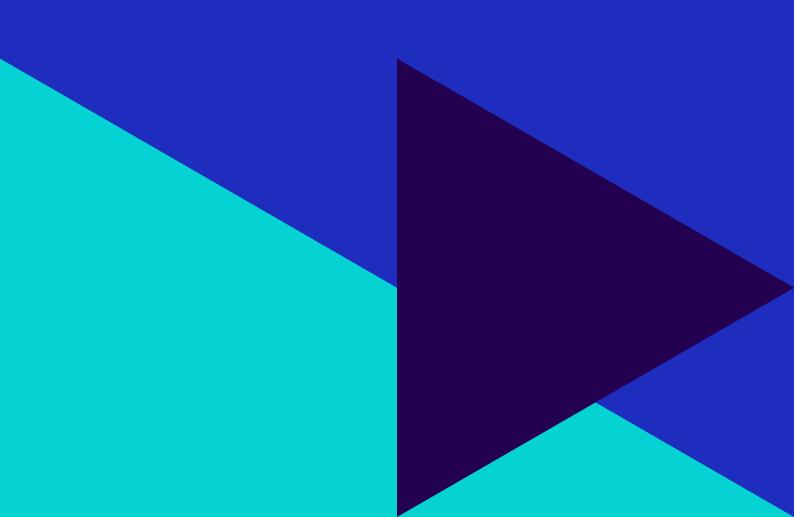
Well-being

As the mental health crisis takes centre stage, many employers have chosen to provide new or expanded options for psychological support to workers, among these access to helplines, counselling, and employee assistance programmes. The pandemic has helped businesses recognize the need to make changes that promote a culture where workers feel empowered to disconnect from work, with specific times reserved for rest and personal life without negative repercussions for their careers.

Employers have also had to find different ways to support workers with small children and other care responsibilities who might be struggling to fulfil work responsibilities. In some cases, they have introduced special parental leave and, in other instances, financial assistance. As economies continue to open up and begin to recover, businesses need to consider what type of support should be made available to encourage workers with care responsibilities to return to their workplaces. This is particularly true for female workers.

Finally, as the use of employee monitoring and surveillance tools and software has increased, it is important for employers to take into consideration the complex ethical questions posed by such measures. The use of this kind of technology without appropriate understanding and consent can significantly impact the employee-employer relationship, reducing trust and promoting negative attitudes and behaviour (ILO 2020c).

▶ References



References

- ADB (Asian Development Bank). 2021. <u>ADB lowers 2021 Growth Outlook for Developing Asia to</u> 7.2%.
- Adian, Ikmal, Djeneba Doumbia, Neil Gregory, Alexandros Ragoussis, Aarti Reddy, and Jonathan Timmis. 2020. *Small and Medium Enterprises in the Pandemic: Impact, Responses and the Role of Development Finance*. Policy Research Working Paper 9414. The World Bank.
- Agrawal, Sapana, Aaron De Smet, Sébastien Lacroix, and Angelika Reich. 2020. <u>To Emerge Stronger from the COVID-19 Crisis, Companies Should Start Reskilling Their Workforces Now.</u> McKinsey & Company.
- Alisha Haridasani Gupta. 2020. "Why Some Women Call This Recession a 'Shecession'." *New York Times* (9 May, updated 18 June 2020).
- Alberio, Marco and Diane-Gabrielle Tremblay. 2021. "Covid 19: Quels effets sur le travail et <u>l'emploi?</u>" *Revue Interventions économiques* 66.
- Alon, Titan, Matthias Doepke, Jane Olmstead-Rumsey, and Michèle Tertilt. 2020. <u>The Shecession</u> (<u>She-recession</u>) of 2020: <u>Causes and Consequences</u>. VOX EU.
- Bartuska, Anna D. and Luana Marques. 2020. <u>Mental Health and COVID-19 in Developing Countries</u>. OECD Development Matters blog.
- Batut, Cyprien and Youri Tabet. 2020. <u>What Do We Know about the Economic Effects of Remote Work?</u> Tresor-Economics No. 270. Ministère de l'Économie, des Finances, et de la Relance Direction générale du Trésor.
- BBC (British Broadcasting Corporation). 2021. <u>How '15-Minute Cities' Will Change the Way We Socialize</u>. Worklife series.
- Bell, Sadie, Richard M. Clarke, Sharif A. Ismail, Oyinkansola Ojo-Aromokuda, Habib Naqvi, Yvonne Coghill, Helen Donovan, Louise Letley, Pauline Paterson, and Sandra Mounier-Jack. 2021. COVID-19 Vaccination Beliefs, Attitudes, and Behaviours among Health and Social Care Workers in the UK: A Mixed-methods Study. MedRxiv.
- Bernauer, Torsten, Nathalie Bouvier-Tersiguel, Heiko Heimes, and Abhishek Shirali. 2021. <u>The Corporate Center: Driving the Next Normal</u>. McKinsey & Company.
- Bernstein, Ethan, Hayley Blunden, Andrew Brodsky, Wonbin Sohn, and Ben Waber. 2020. <u>The Implications of Working Without an Office</u>. The Big Ideas Series. *Harvard Business Review* (15 July).
- Brookings. 2021a. Accelerating COVID-19 Vaccinations in Africa. A panel.
- . 2021b. <u>Africa's Vaccination Campaign Hits Hurdles as Covax Lowers Vaccine Delivery Goals</u>. Africa in the News.
- Brucal, Arlan, Arti Grover, and Santiago Reyes. 2021. <u>Damaged by the Disaster: The Impact of COVID-19 on Firms in South Asia</u>. Blog. The World Bank.
- Business Partners to CONVINCE. 2021. Who We Are.
- B4SA (Business for South Africa). 2021. Our Purpose.
- Chen, Joy, Zijun Cheng, Kaiji Gong, and Jinlin Li. 2020. Riding Out the COVID-19 Storm: How Government Policies Affect SMEs in China.

- Chokski, Niraj, Margot Sanger-Katz, Tara Siegel Bernard. 2021. "<u>Delta's Extra \$200 Insurance Fee Shows Vaccine Dilemma for Employers.</u>" *New York Times* (26 Aug., updated 17 Sep.).
- Chung, Heejung, Hyojin Seo, Sarah Forbes, and Holly Birkett. 2020. <u>Working from Home during the COVID-19 Lockdown: Changing Preferences and the Future of Work</u>. University of Birmingham.
- CIPD (Chartered Institute of Personnel and Development). 2021. <u>COVID-19 Vaccination: Guide</u> <u>for Employers</u>.
- ___. 2021. <u>Health and Wellbeing at Work 2021</u>. Survey report.
- CNP (Conseil National du Patronat du Sénégal). 2021. <u>L'Oeil ouvert: des employeurs sur "le teletravail au Senegal" enjeux & perspectives</u>. Le Parti de l'Entreprise.
- Coe, Erica, Jenny Cordina, Kana Enomoto, Alex Mandel, and Jeris Stueland. 2021. *National Surveys Reveal Disconnect between Employees and Employers around Mental Health Need*. McKinsey & Company.
- Corkery, Michael, Lauren Hirsch, Brookes Barnes, and Kellen Browning. 2021. "After Months of Avoiding the Vaccine Issue, Companies Begin to Mandate." New York Times (8 Aug., updated 30 Sep.).
- Côté, Daniel, Jessica Dubé, and Jorge Frozzini. 2020. <u>Précarité du travail et Inégalités sociales</u> <u>de santé: quelles leçons à tirer de la pandémie de COVID-19</u>. Laboratoire de recherche en relations interculturelles (LABRRI).
- De Fraja, Gianni, Sara Lemos, and James Rockey. 2017. <u>The Wounds That Do Not Heal. The Life-time Scar of Youth Unemployment</u>. Centre for Economic Policy Research (CEPR).
- Deloitte Insights. 2020. *May the Workforce Be with You: The Voice of the European Workforce* 2020. Deloitte report.
- Dyer, Paul, Isaac Schaider, and Andrew Letzkus. 2021. <u>COVID-19 Vaccination Efforts in the Middle East and North Africa</u>. Brookings Infographic.
- ECLAC (Economic Commission for Latin America and the Caribbean). 2020. <u>Sectors and Businesses Facing COVID-19: Emergency and Reactivation</u>. Special report.
- Escobari, Marclea, and Eduardo Levy Yeyati. 2020. <u>Dislocation of Labour Markets: What Policies to Mitigate the Shock?</u> Brookings.
- Euronews. 2021. Italy First in Europe to Require All Employees to Have COVID Health Pass.
- Fayard, Anne-Laure, John Weeks, and Mahwesh Khan. 2021. "<u>Designing the Hybrid Office:</u>
 <u>From Workplace to 'Culture Space'.</u>" *Harvard Business Review* (Mar.–Apr.)
- Financial Times. 2021. "Ireland Plans Home Working Push to Shift City Workers to Rural Areas."
- Fleming, Sean. 2021. *The Pandemic Has Damaged Youth Employment: Here's How We Can Help*. World Economic Forum.
- Flood, Colleen M., Bryan Thomas, and Kumanan Wilson. 2021. "Mandatory Vaccination for Health Care Workers: An Analysis of Law and Policy." Canadian Medical Association Journal (CMAJ) 193(6): E217–E220.
- Florida, Richard. 2020. "The Uncertain Future of Corporate HQs." Harvard Business Review.
- FAO (Food and Agriculture Organization). 2021. <u>Reverse Migration to Rural Areas of Origin in the Context of the COVID-19 Pandemic</u>.
- Galanti, Teresa, Gloria Guidetti, Elisabeth Mazzei, Salvatore Zappalà, and Ferdinando Toscano. 2021. "Work from Home during the COVID-19 Outbreak: The Impact on Employees"

- Remote Work Productivity, Engagement, and Stress." Journal of Occupational and Environmental Medicine 63(7): e426–e432.
- Guardian. 2021. "Employment Rights Offer UK Immunity to Mandatory Workplace Covid Jabs" (8 Aug.).
- Gschwind, Lutz and Oscar Vargas. 2019. "<u>Telework and Its Effects in Europe</u>." In *Telework in the 21st Century*. Edward Elgar.
- Hernandez, Marco. 2020. <u>This Is the Effect Coronavirus Has Had on Air Pollution All across the World</u>. World Economic Forum (WEF).
- Hagel III, John, Maggie Wooll, John Seely Brown. 2019. <u>A Pragmatic Pathway for Redefining Work: The Beaten Path Won't Get You There</u>. Deloitte Insights.
- Hagel, John, Jeff Schwartz, and Maggie Wooll. 2019. "Redefining Work for New Value: The Next Opportunity." MIT Sloan Management Review (3 Dec.).
- IDC (International Data Corporation). 2021. <u>IDC Future of Work Survey Data Show That Hybrid Work Models Are Still Evolving Amid Ongoing Uncertainty and Efforts to Achieve Employee Experience Parity</u>. Press release.
- IEA (International Energy Agency). 2020. IEA Global Energy Review: <u>The Impacts of the Covid-19 Crisis on Global Energy Demand and CO₂ Emissions.</u>
- Judge, Lindsay and Cara Pacitti. 2021. <u>Housing Outlook Q2 2021: The Impact of Covid-19 on Housing Demand across the UK</u>. London, Resolution Foundation.
- ILO. 2018. Care work and care jobs for the future of decent work.
- ___. 2019. <u>Recommendation Concerning the Elimination of Violence and Harassment in the World of Work</u>. Violence and Harassment Recommendation, 2019 (No. 206).
- ___. 2020a. <u>ILO Monitor: COVID-19 and the World of Work</u>. Fourth edition (updated estimates and analysis).
- ____. 2020b. Working from Home: Estimating the Worldwide Potential. Policy Brief.
- ___. 2020c. Teleworking during the COVID-19 Pandemic and Beyond: A Practical Guide.
- ___. 2020d. <u>A Global Survey of Enterprises: Managing the Business Disruptions of COVID-19</u>.
- ___. 2021a. <u>ILO Monitor: COVID-19 and the World of Work</u>. Eighth edition (estimates and analysis updated 27 Oct. 2021).
- ____. 2021b. <u>Navigating the Covid-19 Crisis: Evolving Challenges, Needs and Expectations of Montenegrin Enterprises</u>. Second edition.
- ___. 2021c. <u>Teleworking Arrangements during the COVID-19 Crisis and Beyond</u>. Paper prepared for the 2nd Employment Working Group Meeting under the 2021 Italian Presidency of the G20.
- ___. 2021d. Employment and Social Outlook: Trends 2021.
- IOE (International Organisation of Employers). 2021a. <u>COVID-19</u>: What Employers Need to <u>Know on Vaccinations and Prevention</u>. Concept Note.
- ____. 2021b. <u>COVID-19</u>: What Employers Need to Know on Vaccination and Prevention.
- ITU (International Telecommunication Union). 2020. <u>Economic impact of COVID-19 on Digital Infrastructure</u>.
- Jones Day. 2021. COVID-19 Vaccinations and Considerations for European Employers.

- Kitagawa, Ritsu, Sachiko Kuroda, Hiroko Okudaira, and Hideo Owan, H. 2021. <u>Working from Home: Productivity within Firms</u>. Covid Economics, Vetted and Real-Time Papers, Issue 74. Centre for Economic Policy Research (CEPR).
- KNBS (Kenya National Bureau of Statistics). 2020. <u>Survey on Socio Economic Impact of COVID-19 on Households Report Wave Two</u>. Nairobi.
- Kropp, Brian. 2021. "9 Trends That Will Shape Work in 2021 and Beyond." Harvard Business Review (14 Jan.).
- Lambert, Anne, Joanie Cayoutte-Remblière, Elie Guéraut, Guillaume Le Roux, Catherine Bonvalet, Violaine Girard, and Laetitia Langlois. 2020. "<u>Le travail et ses aménagements:</u> ce que la pandémie de covid-19 a changé pour les Français." *Population & Societies* 7(579): 1–4.
- Lazarus, Jeffrey V., Scott C. Ratzan, Adam Palayew, Lawrence O. Gostin, Heidi J. Larson, Kenneth Rabin, Spencer Kimball, and Ayman El-Mohandes. 2021. "A Global Survey of Potential Acceptance of a COVID-19 Vaccine." Nature Medicine 27: 225–228.
- LinkedIn. 2021a. How COVID-19 Is Driving an Evolution in Hiring.
- ___. 2021b. The Future of Talent.
- Lund, Susan, Wan-Lee Cheng, André Dua, Aaron De Smet, Olivia Robinson, and Saurabh Sangvi. 2020. *What 800 Executives Envision for the Postpandemic Workforce*. McKinsey Global Institute.
- ____, Anu Madgavkar, James Manyika, Sven Smit, Kweilin Ellingrud, and Olivia Robinson. 2021. <u>The Future of Work after COVID-19</u>. McKinsey Global Institute.
- Madgavkar, Anu, Olivia White, Mekala Krishnan, Deepa Mahajan, Xavier Azcue. 2020. <u>COVID-19</u> <u>and Gender Equality: Countering the Regressive Effects</u>. McKinsey Global Institute.
- Malta, Monica, Mario Vianna, Cosme Marcelo Furtado Passos de Silva, Angelica Baptista Silva, and Steffanie A. Strathdee. 2021. "The Foreseen Loss of the Battle against COVID-19 in South America: A Foretold Tragedy." EClinical Medicine 39. Published by The Lancet.
- Markets and Markets. 2021. <u>Chatbot Market by Component, Type (Rule Based & AI Based, Application (Customer Service, Customer Engagement & Retention), Channel Integration, Business Function (ITSM, Finance), Vertical, and Region Global Forecast to 2026.</u>
- Mas, Alexandre. and Amanda Pallais. 2020. "<u>Alternative Work Arrangements</u>." *Annual Review of Economics* 12(1): 631–658.
- Maurizio, Roxana. 2021. <u>Desafíos y oportunidades del teletrabajo en América Latina y el Caribe</u>. ILO.
- McKinsey & Company. 2020. <u>Airflow Considerations for Businesses during the Time of COVID-19</u>. Interactive graphic.
- ___. 2021a. <u>Beyond Hiring: How Companies Are Reskilling to Address Talent Gaps</u>. Survey.
- ___. 2021b. <u>Building Workforce Skills at Scale to Thrive during and after the COVID-19 Crisis</u>. Survey.
- ____. 2021c. <u>The Next Normal: Reimagining Operational Resilience Building Future-proof Strategies</u>. An anthology of related articles. McKinsey & Company.
- McMahon, Jeff. 2020. "Study: Coronavirus Lockdown Likely Saved 77,000 Lives in China Just by Reducing Pollution." Forbes (16 Mar.).
- McQuaid, Ronald. 2017. Youth Unemployment Produces Multiple Scarring Effects. Blog.
- Morikawa, Masayuki. 2021. The Productivity of Working from Home: Evidence from Japan. VOX EU.

- Moss, Jennifer. 2021. "Beyond Burned Out: Chronic Stress Was Rampant Even before the Pandemic. Leaders Can't Ignore It any Longer." Harvard Business Review (10 Feb.)
- Nagaraj, Anuradha. 2021. <u>"Shecession": What COVID-19 Has Meant for Women and Work</u>. World Economic Forum.
- Narayan, Arjun, Murty, Rohan Narayana, Rajath B. Das, and Scott Duke Kominers. 2021. "The Endless Digital Workday." *Harvard Business Review* (12 Aug.).
- NASA (National Aeronautics and Space Administration). 2020. <u>NASA Satellite Data Show 30</u>
 <u>Percent Drop in Air Pollution over Northeast U.S.</u> Earth series.
- Oakman, Jodi., Natasha Kinsman, Rwth Stuckey, Melissa Graham, Victoria Weale. 2020. "A Rapid Review of Mental and Physical Health Effects of Working at Home: How Do We Optimise Health?" BMC Public Health 20, Art. number1825.
- OECD. 2020a. <u>Productivity Gains from Teleworking in the Post COVID-19 Era: How Can Public Policies Make It Happen?</u> Policy Responses to Coronavirus.
- ____. 2020b. <u>Youth and COVID-19 Response: Recovery and Resilience. Policy Responses to Coronavirus</u>.
- ____. 2020c. <u>Supporting Businesses in Financial Distress to Avoid Insolvency during the COVID-19</u>
 <u>Crisis</u>. Technical report, OECD Policy Responses to Coronavirus (COVID-19).
- ____. 2021a. <u>Tackling the Mental Health Impact of the COVID-19 Crisis: An Integrated, Whole-of-society Response</u>. Policy Responses to Coronavirus.
- ___. 2021b. <u>The Role of Telework for Productivity and Well-being during and post COVID-19: Key Highlights of an OECD Survey among Managers and Workers</u>. Global Forum on Productivity.
- Our World in Data. 2021. *Coronavirus (COVID-19) Vaccinations*. Research and Data. Accessed 31 Oct. 2021.
- Oxford Martin School and Citi. 2020. <u>Technology at Work v5.0: A New World of Remote Work.</u>
- PAHO (Pan American Health Organization). 2021. <u>PAHO Warns that Only one in Four People in Latin America and the Caribbean Has Been Fully Vaccinated against COVID-19. World Health Organization</u>. Press release.
- Policy Department for Economic, Scientific and Quality of Life Policies. 2021. <u>The Impact of Teleworking and Digital Work on Workers and Society: Special Focus on Surveillance and Monitoring, as well as on Mental Health of Workers</u>. Study.
- PwC. 2020. CEO Panel Survey: How Businesses Can Emerge Strongly.
- Ray, Julie. 2021. <u>COVID-19 Put More Than 1 Billion Out of Wor</u>k. Gallup.
- Reuters. 2021. "Turkmenistan Makes COVID-19 Vaccination Mandatory."
- Rivera, Suzanne, Kate Robu, Virginia Simmons, and Shubham Singhal. 2020. <u>Reopening Safely: Sample Practices from Essential Businesses</u>. McKinsey & Company.
- Runa. 2020. *The Future of Work in Latin America*. Research report.
- Saad, Lydia. and Adam Hickman. 2021. *Majority of U.S. Workers Continue to Punch In Virtually*. Gallup.
- Schofer, Krista and Arielle Sie-Mah. 2021. <u>Top 10 Considerations for Employers in Implementing a Vaccination Policy</u>. Gowling WLG.
- Schwartz, Jeff. 2021. <u>Create Opportunity for and with the Workforce: Reimagining Work and Partnering with Workers</u>. Deloitte.
- Smith, Allen. 2020. How to Help Survivors of Domestic Violence in the Pandemic. SHRM.

- Sneader, Kevin, Shubham Singhal, Bob Sternfels. 2020. <u>What Now? Decisive Actions to Emerge Stronger in the New Normal</u>. McKinsey & Company.
- Stokel-Walker Chris. 2021. "Covid-19: The Countries that Have Mandatory Vaccination for Health Workers." BMJ 2021;373:n1645.
- Strusani, Davide and Georges V. Houngbonon. 2020. <u>What COVID-19 Means for Digital Infrastructure in Emerging Markets</u>. IFC EmCompass.
- Symons, Wade. 2021. <u>Thinking About a Premium Surcharge for the Unvaccinated?</u> Mercer Health.
- Umland, Beth. 2021. <u>Survey Shows Companies Reconsidering Vaccine Mandates as Delta Surges</u>. Mercer Health.
- UN DESA (United Nations Department of Economic and Social Affairs). 2020. <u>Protecting and Mobilizing Youth in COVID-19 Responses</u>.
- United Nations Global Compact. 2020. <u>COVID-19: How Business Can Support Women in Times of Crisis</u>.
- UN Women. 2021. Facts and Figures: Ending Violence against Women. Accessed 30 Oct. 2021.
- Waizenegger, Lena, Brad McKenna, Wenjie Cai, and Taino Bendz. 2020. "An Affordance Perspective of Team Collaboration and Enforced Working from Home during COVID-19." European Journal of Information Systems 29(4): 429–442 DOI: 10.1080 /0960085X.2020.1800417.
- Wee, Sui-Lee, Damien Cave, and Ben Dooley. 2021. "How Asia, Once a Vaccination Laggard, Is Revving Up Inoculations." New York Times (30 Sep.).
- WEF (World Economic Forum). 2020. The Future of Jobs Report 2020.
- ___. 2021. The Global Risks Report 2021. 16th Edition.
- Williams, Joan C., Rachel M. Korn, and Mikayla Boginsky. 2021. "<u>Don't Lose the Democratizing Effect of Remote Work</u>." *Harvard Business Review* (4 Aug.).
- Wise Jacqui. 2021. "Covid-19: France and Greece Make Vaccination Mandatory for Healthcare Workers." BMJ 2021;374:n1797 (14 July).
- World Bank. 2020. Kenya Economic Update: Navigating the Pandemic.
- ___. 2021a. The Global Economy: On Track for Strong but Uneven Growth as COVID-19 Still Weighs (8 June).
- ___. 2021b. <u>Tracking an Unprecedented Year for Businesses</u>, <u>Everywhere</u> (17 Feb.).