

**Report:  
Just and Dignified Work in the Digital Workplace**

*Summary:* The rapid advancement of technological capacities for the workplace over the last two decades, highlighted during the COVID-19 pandemic, has resulted in a dramatic increase in the implementation of digital solutions for everyday workflows. These solutions, implemented and maintained through corporate and other business interests, have yielded a rise in both productivity and efficiency in our ever-increasingly digital economy. As a result, the workplace, workflows, and even workers themselves are being transformed in unprecedented ways. Many of these transformations, though valuable for the satisfaction of business goals, come at a human cost that is unsustainable for a healthy, dignified community of workers. In order to maintain a sustainable and symbiotic harmony between workers and the technological systems in which they work, we call for an enhancement of Workers Rights to safeguard the value and primacy of Human Rights.

Because modern workplaces and workflows are constantly changing with the development of technological innovations, the challenges that workers face are also changing. Many jobs that used to require an in-person presence may now be done remotely. Many more jobs that once required a human touch have been automated away from the need for human intervention. Nevertheless, the boundaries of human-workflows expand in parallel alongside technological innovations when necessary. Consequently, workers may often find themselves relegated to assisting in the completion of tasks that machines and machine intelligences are unable to perform. In such cases, in the absence of appropriate management, the technological tools used in workplaces can threaten to transform workers themselves into tools and automatons subject to predesigned algorithmic protocols.

An early example of this transformative process was the implementation of Henry Ford's supply chain which forced workers to act like machines on an automobile assembly line. In the contemporary digital economy, automations and algorithmic instructions operate both more subtly and universally than their previous Fordist counterparts. For an 'analog' factory, algorithmic automation both ends and begins at the factory's front doors. However, in today's digital era of work where anyone can work from home on laptops or using personal cellphones, the boundaries of working life and personal life have blurred. Further, the perfection of Fordist automation through advanced digital media now threatens behavioral changes that carry over beyond the locations and hours of one's work. These issues compound themselves into unprecedented *psychological harms* faced by workers in the digital economy. Further, these harms threaten workers' ability to find value or have a meaningful experience in their work and personal lives. In what follows we present three representative case examples of the foregoing harms and their effects. In each case we show how the effect of unhealthy and overbearing digital workplace solutions can put at risk some of the most important traits that comprise essential differences between human workers and machines: the interpretation of rules, social negotiation, and communal connection.

The purpose of the following report is to suggest that our conception of *human rights* needs to be updated in parallel with these digital and technological workplace developments. In particular, we will focus on the notion of the “right to just and favorable conditions of work,” as stated in article 23 of the Universal Declaration of Human Rights and article 7 of the International Covenant on Economic, Social and Cultural Rights [1, 2, 3]. We share the concerns expressed in these documents, but suggest that today they do not sufficiently protect workers from the rapidly shifting workplaces and workflows of the 21<sup>st</sup> century. These workflow shifts, exacerbated by an historic pandemic, have opened the floodgates for novel forms of exploitation that were not, and could not have been contemplated by the foregoing resolutions. We hope that opening a dialogue about common concerns and exploitations due to irresponsible digitalization of workflows and virtualization of workplaces will enable us to make strides towards reconceiving a contemporary notion of *human rights* for the betterment of both workers and working conditions. The immediate goal of this report is to offer the conceptual tools to begin thinking about this issue within the scope of Chile’s impending constitutional reform and the surrounding debate. Chile – known internationally to be among the first and most profound neoliberal experiments – now holds a unique global position to constitutionally recognize these issues. Thus, Chile has a unique opportunity to stand as an exemplar for the direction of future human dignity in a world of responsibly embraced technological innovation.

### **Example 1: The Warehouse and WMS Automation**

The benefits of technological automation in the workplace, with respect to efficiency and productivity, have been immeasurable for businesses worldwide. Computational systems are now able to make operational decisions faster and more reliably than their human counterparts. As a result, strategic and technical decision-making tasks have been allocated away from previously human controlled systems and given to machines. One particularly apparent example of this is in modern warehouses. Warehouse Management Software(s) (WMS) are commonly used to direct employees to the bin location of items to pull from shelves, how to correctly path to those locations, and even how to pack their items into boxes for shipment. Importantly, WMS solutions are effective because they remove human error from the warehouse or factory environment by replacing critical human decision making. Whereas in the past, humans were required to use their critical thinking skills to develop a strategy for the most efficient path through the warehouse, since the advent of the WMS, all of this reasoning is done by machines. All a worker must do in an automated environment is follow their algorithmically-given instructions.

This increased productivity that results from these automations, incur a substantial human cost that, as of yet, has gone largely unchecked. With increasing automation in warehouses, there is a correlative decline in employee wellbeing. According to numerous popular media reports concerning Amazon warehouse employees, rates of attempted suicide, affliction to mental health, and increased stress are all effects of the increasingly automated, technological workplace. In the United States, between 2013 and 2018 across 46 locations, emergency services were called 189

times in response to attempted employee suicide [4]. This is a significant number, and it still yet fails to account for the likely many more underreported, work-related mental health incidents that occurred outside of the workplace. In short, there is an unaddressed problem in these and like workplaces that seriously and pervasively affects employee-wellbeing. We believe that the ultimate cause of the foregoing distress reaches beyond the mere physical conditions of the automated workplace. Warehouse workers are not only subjected to long hours on their feet performing rote mechanical tasks, but they are doing so under the direction of an opaque automating technology – the WMS.

The total automation of an employee’s workflow divorces them both from their autonomy and from their creative capacity to intervene and edit their own workflow. Warehouse employees are actively disincentivized from directing themselves through the warehouse. Divergence from a WMS’ plan results proximally in lower efficiency and ultimately in sanctions for the worker. Hence, workers are not only subject to poor working conditions, but are also unable to edit those conditions to better suit their individual needs. It is a human right to act freely, and while we must all tailor our individual liberties to the needs of our employers for the duration of the workday, this right ought not to ever be wholly discarded. Yet, in the case of inflexible control through the technological automation of a workflow, autonomy or expressive creativity come at the cost of potential financial sanction and job insecurity. Thus, it is no surprise that even without oppressive physical working conditions, when placed largely in the role of an automaton, workers feel oppressed and suffer for it.

### **Example 2: Digital-Platforms and the Digital Informal Economy (“Gig Workers”)**

The “Informal Economy” is a term used to characterize work that is not fully protected or regulated by the state. This designation of work may include self-employment, extra-legal employment, or other employment in which the employer is legally and morally divorced to varying degrees from the wellbeing of their workers. In the last decade, the informal economy has boomed with the advent of digital-platform work including Uber, Rappi, Taskrabbit, Doordash, Airbnb, etc. This digitalization of the informal economy through ‘gig’ based work has afforded numerous opportunities for employment across traditionally static economic boundaries. Yet, while more opportunities for work and income are typically good, the intersection of digitalization with under-regulation threatens to exacerbate a workforce already at-risk for exploitation. Much like warehouse workers, workers who derive income from the newly digital sector of the informal economy are at risk of harm to their overall wellbeing due to the irresponsible use of technological solutions in their working environments.

The challenges that workers in the informal economy are exposed are well-studied phenomena. Informal workers are, on the whole, 15% more likely to suffer from mental health disorders than their formal-economy counterparts [5]; and women even more so [5, 6, 7]. Yet, digital-platform workers are not only exposed to the traditional challenges of the informal

economy, but also those newly realized technological challenges discussed above with respect to warehouse workers. Digital-platform work often involves an automation of workflow determined externally through an algorithmic software. For Uber drivers, income is determined by the efficiency of one's route and the number of rides that they are able to give, thus implicitly putting them in divisive competition with their 'coworkers.' GPS and ride-share app technology determines drivers' routes – and deviation comes at the cost of sanction. The same is true for many digitally-platformed delivery-focused jobs.

The digital automation of one's workflow is often a feature of digital-platform work, though the degree to which it commands a workflow is often less egregious than in the case of warehouse-workers. Whereas every movement of warehouse work can be dictated by an external automating software and enforced by an employer, drivers and other digital-platform workers, insofar as they are 'self-employed,' have some degree of added autonomy in deciding how they will do what they do. However, both warehouse workers and digital-platform workers share a common digital superior that acts as an intermediary between oneself and one's work.

Digital-platform workers may be relatively 'self-employed,' but they are still managed through their corresponding software. These digital platforms, whether it be an Uber-GPS or a WMS, are directive and inform/order the worker of the conditions of their task. Rather than orders coming from a *human* supervisor or otherwise distributed through a *team* environment, tasks are given and directed by a digital stand-in. And where there might normally be a team of coworkers, the often-divisive nature of these task-directives serve to further distance workers from one another through competition and gig-scarcity. Hence, in addition to the stress of job-insecurity, generally low pay, and alienation by automation, digital-platform work in the informal economy now also threatens workers with the foregoing isolation from their peers through digitalization and the inducement of competition between coworkers.

### **Example 3: Teachers and Virtual Working Environments**

The previous examples showed how new forms of unfavorable working conditions through digitalization can affect the *processes* in which workers operate. Yet, over the last decade, and especially in the last year, it has become increasingly evident that the *spaces* in which we work are also undergoing their own virtual revolution. More and more, meetings, office spaces, and classrooms have transitioned to a virtual format. Digital content providers like Zoom, Webex, Skype, Meet, etc. have enabled people to connect from around the world through online meeting platforms. Especially in a time of pandemic and quarantine, these tools have been invaluable for enabling continued human interaction and connection. While we recognize the necessity and great benefit of virtual meeting solutions to our virus-threatened world, we likewise recommend caution and further reflection on the responsible use of these platforms.

## Renegotiating Workers Rights for the Digitally Advanced Workplace

To date, workers are afforded the right to a chair so as not to stand for hours. They are given ample time for breaks to relax or to use a restroom when necessary. When a job presents the possibility for physical danger, workers are trained in safety measures and given the tools required to ensure that they are not injured. Workplaces must legally conform to building standards such as heating, proper ventilation, illumination etc. All of these precautions are taken so that the *physical* conditions in the workplace remain just and favorable for workers. Yet, when the workspace is made *virtual*, new concerns arise that are distinct from their physical counterparts. Importantly, these *virtual* concerns do not yet have analogous tools or social protections as do their *physical* counterparts.

The example of teachers working through virtual classrooms during the pandemic is paradigmatic of the possible harms that follow from an irresponsible digitalization of work. What used to be the responsibility of the school administration is now left up to teachers to manage for themselves. Teachers working virtually are expected to care for their own classrooms, reconstruct their work spaces, and their working conditions – to find a room, sufficient silence, the right technological tools, etc. – in order to teach. Further, teachers working in improvised personal spaces remain isolated from their peers and from their students. And in this imposed grey area of personal and working life, there remains a stark physical absence of robust personal interaction with colleagues and students. The absence of communal interaction places a far heavier burden on the teacher in a virtual space than ever before. The energy to teach, very often derived from the direct human engagement and interaction with students and colleagues, is no longer possible as it previously was. Strikingly, this absence is felt in the teacher’s own home, a place of safety and reprieve, rather than in a school’s classroom. Hence, teachers have become depressed and drained of inspiration [8, 9].

Teachers are a paradigmatic example of the increasingly ubiquitous problems related to physical isolation through virtual remote work. Globally, depression and the general degradation of wellbeing are on the rise since the COVID-19 quarantines, especially among lower-income workers like teachers. This is in large part due to isolation and a lack of in person human interaction. We anticipate that even after the pandemic ends, the effects and influence of virtual work will live on, and so too will the correlated harms that can follow from it. Teachers, who we ask more of now than ever, deserve protections from such concerns that may arise from virtual work. Likewise, these considerations ought to be afforded to all workers in a virtual space.

### **Worker’s Rights are Human Rights**

As it is currently written, Article 23 of the Charter of Human rights states: “Everyone has the right to work, to free choice of employment, to *just and favorable conditions of work* and to the protection against unemployment.” We believe that the current interpretation of this phrase falls short in the newly technological world. Workers rights are human rights and the shifts to virtual and automated work has given rise to new challenges for workers. The challenges we’ve

highlighted above include alienation by automation, isolation through digitalization, and the lack of proper protections for workers in a virtual environment. These challenges are, in part, highlighted by the foregoing examples of teachers, digital-platform workers, and warehouse employees but also likely extend to many more forms of work. Consequently, it is critical that in addition to ensuring justice and favorability for the *physical* conditions of work, the technological advancements of recent years also inspire the need for justice and favorability that may be preventative of harms extending beyond merely physical concerns.

Although the challenges of digital work are often unique to the particulars of any given job, we believe that there are at least three substantial harms that commonly arise from digital work:

**First:** Worker-autonomy is unduly threatened by over-automation of workflows.

**Second:** Workplace communities are made dispensable by the isolating virtualization of workspaces.

**Third:** The informality of digital work challenges employers to provide sufficiently ‘just and favorable conditions of work’ to their employees.

So what is to be done? We propose that the phrase ‘just and favorable conditions’ be enriched so that it may account for justice and favorability in *both physical and digital* environments of work. We believe that worker’s rights are human rights, and likewise suggest that the conditions of one’s work be interpreted as a part of one’s life. Should someone suffer a harm at work, that harm lives with them past the end of the workday. This remains especially true in today’s world where work hours are more and more interspersed with leisure time and space. It is essential to dignity and flourishing both in and out of the workplace that employees be afforded sufficient autonomy and social resources to maintain a healthy work-life balance. Left unchecked, the irresponsible advancement of automation and digitalization in workplace environments will cause a preventable decline in this balance. We resolve that workers have a right to the integrity of their wellbeing, and employers a responsibility to protect this right. In the long term, the protection of this right will benefit both employees and employers alike insofar as comprehensively just and favorable conditions of work preserves the continued stability and health of a workforce. We thus recommend that a commission consisting of workers’ unions and employers gather together to formulate mutually beneficial options to achieve the goals set out by this report in Chile’s upcoming constitutional reorganization.

We offer the foregoing suggestions as first actionable steps towards achieving a technologically advanced society that protects and provides its citizens with fully just and favorable conditions for working and for living in a newly digital world.

**Signed,**

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*References*

- [1] Universal Declaration of Human Rights.  
<https://www.un.org/en/universal-declaration-human-rights/>
- [2] International Covenant on Economic, Social and Cultural Rights.  
<https://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>
- [3] General Comment No. 23 (2016), On the Right to Just and Favourable Conditions of Work.  
(Article 7 of The International Covenant on Economic, Social and Cultural Rights).
- [4] Paget, Sharif, and Max Zahn. “‘Colony of Hell’: 911 Calls From Inside Amazon Warehouses.”  
*The Daily Beast*, The Daily Beast Company, 11 Mar. 2019, [www.thedailybeast.com/amazon-the-shocking-911-calls-from-inside-its-warehouses](http://www.thedailybeast.com/amazon-the-shocking-911-calls-from-inside-its-warehouses).
- [5] Ludermir, Ana Bernarda, and Glyn Lewis. “Informal Work and Common Mental Disorders.”  
*Social Psychiatry and Psychiatric Epidemiology*, vol. 38, no. 9, 2003, pp. 485–489.,  
doi:10.1007/s00127-003-0658-8.
- [6] Santana, V. “Informal Jobs: Another Occupational Hazard for Women's Mental Health?”  
*International Journal of Epidemiology*, vol. 26, no. 6, 1997, pp. 1236–1242.,  
doi:10.1093/ije/26.6.1236.
- [7] Wrigley-Asante, Charlotte. “Unraveling the Health-Related Challenges of Women in the Informal Economy: Accounts of Women in Cross-Border Trading in Accra, Ghana.”  
*GeoJournal*, vol. 78, no. 3, 2012, pp. 525–537., doi:10.1007/s10708-012-9449-7.
- [8] Educativas, Observatorio Chileno de Políticas. “El Bienestar/Malestar Emocional De Los/as Docentes y La ‘Bitácora’ Del Abandono.” *Diario y Radio U Chile*, Diario y Radio U Chile, 18 Aug. 2020, [radio.uchile.cl/2020/08/18/el-bienestarmalestar-emocional-de-losas-docentes-y-la-bitacora-del-abandono/](http://radio.uchile.cl/2020/08/18/el-bienestarmalestar-emocional-de-losas-docentes-y-la-bitacora-del-abandono/).
- [9] Nguyen, Thi. “Zoom Classes Felt like Teaching into a Void - until I Told My Students Why.” *Washington Post*, 11 Mar. 2021, [www.washingtonpost.com/outlook/zoom-classes-felt-like-teaching-into-a-void--until-i-told-my-students-why/2021/03/11/024afb2c-81e5-11eb-81db-b02f0398f49a\\_story.html](http://www.washingtonpost.com/outlook/zoom-classes-felt-like-teaching-into-a-void--until-i-told-my-students-why/2021/03/11/024afb2c-81e5-11eb-81db-b02f0398f49a_story.html).