

Luiz Otávio Linhares Renault

Regional Labor Court of the State of Minas Gerais
ORCID: 0000-0001-6169-6492
e-mail: ocrenault@hotmail.com

Dr Marta Zbucka-Gargas

Uniwersytet Gdański
ORCID: 0000-0003-4013-0531
e-mail: marta.zbucka@prawo.ug.edu.pl

Cláudio Iannotti da Rocha

Federal University of Espírito Santo in Brasil
ORCID: 0000-0003-2379-2488
e-mail: claudiojannotti@hotmail.com

Guilherme Alves Jevaux

Federal University of Espírito Santo in Brasil
ORCID 0000-0003-4788-6913
e-mail: guilhermeajevaux@hotmail.com

4th industrial revolution, labor and procedural labor law 4.0

Rewolucja przemysłowa 4.0, prawo pracy i procesowe prawo pracy 4.0

Abstract

This article aims to analyze the correlation between the 4th Industrial Revolution, Labor Law 4.0 and Procedural Labor Law 4.0, performing a historiography of the work, as well as demonstrating how this new revolution on work and workers is causing real and significant structural shocks, both in Material Law and in Labor Procedural Law. For the elaboration of this article, the deductive method was used, from a qualitative perspective, from the bibliographic research.

Keyword

Labor Law 4.0, Procedural Labor Law 4.0, 4th Industrial Revolution

JEL: K31

Streszczenie

Artykuł ma na celu analizę korelacji pomiędzy czwartą rewolucją przemysłową, prawem pracy i proceduralnym prawem pracy 4.0. Autorzy przybliżają historię pracy, a także wskazują w jaki sposób rewolucja powoduje rzeczywiste i znaczące zmiany strukturalne, zarówno w obszarze prawa materialnego, jak i procesowego prawa pracy. Do opracowania niniejszego artykułu posłużono się metodą dedukcyjną w perspektywie jakościowej oraz wynikami badań literatury przedmiotu.

Keywords

Prawo pracy 4.0, proceduralne prawo pracy 4.0, 4. rewolucja przemysłowa

Assistant Profesor Introduction

In the First Industrial Revolution (1760–1860), humans created the steam engine, using water and coal as energy sources for the operation of machinery, sparking the first rudimentary factories with the mechanization of spinning and weaving of wool, linen and silk and the concentration of human labor in centralized locations. Furthermore, the emergence of steel factories, the construction of boat and steam locomotives, contributed decisively to the emergence of the first industrial cities, such as Glasgow, London, Paris, and Brussels. With the Second Industrial Revolution (1860–1950), the machine powered by electricity, oil, light and heat from the sun, enabled the

emergence of key innovations for the modern world, such as the automobile, computer, combustion and electric engines, incandescent lamp, steam trains, steel ships, telegraph, telephone, television, electric dynamo, plastics, lubricants, and many other synthetic products derived from petroleum, fertilizers, fertilizers and medicines.

This emerging industrial world, defined by many as the Taylorism/Fordist means of production, gives rise to the employment relationship and its logical corollary, Labor Law. At the beginning of the twentieth century, it was structured on large companies, engendered in vertical production, where the raw material entered the factory and from it comes out the final product to be

marketed. Subordination was personal, characterized by the classic relationship between the worker and his or her boss: The eyes of the employer or its representative accompanied, supervised, and personally directed the movements (and maybe even the thoughts) of the worker. The rigidity was so intense that machines and workers seemed to converse.

In the exact terms demonstrated by Luiz Otávio Linhares Renault "the company, in its physical dimension, has always been an important point of hope for both the citizen-employee and the citizen-unemployed" (Renault, 2004, pp.28). It so happens that, in the middle of the 20th century, the Third Industrial Revolution (1950–2010) emerged, of a technical-scientific-informational nature, that brought about the digital age, introducing also a more lean company structure (*lean production*) and the Just-in-Time (JIT) production model, in which a business produces only what is necessary and part of the production and no more the whole of it, changing the production model from vertical to horizontal, marketing specialized products, on a small scale to meet the demand and participating only in one stage of production, thus causing outsourcing.

This new reality was based on advances and technological innovations in the fields of computer science, robotics, microelectronics, and telecommunications, in addition to the emergence of the Internet and satellite communications, as well as advances in the chemical industry, in the opening of markets, in economic and cultural globalization and in productive and business restructuring, thus emerging telework and intermittent work.¹

Scientific and technological advances have made room for the emergence of personal computers, so that people, even geographically, in different locations, began to communicate, exchanging and sharing information electronically. Physical distancing is now no longer an obstacle and face-to-face contact has become of lesser importance in personal, professional, and business relationships. Until the emergence of the digital age, there was the physical and metaphysical world, and through the computer there is also the digital world, which guides and interconnects these two worlds.

The process of computerization has allowed things to exist non-physically, to register within software. Therefore, data, information, calculations, texts and personal and professional planning, once organized, stored and archived in physical paper, began to be created and stored on a computer, or even in cloud storage, via the Internet. The socio-environmental impacts from industrialization and urbanization, which started in First Industrial Revolution and then optimized by the Second and Third Industrial Revolutions, are of such monumental consequence that it caused the United Nations (UN) at the Stockholm Conference in 1972 to publish the *Brundtland Report*, acknowledging for the first time its concern about risks

to human existence due to its effects to the global environment, warning one and all that the Earth and humanity were in danger.

In November of 2021, the United Kingdom will host the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow, and one of the main themes will be the reduction of greenhouse gases, such as the emission of carbon dioxide, from burning fossil fuels in transport and industrial activities. Thus, the creation of green jobs, replacing polluting sources with clean energy systems, through renewable energies will be one of the main messages of COP 26.

Labor Law 4.0

At the beginning of the 21st century, approximately in its first decade, in Germany, the Fourth Industrial Revolution (2010 to date) emerged, which brings up the Intelligent Factory, by many called Industry 4.0, characterized by the responsive, flexible and connected triad, allowing the emergence of gamification. This new business modal breaks with the secular paradigm that existed so far and includes in the production process cloud computing, the internet of things (IoT), artificial intelligence (AI), Big Data, cryptocurrencies, machine-learning, digital platforms and applications, 3D printer and genetic engineering, which are operationalized through computers, tablets, smartphones, drones, sensors, robots and automation, integrating an interconnected, open, linear and sequential system, thus emerging the digital supply network.

Today, people and computational machines dialogue and interact with each other, sparking an impressive and operational productive dynamism never witnessed in Labor historiography. This technological milieu allows the emergence of the modern transnational companies, making possible the emergence of a complex unterritorial productive chain, bringing the possibility of the worker being present in two, three or even four places concomitantly, emerging new professions that were currently unthinkable. Therefore, the relationship between the company, workers and customers becomes more interactive, dynamic, and transparent. This connectivity allows a dialogical process for all people in the supply chain, from the designers all the way to the consumer, passing through the suppliers of raw materials, the manufacturers, packers and carriers, every day faster and more agile.

In Ansbach, Germany, and Atlanta, USA, the sports equipment company Adidas has installed factories, effective the visibility of all involved and collaboration in the supply chain through the '*Speedfactory*', a fully automated production, which, through robotization, produces in high speed and in a personalized way for the end customer, making, in a way, a return to the artisanal model, but without the direct participation of the human person, but with robots, a hypothesis that we coin of advanced manufacturing. In April 2020, Adidas

reported that it was transferring these plants to Vietnam and China, claiming² that it's a better location due to the local know-how and suppliers of raw materials.³

The automotive company BMW in Leipzig, Germany, manufactures the i3, the first all-electric model, fully assembled in an automated manner, without any kind of human intervention in its manufacture.⁴ Both in the Adidas and BMW factories, everyone involved can keep up with, *pari passu*, all production, from raw material to delivery of the final product, making (or giving the impression) that all subjects are protagonists. The supply chains of transnational companies are composed of workers located in different countries and on different continents, making the production reach global. This change and rapid adoption of new technologies are not restricted to developed countries: just like the rest of the effects, globalization and the Internet makes that any innovation can be easily adopted everywhere, and even developing countries can contribute and participate.

In 2021, Brazilian plane company Embraer announced a new fleet of eVTOL planes or electric Vertical Take-Off and Landing, making use of both innovations in battery technology, artificial intelligence, and the Internet of Things, enabling the phasing out of short airplane and helicopter trips, both significant pollutants and contributors to the current climate crisis, with more than 750 units already ordered from companies around the world⁵.

New technologies, mainly cloud computing, the Internet of Things, artificial intelligence, big data, blockchain and digital platforms, allow companies to become multilateral and capable of social audits, driving away the use of abhorrent labor practices, like slave and child labor, while also stimulating the use of hyper-renewable energies (solar, wind, hydraulics and biomass), thus contributing to the emergence of a global protection network, fostering decent work, green employment, sustainable development, ecological preservation and reduction of carbon emissions (Rocha, Abaurre, Portoi, 2022, p. 80).

In addition to all this technological evolution that allows the installation of smart factories, there is another new dimension of labor, also inserted in the 4th Industrial Revolution. Already widespread in Brazil and the world, it is known by many different terms, such as the international euphemism 'Sharing Economy' and, perhaps more truthful, popularly known in Brazil as work on platforms or Uberization. Through apps installed on mobile devices, the worker is available to work for whomever wants or needs they, connecting them, concomitantly, with the company and the customer, regardless of the location in which each is located. From this new dimension of labor, we can coin expressions such as crowd work and "technological society", which have as support the social virtualization and the labor platformization.

To the same extent that water and coal supported the steam engine, hardware supports software, so too

algorithms support digital platforms and applications. In other words: the algorithm is the beating heart of digital platforms and apps, allowing the unprecedented reach and control of such apps upon the worker, while functioning on any smart device.

Today, Uberization means a new world of labor within the old real world, corresponding to a modal genre, a form of adaptive work in any and all professions, being already active, among others, in the transportation of food, passengers and goods; in the so called 'Gig Economy', in which each user could complete these micro tasks or 'gigs' in minutes, being paid soon after, in a decentralized way and without a formal bond with a single company: the human worker does the work that, in the *end*, would be done by the machines, from transcriptions of texts and podcasts to small programming tasks (Prassl, 2018, p. 4); in health services, sports, academic, legal, technological, administrative, architectural, engineering and safety.

In 2019, the biggest app delivering companies in Brazil are, combined, the largest employer in Brazil, with almost 4 million workers, surpassing the number of employees of the Post Office, the largest state-owned company with 109,000 employees.⁶ It is a subject of extreme relevance and importance in the field of labor relations, especially in these trying times, facing the serious pandemic SARS-COVID-19, which has pushed a lot of people who can't make ends to work with delivering apps, many times the only companies hiring through the pandemic and lockdowns to meet the upsurge in demand by people staying home. The work through these online platforms, enables workers, businesses, and consumers to connect with each other at any day, time, and place, literally 'work in the crowd' or crowdwork. However, it is necessary to reflect whether the workers responsible for the execution of these new forms of work are also benefited and receive due retribution for the workhours spent.

The Work on digital platforms can be analyzed through two aspects: the temporal aspect, in which mankind, from the 1st Industrial Revolution all the way till today with the 4th Industrial Revolution, has always worked with the machine, and that is why labor law has emerged; the second, the spatial aspect, derives from the placeless nature of such work, being borderless and with a global reach of its effects and consequences, challenging the elasticity of the social fabric in almost all countries.

Every day there is a new app, with its own characteristics that offers us a different type of service and conditions to its workers and customers. In this everchanging, disruptive universe, the imposed arrangement can be so inhumane, cruel, and dull that people have become statistics, interchangeable and disposable, losing their individuality and disconnecting the work from the worker. In this technological context, a new kind of environment emerges, which we coin the *Virtual Environment*. Its placeless and everywhere, shrinking geographic distances and interconnecting

both workers and employers though cities, states, countries, and continents. Today, being virtual means being more present than physically. This is how the 'new world' of work has been delineated: on the one hand the technological universe, equipping the intelligent factory, favoring and valuing intellectual work, knowledge, and creativity; on the other hand, technological innovations constitute the new worker modal in the digital age, inserting him into a global and borderless work relation through the internet. And in this binary path, idealized by the keynote of freedom that labor law has been challenged daily, there is already talk of Labor Law 4.0 and Labor Procedure 4.0.

Procedural Labor Law 4.0

Aristotle taught that "art imitates life". In the same vein, we can say that procedural law imitates life, because the process is still an art. Just as Labor Law has suffered seismic shocks, the Procedural Labor Law also has been subjects to great changes, with a renovation of its structural procedures and rituals.

Social virtualization and labor platformization have surpassed the epidermal thresholds of Material Law and reached the marrow of Procedural Law, causing the emergence of the Process 4.0, which we have minted from the Virtual Process, putting into analysis several constitutional and infra-constitutional guarantees. The theoretical matrix of this new procedural landscape is Scottish professor Richard Susskind, from Oxford University, author of the book "Online Courts and the Future of Justice", in which defends the use of new technologies, both in the traditional method and the multi-door system of conflict resolutions. And for this it illustrates that the idea that the very concept of Justice is no longer defined as a physical space (the Forum), but as a service. Access to justice is reconfigured through the new technological instruments that are available to society, with deeper paths than simply the automation of existing and applicable methods (Susskind, 2019).

The Procedural Labor Law 4.0 is the result of a historiography initiated in 2010 and that in 2020 gained body and wingspan through the CSJT Joint Act. GP. Gvp. CGJT 6/2020 and Resolutions 345, 372, 378 and 385, all from the Brazilian National Council of Justice (CNJ), a national judicial body that defines norms and standards for the organization of the Judiciary, causing the Labor Process to cease to be digital, as it was known, to become virtual, the fruit of the technological society. It is important to distinguish between the digital and virtual process, because, in the digital process, the procedural acts are practiced in person and by asynchronous techniques, while in the virtual process the procedural acts are performed exclusively remotely by synchronous and asynchronous techniques. In March 2010, the backbone of the Procedural Labor Law 4.0 emerges, through the Term of Technical Cooperation Agreement No. 51/2010 between the National Council of Justice (CNJ), the

Superior Labor Court (TST) and the Superior Council of Labor Justice (CSJT), when the Labor Court officially joined the Electronic Judicial Process — PJe, to develop a single system of electronic processing of judicial proceedings.

On this same date, through the Technical Cooperation Agreement No. 01/2010, signed between the Superior Labor Court, the Superior Council of Labor Justice and the 24 Regional Labor Courts, all labor justice bodies joined the project, and since 2012 all labor justice bodies have fully used the Electronic Judicial Procedure — PJe, regulated by Law No. 11.419/2006 and Resolution No. 136/2014 of the Superior Council of Labor Justice⁷. With the coronavirus global pandemic, the Superior Labor Justice Council (CSJT) issued the CSJT Joint Act. GP. Gvp. CGJT 6/2020, of 05/05/2020, standardizing remote work, procedural acts and deadlines, virtual or teleconference hearings and trial sessions in the Labor Court, its support services and the assistance to lawyers, parties and prosecutors, with physical hearings and face-to-face sessions being prohibited⁸ (according to observations of CNJ Resolutions 313 and 314/2020)⁹.

It is important to bring to light that virtual trial sessions and teleconference sessions are not synonymous, because the first is conducted entirely remotely and asynchronously in a digital environment, lasting a few days, and all members of the Court have the time to analyze the file and present their respective decision or manifestation, not being allowed oral support. In this modality, all judges follow the session from beginning to end in full, and the partial disclosure of decisions is accompanied by lawyers, prosecutors and other interested parties, while full disclosure of the content of the session and judgments is carried out only after its completion.

The remote trial session is held entirely remotely and synchronously because there is a live interaction between the members and during their performance on the designated day and time the judges, lawyers, and prosecutors (Members of the Labor Public Prosecutor's Office) act concomitantly through videoconference. The virtual sessions and the teleconference sessions by videoconference can be adopted by all the collegiate bodies of the Court (Classes, Specialized Subsections, Subsection of Collective Bargaining, Special Organs and the Full Court), and each Regional Labor Court has the freedom to standardize the theme, elaborating its own Act, and must necessarily observe the Resolutions of the CNJ and the guidelines of the CSJT. The single and instructional hearings, as well as the trial sessions, started being recorded in audio and video, in a tool compatible with the National Media Repository for the PJe or PJe-Mídias¹⁰.

In October 2020, the National Council of Justice (CNJ) published Resolution No. 345, which was improved by Resolution No. 378 of 2021, standardizing Digital Justice 4.0, which we call the Virtual Process, allowing the jurisdiction through new technologies to

have access to justice without the need to physically appear in the judiciary, determining that all procedural acts (from the court to the delivery of the property protected by the law) are performed exclusively, electronically or remotely synchronously or asynchronously. Thus, the parties, lawyers, prosecutors, judges, and all procedural subjects (such as witnesses, experts, other auxiliaries, and public servants) use these innovative technologies to act remotely through the Internet and may even produce evidence, hold hearings, and trial sessions by virtual or teleconference.

If without the means to produce evidence or other procedural acts in a virtual way, their realization in a face-to-face manner will not prevent the processing of the process under the "Juízo 100% Digital" or 100% Digital Judgment. The "Juízo 100% Digital" may also use services provided in person by other institutions of the Court, such as adequate conflict resolution, execution of warrants, central calculations, tutoring, among others, provided that these procedural acts can be converted into electronic. The Superior Council of Labor Justice (CSJT) adopted the Zoom platform, thus standardizing for the whole of Brazil for hearings and telepresence trial sessions from 05/01/2021.

For the virtual process to be made effective, it is necessary that the author makes this option, at the time of distribution, and the defendant, when cited, accepts it, and may, within 5 days, counted from the summons or until the rendering of the sentence. As for existing physical proceedings, the Judge may at any time propose to the parties the conversion to the virtual process, or else the parties may enter a legal procedural transaction requiring conversion. It is noteworthy that if it is demonstrated that the impossibility of the production of evidence in a virtual way, it is allowed to be formed in the physical way. The Tribunals that implement the "Juízo 100% Digital" should, within thirty days, communicate to the National Council of Justice, sending details of the implementation and the courts covered.

The "Juízo 100% Digital" may be adopted to cover or not all jurisdictional units of the same territorial and material jurisdiction, ensuring, in any case, free distribution. The implementation of this virtual system by the Courts may be preceded by consultation to be made exclusively to the judges of the courts to be contemplated. The "Juízo 100% Digital" will be evaluated one year after its implementation, and the Tribunal may opt for its maintenance, discontinuity or expansion, communicating its resolution to the National Council of Justice.

Already in the current year of 2021, the National Council of Justice (CNJ) published Resolution No. 372, creating the "Balcão Virtual" or Virtual Counter, determining that the Courts, with the exception of the Supreme Court, make available, on their website, videoconferencing tools that allows immediate contact with the service sector of each judicial unit, popularly called as "balcão" or counter, during public service

hours. The Tribunal may use any technological tool that proves appropriate for virtual attending service, even if different from the solution used for holding hearings, trial sessions or, also, for the practice of other judicial acts. The Tribunal may, in judicial units located in regions of the interior, where the deficiency of technological infrastructure is notorious and so derails the attendance by videoconference, provide for the use of asynchronous communication tool for the service through the "Balcão Virtual", a hypothesis in which the response to the applicant should occur within a reasonable time.

The National Council of Justice (CNJ), through the Department of Information Technology and Communication, may indicate, upon request of the Tribunals concerned, a solution of public and free use available, as well as installation and utilization manuals.

The Balcão Virtual should operate throughout the normal hours of service to the public, like that of the face-to-face service desk, and the public servant designated to act in the Balcão Virtual will provide the first assistance to lawyers and parties, being able to summon other employees of the unit or make scheduling, by the electronic means available, to complement the requested service.

It is important to highlight that the Balcão Virtual does not replace the system of petitioning of electronic process systems adopted by the Courts, being prohibited their use for the protocol of petitions, as well as not applicable to the offices of magistrates. The access link to the Balcão Virtual of the unit should be published on the website of the Courts, preferably next to the telephone numbers and electronic addresses of each judicial unit, with the express mention that the service by that route will take place only during the hours of service to the public stipulated by each court. Balcão Virtual shall be regulated and installed within thirty days of the entry into force of this Resolution, with the appropriate availability of access links on the court's website and communication to the National Council of Justice.

Finally, here emerges Resolution no. 385 of the National Council of Justice, based on Law No. 14.129/2021, regulating the Centers of Justice 4.0, allowing the creation of specialized Nuclei due to the same matter and with jurisdiction over the entire territorial area located within the limits of jurisdiction of the Tribunal that created the Nucleus, which shall contain one Coordinating Judge, and at least two other Judges, effectuating Resolutions No. 345, 372 and 378. Each of these "Núcleo de Justiça 4.0" or Justice Center 4.0 must have a judge, who will coordinate it, and at least two other judges. The choice of "Núcleo de Justiça 4.0" by the author is optional and must be exercised at the time of distribution of the action, and the process assigned to a "Justice Center 4.0" will be freely distributed among the magistrates designated for it.

It is irrevocable the choice of the party author for the processing of its case in the "Núcleo de Justiça 4.0",

and the defendant may object to the proceedings until the presentation of the first manifestation made by the lawyer or public defender, when the case will be referred to the competent physical Court indicated by the author, submitting the process to the new distribution. The opposition of the defendant to the processing of the done by the "Núcleo de Justiça 4.0" can be made in the manner provided for in article 340 of the Brazilian Código de Processo Civil or the Code of Civil Procedure. The non-opposition of the defendant, in the above-mentioned form, will improve the legal procedural transaction, pursuant to article 190 of the Code of Civil Procedure, setting the jurisdiction in the Justice Center 4.0. An Act of the Tribunal will define the operating structure of the Nuclei of Justice 4.0, according to its procedural volume, as well as provide the designation of public servants to act in the unit, which may occur cumulatively to the activities developed in their stocking of origin or exclusively in the nucleus, observing, in this case, the provisions of Resolution CNJ No. 227/2016, of the National Council of Justice.

Conclusion

If, in the plane of Material Law, the 4th Industrial Revolution is creating a social and conjuncture abyss between the Intelligent Factory and Uberization, putting on one side the new factories that operate in an automated and safe way, targeting responsive working conditions and favoring intangible work; on the other hand, are the workers on a platform that work in inhuman conditions, occupying public spaces such as streets, sidewalks and squares, without the minimum sanitary and safety conditions, close to similar situations of slavery, distorting material work. If in the first modal the work is valued, in this second it is devalued.

On the plateau of Procedural Law, the 4th Industrial Revolution is creating a procedural gulf between the Physical Process and the Virtual Process, placing on the one hand Justice 4.0, which disappears with physical structures and through technological innovations allows the process to be permeated by synchronous and asynchronous techniques from beginning to end, when procedural acts are practiced remotely and electronically; on the other hand, there is traditional justice that privileges the contact and existence of the human being, where parties, lawyers and judges interact in person and use technology to assist them.

It is part of human evolution and capacity, which overcome limits and adapt human beings to new and more varied situations, including in the world of work that is not a watertight and unchanging event. Technology and innovation have accompanied man, society, culture, and law since the 1st Industrial Revolution, allowing humanity to constantly evolve and achieve unimaginable achievements.

It is necessary that the Law is aligned with socioeconomic and technological changes, and in Labor

Law and the Labor Procedure the field is very propitious and ideal for this. But what do Labor Law 4.0 and The Labor Procedure 4.0 have in common? The answer is obvious, they have the same protagonist: the algorithms gradually take all the spaces and maybe leave little or no gap for the supporting workers. After all, it is expansionist, invisible, dominant and has no pre-established form. It is past time to think about virtual education and inclusion, preparing, equipping, and empowering all those involved (including the parties), under the possibility of a legal collective exclusion if they remain ignored. Balance has always been, is and always will be virtue. To weigh and establish human and automation limits may unquestionably be the best response of the Law to the 4th Industrial Revolution, so that new technologies are used for a better life for all of us.

It is in this context that the world of work finds itself: on the one hand, traditional Labor Law and Procedure, based on anthropocentrism and which have as protagonists the human being; on the other hand, the Law and the Labor Procedure 4.0, embodied in machines, algorithms, platforms and digital applications, which have as protagonists the new technologies. In any event, as if we were many with multiple voices, within a confusing and illogical geometry, some supersensitive questions arise of the legal-procedural reality before the concreteness of life and all its vicissitudes, joys, dramas, and tragedies, which thrive within the judicial processes.

We are in an increasingly virtual world, whether at work or in the process, and the world is moving towards being, at the same time smaller and larger, depending on the point of view. Workers, companies and consumers connected all time and anywhere; author, defendant and judge, increasingly interactional, dynamically dialoguing. You cannot even speak about a sea anymore, but an ocean of opportunity. Open minds and courage to face to move forward, after all, in face of the trials ahead. The Law and Procedure of Labor have always been challenged and from them they were born and grew, now will be no different. Technology and innovation are increasingly available to everyone, and so they expect consistent answers.

Just as the river runs out to sea, so must be Labor Law and Procedure, observing and using the technological innovations of the 4th Industrial Revolution, through science and innovation that must offer a social fabric to workers and effective access to justice. Human beings, computational clouds, artificial intelligence, machines, transnational companies, multi-territorial supply chains, nomadic work, advanced manufacturing, and virtual process represent the contemporaneity of the labor and procedural universe. Where we will go, which path will we take, what ethical and scientific values will we support, who will lead the hearings, who will listen to and judge us? The human being or machines? Both, with the predominance of one over the other?

Science comes from doubt, the questioning that leads us to knowledge, which on this path we walk in search of reason. Therefore, the Law and the Labor Procedure must accompany social and technological changes, so that it is necessary to the human being more vivacity, quality of life and better days. It's forward where one should look.

The answers are for the readers, teachers, students, magistrates, and other legal professionals, as this is a completely open theme, awaiting the contribution of all social actors, without exception, individuals and legal entities, who are the addressees of the jurisdiction, which takes place through the process.

Przypisy/Notes

¹ In Brazil, telework is regulated in art. 75-A to 75-E in the Brazilian Consolidation of Labor Laws (CLT). In Brazil, the intermittent work is regulated in the arts. 443, § 3 and 452, both from the Brazilian Consolidation of Labor Laws (CLT).

² <https://digital.br.synnex.com/o-que-sao-fabricas-inteligentes>. Access: 04 mai. 2021.

³ <https://www.b9.com.br/117254/adidas-encerra-fabricas-automatizadas-na-alemanha-e-nos-estados-united/>. Acesso: 04 mai. 2021.

⁴ <https://transformacaodigital.com/transformacao-digital/fabricas-inteligentes-a-revolucao-da-industria/>. Acesso: 04 mai. 2021.

⁵ <https://www.reuters.com/business/aerospace-defense/embraers-eve-receives-brazil-order-up-100-vtols-2021-10-03/>. Acesso: 21 mai. 2021.

⁶ Estadão Conteúdo. Apps como Uber e iFood se tornam "maior empregador" do Brasil. Apps de serviços são fonte de renda para 4 milhões de brasileiros; se reunidas em uma mesma folha de pagamento, ela seria mais longa do que a dos Correios. Exame. Acesso em 28/04/2019.

⁷ <https://www.trt13.jus.br/informe-se/noticias/2012/11/historico-do-processo-judicial-eletronico-da-justica-do-trabalho-pje-jt>. Acesso: 01 mai. 2021.

⁸ <http://www.csjt.jus.br/documents/955023/7642229/Ato+006.20+05.05.20.pdf/2c8d04ff-32dd-925e-6402-74bfc60069a?t=1588710352086>. Acesso: 21 mai. 2021.

⁹ <http://www.csjt.jus.br/documents/955023/7642229/Ato+006.20+05.05.20.pdf/2c8d04ff-32dd-925e-6402-74bfc60069a?t=1588710352086>. Acesso: 21 mai. 2021.

¹⁰ <http://www.csjt.jus.br/documents/955023/7642229/Ato+006.20+05.05.20.pdf/2c8d04ff-32dd-925e-6402-74bfc60069a?t=1588710352086>. Acesso: 21 mai. 2021.

Bibliografia/References

Renault, Luiz Otávio Linhares (2004). Que é isto — O Direito do Trabalho? In: Direito do Trabalho. Evolução, Crise e Perspectivas. PIMENTA, José Roberto Freire; RENAULT, Luiz Otávio Linhares; VIANA, Márcio Túlio; DELGADO, Mauricio Godinho; BORJA, Cristina Pessoa Pereira. São Paulo: LTr.

Rocha, Cláudio Jannotti da; ABAURRE, Helena Emerick; PORTO Lorena Vasconcelos (2020). O Mundo do Trabalho e a 4a Revolução Industrial — Direito Coletivo do Trabalho e a 4a Revolução Industrial. V. 2. São Paulo: Tirant lo Blanch.

Susskind, Richard (2019). *Online Courts and Future of Justice*. Oxford University Press.

Estadão Conteúdo. Apps como Uber e iFood se tornam "maior empregador" do Brasil. Apps de serviços são fonte de renda para 4 milhões de brasileiros; se reunidas em uma mesma folha de pagamento, ela seria mais longa do que a dos Correios. Exame. Acesso em 28/04/2019. <https://exame.com/economia/apps-como-uber-e-ifood-sao-fonte-de-renda-de-quase-4-milhoes-de-pessoas/>

Luiz Otávio Linhares Renault, Judge of the Regional Labor Court of the 3rd Region. PhD in Law from the Federal University of Minas Gerais (UFMG). Retired Professor of the Pontifical Catholic University of Minas Gerais (PUC MINAS).

Dr Marta Zbucka-Gargas, Assistant Professor of the Faculty of Law and Administration of the University of Gdańsk. PhD and LLM in Law. Practitioner with many years of managerial experience in human resources and global supply chain management in companies from the energy and offshore sectors.

Luiz Otávio Linhares Renault, sędzia Okręgowego Sądu Pracy III Regionu. Doktor prawa na Uniwersytecie Federalnym Minas Gerais (UFMG). Emerytowany profesor Papieskiego Katolickiego Uniwersytetu Minas Gerais (PUC MINAS)

Dr Marta Zbucka-Gargas, adiunkt na Wydziale Prawa i Administracji Uniwersytetu Gdańskiego. Doktor nauk prawnych i LLM w zakresie prawa. Praktyk z wieloletnim doświadczeniem menedżerskim w zakresie zarządzania zasobami ludzkimi oraz globalnymi łańcuchami dostaw w spółkach z sektora energetycznego i offshore.

Cláudio Iannotti da Rocha, Professor of the Law Department of the at Federal University of Espírito Santo (UFES), in the Undergraduate Course and in the Graduate Program in Procedural Law. Post-Doctorate in Law at the Federal University of Bahia (UFBA). PhD and Master's in Law from the Pontifical Catholic University of Minas Gerais (PUC MINAS). Leader of the Research Group Work, Social Security and Process: dialogues and criticisms (UFES-CNPq). Member of the Research Group Working Relations in Contemporaneity (UFBA-CNPq). Member of the Research Group Work, Constitution and Citizenship (UnB-CNPq). Member of the Research Group Network on Labor Law and Process (RETRABALHO). Author of books and articles published in Brazil and abroad. Researcher. Lawyer

Guilherme Alves Jevau, Master's student at Federal University of Espírito Santo (UFES). Researcher of the Research Group on Labor, Social Security and Process: dialogues and criticisms (UFES-CNPq). Lawyer.

Cláudio Iannotti da Rocha, profesor Wydziału Prawa Federalnego Uniwersytetu Espírito Santo (UFES), na studiach licencjackich i magisterskich z prawa procesowego. Doktorat z prawa na Uniwersytecie Federalnym Bahia (UFBA). Doktorat i magister prawa na Papieskim Katolickim Uniwersytecie Minas Gerais (PUC MINAS). Lider Grupy Badawczej Praca, Zabezpieczenie Społeczne i Proces: dialogi i krytyka (UFES-CNPq). Członek grupy badawczej Working Relations in Contemporaneity (UFBA-CNPq). Członek Grupy Badawczej Praca, Konstytucja i Obywatelstwo (UnB-CNPq). Członek Grupy Badawczej Network on Labor Law and Process (RETRABALHO). Autor książek i artykułów publikowanych w Brazylii i za granicą. Badacz. Prawnik.

Guilherme Alves Jevau, student studiów magisterskich na Uniwersytecie Federalnym Espírito Santo (UFES). Pracownik naukowy Grupy Badawczej ds. Pracy, Zabezpieczenia Społecznego i Procesu: dialogi i krytyka (UFES-CNPq). Prawnik.

Polskie Wydawnictwo Ekonomiczne



PRZEMYSŁ 4.0
RYSZARD KNOSALA POLECA

ARKADIUSZ GOLA
GABRIEL KOST
JERZY ZAJĄC

INTEGRACJA ZAUTOMATYZOWANYCH I ZROBOTYZOWANYCH SYSTEMÓW WYTWARZANIA



POLSKIE WYDAWNICTWO EKONOMICZNE

Polecamy

Więcej informacji
na stronie
Wydawnictwa
www.pwe.com.pl