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2021

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# AUTOMATION AND THE INTERNATIONAL HUMAN RIGHT TO WORK

*Martin Kwan\**

## INTRODUCTION

Automation by nature is more efficient than certain human jobs in terms of costs, quality and capacity. It is designed to replace humans. With the effect of eliminating jobs, it directly erodes the right to work. The issue is whether the right to work can provide any protection for the workers replaced. However, the “right to work scarcely receive[s] attention in discussions of human rights.”<sup>1</sup> Therefore, it is important to explore the modern relevance of the right. With automation’s threat to jobs, the pertinence and importance of the right to work will arguably increase. It is urged that there should be more discussions on how the right to work can take its updated shape and form in the new age of automation.<sup>2</sup> This Article aims to serve as a brief introduction to this debate and it proposes how the right to work should be applied in the age of automation.

While the right to work should be enforced, some argue that keeping jobs is not a feasible way to protect this right because the tendency to switch to automation is too strong and unstoppable.<sup>3</sup> As the right to work and automation do not coexist by nature, generic human rights measures, such as requiring due diligence or right-compliant implementation, are not adequate.<sup>4</sup> It is also not practical to suggest stopping and slowing down automation. Tailored solutions are needed. It may be better to accept the hard truth that the right to work, in the sense of having access to jobs, will inevitably and eventually become obsolete

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<sup>1</sup> Hugh Collins, *Is there a Human Right to work?*, in *THE RIGHT TO WORK: LEGAL AND PHILOSOPHICAL PERSPECTIVES* 17, 18–20 (Virginia Mantouvalou ed., 2015) (suggesting that the right is seldom explored because it is perceived by some as “imprecise, impracticable, inconsistent, instrumental and incoherent.”) It is “imprecise” and “inconsistent” because it can be defined as prohibiting the governments from interfering with the right to work (prohibitory); but it can also be defined as requiring the provision of access to full employment (obligatory). *See id.* It is also “impracticable” because full employment cannot be feasibly achieved. *Id.* Given the right to work is merely an “instrumental” route to allow the proper enjoyment other rights and freedoms, it is not necessarily essential. *Id.* Its “incoherence” traces from the fact that not all perceive work as beneficial to our lives.). *See generally* James W. Nickel, *Giving Up on the Human Right to Work*, in *THE RIGHT TO WORK*, *supra* note 1, at 137 (stating that the right to work “seems not to get taken very seriously or to accomplish much”).

<sup>2</sup> *See generally* Collins, *supra* note 1.

<sup>3</sup> *See generally* Karla Lant, *Rise of the Machines: We Can Stop Automation from Destroying Society*, *FUTURISM* (Apr. 14, 2017).

<sup>4</sup> *See generally* Jeffrey Hirsch, *Worker-Protection Laws Aren’t Ready for An Automated Future*, *CONVERSATION* (Aug. 28, 2019).

and not realistically protectable for the replaced workers. As such, the focus should turn to how the derogation of the right can be adequately remedied considering that the right to work (together with other rights) legally requires the provisions of redress, such as training and guaranteed income, to the deprived workers.

In this Article, “automation” is defined broadly to include any reliance on technology which removes the formerly required role of human labor. It would therefore also include the inter-related deployment of robots and artificial intelligence (AI), such as the self-navigation of vehicles.<sup>5</sup> “Innovators” denotes technology companies which create automating technologies. Meanwhile, the “right to work” refers to the right outlined in the international human rights instruments, like the Universal Declaration of Human Rights, and should not be confused with any rights under U.S. law.<sup>6</sup>

Before starting, it is helpful to clarify the assumptions made. This Article does not seek to debate whether there will be a net loss of jobs considering automation will create some new jobs.<sup>7</sup> Instead, the analysis is based on the prediction and assumption that a substantial group of workers who only possess automatable skills and are unable to acquire hard-to-automate skills, due to age, or lack of accessibility or alternative talent, will be replaced.<sup>8</sup> For these workers, the right to work is practically useless and unenforceable because there is no job for them. The analysis is not based on a particular jurisdiction but instead based on human rights covenants and guidelines, as the adoption of automation and its impact are globalized.

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<sup>5</sup> For example, some describe “intelligent automation” as a process of automation that utilizes AI. See David Schatsky & Vikram Mahidhar, *Intelligent automation: A new era of innovation*, DELOITTE INSIGHTS (Jan. 22, 2014). Often “the automation of decision-making” requires AI. See Filippo Raso et al., *Artificial Intelligence & Human Rights: Opportunities & Risks*, BERKMAN KLEIN CENTRE 1 (Sept. 25, 2018).

<sup>6</sup> See, e.g., Universal Declaration of Human Rights art. 23, G.A. Res. 217(111) A, U.N. Doc. A/RES/217(III), (Dec. 10, 1948) (stating that “(1) Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment. (2) Everyone, without any discrimination, has the right to equal pay for equal work. (3) Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection. (4) Everyone has the right to form and to join trade unions for the protection of his interests.”) [hereinafter UDHR].

<sup>7</sup> See generally Marcus Casey & Sarah Nzau, *Robots Kill Jobs, But They Create Jobs, Too*, BROOKINGS (Mar. 18, 2019).

<sup>8</sup> See generally W. E. Butler, *The Right to Work*, 13 INT’L LEGAL PRAC. 69 (1988).

## I. AUTOMATION'S THREAT TO JOBS

It is undisputed that automation has a lot of benefits, but it simultaneously creates myriad issues.<sup>9</sup> Of note, one of the most controversial problems is the elimination of jobs.<sup>10</sup> Corporations switch to automation because of its higher efficiency and lower costs.<sup>11</sup> It is predicted that there will be “net job losses from automation.”<sup>12</sup> Automation has gone far beyond the original vision of only replacing “dull, dirty or dangerous” jobs.<sup>13</sup> Not only does it replace labor intensive jobs (such as cab driving), tertiary and professional jobs are also in danger.<sup>14</sup> For example, it eliminates the need for doctors for certain procedures.<sup>15</sup> AI has a higher accurate detection rate of cancerous skin lesions than dermatologists.<sup>16</sup> In one situation AI diagnosed a “varying form of leukaemia” within minutes when doctors failed to do so for months.<sup>17</sup> The same holds true for other professionals, such as radiologists.<sup>18</sup>

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<sup>9</sup> Parliamentary Assembly of the Council of Europe, *Recommendation 2102 (2017): Technological convergence, artificial intelligence and human rights* Humankind is increasing its abilities by boosting them with the help of machines, robots and software.”) [hereinafter *Recommendation 2102 (2017)*]; see also *White Paper: On Artificial Intelligence -A European approach to excellence and trust*, COM (Feb. 19, 2020). However, doubts have also been raised regarding its proper application. See, e.g., Peter Asaro, *On banning autonomous weapon systems: human rights, automation, and the dehumanization of lethal decision-making*, 94 INT'L. REV. RED CROSS 687, 687 (2012) (explaining that the problem of being used as autonomous weapon systems); Australian Human Rights Commission, *Human Rights and Technology Issues Paper*, 29 (July 2018) (detailing the possibility of algorithmic discrimination).

<sup>10</sup> See, e.g., Hannah Sloan, *Human Rights and IoT: The Right to Fair and Decent Work*, IOT FOR ALL (Oct. 23, 2018) (“[T]he efficiencies produced by automation will result in widespread job loss. It’s entirely possible that the continued growth of constantly-improving and self-maintaining machines could eliminate 99% of all jobs today.”); see also Carl B. Frey & Michael A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerisation?*, 114 TECH. FORECASTING & SOC. CHANGE 254, 265–69 (2017).

<sup>11</sup> Cynthia Estlund, *What Should We Do After Work? Automation and Employment Law*, 128 YALE L.J. 254, 258, 290–92, 299 (2018) (noting that hiring people can be troubling because of burdensome employment law obligations and human rights issues, and therefore corporations prefer automation).

<sup>12</sup> *Id.* at 276.

<sup>13</sup> Brian Heater, *Technology Is Killing Jobs, and Only Technology Can Save Them*, TECH CRUNCH (Mar. 26, 2017).

<sup>14</sup> See, e.g., Frey & Osborne, *supra* note 10. Another interesting example is the replacement of 60,000 production workers’ jobs with robots by the electronic manufacturer Foxconn. See Jane Wakefield, *Foxconn Replaces ‘60,000 Factory Workers with Robots’*, BBC NEWS (May 25, 2016).

<sup>15</sup> Luke Oakden-Rayner, *Artificial Intelligence Won’t Replace Doctors Soon but It Can Help with Diagnosis*, ABC NEWS (Sept. 19, 2017) (“The Stanford team that created a skin cancer detector as accurate as dermatologists is already working on a smartphone app. Before long, people will be able to take their own skin lesion selfies and have their blemishes analyzed on the spot. This AI is leading the race to become the first app that can reliably assess your health without a human doctor involved.”).

<sup>16</sup> See Siddhartha Mukherjee, *A.I. Versus M.D.*, NEW YORKER (Mar. 27, 2017).

<sup>17</sup> James Billington, *IBM’s Watson Cracks Medical Mystery with Life-Saving Diagnosis for Patient Who Baffled Doctors*, INT’L BUS. TIMES UK (Aug. 8, 2016).

<sup>18</sup> Roxanna Guilford-Blake, *Wait. Will AI Replace Radiologists After All?*, RADIOLOGY BUS. (Feb. 18, 2020).

Despite the impact, various governments have generally adopted a *laissez-faire* approach towards the human rights issues.<sup>19</sup> There is an inclination towards promoting innovation and there does not appear to be any restrictions on what can be automated. In effect, it forces people to “race with the machines.”<sup>20</sup> Yet, it is a competition that a multitude of people will lose considering that “[u]nlike human labor, machines tend inexorably to get more capable and cheaper over time.”<sup>21</sup> By contrast, not everyone is good at acquiring new skills and it usually takes a lot of time to do so. This is a serious issue for our societies because automation “threatens to leave many people not with fewer hours of work and decent pay but instead with no regularly paid work and too little income to live a decent life.”<sup>22</sup> It will cause “threats of political instability, increasing economic inequality, and rising poverty rates.”<sup>23</sup> This leads to the central question: whether the right to work can protect the replaced workers and how can it do so? How should the right to work and the benefits of applying automation be balanced?

## II. THE HUMAN RIGHTS CONSIDERATIONS

### A. *The Right to Work*

Generally, the victims of automation want to have a job.<sup>24</sup> When automation eliminates possible jobs, it in effect bans people from working. Therefore, automation infringes the right to work.<sup>25</sup> The victims argue that the right to work

<sup>19</sup> Diane Desierto, *Human Rights in the Era of Automation and Artificial Intelligence*, EJIL: TALK! (Feb. 26, 2020).

<sup>20</sup> See ERIK BRYNJOLFSSON & ANDREW MCAFEE, *RACE AGAINST THE MACHINE: HOW THE DIGITAL REVOLUTION IS ACCELERATING INNOVATION, DRIVING PRODUCTIVITY, AND IRREVERSIBLY TRANSFORMING EMPLOYMENT AND THE ECONOMY* (2012).

<sup>21</sup> Estlund, *supra* note 11, at 293.

<sup>22</sup> *Id.* at 276.

<sup>23</sup> See, e.g., Sloan, *supra* note 10. The threat to inequality is particularly potent for females, who have less access to technological training. See United Nations Human Rights Council, Rep. of the Secretary-General on Question of the realization of economic, social and cultural rights in all countries: the role of new technologies for the realization of economic, social and cultural rights, U.N. Doc. A/HRC/43/29 (Mar. 4, 2020), at para. 28 [hereinafter U.N. Rep. A/HRC/43/29]; Australian Human Rights Commission, *supra* note 9, at 20 (“The social and economic consequences of widespread automation are also likely to be different for women than men, with significant implications for socio-economic equality and the global gender gap.”).

<sup>24</sup> See generally Kevin Drum, *You Will Lose Your Job To A Robot—And Sooner Than You Think*, MOTHER JONES (Nov./Dec. 2017).

<sup>25</sup> Desierto, *supra* note 19 (explaining how making “redundant or irrelevant current human skills, education, learning, or capacities,” challenges human dignity and the right to work.); see also Access Now, *Human Rights in the Age of Artificial Intelligence*, 26 (Nov. 2018); Raso et al., *supra* note 5, at 56–57 (“large-scale workforce displacement caused by the deployment of AI obviously burdens [the right to work] it is difficult for a business to determine what if anything it should do to mitigate this impact on the right to work.”). It was

ensures automation does not eliminate jobs.<sup>26</sup> The right is expressly recognized as a fundamental right by various human rights covenants.<sup>27</sup> For example, the International Covenant on Economic, Social and Cultural Rights provides that: “The States Parties to the present Covenant *recognize the right to work*, which includes the right of everyone to the *opportunity to gain his living by work* which he freely chooses or accepts, and *will take appropriate steps to safeguard* this right.”<sup>28</sup> Ideally, the right to work ensures that humans can support themselves. Work is not only about maintaining livelihood but is also related to human dignity as a vital aspect of our lives and cultures.<sup>29</sup> As such, supporters of the right to work argue that automation is an incompatible concept with the right to work and must be restrained and regulated.<sup>30</sup>

A human rights-based approach should be adopted to guide technological application and “ensure that human rights law is placed at the heart of advancements in the field of AI.”<sup>31</sup> Pursuant to the U.N. Guiding Principles for Business and Human Rights, it is advised that corporations should: (a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur; (b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations.<sup>32</sup> A hypothetical example would put the issue in context. There are 100 people and 150 jobs. Automation reduces the number of jobs by 100 (after deducting the number of new jobs that automation creates). This leaves 50 people jobless. Arguably, the right to work should ensure there are at least an

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further noted that “AI might trigger widespread unemployment.” *Id.*

<sup>26</sup> See generally Peter Dizikez, *MIT Report Examines How to Make Technology Work for Society*, MIT: NEWS (Sept. 4, 2019).

<sup>27</sup> See, e.g., International Covenant on Economic, Social and Cultural Rights, *Opened for signature* Dec. 19, 1966, 999 U.N.T.S. 171 [hereinafter ICESCR]; UDHR, *supra* note 6, art. 23; European Social Charter, Oct. 18, 1961, 529 U.N.T.S. 89, art. 1 (entered into force Feb. 26, 1965) [hereinafter ESC]; see also U.N. Committee on Economic, Social and Cultural Rights (CESCR), *General Comment No. 18: The Right to Work (Art. 6 of the Covenant)*, E/C.12/GC/18 (Feb. 6, 2006) (“The right to work is essential for realizing other human rights and forms an inseparable and inherent part of human dignity. [] The right to work contributes at the same time to the survival of the individual and to that of his/her family, and insofar as work is freely chosen or accepted, to his/her development and recognition within the community.”) [hereinafter *General Comment No. 18*]; Colm O’Cinneide, *The Right to Work in International Human Rights Law*, in *THE RIGHT TO WORK*, *supra* note 1, at 99, 120 (“The right to work is fundamental within the ESC framework of social rights protection, as recognised in how this right has been placed first within textual scheme of the Charter.”).

<sup>28</sup> ICESCR, *supra* note 27, art. 6.

<sup>29</sup> JAMES GRIFFIN, *ON HUMAN RIGHTS* 207–08 (2008); O’Cinneide, *supra* note 27, at 100.

<sup>30</sup> See generally Drum, *supra* note 24.

<sup>31</sup> U.N. Secretary-General, *Promotion and protection of the right to freedom of opinion and expression*, U.N. Doc. A/73/348 (Aug. 92, 2018).

<sup>32</sup> UNITED NATIONS HUMAN RIGHTS OFFICE OF THE HIGH COMMISSIONER, *GUIDING PRINCIPLES ON BUSINESS AND HUMAN RIGHTS* 14, 15 (2011).

equal number of jobs to the number of people, and hence automation can only replace 50 jobs (after deduction of new jobs created). Individuals should not be deprived of the “opportunity to gain [their] living by work,” which is explicitly provided in art. 6 of the International Covenant on Economic, Social and Cultural Rights (ICESCR).

### *B. There are Competing Rights*

Nonetheless, there are other rights supporting the application of automation. Most importantly, there is a “right to science,”<sup>33</sup> which is “the right of everyone” to “enjoy the benefits of scientific progress and its applications.”<sup>34</sup> Restraining automation in effect inhibits scientific and technological applications and breakthroughs, which restricts the common law “right to innovative.”<sup>35</sup> Besides, automation has a lot of benefits as mentioned above.<sup>36</sup> The general public should be allowed to make good use of the advancement of technology. Furthermore, the right to freedom of expression includes the “freedom to seek, receive and impart information and ideas of all kinds.”<sup>37</sup> Arguably, this supports the development and application of automation. Moreover, it is further argued that restricting innovation would constitute a limitation on the freedom of thought.<sup>38</sup>

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<sup>33</sup> See, e.g., Jessica M. Wyndham & Margaret W. Vitullo, *Define The Human Right To Science*, 362 SCIENCE 975 (2018).

<sup>34</sup> ICESCR, *supra* note 27, art. 15(1)(b); UDHR, *supra* note 6, art. 27 (1) (“Everyone has the right freely to...share in scientific advancement and its benefits”); HELLE PORSDAM, *THE TRANSFORMING POWER OF CULTURAL RIGHTS: A PROMISING LAW AND HUMANITIES APPROACH* 134 (2019) For the importance of this right, see Audrey R. Chapman, *Towards an Understanding of the Right to Enjoy the Benefits of Scientific Progress and Its Applications*, 8 J. HUM. RTS 1, 2 (2009) (“science, particularly applied science or technology, has been identified as an instrument to stimulate economic growth or to promote other national goals”); Yvonne Donders, *The right to enjoy the benefits of scientific progress: in search of state obligations in relation to health*, 14 MED., HEALTH CARE, & PHIL. 371, 371 (2011) (explaining how it is closely related to the enjoyment of other human rights, such as the right to health provided in art. 12 of the ICESCR). It is noteworthy that there is no U.N. General Comment on this right. See Alexandra Phelan, *Human Rights Implications of Pathogen Sharing and Technology Transfer*, in *VIRAL SOVEREIGNTY AND TECHNOLOGY TRANSFER: THE CHANGING GLOBAL SYSTEM FOR SHARING PATHOGENS FOR PUBLIC HEALTH RESEARCH* 120, 129 (Sam F. Halabi & Rebecca Katz eds., 2020) (explaining that it is a right that is “slowly gaining prominence”).

<sup>35</sup> See Andrew W. Torrance & Eric A. von Hippel, *The Right to Innovate*, 2015 MICH. ST. L. REV. 793, 796–97, 818, 828 (2015) (arguing that there is a right to innovate under common law, subject to legal limitations); Donders, *supra* note 34, at 373 (arguing that article 27 of the ICESCR also includes the right of scientists to freely conduct science, which includes “the right or freedom to assess and choose the preferred path of scientific and technological development.”).

<sup>36</sup> See *generally Benefits of Automation*, PRODUCTIVITY INC., <https://www.productivity.com/benefits-of-automation/>.

<sup>37</sup> See International Covenant on Civil and Political Rights, *opened for signature* Dec. 19, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR]. See also UDHR, *supra* note 6, art. 19.

<sup>38</sup> ICCPR, *supra* note 37, art. 18.

### C. *Balancing the Rights*

Some supporters of the right to work contend that it should be upheld over other competing rights. They would further argue the right to innovate and the right to get access to scientific benefits are neither absolute nor exclusive.<sup>39</sup> For example, intellectual property law constitutes a legal limitation imposed on scientists' ability to innovate and the right to benefit from scientific advancement.<sup>40</sup> Therefore, doctrinally, innovation and its application can be legitimately halted if a government desires.<sup>41</sup> Additionally, it is important to “ensure that the results of scientific and technological developments are used in the interests of strengthening [] freedom [] in accordance with the Charter of the United Nations.”<sup>42</sup> It has been recognized that scientific advancement is not necessarily perfect for the society: “[t]aking into consideration that, while scientific and technological developments provide ever increasing opportunities to better the conditions of life of peoples and nations, in a number of instances they can give rise to social problems, as well as threaten the human rights and fundamental freedoms of the individual.”<sup>43</sup>

The deprived workers equally have the right to benefit from scientific advancement.<sup>44</sup> Yet, automation forces them out of work. They are the primary group oppressed by the advancement and deployment of technologies. People are now forced to constantly learn new skills for life.<sup>45</sup> While this may sound unproblematic to many, this is a troubling and unattainable requirement to a lot of people—especially those who are less privileged and less capable of acquiring new skills. Different people have different talents. Some people struggle to learn hard-to-automate skills, but they have other natural talents, such as strong physical strength or good reflexes for manual work. When everyone should equally benefit from the right to work and scientific benefits, it is unfair to sacrifice a specific group of people.

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<sup>39</sup> Donders, *supra* note 34, at 378 (“For example, States may limit scientific freedom to prevent harmful effects of science[.]”).

<sup>40</sup> Rich Jorgensen, *The Freedom to Innovate: A Privilege or a Right?*, 19 PLANT CELL 1433, 1433–34 (2007) (“Intellectual property ownership rights, by definition and intent, limit the ability of scientists to innovate and to commercialize the products of their innovations.”).

<sup>41</sup> See, e.g., Asaro, *supra* note 9, at 687 (proposing that it is legitimate to ban autonomous weapons).

<sup>42</sup> G.A. Res. 3384 (XXX) (Nov. 10, 1975).

<sup>43</sup> *Id.*

<sup>44</sup> ICESCR, *supra* note 27, art. 15(1)(b). UDHR, *supra* note 6, art. 27 (1) (“Everyone has the right freely to...share in scientific advancement and its benefits”).

<sup>45</sup> Jacques Bughin, Susan Lund, & Eric Hazan, *Automation Will Make Lifelong Learning a Necessary Part of Work*, HARV. BUS. REV. (May 24, 2018), <https://hbr.org/2018/05/automation-will-make-lifelong-learning-a-necessary-part-of-work>.

### III. THE UNSTOPPABLE TREND OF AUTOMATION

Parts I and II explained that the right to work should be protected, especially because the right to science is not absolute. Additionally, there is not an overwhelming *legal*, as opposed to economic, justification for upholding the right to science over the right to work. A fair view would suggest that the importance of the right to work is legally on par with the competing right to science. There must be something extra that warrants tilting the balance in favor of automation. This is especially the case when there are strong views in favor of protecting jobs: “[t]o have no work to do—to find nothing one can do that makes any difference to anyone or anything—is among the very worst thing that can befall someone, even if he or she can escape starvation.”<sup>46</sup> This Article does not seek to refute the value of work to humans. However, the thrust of the problem is that there is very little practical incentive to protect jobs from automation. The governments want the “robotics dividend,” which refers to improved economies due to higher productivity brought by automation.<sup>47</sup> Under this trend, jobs are simply not savable.

#### *A. Completely Halting Automation is Not Feasible*

It is unlikely that a competitive government, or any government which aims to protect its own industries, would completely stop automation. For example, the U.S. government strongly prefers and supports innovation and the application of technology:

It is the policy of the [U.S.] Government to sustain and enhance the scientific, technological, and economic leadership position of the United States in AI R&D and deployment... The United States *must* drive technological breakthroughs in AI across the Federal Government, industry, and academia in order to promote scientific discovery, economic competitiveness, and national security.<sup>48</sup>

Besides, it has been noted, “The U.S. law of work itself simply is not designed to preserve jobs or to slow the pace of job destruction in the private sector.”<sup>49</sup>

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<sup>46</sup> David Wiggins, *Work, its Moral Meaning or Import*, in *THE RIGHT TO WORK*, *supra* note 1, at 11, 13–15 (explaining how given the important “need” for human to work as a philosophical “necessity of life,” therefore replacing jobs with automation is a “fundamental harm” to citizens).

<sup>47</sup> OXFORD ECONOMICS, *HOW ROBOTS CHANGE THE WORLD: WHAT AUTOMATION REALLY MEANS FOR JOBS AND PRODUCTIVITY* (Jun. 2019).

<sup>48</sup> Exec. Order No. 13,859, 84 Fed. Reg. (Feb. 11, 2019).

<sup>49</sup> Estlund, *supra* note 11, at 294.

With the impact of globalization and the globalized supply chain,<sup>50</sup> a company cannot compete in the global arena without relying on automation to reduce costs and improve efficiency and quality. Generally, buyers will switch to cheaper providers from competing countries who have utilized automation.<sup>51</sup> Hence, governments banning automation to save jobs will harm their export economies.<sup>52</sup> It is widely accepted that innovation and automation are essential to winning in competitive environments.<sup>53</sup> For example, it was reported that reducing the number of pilots from two to one could save the whole U.S. industry \$15 billion, while switching to completely to automation could save the United States \$35 billion.<sup>54</sup> If an airline company utilizes semi- or full automation and benefits from the reduction in costs, it would secure an edge in such a price-sensitive industry by switching to automation.<sup>55</sup>

### *B. The Legal Necessity of Preserving Jobs*

There are compelling policy and economic justifications, such as improved efficiency, in favor of supporting automation and upholding the competing rights. When the right to work and the competing rights are theoretically of equal legal importance, these pragmatic justifications justify outweighing the latter over the right to work. The legal issue becomes whether the right to work is derogable.

Legally, there are four arguments suggesting that the right to work does not mandatorily require jobs to be kept. First, the U.N. Committee on Economic, Social and Cultural Rights acknowledges that a “distinction should be drawn between the *inability* and the *unwillingness* of States parties to comply with their obligations” in respect of the right to work.<sup>56</sup> Arguably, States and corporations are unable to keep jobs, because they are *compelled* to engage in automation for competition and economic development.

Second, the right to work is not an “absolute and unconditional right to obtain employment.”<sup>57</sup> Governments fulfill their obligations as long as they

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<sup>50</sup> *Id.* at 287.

<sup>51</sup> *See generally id.*

<sup>52</sup> *See id.*

<sup>53</sup> *Id.* at 279 (“Firms in competitive markets will lose out if they continue to employ people to do things that machines can do more efficiently”).

<sup>54</sup> David Reid, *Single pilot long-haul flights could be taking off within 5 years, UBS says*, CNBC (Aug. 7, 2017).

<sup>55</sup> *Id.*

<sup>56</sup> *General Comment No. 18, supra* note 27, at para. 32 (emphasis added).

<sup>57</sup> *Id.* at para. 6

promote and seek to achieve full employment.<sup>58</sup> Similarly, article 1(1) of the European Social Charter (ESC) provides that states have obligations to achieve a level of employment that is “as high and stable as possible.”<sup>59</sup> Actual full employment is not required. With an interesting argument, Nickel supports the view that actual full employment is never expected: had the right to work expected full employment, the U.N. General Comment No. 18 would have required governments to become the employer of last resort.<sup>60</sup> This illustrates that employment is largely left largely as a matter to the market.<sup>61</sup> Governments are, therefore, not compelled by the right to work to ban automation in order to keep jobs.

Third, retrogressive steps related to the right to work can be taken by the states, if they are “duly justified by reference to the totality of the rights provided for in the Covenant.”<sup>62</sup> This suggests that it is permissible for states to weigh other rights over the right to work. If states see automation as highly beneficial, it could legitimately prioritize the competing right over the right to work in order to benefit from scientific advancement. Fourth, states are only obliged to “assist and support individuals in order to enable them to *identify and find available* employment.”<sup>63</sup> It does not say that states must ensure employment.

It is helpful to clarify that even though the right to work does not behoove retaining jobs, the fact that automation eliminates jobs still amounts to an erosion of the right. This is because it reduces access to employment and interferes the “right of everyone to the opportunity to gain his living by work” as explicitly provided in article 6 of the ICESCR. States are still obliged to push for higher employment and have other obligations such as providing training.<sup>64</sup> In addition, states should ensure the *full* realization of the right by undertaking measures to the maximum of available resources.<sup>65</sup>

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<sup>58</sup> *Id.* at para. 41; *see also* O’Cinneide, *supra* note 27, at 115 (describing how to constitute a breach of the right to work, there must be “clear evidence” of the government’s failure to take action to achieve employment).

<sup>59</sup> ESC, *supra* note 27, art. 1.

<sup>60</sup> Nickel, *supra* note 1, at 145–46.

<sup>61</sup> *Id.* at 145–46.

<sup>62</sup> *General Comment No. 18*, *supra* note 27, at para. 21.

<sup>63</sup> *Id.* at para. 12(a).

<sup>64</sup> *Id.* at paras. 36 (failure to provide training is a violation), 43 (obligation to “create conditions favourable to the enjoyment of the right”), 41, 48 (there should be remedies for any violation).

<sup>65</sup> *See id.* at paras. 2 (obligation to achieve the full realization of the right), 21 (even though a retrogressive policy can be taken, it should be justified by reference to the full use of maximum resources), 32 (failure to use maximum resources is a violation); *see also* ICESCR, *supra* note 27, art. 2(1).

### C. *Selectively Stopping Automation for Certain Positions is Not Feasible*

Even accepting that the right to work does not necessitate keeping jobs, the question of the extent of justifiable derogation remains: can automation be implemented in a manner that is less disruptive? Supporters of the right to work may propose that there should be a law, such as the Automation Impact Act or Ordinance, which limits the extent of replacement.<sup>66</sup> For example, a balanced approach could be adopted. Automation could be limited to industries that are in competition with other countries (e.g., manufacturers for export goods). These sectors would benefit the most from the efficiency and cost reduction provided by automation.<sup>67</sup> By contrast, in *service* sectors that cater only to domestic markets (such as cab driving, line cooks, and cashier check-outs), automation should be banned.

However, this solution is not pragmatic for four reasons. First, imposing a ban may not promote business. From a business perspective, an illustrative example would be the usage of Kiva robots by Amazon. The robots “automate the ‘picking and packing’ process at some large Amazon warehouses” and “have sped up operations while cutting costs by about 20%.”<sup>68</sup> Moreover, many companies engage in both local and overseas markets. It is not viable to partially ban automation for certain segments, such as domestic ones. Generally, permitting automation could save costs or earn more profits. Those savings or earnings could in turn be applied to improve the overall competitiveness of the global market.

Second, banning automation prevents domestic consumers from benefiting from the improvements brought about by automation, such as mistake-free autopilot or more accurate medical diagnoses. The right to benefit from the advancement of science is an equally powerful and fundamental human right.<sup>69</sup> The aim of saving jobs could also harm the workers whose jobs are preserved, because they equally cannot benefit from the advancement of science. Third, prohibiting automation is difficult to implement. For example, it is hard to determine whether a semi-automatic machine that eliminates only some jobs should be prohibited. Similarly, governments may not be able to immediately perceive the job replacement effect of certain technology implementations. Jobs may have already been incrementally and irrevocably wiped out by the time the

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<sup>66</sup> See generally JOËL BLIT, SAMANTHA ST. AMAND, AND JOANNA WAJDA, AUTOMATION AND THE FUTURE OF WORK: SCENARIOS AND POLICY OPTIONS (2018).

<sup>67</sup> *Id.*

<sup>68</sup> Estlund, *supra* note 11, at 266.

<sup>69</sup> See generally Wyndham & Vitullo, *supra* note 33.

actual impact is realized.<sup>70</sup> Fourth, justifying a discriminatory approach which protects certain sectors or occupations over others from automation will still result in job losses where automation is unavoidable.<sup>71</sup>

#### *D. Slowing Automation is Not Attainable*

It has been proposed that automation should be slowed down, for there to be a smoother transition.<sup>72</sup> It provides more time for re-training and switching to new jobs. The speed of automation is a crucial factor:

But the faster jobs are destroyed, the harder it will be for public and private job creation and worker retraining to keep pace. Faster job destruction will yield more wrenching social consequences and less hospitable conditions for a serious political debate about spreading the gains and mitigating the losses from automation.<sup>73</sup>

While this is a good suggestion, in practice there may be very little incentive to slow automation's speed, especially when competition is fierce and globalized: "A prescription of slower automation will be anathema to those who tout automation's role in economic growth, prosperity, innovation, and in improving human welfare. Automation...improves efficiency, quality, safety, and sustainability."<sup>74</sup>

### IV. COMPLIANCE SHOULD NOT BE AIMING AT SAVING JOBS

As established above, there is no simple way to implement automation in a way that is compatible with the right to work by keeping jobs. It is hence inappropriate to apply general human rights measures that seek to restrict the application of automation in order to ensure human rights compliance.<sup>75</sup>

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<sup>70</sup> Raso et al., *supra* note 5, at 54 ("It is hard enough to predict what human rights impacts a relatively anodyne product will have when it is released into the marketplace, hence the challenge of assessing the human rights impacts of AI systems before they are deployed is all the more considerable[.]").

<sup>71</sup> Bridget McCrea, *There's No Stopping Warehouse Automation*, LOGISTICS MGMT (July 23, 2020).

<sup>72</sup> Estlund, *supra* note 11, at 301.

<sup>73</sup> *Id.* at 282.

<sup>74</sup> *Id.* at 282, 293 ("In short, technological innovation outpaces human evolution. [] But the functional capabilities of machines appear to be rising much faster and with fewer apparent natural limits than those of humans.")

<sup>75</sup> By "general" I refer to solutions that are not tailor-made but are designed for dealing with the impact of new technological applications generally.

*A. Requiring Corporations to Perform Due Diligence is Not Helpful*

The U.N Guiding Principles of Human Right on Business suggests that corporations should “carry out human rights due diligence” in order to “identify, prevent, mitigate and account for how they address their adverse human rights impacts, business enterprises should.”<sup>76</sup> There is support for conducting due diligence to deal with technological impact.<sup>77</sup> Some have criticized that innovators have not paid sufficient attention to the potential disruptive consequences.<sup>78</sup>

However, due diligence is arguably only appropriate for tackling other human rights issues, such as privacy, but not for the right to work. Even if due diligence were to reveal that a particular application of automation will eliminate many jobs, nothing can realistically be done to save the jobs. Moreover, corporations may not be best placed to deal with the political and social effects of job destruction. These matters should be left to the government. Corporations should focus their time and resources solely on innovating.

*B. Seeking Coordination Between the Innovators and the Replaced Workers is Not Practical*

Another generic solution is that innovators should coordinate with those affected.<sup>79</sup> To protect the human rights of the affected, they should be allowed to participate:

The development, diffusion and adoption of new technologies consistent with international obligations *can be enhanced by effective and meaningful participation of rights holders*. Towards that end, States should create opportunities for rights holders, *particularly those most affected* or likely to suffer adverse consequences, *to effectively participate and contribute to the development process*, and facilitate targeted adoption of new technologies. Through participation and inclusive consultation, States can determine what technologies would be most appropriate and effective as they *pursue balanced and*

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<sup>76</sup> See UNITED NATIONS HUMAN RIGHTS OFFICE OF THE HIGH COMMISSIONER, *supra* note 32, at 17, 18.

<sup>77</sup> U.N. Rep. A/HRC/43/29, *supra* note 23, at para. 51 (“Appropriate due diligence processes, taking into account the full range of rights under international human rights law throughout the life cycle of a technological system, can help avoid unduly narrow analysis of potential risks.”); Raso et al., *supra* note 5, at 5, 52 (“Human rights due diligence by businesses can help avoid many of the adverse human rights impacts of AI.”).

<sup>78</sup> KATE SASLOW & PHILIPPE LORENZ, ARTIFICIAL INTELLIGENCE NEEDS HUMAN RIGHTS 7 (Sept. 2019) (“AI development in the private sector has followed the quick and dirty paradigm that Facebook popularized: ‘move fast and break things’”).

<sup>79</sup> *Id.* at 18 (“AI needs a framework for development and use in accordance with human rights.”).

*integrated sustainable development* with economic efficiency, environmental sustainability, inclusion and equity.<sup>80</sup>

However, this suggestion, although effective for other human rights, is again not suitable for the right to work. Although it has been reported that “Germany permits workers to negotiate with management over uses of labor-saving technology,”<sup>81</sup> there is no feasible way of seeking coordination with the replaced. With fierce global competition, a half-way approach, that pleases replaced workers at the expense of not freely and fully implementing automation, might prove to be a mutual loss for both innovators, capital owners, and the workers. Furthermore, some jobs will still be cut as long as automation is implemented—even with coordination. Instead of spending time on lengthy coordination, it is better to provide redress, such as training, while fully allowing automation. To tackle the impact of automation, there should be tailored solutions, which will be discussed in Part V below.

## V. REDRESS FOR THE EROSION OF THE RIGHT TO WORK

Although actual full employment is not required and all jobs cannot be retained, governments are still obliged to take policy measures to “create the conditions for full employment.”<sup>82</sup> In particular, states are legally required to provide alternative ways of protecting the right to work, which is provided clearly in the relevant covenants:

*The steps to be taken by a State Party to the present Covenant to achieve the full realization of this right shall include technical and vocational guidance and training programmes, policies and techniques to achieve steady economic, social and cultural development and full and productive employment under conditions safeguarding fundamental political and economic freedoms to the individual.*<sup>83</sup>

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<sup>80</sup> U.N. Rep. A/HRC/43/29, *supra* note 23, at para. 47 (emphasis added).

<sup>81</sup> Estlund, *supra* note 11, at 295.

<sup>82</sup> *General Comment No. 18*, *supra* note 27, at paras. 4, 43.

<sup>83</sup> ICESCR, *supra* note 27, art. 6(2) (emphasis added). *See also* ESC, *supra* note 27, art. 1(4) (obligation to provide training), art. 10 (the right to vocational training); Desierto, *supra* note 19 (suggests that ICCPR and ICESCR makes “it imperative for all States to deliberate craft policies that both anticipate and provide remedy and redress for the inevitable externalities and human impacts of automation and AI”); GRIFFIN, *supra* note 29, at 207 (“If in an advanced technological society there were not enough work for everyone, and those without it were adequately provided for”, he argues that the right to work is dispensable and is not violated. It is noteworthy that Griffin qualifies non-violation with the precondition of having adequate redress.); Devin O. Pendas, *Toward World Law? Human Rights and the Failure of the Legalist Paradigm of War*, in HUMAN RIGHTS IN THE TWENTIETH CENTURY 217, 235 (Stefan-Ludwig Hoffmann ed., 2011) (noting that “the right to work, certainly as an international right, is a politically potent expression of a desire for broadly distributed prosperity and the

Governments certainly play an important role in dealing with the “troubling distributive consequence” of automation.<sup>84</sup> But corporations should help alleviate the impact where possible. Before discussing any of the solutions, the first and foremost starting point is that both the government and the corporations must actively acknowledge, instead of sitting idly by and remaining indifferent to, the impact on the right to work.<sup>85</sup> Notably, it should be recognized that certain groups of people are particularly disadvantaged by the advancement of technologies instead of benefiting from it. Therefore, there needs to be a “specific emphasis on poor and marginalized people to empower them and build their capacity to take full advantage of those technologies.”<sup>86</sup>

This Article proposes three solutions. The first proposal is that training and education must be provided.<sup>87</sup> However, training alone is often not an adequate solution. Specifically, it is not feasible to ask people to keep coming up with training at the pace that automation replaces workers.<sup>88</sup> For example, if a 45-year-old taxi driver acquires a new skill and the new skill is replaced in the next ten years, it is difficult to expect a 55-year-old person to learn another skill again, which may too be replaceable. It comes back to the problems that: (1) not everyone is good at learning, and (2) the controversy of whether it is unduly

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sense that gross poverty is unjust,” meaning it is normatively unjustifiable for automation to deny access to prosperity to some by destroying jobs).

<sup>84</sup> Raso et al., *supra* note 5, at 5, 52, 56; *see also id.* at 57 (“[W]hen due diligence reveals human rights impacts that have complex distributive consequences, the need for government public policy leadership is at its greatest [] governments could consider creating incentives to ensure that effective due diligence is undertaken”).

<sup>85</sup> U.N. Rep. A/HRC/43/29, *supra* note 23, at para. 62 (recommending states to “[f]ully recognize the need to protect and reinforce all human rights in the development, use and governance of new technologies”).

<sup>86</sup> *Id.* at para. 48.

<sup>87</sup> *General Comment No. 18, supra* note 27, at paras. 36 (explaining failure to provide training is a violation) (“States parties must have specialized services to assist and support individuals in order to enable them to identify and find available employment.”). *See also* Council of Europe Commissioner for Human Rights, *Unboxing Artificial Intelligence: 10 steps to protect Human Rights* (May 2019) (“Adequate plans should be developed for reschooling and reassigning jobs to those workers clearly affected by a decrease in the demand for human labour”); EUROPEAN GROUP ON ETHICS IN SCIENCE AND NEW TECHNOLOGIES, *FUTURE OF WORK, FUTURE OF SOCIETY* 77 (Dec. 19, 2018); Sloan, *supra* note 10 (suggesting that “[e]ducation and collaboration will be necessary to endure the inevitably painful workforce transition”). Collins argues that it is impracticable to create jobs for everyone. Collins, *supra* note 1, at 37. Therefore, even though “the right to work might require that the government creates jobs for the long-term unemployed,” he argues that “a better strategy for respecting the right will often be improvements in the supply-side of the labour market through education, training and help with job search.” *Id.*

<sup>88</sup> *Recommendation 2102 (2017), supra* note 9 (“notes with concern that it is increasingly difficult for lawmakers to adapt to the speed at which science and technologies evolve and to draw up the required regulations and standards”); Australian Human Rights Commission, *supra* note 9, at 22 (“regulating technology is difficult, for reasons that include: the extraordinary pace of change in this area”); Estlund, *supra* note 11, at 321 (“The faster jobs are automated, the less time people will have to acquire the skills needed in a more tech-infused economy”).

harsh to expect the (usually) less privileged to constantly learn. Moreover, there still needs to be a way to support living during the transition of training.

To supplement training, the second solution is to counteract the erosion of the right to work. Article 6(2) of the ICESCR provides that “policies [] to achieve steady economic [] development” are subject to “conditions safeguarding fundamental political and economic freedoms to the individual.” Applying the policy of promoting automation should be done in a way that safeguards the economic freedom of the individual. Reading this with article 10 of the ICESCR, which provides for the right to social security, would require the government to financially make up for the loss of jobs.<sup>89</sup> Furthermore, the right to benefit from science would require the displaced to have a share of the benefits.<sup>90</sup> Their right to science is infringed if they are only disadvantaged by automation, leaving them jobless and penniless.

The need to provide a redress for the loss of the right provides a strong legal foundation for suggestions, such as universal basic income (UBI) or tax based on application of technology.<sup>91</sup> It has been proposed that there should be a robot tax.<sup>92</sup> Estlund argues that it would reduce the financial incentive to replace labor and hence slow it down.<sup>93</sup> However, it can achieve more because the government can make effective use of the tax to help the replaced (e.g., for funding the provision of UBI).

Further support for the obligation to make up for the derogation can be found in various human rights instruments. The U.N. General Comment No. 18

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<sup>89</sup> See ESC, *supra* note 27, art. 12 (right to social security); see also Collins, *supra* note 1, at 30, 37 (arguing that providing social welfare such as guaranteed income alone is not a sufficient substitute, because the right to work does not only protect livelihoods and dignity, but it also protects self-realization). Collins hence views work highly, and the governments should impose whatever means to achieve better distribution of employment opportunities. See *id.* Whilst it is culturally true that work is closely related to self-realization, the new age of automation (commonly known as the “Fourth Industrial Revolution”) will arguably change this understanding. See John Bellamy Foster, *The Meaning of Work in a Sustainable Society*, 69 MONTHLY REV. (Sept. 1, 2017) (arguing that in the future with automation and guaranteed income, people will “focus instead on maximizing leisure as society’s highest aim”); Nickel, *supra* note 1, at 147 (predicting that because many people may become jobless in the future, the current stigma of being jobless will fade and access to work will be assigned with less importance).

<sup>90</sup> ICESCR, *supra* note 27, art. 15(1)(b). UDHR, *supra* note 6, art. 27 (1) (“Everyone has the right freely to...share in scientific advancement and its benefits”).

<sup>91</sup> U.N. Rep. A/HRC/43/29, *supra* note 23, at para. 62 (there is a need for states to invest “in the right to social protection to build resilience for changes and instability, including those caused by technological change”).

<sup>92</sup> Kevin J. Delaney, *The Robot that Takes Your Job Should Pay Taxes, Says Bill Gates*, QUARTZ (Feb. 17, 2017); Estlund, *supra* note 11, at 317.

<sup>93</sup> Estlund, *supra* note 11, at 317.

emphasizes that states should establish “a compensation mechanism in the event of loss of employment” and “plans to counter unemployment.”<sup>94</sup> Furthermore, article 2(2) of the International Covenant on Civil and Political Rights (ICCPR) provides that states have an obligation to “take the necessary steps [] to give effect to the rights.”<sup>95</sup> Article 2(3)(a) of the ICCPR provides that states must “ensure that any person whose rights or freedoms as herein recognized are violated shall have an effective remedy.” Moreover, these obligations are further reinforced by article 16 of the U.N. Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law, which suggests that “[s]tates should endeavour to establish national programmes for reparation.”<sup>96</sup> Similarly, principle one of U.N. Guiding Principles on Business and Human Rights recommends that states should “redress such abuse through effective policies, legislation, regulations and adjudication.” The case for States’ obligation to make up for the derogation is particularly strong because they are the ones who adopt pro-automation policies.

It is interesting to note that it has been argued the right to work will become obsolete because of automation.<sup>97</sup> By striking contrast, others argue that it will become obsolete *only after* governments provide protection such as ensured income.<sup>98</sup> The two arguments are both correct because they merely view the matter from different perspectives, and in doing so they highlight a vital point. The first argument denotes the hard truth: even without guaranteed income, the right to work is doomed to become archaic as automation keeps eradicating jobs. However, the second argument suggests what *should* be done. Given that the right to work is a fundamental right enshrined in various international legal instruments, action should be taken to indemnify its loss.

The third solution suggests that corporations and innovators should take up corporate social responsibility. The above two solutions impose the burden on the States. However, it should not be ignored that corporations are the ones who decide to implement automation facilitated by the States’ policies. Although the decision to switch to automation may not be entirely voluntary (as some of them are forced by competition to do so), corporations should help contribute to tangible solutions. Principle 11 of the U.N. Guiding Principles on Business and

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<sup>94</sup> *General Comment No. 18, supra* note 27, at para. 26.

<sup>95</sup> *See also* ICESCR, *supra* note 27, art. 2.

<sup>96</sup> *See* G.A. Res. 60/147 (Dec. 16, 2005).

<sup>97</sup> Matthijs M. Maas, *International Law Does Not Compute: Artificial Intelligence and the Development, Displacement or Destruction of the Global Legal Order*, 20 MELBOURNE J. INT’L L. 29, 41–42 (2019).

<sup>98</sup> Nickel, *supra* note 1, at 146–48 (arguing that the right to work is only obsolete when people have access to government-ensured minimum income, considering access to employment is a “goal,” but not a “right”).

Human Rights clearly suggests that corporations “should address adverse human rights impacts with which they are involved.” Principle 13(b) of the same recommends that mitigation should be done. This does not mean corporations should consider cutting less jobs, which has been argued above as impractical. Instead, they could offer training or other education programs for replaced workers.

## VI. THE PROBLEMS WITH U.N. GENERAL COMMENT NO. 18

The economic reality is that automation is preferred by governments and corporations over keeping the jobs it replaces. Part III(B) established that U.N. General Comment No. 18, which is a “highly authoritative” interpretation of the right to work under ICESCR,<sup>99</sup> can be understood as supporting automation and justifying not keeping jobs. However, U.N. General Comment No. 18 contains vague statements that could be understood to suggest differently. This inconsistency may lead to confusion and uncertainty. In particular, the U.N. Comment states that States have the obligation to “respect, protect and fulfil[.]”.<sup>100</sup> It problematically explains that the “obligation to protect requires States parties to take measures that prevent third parties *from interfering* with the enjoyment of the right to work.”<sup>101</sup> Strictly speaking, automation amounts to interference, as it reduces access to work. Therefore, this statement essentially requires States “to take measures” to halt automation.<sup>102</sup>

At the same time, creating the threshold with the wording ‘interference’ is questionable, because it is too low a threshold. The word “interference” is of legal significance. Notably, the word “interference” is not used in the ICESCR itself, but it is used in the ICCPR to denote a different degree of protection.<sup>103</sup> For example, article 17 of the ICCPR provides that there should be no “arbitrary or unlawful interference” with privacy.<sup>104</sup> By contrast, article 19 provides that

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<sup>99</sup> O’Cinneide, *supra* note 27, at 102.

<sup>100</sup> *General Comment No. 18, supra* note 27, at para. 22.

<sup>101</sup> *Id.* at para. 22 (emphasis added). At the same time, paragraph 22 similarly said that the “obligation to respect the right to work requires States parties to refrain from interfering directly or indirectly with the enjoyment of that right.” *Id.* General Comment No. 18 is highly confusing because of its word use. *See id.* at para. 32 (“Violations through acts of omission occur, for example, when States parties do not regulate the activities of individuals or groups to prevent them *from impeding* the right of others to work.”) (emphasis added); *id.* at para. 35 (referring to the need to “prevent them *from violating* the right to work of others) (emphasis added).

<sup>102</sup> *See id.*

<sup>103</sup> ICCPR, *supra* note 37, art. 19.

<sup>104</sup> *Id.* art. 17.

everyone has “the right to hold opinions without interference.”<sup>105</sup> The more stringent wording of article 19 reflects that it is non-derogable.<sup>106</sup> The careful choice of words in the ICCPR evidences an intentional parallel because both the ICCPR and the ICESCR are based on the UDHR and they are adopted in the same Resolution.<sup>107</sup> Hence, the U.N. Committee which drafted the U.N. General Comment No. 18 in 2006 presumably must be well-aware of the subtle meaning of the word “interference.”

Applying this observation, the General Comment No. 18 has set a highly dubious threshold. It does not qualify the level of interference, such as “arbitrary interference.” If *any* interference should be prevented, it would mean that automation must be stopped, even if automation is done with the benign motive of benefiting the overall economy with improved efficiency. This cannot be right, because by analogy, if a highly capable person can do the work of four people alone and leave them unemployed in a hypothetical economy with only five available jobs, the highly capable person is similarly “interfering” with the right to work of others. However, it would be illogical to say that the highly capable person should be prohibited because of the highly capable person’s skill set. Apart from uncertainty, General Comment No. 18 has set an outmoded goal that has become increasingly less achievable. It expects full employment.<sup>108</sup> However, the economic reality, or the ideal world created by automation, is moving towards eliminating the need for humans to work.

## CONCLUSION

The prevalent analysis of human rights impact of automation and AI usually suggests that the “design and deployment should avoid harms to fundamental human values.”<sup>109</sup> This solution for ensuring compliance is right for most of the human rights issues. However, it is too generic for the right to work. Automation cannot be designed or deployed in a manner that avoids destroying jobs, as its very aim is to replace humans. However, that does not mean that the right to

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<sup>105</sup> *Id.* art. 19.

<sup>106</sup> U.N. Committee on Economic, Social and Cultural Rights (CESCR), *General comment No. 34: Article 19: Freedoms of opinion and expression*, CCPR/C/GC/34 (Sept. 12, 2011), at paras. 5, 9.

<sup>107</sup> G.A. Resolution 2200A (XXI) (Dec. 16, 1966); KOLDO CASLA, POLITICS OF INTERNATIONAL HUMAN RIGHTS LAW PROMOTION IN WESTERN EUROPE: ORDER VERSUS JUSTICE 90 (2020) (“The two treaties were adopted the same day, included in the same legal document, entered into force the same year and have achieved a similar number of ratifications”).

<sup>108</sup> *General Comment No. 18*, *supra* note 27, at paras. 3, 19, 41,

<sup>109</sup> *See generally* MARK LATONERO, GOVERNING ARTIFICIAL INTELLIGENCE: UPHOLDING HUMAN RIGHTS & DIGNITY (2018).

work is rendered wholly irrelevant. Instead, the inevitable loss of the right to work should be mended by customized solutions other than keeping jobs.

This Article argues that the right to work, together with other applicable rights, legally demand both governments and corporations to make up for the loss of jobs. The provision of training is a must. In addition, there could, for instance, be a UBI or a robot tax. While governments, especially those in capitalist countries, may not be willing to pay,<sup>110</sup> the right to work justifies the obligation to pay. There is also a strong call for corporate social responsibility in this regard. Technologies are often controlled by the powerful and resourceful corporations: “[T]he most powerful players in the artificial intelligence arena are private sector actors. Innovation in AI comes from large companies and enterprises who possess state-of-the-art hardware, star researchers, and proprietary data to train and develop powerful AI models.”<sup>111</sup>

This raises social concerns regarding whether it is right for them to maintain dominating control over their workers’ livelihoods, which can be easily disrupted and dictated by automation.<sup>112</sup> This creates undesirable equality problems: “[A] growing economic chasm between those who create or own the new technology, or whose high-end skills are complemented by that technology, and most workers who are stuck competing for the less-skilled but still human jobs that remain.”<sup>113</sup>

Although the exact impact of automation is yet to be seen, States and corporations must pay sufficient attention to the right to work, because the adoption of automation and the erosion of the right to work are incremental. Simply because automation is preferred and promoted due to its benefits does not mean that a certain group of people should be deprived of jobs without any redress. The focus should be on distributing the “robotics dividend more evenly by helping vulnerable workers prepare for and adapt to the upheaval it will bring.”<sup>114</sup>

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<sup>110</sup> Estlund, *supra* note 11, at 276.

<sup>111</sup> Saslow & Lorenz, *supra* note 78, at 11; Donders, *supra* note 34, at 380 (“scientific progress is often driven and controlled by private corporation[.] Corporations and businesses themselves may not be bound directly by international human rights standards, but they too have responsibilities in relation to the advancement of human rights, at least to respect them.”).

<sup>112</sup> Desierto, *supra* note 19 (seeing the problem as caused by “monopolistic tech companies”); EUROPEAN GROUP ON ETHICS IN SCIENCE AND NEW TECHNOLOGIES, *supra* note 87, at 34–35.

<sup>113</sup> Estlund, *supra* note 11, at 258.

<sup>114</sup> OXFORD ECONOMICS, *supra* note 47, at 7.

In conclusion, there is a pressing need to review the current understanding of the right to work, given the changes and disruptions brought by automation. U.N. General Comment No. 18 is no longer relevant. For example, it suggests that the right to work would demand policies that (1) “stimulate economic growth” and (2) “overcome unemployment and underemployment” simultaneously.<sup>115</sup> In the age of automation, these two goals may be inconsistent because automation stimulates growth by creating efficiency through eliminating human input. There should be a new U.N. comment tailored for today’s new automation reality.

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<sup>115</sup> *General Comment No. 18*, *supra* note 27, at para. 26.