



HUMAN RIGHTS IN THE CONTEXT OF THE INDUSTRIAL REVOLUTION 4.0 IN VIETNAM - REALITY AND SOLUTIONS

DIREITOS HUMANOS NO CONTEXTO DA REVOLUÇÃO INDUSTRIAL 4.0 NO VIETNAME – REALIDADE E SOLUÇÕES

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ABSTRACT

Objective: To analyze the current state and implementation of human rights in Vietnam within the context of the Fourth Industrial Revolution (IR 4.0), identifying both achievements and limitations, and to propose solutions to enhance human rights protections going forward.

Methods: The study utilizes a qualitative approach, incorporating analytical, synthetic, logical, and historical methods to examine human rights issues in the era of IR 4.0 in Vietnam.

Results: The research highlights Vietnam's deep-rooted commitment to human rights as part of its national development strategy. However, it also points out significant challenges in adapting human rights practices to the rapidly evolving technological landscape, which includes issues of data privacy, labor displacement, and access to information.

Conclusion: The paper advocates for legal reforms and a strategic, balanced approach to technological integration and human rights protections in Vietnam. It suggests that enhancing legal frameworks and increasing international cooperation are crucial to advancing human rights in the context of IR 4.0.

Keywords: Industrial Revolution 4.0; Human rights; Reality; Solutions; Vietnam

RESUMO

Objetivo: Analisar o estado atual e a implementação dos direitos humanos no Vietnã no contexto da Quarta Revolução Industrial (IR 4.0), identificando tanto as conquistas quanto as limitações, e propor soluções para melhorar a proteção dos direitos humanos no futuro.

Métodos: O estudo utiliza uma abordagem qualitativa, incorporando métodos analíticos, sintéticos, lógicos e históricos para examinar as questões de direitos humanos na era da IR 4.0 no Vietnã.





Resultados: A pesquisa destaca o compromisso enraizado do Vietnã com os direitos humanos como parte de sua estratégia de desenvolvimento nacional. No entanto, também aponta desafios significativos na adaptação das práticas de direitos humanos à paisagem tecnológica em rápida evolução, que inclui questões de privacidade de dados, deslocamento de trabalho e acesso à informação.

Conclusão: O artigo defende reformas legais e uma abordagem estratégica e equilibrada para a integração tecnológica e proteções de direitos humanos no Vietnã. Sugere que o aprimoramento de quadros legais e o aumento da cooperação internacional são cruciais para o avanço dos direitos humanos no contexto da IR 4.0.

Palavras-chave: Revolução Industrial 4.0; Direitos humanos; Realidade; Soluções; Vietname

1. INTRODUCTION

The Industrial Revolution 4.0 (IR 4.0) has unfolded on a global scale, unveiling a vast and intricate landscape fraught with implications that challenge complete foresight. This transformative era necessitates proactive responses from nations, given the significant influence wielded by smart industry and modern technology. Progressing at an exponential pace, the full spectrum of IR 4.0's implications remains largely unrealized, accompanied by a myriad of challenges across various domains, notably in the realm of human rights protection. In the early 21st century, Vietnam embarked upon leveraging the opportunities presented by IR 4.0, actively contributing to the advancement of human rights, a recognition duly acknowledged by the international community. Hence, it becomes imperative to undertake an objective analysis and evaluation of the present state of human rights promotion within the Vietnamese context amidst the Fourth Industrial Revolution. Subsequently, solutions must be proposed to further bolster human rights endeavors in Vietnam amidst the transformative tide of IR 4.0.

2. LITERATURE REVIEW

Pivotal international human rights instruments, such as the Charter of the United Nations (1945) and the Convention on the Rights of the Child (1989), significantly enhance the global understanding of human rights. As a signatory to these declarations and conventions, Vietnam is committed to upholding its principles and obligations (Pham, 1998). Human rights research is inherently multidisciplinary, encompassing fields such as law, philosophy, sociology, politics, anthropology, culture, and history.





This comprehensive approach deepens the understanding of human rights' importance, fosters an expansive research environment, and contributes to societal development (Vinh, 2010). Additionally, the Constitution of the Socialist Republic of Vietnam (2013) explicitly acknowledges, respects, protects and guarantees human rights across various domains (National Assembly, 2015).

Dinh Cong Tuan, in his work "The Project of EU Social Security System and Lessons for Vietnam," presents a thorough analysis of labor policy reforms in Europe. Tuan examines the German "social market" model, the English "free market" model, and the Swedish "democratic society" model, highlighting their approaches to workforce settlement and social security (TUAN, 2010). Klaus Schwab's "The IR 4.0" investigates the emergence and significant transformations introduced by the Fourth Industrial Revolution. Schwab provides a detailed assessment of its effects on various aspects of social life, with an emphasis on the global labor market (Klaus, 2018). Tran Thi Van Hoa's "IR 4.0 - Problems posed for Socio-economic Development and International Integration of Vietnam" explores the historical context of industrial revolutions, trends in the Fourth Industrial Revolution, and their implications for Vietnam. Hoa offers a comprehensive analysis of the opportunities, challenges, and requirements for Vietnam's socio-economic development and labor market, proposing strategies to capitalize on benefits and address the challenges of this revolution (Hoa, 2017). Phan Xuan Dung, in "The IR 4.0 - The Revolution of Convergence and Savings," concisely outlines the main features of the ongoing Fourth Industrial Revolution. Dung examines its nature and impact on the global labor market, security, and defense, and discusses the innovative policies adopted by various countries to leverage opportunities and mitigate challenges (Dung, 1998).

Addressing the impact of IR 4.0 on human rights, Phil and Christen (2018) assert that technology holds the potential to either liberate individuals from monotonous tasks or eradicate livelihoods. They underscore that the decisions made by governments and companies will significantly influence these outcomes. Human rights research is a central focus of extensive scholarly inquiry, exploring the concept from various perspectives and disciplines. Interpretations of human rights vary depending on the objectives, goals, and scope of each research endeavor. Key international documents, including the Declaration of Independence (USA, 1776), the Universal Declaration of Human Rights (UN, 1948), and the Vienna Declaration and Programme of Action (World Conference On Human Rights, 1993), have played pivotal





roles in shaping the global understanding and advocacy of human rights. These documents, stemming from the struggles of peaceful and progressive forces, serve as essential references for human rights research.

The article "Perception, Policy, and Implementation of Human Rights in Vietnam" clarifies the perspectives of both the world and Vietnam on human rights, affirming that "These are the natural, sacred, and inviolable rights of humans, such as the right to life, liberty, and the pursuit of happiness minimum rights that any government must protect." Additionally, the article analyzes the current state of human rights promotion in Vietnam, asserting that "Human rights are a common value of humanity; in a society with antagonistic classes, the concept of human rights is class-based; human rights are associated with national independence and socialism; the rights and interests of individuals must always be linked with the rights and interests of the community, with national independence and socialism; individual democratic and freedom rights are inseparable from civic duties and responsibilities, democracy must go hand in hand with discipline and law; human rights are always connected to history, tradition, and dependent on the country's level of economic and cultural development. Respecting and ensuring human rights is primarily the responsibility of the State and is an internal matter of each country. Human rights, democracy standards, and models cannot be imposed or mechanically copied from one country to another" (Lan, 2024).

Overall, this body of research provides a multifaceted, interdisciplinary perspective that underscores the fundamental, sacred, and inviolable nature of human rights.

3. RESEARCH METHOD

Human rights are one of the three foundational pillars of the United Nations, alongside peace, security, and development. They occupy a pivotal position in international relations and are central to shaping global development policies. Since its establishment in 1945, and particularly over the last two decades, the United Nations has spearheaded initiatives to translate human rights standards from foundational international documents into concrete realities worldwide. A key component of this mission is the integration of a human rights-based approach (HRBA) into development policy formulation. In 1997, the Secretary-General of the United Nations formally advocated for embedding human rights considerations into all UN activities. Following





this directive, UN organizations began incorporating a human rights-based approach into their practices, a trend that has gained significant traction since the late 1990s. Many countries have emulated this approach, placing human rights at the forefront of their national development agendas. The United Nations, particularly through the Office of the United Nations High Commissioner for Human Rights, views the HRBA as a comprehensive and fundamental framework. This approach is defined as "...a conceptual framework for the human development process that is grounded in international human rights standards and aimed at promoting and safeguarding human rights" (Office of the United Nations High Commissioner for Human Rights, 2006, p. 17).

The HRBA prioritizes the realization of specific human rights by aligning the content of these rights with the strategies employed to implement them. It emphasizes not only achieving predetermined objectives but also the processes and decisions involved in attaining these goals. In policymaking and development program implementation, the HRBA underscores the inherent rights, interests, and freedoms of rights holders, while delineating the obligations and legal responsibilities of duty bearers. For the relationship between beneficiaries and duty bearers to be effective, the HRBA in development policymaking must adhere to several principles: Integrating a human rights-based approach into the development policy process involves several key elements: ensuring legality in decision-making; maintaining transparency in the implementation of programs, plans, and policies; holding duty bearers accountable; empowering vulnerable and marginalized groups; and guaranteeing the participation of rights holders in both the planning and implementation phases. This approach also emphasizes equality and non-discrimination. Incorporating a human rights-based approach requires the application of fundamental human rights standards and principles throughout the formulation, execution, and evaluation of development programs and projects. This process involves assessing and enhancing the capacities of both rights holders and duty bearers. It also includes a thorough analysis of the relationships between these groups to ensure that development initiatives are equitable, inclusive, and effective. This approach necessitates clear role definitions and underscores the responsibility of duty-bearers to transparently exercise rights without discrimination. It prioritizes vulnerable groups, ensuring their inclusion in the development process to achieve the intended outcomes of programs, projects, and policies.





While diverse approaches to policymaking and implementation exist, the human rights-based approach offers distinct advantages that enhance the effectiveness of policymaking and implementation. These benefits include the robust fulfillment of fundamental human rights, the establishment of strong frameworks for human development, and the equitable resolution of the dynamics between rights holders and duty bearers. In alignment with the Vietnamese government's commitment to advancing human rights within socio-economic frameworks, this research employs qualitative analysis and explanatory research methodologies. It is further supported by historical data and the methodologies of historical and dialectical materialism.

4. RESULTS AND DISCUSSION

4.1. Overview of the impacts of the Industrial Revolution 4.0 on human rights

Karl Marx once argued that the defining characteristic of different economic epochs lies not solely in what they produce, but rather in how they produce and the nature of labor within them. In his analysis, Marx associated the use of water-powered rice mortars with feudal society, while he saw the advent of steam engines as emblematic of the capitalist era, reflecting the onset of the First Industrial Revolution around 1784. The Second Industrial Revolution, commencing circa 1870, marked by the dominance of iron and steel, brought about significant advancements in civilization and a substantial increase in productivity. The Third Industrial Revolution, starting in 1969, saw the emergence of computers, the internet, and eco-engineering, ushering in an era of information society characterized by enhanced communication and economic activities. As the 21st century unfolded, the term "IR 4.0" gained prominence in media and social networks. Initially introduced at the Technology Exhibition Fair in Hannover, Germany, and subsequently integrated into Germany's High-Tech Strategic Action Plan in 2012, the concept received official recognition at the 46th World Economic Forum in 2016. Klaus Schwab elucidated this concept, defining IR 4.0 as an evolutionary step emerging from the digital revolution, which amalgamates various technologies to precipitate rapid transformations across economic, corporate, social, and individual realms.

IR 4.0 symbolizes the convergence of physics, digital technology, and biology, leading to unprecedented production capabilities and profoundly impacting global





economics, politics, and society. Four key features emerge from this revolution: (i) the amalgamation of sensor technology, big data analytics, cloud computing, and Internet of Things (IoT) connectivity drives the proliferation of automation and intelligent production systems; (ii) the adoption of 3D printing streamlines production processes, allowing for the creation of products without intricate assembly, thereby lowering costs and circumventing intermediaries; (iii) advancements in nanotechnology and novel materials engender the creation of innovative material structures applicable across diverse domains; and finally, the integration of artificial intelligence and cybernetics empowers remote control and interaction with unprecedented speed and precision, transcending spatial and temporal constraints.

Human rights epitomize an intrinsic dignity bestowed upon every individual, universally acknowledged by nations worldwide. This recognition asserts that, regardless of gender, language, ethnicity, race, nationality, religion, residence, occupation, disability, social standing, or any other distinguishing trait, every person inherently deserves certain fundamental rights. These rights are enshrined and safeguarded by international agreements, global norms, and documents within the international legal framework, as well as the domestic legislation of individual nations. The framework of international human rights standards has been established and embraced by nations, compelling all sectors and entities within society to uphold, protect, and advance these rights, even amidst the myriad changes of the modern era. IR 4.0 presents both opportunities and challenges in upholding human rights within countries. This new era of technological advancement offers potential for enhanced human development and greater access to information, yet it also poses risks related to privacy, inequality, and job displacement. Therefore, nations must adapt their human rights strategies to address the evolving landscape shaped by IR 4.0.

The emergence of IR 4.0 brings forth a plethora of opportunities for the advancement of human rights recognition, promotion, and protection. One notable advantage lies in the accelerated dissemination of information facilitated by internet connectivity, big data utilization, and the proliferation of online platforms. These technological advancements enable swifter access to crucial information, enhancing awareness of human rights issues and facilitating prompt responses to violations, particularly against marginalized communities. Furthermore, the integration of big data analytics streamlines the identification and monitoring of discrimination, aiding in targeted intervention and support for vulnerable groups. The rapid dissemination of





information regarding human rights violations empowers governments and other stakeholders to provide timely assistance and advocacy. The development of innovative technologies, particularly in healthcare and education, contributes to improved accessibility to essential services and fosters socio-economic development. This, in turn, bolsters individuals' capacity to exercise their rights to health, education, and cultural participation, thus promoting inclusive growth and well-being. Digital platforms also play a pivotal role in amplifying freedom of expression, serving as accessible mediums for individuals worldwide to voice their opinions and engage in public discourse. Advancements in genetic technology offer additional benefits, particularly in the realm of crime investigation, aiding in the pursuit of justice for victims, especially women and children. Furthermore, the integration of automation technology not only enhances productivity and income levels but also fosters investments in human development, including education, healthcare, and workplace rights. However, it's essential to acknowledge that the evolution of technology also brings about challenges, such as the rise of the gig economy and novel business models centered around self-employment. Nevertheless, with proactive measures and responsible governance, IR 4.0 holds immense potential to propel sustainable social progress and advance the realization of human rights for all.

The advent of IR 4.0 brings with it a myriad of challenges in the realm of human rights promotion and protection across diverse spheres. While the internet and social media platforms serve as crucial mediums for information dissemination, education, and the exercise of freedom of expression, they also present novel challenges. Online spaces have become breeding grounds for various forms of misconduct, including online violence, aggressive propaganda, discrimination, and the propagation of misinformation. Moreover, the ease of accessing personal data has led to encroachments on democratic processes, with technology being exploited to manipulate elections in some nations.

The advancement of algorithms and artificial intelligence often outpaces legal frameworks, particularly concerning online privacy, data protection, and personal information security. The rapid dissemination of information on social networks raises concerns regarding personal privacy violations, as once shared, retracting or deleting such information becomes arduous. Consequently, many countries have been compelled to enact legislation addressing personal data protection in response to the evolving technological landscape, emphasizing corporate responsibility for





safeguarding privacy and personal information (Phil & Christen, 2018). While artificial intelligence holds promise in revolutionizing healthcare, its implementation can exacerbate existing societal inequalities and disparities. Automation technology, while enhancing productivity and freeing human labor, simultaneously jeopardizes millions of jobs, particularly in traditional industries. This phenomenon results in a shift towards new industries and occupations that necessitate specialized skills, leaving many workers at risk of unemployment. Research by the McKinsey Global Institute estimates that automation technology may replace between 400 and 800 million jobs worldwide by 2030, highlighting the urgency for proactive measures to address the socio-economic implications of technological advancement (James & et al., 2017).

The rise of "smart factories" employing interconnected machines capable of autonomously managing production processes, marks a transformative shift in manufacturing. With the onset of IR 4.0, a notable trend emerged wherein technologically and financially advanced countries prioritize investment in "smart factory" technologies over traditional labor-intensive approaches. This poses a significant challenge, especially for nations reliant on low-skilled labor, compelling them to rethink strategies about career transitions, education, and labor dynamics. As "smart factories" gain traction, they redefine traditional production paradigms by streamlining processes and minimizing dependence on human labor. Consequently, countries endowed with technological and financial resources opt to invest in these advanced manufacturing technologies, shifting away from reliance on labor-intensive practices. This trend accentuates the need for strategic foresight among nations with significant low-skilled labor forces, prompting considerations regarding workforce transformation, educational reform, and labor policies. Addressing this challenge requires proactive measures to facilitate the transition towards a technologically adept workforce. This entails investing in education and vocational training programs tailored to the demands of emerging industries. Additionally, fostering collaboration between stakeholders, including governments, educational institutions, and private enterprises, is vital to ensure alignment between skill development initiatives and industry requirements. Moreover, reimagining labor relations and employment policies becomes imperative in light of evolving technological landscapes. This includes exploring flexible work arrangements, upskilling opportunities, and social safety nets to support workers affected by technological displacement. By embracing innovation and adapting proactively to technological advancements, nations can navigate the





challenges posed by the proliferation of "smart factory" technologies, fostering sustainable economic development and inclusive growth.

The proliferation of "temporary" and "freelance" labor arrangements, which lack formal employment contracts, poses significant challenges in safeguarding workers' rights, including fundamental entitlements to decent working conditions, collective bargaining, and freedom of association. Furthermore, the advent of Industry 4.0 has led to significant disruptions in global labor markets, fundamentally reshaping traditional employment structures. The World Economic Forum has raised concerns about the profound challenges posed by IR 4.0 to labor markets, particularly highlighting the looming imbalances between labor supply and demand. As technological advancements drive a surge in demand for high-skilled labor, the need for unskilled and mid-skilled workers is expected to plummet drastically. Projections suggest that while IR 4.0 may generate approximately 2 million new jobs within high-tech and automation sectors, it could simultaneously render obsolete around 7 million jobs reliant on low-skilled and unskilled labor (Klaus, 2018, p. 123).

In essence, the convergence of technological innovation and evolving labor dynamics underscores the urgency of proactively addressing the implications of Industry 4.0 on employment. This necessitates concerted efforts to safeguard the rights and well-being of workers amidst the rise of non-traditional employment arrangements and the shifting demand for skills in the global workforce. By adopting comprehensive strategies encompassing education, training, social protection, and labor market policies, nations can navigate the challenges posed by IR 4.0 while fostering inclusive and sustainable economic growth.

The advent of IR 4.0 has profound implications for vulnerable populations, including women, people with disabilities, children, and the elderly. While digital technologies and online platforms hold promise in advancing gender equality through improved access to information, education, and development opportunities, they also expose individuals to heightened risks such as cyberattacks, harassment, and violence. Children, in particular, stand to benefit from the educational opportunities afforded by new technologies, yet they are also vulnerable to various rights violations, including modern slavery, child labor exploitation, online abuse, and trafficking, posing significant challenges to their privacy and well-being. In response to the robust development of IR 4.0, countries must demonstrate strategic foresight and take decisive action to capitalize on opportunities while addressing challenges. Assessing





the impact of IR 4.0 requires a comprehensive examination of its multifaceted effects, encompassing not only economic, technological, and managerial dimensions but also social, legal, and human rights considerations. While IR 4.0 holds the potential for countries to achieve greater prosperity and integration, it also presents formidable challenges related to labor rights, inequality, and heightened vulnerability among marginalized segments of society.

In the current landscape, as nations devise and enact development strategies and policies amidst the transformative impact of IR 4.0, there is a growing recognition of its implications for human rights. Governments worldwide are actively integrating considerations of human rights into their industrial development agendas. Take Thailand, for example, which has incorporated a human rights platform and program into its Thailand Strategy 4.0. This initiative aims to raise awareness about human rights, establish mechanisms for tracking rights violations, foster a culture centered on rights, monitor the exercise of rights, enhance data collection on violations, adapt laws to changing circumstances, bolster the awareness of human rights among state officials, mitigate violations and abuses, showcase exemplary human rights models, and implement proposals for advancing human rights.

Similarly, the Australian government has embarked on various endeavors to address the challenges and opportunities of IR 4.0. In 2016, the Australian Prime Minister established a dedicated government group tasked with navigating the complexities of this technological revolution. This group collaborates closely with the German government on implementing the Industry 4.0 platform across diverse domains, including architectural standards, support for small and medium-sized enterprises (SMEs), establishment of industrial test stations for Industry 4.0, development of network security systems, job creation initiatives, and education and training programs. These efforts underscore a proactive approach to addressing the multifaceted challenges and opportunities arising from IR 4.0, with a keen focus on upholding and promoting human rights in the digital age (Nguyen, 2021).

4.2. The reality of human rights in the context of the 4.0 Industrial Revolution in Vietnam

In Vietnam, individuals are positioned at the forefront, serving as the central focus and driving impetus behind all policies and endeavors. Despite encountering a





multitude of challenges, both objective and subjective, Vietnam has made notable advancements in the protection and promotion of human rights, earning recognition and commendation from the international community. Since the enactment of the 2013 Constitution, remarkable progress has been achieved in legal reforms and institutional enhancements, resulting in the enactment or revision of over 100 laws about human rights.

A significant milestone was reached on November 20, 2019, with the passage of amendments to the Labor Code by the National Assembly, introducing several new regulations aimed at enhancing the protection of workers' rights. These amendments closely align with key international treaties of the International Labor Organization. Tangible advancements in human rights protection are evident across various domains. Effective implementation of policies benefiting individuals with meritorious services, social protection measures, employment generation initiatives, and sustainable poverty alleviation endeavors have made significant impacts. Participation rates in social insurance, health insurance, and unemployment insurance have substantially increased, contributing to a rapid reduction in the poverty rate to below 3% by 2020. Significant attention has also been directed towards ethnic affairs, religious freedoms, elderly care, women's and children's rights, physical fitness promotion, sports, and information and communication. Essential infrastructure, particularly in disadvantaged districts, communes, and ethnic minority regions, has been extensively upgraded. These efforts collectively demonstrate a comprehensive approach to enhancing human rights and social welfare, ensuring that progress reaches all segments of society.

Vietnam's Human Development Index (HDI) has consistently ascended, positioning the nation among those with a commendably high average level of human development globally. Noteworthy achievements include the attainment of many Millennium Development Goals ahead of schedule, particularly in poverty reduction, healthcare, and education, earning accolades for its progress. Continuing its proactive approach, Vietnam remains steadfast in implementing the national action plan for sustainable development under the United Nations' 2030 Agenda, thereby reaffirming its commitment to advancing human rights and sustainable development both nationally and internationally. The achievements in human development are reflected through the steadily and relatively stable increasing trend in the HDI. Vietnam's HDI for 2021-2022 is 0.703. With this result, Vietnam has entered the list of countries with





high human development and is ranked 115th out of 191 countries and territories. The HDI not only reflects humanistic values but also serves as a comprehensive measure of human development across various aspects: health, education, and income. The HDI provides an overview of a country's development based on five criteria: 1) humans are the center of development; 2) the people are the goal of development; 3) enhancing the status of the people (including enjoyment and contribution); 4) emphasizing the establishment of equality for people in all aspects (such as religion, ethnicity, gender, nationality, etc.); 5) creating opportunities for the best choices for people in terms of economics, politics, society, and culture (Lan, 2024).

To effectively harness the opportunities and surmount the challenges posed by IR 4.0, the Vietnamese government has articulated a clear directive: "To formulate an approach and actively engage in IR 4.0 at the earliest opportunity." In March 2017, discussions on IR 4.0 were held during the government's regular meeting, culminating in the issuance of Directive No. 16/CT-TTg by the Prime Minister. This directive delineates the challenges and opportunities presented by IR 4.0 and proposes strategies for Vietnam to "leapfrog and lead" in this era of technological advancement. Vietnam stands among the nations transitioning into the era of IR 4.0, presenting myriad developmental prospects across sectors such as manufacturing, services, agriculture, banking, and finance. The adoption and utilization of emerging technologies hold the promise of substantial economic expansion, directly bolstering human rights advancement in diverse spheres. For instance, the advent of digital technology has catalyzed job creation in burgeoning industries and sectors within Vietnam, thereby fortifying the right to employment and ensuring an adequate standard of living. Technological innovations further pave the path for progress in healthcare, facilitating broader access to medical services and upholding health rights. The burgeoning realms of printing and online services offer significant avenues to foster access to information and freedom of expression. Presently, Vietnam's engagement with IR 4.0 remains relatively moderate. A 2017 assessment by the Ministry of Science and Technology rated Vietnam's readiness for IR 4.0 at just 4.9 out of 10. Therefore, Vietnam must develop policies, strategies, and programs with a long-term vision to successfully navigate this revolution. These initiatives should consider the wide-ranging impacts and associated risks across the economic, social, legal, and human rights domains.

In Vietnam, as in many other countries, the onset of IR 4.0 has significantly





influenced human rights, impacting legislative frameworks and practical applications alike. Several challenges have surfaced in this landscape:

Internet and Social Platforms: The widespread integration of the Internet and social media platforms has introduced legal complexities concerning the realization and safeguarding of human rights in Vietnam. Issues revolving around privacy, particularly of the protection of personal data and the right to be forgotten online, present new and intricate challenges. While the 2013 Constitution addresses these concerns to some degree, Vietnam has yet to enact dedicated privacy legislation to effectively address these evolving legal intricacies.

Labor Dynamics: The advent of the gig economy, characterized by innovative business models and industrial relations, has engendered a workforce that operates beyond the confines of Vietnam's existing labor laws and the Law on Social Insurance. Furthermore, current labor legislation fails to acknowledge emerging rights in the context of IR 4.0, such as the right to disconnect from work-related communications outside of official working hours.

Employment Rights: IR 4.0 directly impacts employment rights protection in Vietnam, particularly in key manufacturing sectors like garments, footwear, and electronics. These sectors, pivotal to Vietnam's exports and foreign direct investment, face significant influence from automation technology and smart factories. Job displacement poses a direct risk to Vietnamese workers, especially given that a substantial portion of the workforce, approximately 17%, is engaged in these manufacturing sectors. Formulating policies, implementing retraining programs, and facilitating career transitions for affected workers are imperative to address this challenge.

Addressing these challenges requires proactive measures, including the enactment of comprehensive privacy legislation, updates to labor laws to accommodate evolving employment dynamics, and the development of policies to mitigate the impacts of job displacement due to automation. By addressing these issues, Vietnam can better navigate the complexities of IR 4.0 while safeguarding the rights and well-being of its citizens.

In Vietnam, as in other countries, the advent of IR 4.0 has brought about significant impacts on human rights, both in terms of legislative frameworks and practical implementation. Several challenges have emerged within this context:

Internet and Social Platforms: The widespread adoption of the Internet and





social media platforms has introduced numerous legal challenges to the realization and protection of human rights. Privacy concerns have become prominent, necessitating the establishment of legal provisions for the protection of personal data and the right to be forgotten online. While these issues are recognized in the 2013 Constitution, Vietnam has yet to enact dedicated privacy legislation to effectively address them.

Gig Economy Dynamics: The rise of the gig economy, characterized by new business models and industrial relations, has resulted in a workforce largely operating beyond the scope of Vietnam's current labor laws and the Law on Social Insurance. Additionally, existing labor legislation fails to encompass certain new rights emerging from IR 4.0, such as the right to disconnect from work-related communications outside of working hours.

Employment Rights: IR 4.0 significantly impacts employment rights in Vietnam, particularly in key manufacturing sectors such as garments, footwear, and electronics, which are vital to the country's exports and foreign direct investment. The adoption of automation technology and smart factories poses a direct threat of job displacement to Vietnamese workers, notably since 17% of the workforce is employed in these sectors. Consequently, developing policies, implementing retraining programs, and facilitating career transitions are crucial to support these workers.

Addressing these challenges necessitates proactive measures, including the enactment of comprehensive privacy legislation, updates to labor laws to accommodate evolving employment dynamics, and the formulation of policies to mitigate the impacts of job displacement due to automation. By tackling these issues head-on, Vietnam can better navigate the complexities of IR 4.0 while safeguarding the rights and well-being of its citizens.

These challenges highlight the need for Vietnam to proactively update its legal framework and social policies to address the evolving human rights landscape brought about by IR 4.0.

4.3. Solutions to promote human rights in the context of the Industrial Revolution 4.0 0 in Vietnam

Firstly, to build on the 2013 Constitution, Vietnam should continue refining and enhancing legislation to ensure human rights are protected. This process involves





transforming the human rights provisions delineated in the 2013 Constitution into clear, transparent, and consistent standards that facilitate understanding and implementation. Eliminating any ambiguity surrounding these rights is essential. It is crucial to issue unified guidelines promptly for the lawful restriction of rights, as outlined in Article 14 of the 2013 Constitution. Establishing a robust legal framework rooted in democracy, the rule of law, and social governance is vital for safeguarding human rights. This framework should include the development and enforcement of legislation supportive of implementing socialist democracy, encompassing laws related to referendums, associations, protests, and access to information. Additionally, it should institutionalize the mechanisms and operations of entities like the National Election Council, National Audit, and constitutional mechanisms, thereby reinforcing the functioning of the socialist rule of law state. The state's responsibilities for national governance must also be institutionalized, including enacting laws to oversee and critique the Fatherland Front and manage national security. These measures collectively aim to establish a comprehensive legal framework within Vietnam that effectively guarantees the rights of all individuals and societal groups.

Secondly, the focus should remain on constructing and reinforcing state institutions responsible for safeguarding and monitoring the enforcement of human rights. This entails concentrating efforts on the consolidation and enhancement of mechanisms for redress and compensation for violations of human rights. In establishing mechanisms to detect and prevent human rights violations across all domains and protect the rights of vulnerable and marginalized groups, Vietnam should consider the creation of a dedicated national human rights body. This entity would complement the existing legislative, executive, and judicial branches, ensuring comprehensive oversight and enforcement of human rights standards in line with international norms. Several options merit consideration in this endeavor, each conforming to international standards and aligned with Vietnam's evolution into a socialist state governed by law:

Appointment of an Inspector of the National Assembly (Ombudsman): This approach involves designating an Inspector within the National Assembly to serve as an Ombudsman, tasked with investigating complaints of human rights violations and promoting accountability within the government. The Ombudsman's office would operate independently, reporting directly to the National Assembly.

Formation of a Congressional Human Rights Council: Alternatively, Vietnam





could establish a Congressional Human Rights Council as a committee led by the National Assembly Party. This council would be responsible for monitoring human rights issues, conducting investigations, and proposing policy recommendations to address violations and promote rights protection.

Establishment of a Human Rights Committee under the Government: Another option is to create a Human Rights Committee within the Government, tasked with overseeing human rights policies and implementation across various ministries and agencies. This committee would coordinate efforts to address human rights concerns and ensure compliance with international standards.

Formation of the Vietnam Human Rights Protection Association: Additionally, Vietnam could consider establishing the Vietnam Human Rights Protection Association as a social organization under the Vietnam Fatherland Front. This association would serve as a non-governmental entity dedicated to advocating for human rights, monitoring violations, and providing support to vulnerable and marginalized groups.

Each option offers unique strengths and considerations, and Vietnam should undertake a comprehensive and scientifically informed exploration of these possibilities. The selected approach should prioritize independence, transparency, and effectiveness in safeguarding human rights and promoting social justice within the country.

Thirdly, significant emphasis should be placed on integrating a human rights-based approach into the development and implementation of laws, policies, programs, and projects aimed at advancing socio-economic growth. This approach should prioritize initiatives aimed at empowering both rights holders and duty bearers to exercise specific rights within their respective spheres. Additionally, it should facilitate substantial improvements in securing economic, social, and cultural rights for marginalized groups, including individuals living in poverty, persons with disabilities, ethnic minorities, and those affected by HIV/AIDS. These actions are crucial for strengthening the institutional framework that underpins human rights in Vietnam, thereby ensuring comprehensive protection and proactive promotion of human rights across all sectors of society.

Fourthly, there is an urgent need to intensify efforts in communicating and educating about human rights. This entails a comprehensive overhaul of the content and methodologies used in human rights education for leaders, managers, law enforcement personnel, and university students at all levels. Human rights education





should be systematically integrated into the curricula of political and administrative schools, universities, and mass organization institutions. The primary goal is to enhance awareness, foster respect, and promote adherence to human rights principles in the administrative functions of government agencies, civil servants, and public employees, as well as within social and economic organizations, development initiatives, and policies.

Fifthly, there should be a sustained effort to enhance international cooperation in the field of human rights, focusing on improving capacity in law construction and enforcement and overseeing the assurance of human rights. Current priorities should include: Enhancing the quality of reports submitted to United Nations conventions and mechanisms: Vietnam should strive to improve the quality and accuracy of reports submitted to United Nations conventions and mechanisms, including the United Nations Human Rights Council. This involves comprehensive and transparent reporting on human rights conditions, progress, and challenges within the country. Adopting a proactive strategy in engaging with human rights mechanisms: Vietnam should adopt a proactive approach in engaging with various human rights mechanisms and procedures at the United Nations, within Southeast Asia (ASEAN), and during human rights dialogues. This includes active participation in discussions, cooperation with international human rights bodies, and constructive engagement with other countries to effectively address human rights issues. Developing diverse forms of economic cooperation to support human rights education: Vietnam should explore diverse forms of economic cooperation aimed at supporting human rights education at the national level. This may involve collaboration with international organizations, civil society groups, and educational institutions to develop and implement human rights education programs, training workshops, and awareness campaigns.

These steps are crucial for fostering a deeper understanding and respect for human rights across all sectors of Vietnamese society. By actively engaging in the global human rights community and prioritizing international cooperation, Vietnam can demonstrate its commitment to upholding human rights principles and contribute to the advancement of human rights both domestically and internationally.

5. CONCLUSION

In recent years, Vietnam has attained noteworthy achievements in the realm of





human rights, consolidating our nation's standing and influence on the global stage. Our economy has expanded in scale, potential, and competitiveness, underpinned by stable macroeconomic foundations and robust growth. The quality of life for our citizens has seen continuous enhancement, engendering increased confidence from both the business community and society at large. These advancements have been facilitated by harnessing the positive facets of IR 4.0 to propel our populace forward, aligning them with the imperatives of socio-economic progress. However, alongside its benefits, IR 4.0 has also presented a multitude of challenges to human development. Hence, it is imperative for Vietnam to systematically implement the aforementioned solutions to safeguard human rights in this new era. IR 4.0 assumes a pivotal role in shaping a society conducive to sustainable development, primarily through the advancement of human development.

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