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# Defining the Future of Work, Before It Defines Us

*The Evolving International Labour Organization*

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## *Evolutions of Revolutions*

Technological innovations have always revolutionized the way people live and work. In human history, evolutions in technology have advanced our economic foundation through improving production, diversification, and the creation of a global marketplace.<sup>1</sup> But these advances have also spurred conflict and competition in the labor market. These have been periods of dramatic economic growth, and dramatic growing pains. The first technologies powered the shift toward an agrarian lifestyle, with growth of cities, supply chains, logistics, and trade. The expansion of industries through electricity and engines was a second wave of technological advances while digital innovations marked the third big wave.

Technology has constantly and consistently changed how people work and how economies and societies are organized. Governments, labor unions, and companies grew to shape how people worked and to mitigate conflict. Technological innovations and free trade led the way to the global economy. But while that global economy thrives on continual evolution, those reliant on the system resist change to protect their wellbeing.

In the past, that global system has been somewhat disconnected, with countries working and growing independently. Abundant resources seemingly without limitation fed growth, education was limited to a few elites, and new industries represented new and more jobs for many. Globalization and technological advents enabled labor markets in developing countries to gain a slice of the global pie. This is a healthy trend in the world economy, with more people competing in and contributing to global output, resulting in

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<sup>1</sup> Klaus Schwab, "The Fourth Industrial Revolution: What It Means and How to Respond," World Economic Forum, January 14, 2016, <https://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond/>.

increased economic efficiency. However, there are threats to the opportunities that today's technologies represent for tomorrow.

*“There is an increasing need for cognitive skills, a readily adaptable workforce, which coupled with the growing complexity of job tasks, will increase the demand for workers with strong core skills and motivation to learn and adapt throughout their professional careers.”*

*-Guy Ryder, International Labour Organization (ILO) Director General<sup>2</sup>*

In the twenty-first century, the technologies at the center of the “Fourth Industrial Revolution”—robotics, artificial intelligence, 3D printing, and others—are defining the future of work and our society into a drastically different system than ever before. While past industrial revolutions created and destroyed jobs, they eventually resulted in overall positive net job effects, including improving working conditions, efficiency, and enabling diverse people to enter global supply chains.

Well documented labor and human rights abuses throughout past industrial revolutions convinced governments and civil society to protect workers. The new Fourth Industrial Revolution will be similar in that if it is not well managed, it could lead to job loss and human rights abuses. But if confronted now through economic modernization and forward thinking, the fourth industrial revolution could power a sustainable future where emerging markets mature, and developed economies do not face similar shocks to the Great Depression and Great Recession.

Some experts argue that the current Fourth Industrial Revolution will be dramatically different with unprecedented job losses. Sophisticated machines and automation will enable a few to do the job tens or hundreds used to do.<sup>3</sup> The worry is that the trend of automation can minimize costs and maximize efficiency, but it may risk destroying jobs, which millions of people rely on globally. However, the World Economic Forum recently found that while robots could displace around 75 million people from their jobs by 2022, the industry could also *create* 133 million jobs.<sup>4</sup> But to ensure this reality occurs, governments need to work in concert with education systems, multilaterals, and industry to prepare the workforce of the future.

Not only could technology limit the sheer amount of jobs—especially if we do not adjust our current economic strategies—but it could also impact the industries the world relies on to create jobs for the growing youth bulge and the “character of production and employment.”<sup>5</sup> In the past, massive growth in agricultural, steel, iron, shipping, mining, garment, and other industries provided the bulk of jobs. But now, many manufacturing-based industries are exposed to automation or phasing out in favor of more sustainable and cleaner technologies.

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<sup>2</sup> Guy Ryder, “Rethink Lifelong Learning,” International Labour Organization, September 6, 2018, [https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/ilo-director-general/statements-and-speeches/WCMS\\_644530/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/ilo-director-general/statements-and-speeches/WCMS_644530/lang-en/index.htm).

<sup>3</sup> James Manyika, “What Is the Future of Work,” McKinsey, December 2017, <https://www.mckinsey.com/featured-insights/future-of-organizations-and-work/what-is-the-future-of-work>.

<sup>4</sup> “WEF: Robots ‘Will Create More Jobs Than They Displace’,” BBC, September 17, 2018, <https://www.bbc.com/news/business-45545228>.

<sup>5</sup> “Global Commission on Future of Work—Five Things You Need to Know,” ILO, August 2018, [https://www.ilo.org/global/topics/future-of-work/WCMS\\_578759/lang-en/index.htm](https://www.ilo.org/global/topics/future-of-work/WCMS_578759/lang-en/index.htm).

At the same time, technology is shifting labor into a more digitized and automated space while people are educated for industries of the past. Non-standard forms of employment have popularized as digital marketplaces for skilled and unskilled labor alike have grown. Many people use these opportunities for supplemental income, but in the future, they could form the bulk of employment for people in developed and developing countries alike.

Technology represents a chance for drastic evolutions in the way the world works, how it produces goods and services, and how the economy works. But while some have been early adopters of technologies, which could rework global labor and industry, many governments, industries, and workers have resisted and retrenched into traditional industries with potentially limited and unsustainable futures. Disturbances arise in the global system as developed countries strive to maintain their dominant grip and emerging markets try to leapfrog to compete. These rippling evolutions will impact global society, and they must be managed before they manage us.

### *International Labour Organization at the Forefront of the Future of Work*

Tectonic technological and societal shifts have been upsetting established systems for generations. These evolutions became more pronounced as countries became more interwoven in a global economy. The industrial revolutions of the eighteenth and nineteenth centuries sacrificed many human rights in the name of progress. Skyscrapers, railroads, meatpacking, steel and iron plants, mines, cotton fields, and cities all grew as the rights and conditions for the people who worked in them diminished.

After World War I, in recognition of the atrocities against human rights and as a response to the abuses in the Bolshevik Revolution in Russia, the global community confronted these worsening human rights conditions multilaterally. The International Labour Organization (ILO) was established in 1919 as part of the system designed to ensure lasting global peace established on social justice.<sup>6</sup> For the first time, a global community recognized workers and employers' rights and decent work as human rights and made social justice a vital part of the fabric of world peace. The ILO was ahead of its time in many ways. It was the first specialized UN agency, paving the way for other organizations like the United Nations Children's Fund (UNICEF) and the United Nations High Commissioner for Refugees (UNHCR). Even in its structure, the ILO was revolutionary. Most previous governing organizations only featured the voices of a few elites and discounted the opinions or views of many governed. But the "tripartite" structure of the ILO ensured governments, employers, and employees would all have a voice in labor conditions.

While we have the ILO and labor unions to thank for the work week and the weekend, combatting forced and child labor, promoting gender equality, defending worker rights, and introducing social protections, perhaps the most forward-thinking piece was the recognition that "the failure of any nation to adopt humane conditions of labor is an obstacle in the way of other nations, which desire to improve the conditions in their own countries."<sup>7</sup> That recognition amounts to the belief that poverty anywhere threatens prosperity everywhere.

The ILO has always been at the forefront of the world of work. As it commemorates its 100th anniversary in 2019, the ILO is again leading the discussion and direction of the future of work in the context of the Fourth Industrial Revolution and an interconnected global economy. As the organization turns 100 years

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<sup>6</sup> "Origins and History," ILO, <https://www.ilo.org/global/about-the-ilo/history/lang--en/index.htm>.

<sup>7</sup> *Ibid.*

old, it is looking at what the Fourth Industrial Revolution could do to upheave a global economic system from which so many millions benefit.

What do new technologies, industries, and countries entering world industries mean for social justice in work? What is the modern role of the ILO in delivering human rights in labor as work digitizes, new industries arise, people work in gig economies, and new countries industrialize? To answer these questions, which so many are asking, the ILO has launched the Global Commission on the Future of Work.<sup>8</sup> Many research organizations and thought leaders are contemplating the changing world of work, but the ILO's reach, tripartite structure, and aim for justice is perhaps the world's best chance for channeling potentially threatening evolutions into growth.

### *What's at Stake in the World of Work?*

Modern technological disruptions come at a time of pressing needs in the labor market. Limited formal job growth and the lack of protection at work are huge challenges in developing countries since demographic trends tell us that more people will need jobs than ever before. The United Nations estimates that the number of people under 25 globally will have risen by 7 percent from 2015 to 2030, with Africa alone accounting for an almost 300 million person increase.<sup>9</sup> Countries experiencing the largest youth bulges in the next few years are already struggling with health and education issues, which could be exacerbated by shifting demographics and underdevelopment, leading to these groups fueling civil conflicts rather than solving them.<sup>10</sup> <sup>11</sup> More young people are entering the job market, and these generations have high expectations about the world of work. In addition to a lack of jobs, the jobs that do exist experience little to no wage growth and are often in the informal economy. A, perhaps, more problematic issue than unemployment is that more than 1.4 billion workers worldwide are in a position of vulnerable employment. These people lack elements associated with decent employment, such as adequate social security and a voice at work. Stagnant wage growth concurrent to increased production—which many governments are pushing—has led to economic collapse in the past, most notably during the Great Depression.

Of the limited youth who do get jobs, many may not even have access to decent work. These trends spur on global migration rates, conflict, and unrest. If wage growth and quality of work do not advance, what kind of issues will the world face? Failing to develop meaningful job opportunities could contribute to the rise in conflict, migration, and extremism and require even more investments into social protection systems.

In many developed countries, the populations are aging with more people working longer, limiting how many youths can enter the workforce and rework societies for tomorrow's realities. In developing countries, youths who have aspired to work in skilled industries, thanks to globalized expectations, face the reality of a limited job market. Environmentally, industries with high carbon output are being transitioned out in favor of sustainable production. Yet developing countries still want to utilize these

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<sup>8</sup> "Global Commission on Future of Work—Five Things You Need to Know."

<sup>9</sup> UN Population Division, "Youth Population Trends and Sustainable Development," The United Nations, no. 2015/1 (May 2015), [http://www.un.org/en/development/desa/population/publications/pdf/popfacts/PopFacts\\_2015-1.pdf](http://www.un.org/en/development/desa/population/publications/pdf/popfacts/PopFacts_2015-1.pdf).

<sup>10</sup> United Nations, Department of Economic and Social Affairs, Population Division Population, *2030: Demographic Challenges and Opportunities for Sustainable Development Planning*, (New York: The United Nations, 2015), <http://www.un.org/en/development/desa/population/publications/pdf/trends/Population2030.pdf>;

<sup>11</sup> Lionel Beehner, "The Effects of the 'Youth Bulge on Civil Conflicts,'" *Council on Foreign Relations*, April 2007, <https://www.cfr.org/backgrounder/effects-youth-bulge-civil-conflicts>.

industries to expedite their own development. While financial markets and consumers have signaled that sustainable industries are the way of the future, very few governments have followed suit. The Paris Climate Accords were a notable step toward creating a workforce focused on future industrial growth. But since then, many governments have reverted to selling workers on industries of the past making a comeback in the future, rather than evolving.

Wage stagnation, economic inequality, the rise of flexible contracts and the gig economy, and declining unions are a reality. In developing countries, 60 percent of workers are in informal jobs—often low paid, with no social protections and with bad working conditions. These dual narratives create a symbiotic relationship between the developing and developed worlds, which was recognized in the ILO preamble referencing that poverty anywhere threatens prosperity everywhere.

### *Poverty Anywhere Threatens Prosperity Everywhere*

The ability for technology to completely disrupt the global economic system is highly debated, but the necessity to embrace change and shape our own future of work represents a better chance to achieve common goals and minimize inequality. The ILO has a unique opportunity to convene its tripartite structure to shape the discussion on the world of work and propose new tools to manage the future.

*“We understand that the front-loading of qualifications for a whole lifetime doesn’t work anymore. We need to replenish skills throughout a working career, and this calls for revisiting the models and concepts of lifelong learning to create the future we want.”*

*-Guy Ryder, ILO Director General<sup>12</sup>*

There are some visible trends that are shaping the future world of work, and the global system must recognize and change with these trends if they are to be channeled for good. In the first place, systemically, there is the larger question around the current liberal institutional order, which has defined the global direction since World War I. Given new technologies and industries, old models for organizing labor, employment, and production may not work going forward.<sup>13</sup> Concurrent with declining membership, there are more legal limits on labor unions.<sup>14</sup> <sup>15</sup> With the advent of new technologies and decentralized labor models, labor unions face the great challenge of organizing while people move more quickly and often between industries and while manufacturing in the developed world diminishes.

Second, the traditional work model is also evolving. For older generations in advanced economies, the world of work consisted of well-defined stages: people were educated, had one career—got a job with an employer for 35 years—and eventually retired at 65 with a pension. With rapid transitioning technologies and industries, it now seems that there are blurred lines between careers, work, education, and retirement. Furthermore, retirement may not be a reality for many people as social security systems are strained, and

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<sup>12</sup> Guy Ryder, “Rethink Lifelong Learning.”

<sup>13</sup> James Manyika, “What is the Future of Work?”

<sup>14</sup> Niall McCarthy, “Which Countries Have the Highest Levels of Labour Union Membership?” *Forbes*, June 20, 2017, <https://www.forbes.com/sites/niallmccarthy/2017/06/20/which-countries-have-the-highest-levels-of-labor-union-membership-infographic/#2bbf9a4033c0>.

<sup>15</sup> Michael Paarlberg, “The Future of American Unions Hang in the Balance,” *The Guardian*, February 26, 2018, <https://www.theguardian.com/commentisfree/2018/feb/26/janus-afscme-supreme-court-case-labor-unions-impact>.

wages are not enough to save for retirement. People could now have multiple careers, educations, retirements, or none at all. Governments, education systems, companies, and society need to rethink what kind of education and social protection systems we need for this new world of work of blurred lines. For example, if retirement vanishes, what other social safety nets need to be constructed to care for an aging population? And with the advent of non-standard employment, how can workers be guaranteed the same rights as traditional workers?<sup>16</sup> Beyond welfare programs, education systems must adjust now to the realities of tomorrow, especially in the face of training workforces for the industries of the future. Governments do no favors for their citizens by supporting industries, which may be obsolete in the next few years.

Third, in recognition of these shifting realities around industries and economic systems, education and expectations around careers must end. For many, spurning an accepted career path is unthinkable, and apprenticeships or vocational training are demonized. That needs to change. Apprenticeships are an efficient method for getting quality work and training for a youth bulge that is three times more likely to be unemployed as someone over 25.<sup>17</sup> Technical and Vocational Education and Training (TVET) is useful for recognizing the rapidly oscillating job market in congruence with technological development around the world and empowering a labor force to adjust to those realities, especially in developing countries. TVET can be used as a purposeful education strategy to prepare today's students for tomorrow's jobs, especially in developing contexts.

Fourth, in recognition of the previous trends, governments and groups like the ILO will be responsible for creating an enabling environment and legal framework in which the rights of workers are not compromised as labor changes and evolves. For example, the growing gig economy is conducive to companies skirting accepted labor standards by pointing to emerging issues such as what constitutes an employee or an employer. But if these labor models are truly the way of the future, then governments and multilaterals need to work with these companies rather than against them. Recognizing the evolutions in labor offers a better chance of empowering workers in the future. So, then the question becomes, what role will governments have in job creation, in empowering the private sector of the future, and in ensuring that rights for workers are still guaranteed as work changes?

## *Facilitating the Future*

As leaders in the developing and developed worlds alike continually retrench themselves in older systems suited to past industrial models, the ILO is uniquely positioned as an interlocutor between the industries of the future, the workers who will work in them, and the governments, which will regulate them. There is a role for governments, international organizations, companies, civil society, and unions. Governments need to be agenda setters and encourage innovation and invest in a future that helps them remain competitive. Companies are the bastions of innovation that define global economic growth and progress. Civil society and international organizations need to promote protections given the history of how technological evolutions have negatively impacted labor in the past. And labor unions must evolve to protect workers, not jobs, as people increasingly work in nontraditional industries.

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<sup>16</sup> Christina Behrendt and Quynh Anh Nguyen, "Innovative Approaches for Ensuring Universal Social Protection for the Future of Work," ILO (Geneva: ILO, 2018), [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms\\_629864.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---cabinet/documents/publication/wcms_629864.pdf).

<sup>17</sup> Guy Ryder, "The Apprenticeship Innovation Challenge," ILO, July 4, 2018, [https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/ilo-director-general/statements-and-speeches/WCMS\\_634224/lang--en/index.htm](https://www.ilo.org/global/about-the-ilo/how-the-ilo-works/ilo-director-general/statements-and-speeches/WCMS_634224/lang--en/index.htm).

The ILO has a role in building the future as well. While the goal to guarantee rights for workers remains the same regardless of geography, achieving that goal will take different paths in every country and in every industry. As the economies in the developed world transform and emerging markets mature, each will have different needs and problems. But workers will always need protections and guarantees independent of what their career and work look like. The ILO was revolutionary in its creation and earliest declarations, and the world needs the organization to be visionary again. The ILO Global Commission on the Future of Work is the necessary first step to facilitating a future of work for all. Now, the challenge will be levying and channeling the global changes necessary for ensuring that future.

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