

ASSESSING THE SOCIAL DIMENSION OF THE DIGITAL ECONOMY

Policy frameworks for quality jobs of tomorrow

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Anna Byhovskaya, Trade Union Advisory Committee to the OECD (TUAC)

The International Trade Union Confederation (ITUC) is the global voice of the world's working people. The ITUC's primary mission is the promotion and defense of workers' rights and interests, through international cooperation between trade unions, global campaigning and advocacy within the major global institutions. Its main areas of activity include trade union and human rights; economy, society and the workplace; equality and non-discrimination; and international solidarity. The ITUC adheres to the principles of trade union democracy and independence.

The Trade Union Advisory Committee (TUAC) is the interface for trade unions with the Organisation for Economic Co-operation and Development. It represents 58 national trade union centers and 66 million workers in OECD countries along with associate members in Brazil, Indonesia, the Russian Federation and South Africa. TUAC closely monitors policies on economic development, employment, investment, financial markets, corporate governance, taxation, innovation and the digital economy, skills, development and climate change.



WORLD



31,934

GDP per person
employed
(constant 1990 PPP \$)



44

Internet users
(per 100 people)



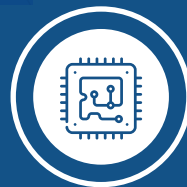
99

Mobile cellular
subscriptions
(per 100 people)



2.12

Research and development
expenditure
(% of GDP)



17

High-technology exports
(% of manufactured exports)

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New technologies and their impact on jobs are spreading at an increasingly rapid pace. The future of work will bring opportunities and challenges that will need to be addressed by all stakeholders: governments, businesses, international organizations, the internet governance community, and trade unions – in both industrialized and developing countries. A long-term scenario, where technological progress results in positive change for both workers and consumers, begins with a careful assessment of the present situation: 1) the scope of the impact of technological change on jobs; 2) the policy challenges it poses; and 3) corresponding solutions.

While estimates of the market share and job effects of the digital economy vary widely, a mid-term rise in labor market polarization is likely. But it is also preventable.

The expansion of the digital economy has tangible effects on labor markets. This is true for industrialized countries as well as for developing economies, depending on the extent to which their economies and infrastructure support digitalization. Complex networks and technologies, including big data, cloud computing, robotics and the Internet of Things (see **Table 1**) enable new business and employment models in both manufacturing and services. New forms of non-standard work in the online platform economy and mobile work are creating a growing gap between digital innovation and decent work, which includes fair wages, social protection and the right to bargain

collectively. While estimates of the market share and job effects of the digital economy vary widely, a mid-term rise in labor market polarizationⁱ is likely. But it is also preventable.

So, how can the profits from digitalization be channeled into social gains and greater productivity for all workers? How can regulatory frameworks be used to reduce inequalities and improve living standards in the long term?

This chapter provides an overview of the short- and medium-term effects of digitalization on

workers. It then seeks to map out the effects of digitalization on existing jobs as well as the implications of the growing platform economy for employment relationships and working conditions. It links these impacts to potential policy frameworks and the role of trade unions. In doing so, the chapter considers how to align technological innovation with appropriate regulatory and labor market policies and standards to ensure a fair transition toward quality jobs in the digital era.

Table 1

Glossary of key terms

ICT	Information and Communication Technology (ICT) including ICT infrastructure, ICT products and information and electronic content. ¹
Automation	Any process that leads to functions in production or service systems being performed automatically. Automation affects a range of industries and sectors, enabled by different technologies, including robotics, sensors, and IT applications.
Big Data	Techniques and technologies for processing and analyzing large volumes of data. ²
Cloud Computing	Storage of data on multiple web servers.
Digitalization	Processes leading to the gradual adoption or use of digital or ICT by an organization, industry, or society.
Robotics	Application of robots, leading to an increased automation of tasks through machines and process systems.
Internet of Things	A form of IT infrastructure involving interconnecting (physical and virtual) objects and devices, based on existing and evolving interoperable ICTs. ³

ⁱ Labor market polarization refers to a decline in the number of middle-class jobs requiring a moderate skill level relative to low-paying jobs requiring a low skill level and high-paying jobs requiring a high skill level. .

Introduction

The “digital economy” is ubiquitous. Linking it only to the Information and Communication Technology (ICT) sector is too limited as digitalization now penetrates most aspects of economies and societies. The digital economy is built on connectivity and networks, resulting in integrated systems that enable rapid production, instant transmission and sharing of content in virtually all spheres of economic and social activity.

Business models rely on the free flow of data, cross-border transactions, and the mobility of intangible resources. As a result, the location of economic activities is becoming more fragmented and the attribution of a company’s rights and duties to particular jurisdictions more difficult.

Digital change in industrialized and developing economies

Disruptive innovation refers to new goods and services replacing existing structures and competitors. In the absence or non-application

of appropriate regulations and policies to govern the new structures, this rapid transformation can have adverse effects on employment and working conditions, such as displacement of workers and increasing skill gaps in occupational tasks. While the digital economy is growing fast – mobile broadband is, for example, considered the fastest growing technology to date^{ii,4} – its scope and effects on economies are hard to determine.

The digital sector’s share in global Gross Domestic Product (GDP) is projected to increase up to 3 percentage points by 2020 in some advanced economies.⁵ The digital economy itself contributes up to 8 percent of GDP in G-20 economies, according to the European Commission.⁶ An exponential rise in private investment in key technologies, such as Artificial Intelligence (AI), is driving this trend.⁷

Successful firms in the digital economy can reach global scale quickly without a lot of physical infrastructure and human resources. For

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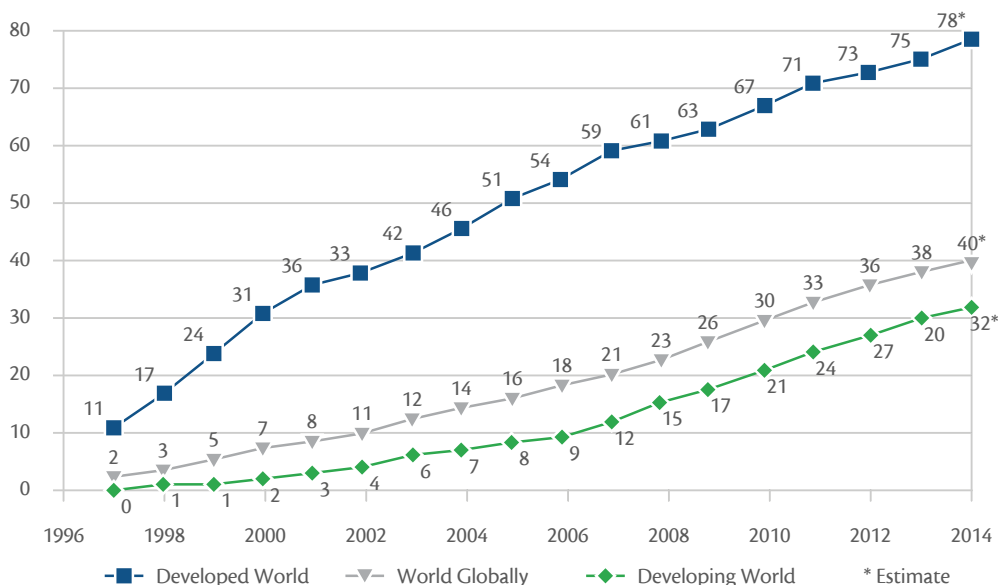
ⁱⁱ Forecasts estimate that by 2020, there will be 5.6 billion unique mobile subscribers globally – more than the number of people with electricity at home (5.3 billion), bank accounts (4.5 billion) or running water (3.5 billion).

developing countries in particular, this enables companies to integrate into global value chains more effectively and easily, creating new market linkages or altering existing ones. This is true for production of goods and the provision of services, since workers in any location can be contracted to complete online tasks. This poses its own challenges for working conditions. As broadband access in developing countries is also growing, regulatory challenges should be addressed at an early stage to ensure that digital divides close in tandem with decent job creation.

For now, more than half of the world's population does not have access to the internet, a vast majority living in developing countries (see **Figure 1**). With increased penetration of ICT, this raises the specter of deepening development gaps between countries, as well as within emerging economies, where investment in broadband is significant but highly uneven.

Bridging such digital divides – within and between countries – can be achieved with public policies and investments that promote ICT

Figure 1
Internet users/100 people



Source: "Internet users per 100 inhabitants 1997 to 2014", ICT Data and Statistics (IDS), International Telecommunication Union (ITU). Retrieved 25 May 2015.

diffusion and universal broadband access and support developing countries, rural regions and vulnerable groups in accessing ICT services.

This chapter will concentrate on the effects of the digital economy in industrialized countries, as they are more amplified and data is more readily available. However, these effects demonstrate the impact that can be expected globally from greater digitalization, especially given that investment, competition and labor regulations governing – especially their enforcement – are often weaker in the developing world.

The scope of digital change and labor market implications

Digital content and products are sweeping the globe. The scale and pace of innovation in digital technology is unprecedented (see **Figure 2**). This can be attributed to several factors. First, low and decreasing costs of data collection, storage – consider the “Cloud” – and processing are driving adoption of digital products and contents. Internet penetration has become faster and networks are now more sophisticated, from internet to mobile networks to virtual reality.

Meanwhile, the amount of data circulating online and collected is growing – think of “Big Data”. This allows for more efficient data analysis, but bears considerable privacy concerns. Algorithms are increasingly smarter – seen with the rise of Artificial Intelligence Interfaces and pattern recognition software.

These factors will speed up automation processes and re-structure service delivery

Bridging such digital divides – within and between countries – can be achieved with public policies and investments that promote ICT diffusion and universal broadband access and support developing countries, rural regions and vulnerable groups in their ability to access ICT services.

and the functioning of global value chains. This will in turn transform the way people work and the competencies required by workers. Existing processes will become more efficient, bearing opportunities for productivity growth, but also posing the threat of job displacement. This will more likely affect workers who perform

routine-intensive, repetitive tasks. Digitalization could also lead to increased “casualization” of work, the fragmentation of jobs into tasks, and the transformation of entire sectors like transport and hospitality. This is already visible with the provision of urban transport or rooms and holiday homes via web-based applications.

The effects of digital diffusion – the spread and use of ICT tools – on jobs are multi-layered: an ongoing process of greater automation in manufacturing; the creation of sophisticated online training and online public services (e-government); a rise in self-employment, enabled by online platforms; and working arrangements based on increased ability of employees to work remotely and across borders.

The expansion of mobile work is a good example of how digitalization is changing the way we work right now, as “workers can do their job from any place at any time, supported by

modern technologies.”⁸ ICT-enabled mobile work increases the flexibility and autonomy of workers, in particular for those who want to work from a different location, or from their place of residence, which may be remote or rural.

But other effects of “teleworking” and flexible working arrangements may not be as positive: employers may shirk their responsibilities. For example, employers may not adequately ensure health and safety for mobile workers, including insurance, ergonomic and/or secure equipment and workplace inspections. Working conditions and hours become difficult to regulate

Figure 2
Diffusion of selected ICT tools and activities across OECD countries as a percentage of enterprises with ten of more persons employed:



Source: OECD (2015), OECD Science, Technology and Industry Scoreboard 2015, OECD Publishing (figure 4 - page 32)

and oversee for mobile workers. At the same time, employees working remotely on a regular or permanent basis may be excluded from company discussions and decisions involuntarily if no remote communication channels or face-to-face meetings are arranged. This not only limits their knowledge about internal processes but their access to a community and ability to raise and share concerns.

Beyond that, technically advanced monitoring can result in several issues, including privacy violations, “as systems [...] capture whether a worker is logged on to the company network and how long they work on each task.”⁹ Such monitoring exacerbates the existing trend of task-based payment rather than payment based on working hours, depriving more workers of traditional compensation schemes and enhancing the possibility of income insecurity. Mobile work needs to abide by the same standards as regular employment – social security, minimum wage, and agreed upon working hours. Otherwise, there will be additional pressure on workers to compete for tasks, be constantly available, and work faster to satisfy the client or their employer.

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Social dialogue is essential to bring flexibility gains from technology advances together with worker well-being and protection. Agreements on working time and design – agreements to protect workers from any repercussions on their health, safety and welfare – should be integral to governing mobile work.

More broadly, at least two impacts must be considered in the context of digital change and the world of work. First, job losses could accelerate if no fair transition strategies are put in place to address the replacement of routine-intensive jobs brought on by automation. Second, the upward trend of increases in the number of non-standard jobs could be amplified by the rise of online platform enabled work. Both trends might lead to training deficits and growing income inequalities.

The policy response

Policymakers, trade unions, civil society and businesses need to respond to different dimensions of the digitalization of work. Technological change presents great potential for job creation in sectors related to science, technology, engineering, and

mathematics (STEM), including ICT, health and services. Technologies that shift economies to a more “low-carbon” growth trajectory will also generate opportunities for employment. There are now more than 8 million workers worldwide employed in renewable energy. The G20 countries have committed to infrastructure spending of 1 percent of GDP to enable green infrastructure to meet the climate change challenge. This will lead to job creation. As past industrial transformations have demonstrated, investment in research, development and innovation can boost jobs in all sectors.

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Yet the evolution of new digital technologies could also potentially displace large numbers of workers and affect the nature of work in some occupations. A balanced, critical assessment is necessary.

This chapter takes a systematic approach, looking at present employment dynamics

across two dimensions: first, the effects of digitalization on occupational tasks in existing jobs; and second, the nature of new jobs created directly by the digital economy, focusing on online platform-enabled work.

Traditional jobs affected by digitalization

Digitalization will impact production, resource management, and service delivery. According to recent studies, jobs in a diverse set of sectors and occupations will experience digitalization to varying degrees. From manufacturing and retail, to translation and financial services, to logistics and transport, workers across a large swathe of the economy will be affected. In some cases, jobs will disappear completely, while for most occupations only specific tasks will change.

Big Data and sensors for real-time, remote monitoring of processes will optimize logistics and shape general production and maintenance tasks. Advanced manufacturing, where automation has long been underway, is witnessing increased use of man-machine collaboration and 3-D printing. Utilizing intelligent systems to achieve more effective, tailor-made production is good, but concomitant training, health and safety at work will help ensure that workers benefit as well.

Predictions vary on the number of jobs that could be displaced by such processes. An Oxford Martin School study claimed that 47 percent of jobs in the United States are at risk of automation over the next two decades.¹⁰

Such estimates involve significant uncertainties. What is more important to examine is the extent to which the tasks in a given occupation are, or can be, automated. The OECD finds that “a relatively higher ICT intensity can substitute for part of the more routine jobs.”¹¹ In other words, depending on the sector and sophistication of the enterprise, occupations performed through a set of discrete tasks can be partly automated or modified through the use of ICT systems.

As a recent study pointed out, just 9 percent of jobs are at high risk of being displaced through automation, as over 70 percent of the tasks they involve can be automated. Another 25 percent of jobs would be transformed but not necessarily eliminated, since only half of the involved tasks can be automated.¹²

The World Bank predicts that certain tasks will always require capabilities that humans possess and computers do not – such as complex reasoning, socio-emotional skills, tacit knowledge and judgment.¹³

Other experts and observers are less optimistic about the job displacement effects of automation.

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Erik Brynjolfsson and Andrew McAfee from the MIT Sloan School of Management suggest that “the second machine age” will affect a wide range of cognitive, non-routine tasks amid a “great decoupling” of economic growth and job creation.¹⁴ As Nouriel Roubini points out, “unless the proper policies to nurture job

growth are put in place, it remains uncertain whether demand for labor will continue to grow as technology marches forward.”¹⁵

Such theories are likely too simplistic. Any automation process and the introduction of new technologies can enhance productivity while maintaining or even increasing the size of a company’s or sector’s workforce, or else create new jobs elsewhere in the economy.

The most likely scenario is that new technologies will make dealing with complex tasks more efficient, while other, more simple or repetitive tasks will become fully or partially automated. In between, as technology advances, there is a significant opportunity to create new jobs and to adapt existing jobs to leverage the benefits of digital change. Such opportunities need to be explored and a transition to such jobs facilitated.

However, if the transition to a more digitized world is not managed carefully, labor markets will become increasingly polarized – with high-wage, stable jobs for those with specialized skills, low-wage service sector jobs that are hard to automate but easy to place under non-standard employment relationships, and not much left in the middle. As the Oxford Martin report notes, “wages and educational attainment exhibit a strong negative relationship with the probability of computerization.” Such non-standard jobs “tend to have fewer rights to social protection, receive less training, often have weaker career progression, lack access to mortgage and other forms of credit, and face greater insecurity.”¹⁶

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In this context, active labor market policies and investments in re-training schemes and employer-promoted work-based learning should be designed to help workers who are displaced by digitalization adapt to technology through the acquisition of other skills that open doors to high-quality jobs. Moreover, such programs can help workers who have maintained their jobs learn new skills and perform new functions in their

current work, as a way of preventing displacement and remaining employable in the digital era. Beyond training programs, labor standards and policies need to be applied to prevent the spread of precarious non-standard work facilitated by technological change.¹⁹

Social dialogue is a well-proven method for managing processes of change and should be a central element of policymaking and implementation. Consultations with worker representatives are central to developing fair transition strategies and designing working arrangements and training. It is essential to discuss employment conditions, training needs and potentially new job profiles with trade unions

and employees at an early stage. Input from workers benefits business processes. Committed employees who know how to effectively utilize new technologies will contribute to a firm's overall productivity. A workforce in regular employment will earn better and consume more of the firm's goods and services.

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At present, trade unions take part in policy discussions on innovation and industrial

frameworks in some countries, especially in Europe due to a strong model of social dialogue.²⁰

They accompany workers in steering the introduction of new technologies through collective bargaining to ensure fair wages and transition arrangements, training and career guidance. Governments and businesses should support such models and

engage workers in the process of technology adoption.

Non-standard forms of work

"Non-standard work refers to jobs that fall outside of the realm of standard work arrangements, including temporary or fixed-term contracts, temporary agency or dispatched work, dependent self-employment, as well as part-time work, including marginal part-time work, which is characterized by short, variable, and often unpredictable hours. It can be both formal and informal."¹⁷

Employment relationship

"The employment relationship is a legal notion widely used in countries around the world to refer to the relationship between a person called an "employee" (frequently referred to as "a worker") and an "employer" for whom the "employee" performs work under certain conditions in return for remuneration. It is through the employment relationship, however defined, that reciprocal rights and obligations are created between the employee and the employer."¹⁸

Jobs in the digital economy

When discussing jobs created through the digital economy, policy attention is currently focused heavily on the “platform economy.” Every day, a new mobile application or online platform emerges promising to deliver a service faster and cheaper than before. Certain digital economy companies dominate the news cycle, whether because of large-scale product launches and service expansions (e.g. Google and Amazon), intense competition (e.g. Apple vs. Microsoft), or controversies surrounding lawsuits or workers’ protests (e.g. Uber).

Online platforms operate on different business models,²¹ including non-profit platforms that enable interactions between online users and for-profit peer-to-peer platforms that enable exchanges of resources or co-financing pledges between them.

This section focuses on the for-profit platform economy, which can be differentiated from the collaborative sharing economy. The chapter focuses specifically on platforms operating as for-profit businesses that bring together workers and consumers – a so-called business-worker-

user business model. Such companies monetize the transactions and service delivery that take place, impose fees and often set wages, rules and standards.

Jobs on such platforms can be divided into two categories: on-demand jobs and crowd work (see **Table 2**). In both cases, platform companies assume an intermediary role in connecting

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workers that provide services to clients. The difference lies in the nature and location of the work performed, and the organizational structures of the platforms. On-demand jobs refer to traditional work, such as driving, cleaning, and administrative tasks, offered via mobile or

web applications. Crowd work refers to tasks completed remotely, for which the worker need not be in any particular location.²² Location is indeed an important distinction affecting the way work is performed, as a recent European Trade Union Institute (ETUI) report argues.²³

Both types of platforms can also serve as a vehicle for outsourcing. Previously, tasks such as design, translation or accounting would have been

carried out by in-house employees or freelancers based on contractual arrangements. Now firms can outsource these tasks to platform economy workers to reduce labor costs.

Both types of platform economy work – on-demand and crowd work – are likely to become a much broader phenomenon. Platforms are growing exponentially and expanding to new sectors – for example, UberHealth for care work and UberEat for food delivery. More traditional companies have also begun acquiring or investing heavily in platforms, leading to a potential proliferation of these business models.

Ensuing challenges

The main issue with platform economy work is the fact that companies often skirt regulatory standards. Like other firms, online platforms

profit from demand for certain goods and services, but unlike traditional companies, they often avoid regulatory obligations – especially regulations related to labor, consumer protection and taxation. The dissolution of employment relationships and the risk of increased income insecurity are two major outcomes of this regulatory arbitrage.

While not all platform companies are operating in the same way, there are prominent challenges. First, business models often rely on short-term financing with high pressure on profit margins, motivating firms to skirt regulations around the employment relationship and taxation. In this context, firms shift the risk of entrepreneurship to the workers – no demand, no work – along with the burden of taxation and social protection. Even though workers take on these burdens, they often

Table 2

On-demand jobs vs. crowd work

	On-demand jobs	Crowd work
Description	Traditional, often physical and location-based work facilitated through mobile applications or web platforms that often set the terms of service (including prices and fees) for both the consumers and workers.	Tasks that are performed online across borders through web platforms.
Examples of Work/Tasks	Driving, cleaning, care or repair work, delivery services, clerical work.	Website development, graphic design, ghost writing, translation, photo tagging.
Examples of Platform Economy Firms	Uber, Lyft, Care.com, Handy, Deliveroo, TaskRabbit.	UpWork, Crowdflower, Amazon Mechanical Turk, Crowdsourcse, 99Designs.

lack control over decisions around pricing, service delivery, and working hours, making their work distinct from other forms of entrepreneurship. At the same time, crowd workers are often forced to compete for tasks across borders, and are unable to claim their rights or contest their working conditions – whether because of fear, lack of information, or active discouragement from the company.

Workers feel forced to provide services at below-market price in order to attract work and establish a good reputation on the platform. The system relies on the fact that there is not enough demand, but an oversupply of workers willing to take on tasks. With criticism rising, TaskRabbit – an online platform for services such as cleaning, running errands or repair work operating since 2008 pre-dominantly in the United States and United Kingdom – recently introduced a minimum wage of US\$ 11.20, higher than the minimum wage in many U.S. states. Nonetheless, the company still denies its “Taskers” an employment relationship.

By avoiding employer responsibilities, including contributions to social security benefits, and by preventing workers from organizing collectively or obtaining any rights, such as those around

sick, maternity and/or paid leave, some of these companies drive precarious work. Companies in this field are spending substantial resources on lobbying for relaxation or removal of regulations that hinder their business models and could potentially force them to establish an employment relationship with workers. The same applies to preventing new regulations or legal frameworks tailored specifically to the platform economy.

Many observers and trade unions are raising the issue of online platforms classifying their employees as independent contractors. Workers on these platforms need to pay taxes and social security contributions as would any other self-employed worker, while firms like

Uber – an on-demand transportation provider – take commissions from their earnings.

One of Uber’s arguments for not granting employee status to its workforce is the immeasurability of hours worked. However, on-demand, app-based platforms are a data mine, tracking every step of service delivery. As the Economic Policy Institute has pointed out: “Uber can and does measure the time drivers have their apps on, to the minute.”²⁴ In some U.S. cities, Uber

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guarantees average wages per hour if a driver is working most of the time on the application within a certain time period. The wages are above the statutory minimum wage, but once social security, insurance costs and potential payments on loans taken to buy a car are deducted, they slip below the minimum wage. In addition, unpredictable demand, volatile price settings and rating systems affect engagement rates and thus exclude drivers from the guaranteed wage program and predictable, regular earnings more generally.

Most online platforms like Uber determine the fees and prices without consulting their workers. At the same time, service delivery is rated by the clients, who might not always be objective. Uber can then block a driver if the ratings are bad or if she/he does not respond to a request fast enough. This does not fit well with the company's assertion that drivers are independent contractors or freelancers.

What about the scale and prevalence of platform economy work?

According to a 2016 JP Morgan Chase report, 4 percent of American adults earned income from the online platform economy between 2012 and 2015, a 47-fold increase over the last three

years.²⁵ For most individuals, platform work is not their principal source of income. Those working on labor platforms, such as Uber or TaskRabbit, earned an average of 33 percent of their total monthly income through the platform. For those earning through capital platforms, such as eBay or Airbnb, the average was 20 percent of monthly income. The share of income earned is higher among low- and medium-income workers in labor platforms – pointing to the fact platform economy work might be a last resort for those struggling to make ends meet.

There is thus a distinction between workers only using the platforms irregularly to top up their income, which nonetheless points to the fact that wages may be insufficient, and those who need to engage on platforms more regularly in addition to their regular job. The latter results in overtime work, and points to the fact that these workers cannot find another source of income in the formal economy. There are also those who are at first attracted by the accessibility of this type of work but are not aware of its downsides. All in all, the platform economy for low- and medium-income workers is a manifestation of rising income inequality more than freedom of choice.

Platform economy workers lack fundamental labor standards and rights at work.

With employment levels yet to return to pre-crisis levels in most industrialized economies, the platform economy emerges as the only recourse for some workers. When they are not recognized as employees, their economic situation remains unstable and they lack training and other opportunities to find more permanent, regular employment. In developing countries, where informal employment is still high, such opportunities present a chance to earn more income. However, in the long-term, they do not lead to achieving decent work and standard employment relationships in these economies, and instead create a new category of non-standard work. To avoid such a precarious cycle, platforms should provide a threshold of hours worked that would allow for an employment relationship with all labor rights in place.

The long-term consequences of the trends described here are manifold. First of all, those who work part- or full-time in the platform economy, like other non-standard workers, generally earn less than those in similar jobs with

standard employment relationships. In the OECD, median annual earnings of non-standard workers are about half the level of those for standard workers.²⁶ These low earnings have short- and long-term consequences for economic growth. Low wages lead to weak aggregate demand, preventing the global economy from getting back on track.

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In the long run, the growth of non-standard work will impact the skill levels and productivity of the workforce, since training is often insufficient or absent altogether. On the other hand, a commitment

to workers through standard employment relationships can boost productivity, leading not only to lower levels of inequality but also more sustainable economic growth.^{iii,27}

The challenges at hand might present an opportunity to identify and bring together workers now assembled through large online platforms. For example, tradespeople like plumbers and electricians, who have long worked as self-employed independent contractors, may

ⁱⁱⁱ A stronger commitment to employees exercised through regular employment contracts can lead to less need for monitoring of their work; greater loyalty and thus less likelihood of “leakages” of sensitive company information; and greater utilization of employees’ tacit knowledge to build innovation potential and expand operations.

now be easier to organize if a large proportion are working through a single platform.²⁸ This may offer

scope for establishing collective bargaining rights for these workers.

Policy pathways toward a more equitable digital economy and quality jobs

As outlined above, the technologies enabling the digital economy and digitalization processes result in employment challenges that are not new, but are amplified and spread at a faster pace. Policies and regulatory frameworks do not need to be completely revised or reinvented. Instead they need to take into account the changing dynamics of work.

The potential of automation of certain tasks within jobs demands fair transition strategies: increased funding for public education and training systems, including support and training for teaching staff; investment in technical and vocational education and training (TVET) and apprenticeship programs; and on-the-job training to enable people to acquire basic, advanced and/or specialized digital skills depending on their professional needs. Moreover, social safety nets

and active labor market policies are necessary to bring workers into new quality jobs.

Companies deploying new business models in the digital economy need to be held to the same standards as more traditional firms when it comes to workers' rights. In this context, effective regulatory frameworks around investment, competition and taxation are also essential.

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Finally, in addition to a more robust strategy to improve employment outcomes for workers affected by digitalization, greater equality of access to the digital economy needs to be ensured. This requires investments in ICT and broadband infrastructure development to bridge digital divides and allow for local content development in developing countries and among vulnerable groups.

An action plan for quality jobs in the digital economy²⁹

Ensuring good working conditions through:

1. Working hours regulation, including overtime regulation.
2. New rules for mobile work .
3. Innovative work practices that enhance labor productivity and employee satisfaction .
4. Data protection – personal and commercial – including machine-collected data at the workplace.
5. Lifelong learning: on-the-job training and strengthened TVET systems.

Promoting employment relationships and a rights-based approach:

1. Extend rights and protections to all workers, regardless of the type of labor contract.
2. Reattach employer responsibilities, such as contributions to social security benefits.^{iv}
3. Establish binding corporate accountability for lead firms, including transparency criteria on budgets, labor practices and workers in supply chains.
4. Strengthen social safety nets for platform economy workers by ensuring similar coverage including health, disability, pensions and unemployment benefits as other workers.
5. Enforce minimum wage legislation .
6. Strengthen collective bargaining coverage and effective social dialogue.

Developing systemic policies based on:

1. Union involvement in all national, sectoral and local digital transition processes.
2. Social protection systems that provide universal and portable coverage.
3. Commitment to quality jobs, including fair wages, social protection coverage, upskilling and stronger labor market institutions.
4. Public investment in universal broadband access.
5. Education and training systems across all age groups to prepare workers for technological changes .
6. Automation processes that render production more efficient without displacing workers.
7. Job creation in the ICT sector and STEM-related fields, in health and services sectors, and through the transformation of industries to low-carbon pathways.

Establishing preventative mechanisms including:

1. Fair transition strategies for workers in sectors prone to automation and digitalization – including a whole-of-government approach that features technology, industrial, employment, social and training policies .
2. Predicting shifts in job profiles and identifying new employment opportunities.
3. Anticipating future skill needs by occupational task.
4. Analyzing the spread and effects of new technology on production, service delivery and working conditions.

^{iv} In countries where such benefits are provided in regular employment.

Strengthening workers' voice in the digital economy and digitalization processes

Healthy industrial relations generally result in greater income stability and distribution, and are critical for managing the transition to more digitalized economies. Evidence shows that strong labor market institutions, including collective bargaining and hence unions, are essential to ensuring fair wages and an equitable distribution of productivity gains. In a 2015 paper, the International Monetary Fund's research department made the case for trade unions and collective bargaining as a powerful tool to keep income inequality in check.³⁰

Unions are at the forefront in guaranteeing good working conditions and overseeing and managing the effects of outsourcing and displacements resulting from technological change.

It is therefore crucial to expand union membership and collective bargaining coverage in the context of the digital economy rather than allow it to weaken. Unions do not only react to disruptive processes; they also contribute to the development of future company strategies and support employee-driven innovation and further development of workforce skills. They negotiate the introduction of new organizational models

– including those that promote data protection and workers' health and safety – and technology, such as advanced ICT and robotics, through meaningful social dialogue.

Trade unions at the national and global level are developing principles, engaging directly in the digital economy, and participating where possible

in the development of industrial and innovation policies. For example, trade unions and the International Transport Workers' Federation (ITF) are supporting Uber workers in their effort to organize and establish an

employment relationship. IG Metall in Germany created the Fair Crowd Work website that allows platform economy workers to rank their wages, rate their working conditions, and obtain information on their rights.

Moreover, trade union action compels government action to improve the quality of work. The California Labor Commission ruled in June 2015 that an Uber driver is an employee, not an independent contractor,³¹ and the U.S. city of Seattle passed a bill giving on-demand drivers the right to unionize.³²

Healthy industrial relations result in greater income stability and distribution, and are critical for managing the transition to more digitalized economies.

We cannot yet foresee all the consequences from digital change. What is needed now is to examine the opportunities and challenges arising and shape legal instruments and regulatory frameworks toward reaping the benefits and

minimizing the costs of a large-scale transition to digital work. Unions are integral to the process of ensuring that economies of the future are inclusive.

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