

Assessing the Impact of the Fourth Industrial Revolution on The Subject of Labour Relations

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ABSTRACT: The 4th industrial revolution has a huge impact on the subject of labour relations. Workers also face opportunities and challenges from automation and the application of new technologies, which can cause changes in labour demand and skill requirements. This article analyzes the theoretical basis of the impact of the 4th industrial revolution on employees, employers, and laws related to the subject of labour relations. This article also evaluates the current impact situation as well as some recommendations on raising awareness of labour relations subjects.

Keywords: Labour relations, Labour laws; Trade Union; Vietnam.

I. Theoretical basis for the impact of the 4th industrial revolution on the subject of labour relations

The Fourth Industrial Revolution focuses on combining technological advances in physics, digital technology and biology, creating new production possibilities and having far-reaching economic and political impacts. , and global society. This can be summarized through four main characteristics. First, the use of new sensor technology, big data analytics, cloud computing and the internet of things promote the development of automated machinery and smart manufacturing systems. Second, the use of 3D printing technology to produce finished products without the need to assemble auxiliary equipment, as well as printing new products using non-traditional methods, helps reduce production costs. Third, use nanotechnology and new materials to create new material structures with wide application in many fields. Finally, the application of artificial intelligence and machine learning enables remote control without the constraints of space and time, increasing interaction and precision.

The subjects of legal relations are individuals and organizations with subject capacity and are allowed to participate in legal relations. Subjects of labour relations are parties participating in labour relations, including employees and employers.

An employee is a person of a certain age or older according to national regulations, capable of working, working under a labour contract, being paid a salary and subject to the management and administration of the employer. dynamic.

Employees are always individuals, including: citizens, foreigners and stateless people.

To become an employee in a labour relationship, that person must satisfy the conditions of having two elements: labour law capacity and labour behavioral capacity.

Labour legal capacity is the ability of citizens to be granted labour rights and obligations by law. Labour legal capacity is different from civil legal capacity in that labour legal capacity does not appear as soon as an individual is born but must reach a certain age.

Labour behavioral capacity is the ability of citizens, through their own behavior, to exercise assigned labour rights and obligations. A citizen's labour behavioral capacity is determined based on two factors: physical

fitness (conditions of having normal health, being able to perform a job) and mental capacity (cognitive ability to perform a job). the labour they perform and for the purpose of the work they do).

Thus, to have full labour behavioral capacity, that citizen must go through a period of physical development and must have a process of accumulating knowledge and labour skills (that is, they must be educated and trained). training...).

The 4th industrial revolution greatly affects workers such as issues of working age, employment, migrant workers, and labour capacity of workers.

Employer is an individual or organization that hires and uses workers under a labour contract; If it is an individual, it must have full civil capacity.

To participate in labour relations as an employer, agencies, organizations and individuals must also meet the conditions prescribed by law, must have legal capacity and ability. behavioral force.

The legal capacity of an employer is the legal capacity that gives them the right to select and employ workers. The employer's behavioral capacity is the ability of the employer to select and employ employees directly and specifically by their own behavior. This behavior is often expressed through the actions of a legal representative or authorized person.

The 4th industrial revolution has a huge impact on employers. Employers face many challenges and also many opportunities such as structural change, technology, and artificial intelligence. The trend of cutting labour to replace with machines, the trend of requiring higher quality labour while the labour market cannot keep up.

II. Impact of the 4th industrial revolution on the law on the subject of labour relations

The subject and scope of regulation of the Labour Law are the most important elements of the Labour Law, thereby determining which social relationships are regulated by the Labour Law. Basically, Labour Law often tries to regulate all labour relations in society. However, the 2012 Vietnam Labour Code stipulates the subjects and scope of regulation in **Article 2. Subjects of application:** Vietnamese employees, apprentices, trainees, and other types of employees provided in this Code ; Employers; Foreign employees who work in Vietnam; Other agencies, organizations and individuals directly related to industrial relations.

Article 3 Labour Code 2012 Interpretation of terms: *Employee* means a person who is full 15 years or older, has the ability to work, works under a labour contract, is paid with wage and is managed and controlled by an employer; *Employer* means an enterprise, an agency, an organization, a cooperative, a household or an individual that hires or employs employees labour under contracts; if the employer is an individual, he/she must have full civil acting capacity ; *Employees' collective* means an organized group of employees working for the same employer or in the same division within the organizational apparatus of an employer .[1]

However, in the context of international integration, especially with the explosion of the 4th industrial revolution, many new relationships will appear, such as labour relationships in self-employment or relationships Platform-based labour systems (phone applications, web) such as Grap and UBER are posing many challenges in expanding the subjects and scope of the Labour Code.

III. Current status of the impact of the 4th industrial revolution on the subject of labour relations

Resolution of the XII Politburo (2016) clearly states: "We must soon build a strategy to approach and proactively participate in the 4.0 Industrial Revolution." Resolution 23 of the Party Central Committee (March 22) on Vietnam's Industrial Development Strategy to 2030 with a vision to 2045 affirms: Vietnam must "effectively take advantage of the advantages of latecomers in industry." to have a reasonable 'shortcut, ahead of the curve' approach in developing industries" [2].

Facing the trend of being ready to welcome the 4th industrial revolution, the subject of labour relations has had certain changes [3]. According to a report by the General Statistics Office, the population aged 15 and over is 72.20 million people, an increase of 0.86% compared to the fourth quarter of 2016, women increased by 0.4%; Urban areas increased by 0.44%. The size of the labour force of the workforce aged 15 and over is 55.16

million people, an increase of 1.11% compared to quarter 4/2016; female increased by 0.15%; Urban areas increased by 1.11%. In the fourth quarter of 2017, the labour force participation rate of the population aged 15 and older was 76.9%, continuing to increase slightly compared to the third quarter of 2017 and the same period last year. Compared to the fourth quarter of 2016, the group with college and university degrees or higher increased faster in size. The labour force aged 15 years and older who has been trained with a degree/certificate in the fourth quarter of 2017 is 12.02 million, an increase of 351 thousand people (3.01%) compared to the fourth quarter of 2016. Of which, the strongest increase was in the college group (7.93%), followed by the university and postgraduate group (5.73%) and the intermediate group (1.08%); decreased quite sharply in the primary vocational group (-5.53%). At the time of statistics in the fourth quarter of 2017, the proportion of trained workers with degrees/certificates accounted for 21.8% of the workforce, a slight increase (0.4 percentage points) compared to the same period last year. before. Of the total workforce, the proportion of workers with a university degree or higher is 9.74%; college is 3.44%; intermediate level is 5.23%; and primary vocational training is 3.39%. [4]. Besides, there are also many challenges related to employment, cybersecurity...[5]

Besides, according to many studies and opinions, the application of technological advances in the 4.0 Industrial Revolution has brought many positive changes for workers and employers [6]. Thanks to automation and smart technology, workers can have a safer working environment, helping them work more efficiently and have more time for rest and entertainment. This has the potential to bring significant benefits to workers' health and well-being.

IV. Recommend solutions to raise awareness of labour relations subjects

Businesses need to soon be aware of the huge impacts of international integration. Because the sooner they are exposed to this fourth revolution, the more opportunities will open for businesses. Enterprise competitiveness is closely linked to the level of technology application in production and management. The context of international integration, especially the 4.0 industrial revolution, builds digital businesses based on connecting value chains inside and outside businesses, digitizing production and service processes, and creating new solutions. new business model . Applying smart sensors, communication devices and integrated management solutions, businesses can digitize the entire operating process from production, business to management. Information from the production process through sensors is digitized into real-time data and transmitted to processing systems and management systems. Thanks to that, centralized operating management systems always have complete, updated and accurate data to help managers make timely operating decisions. The more complete the level of digitization, the more updated and accurate the information is. Commercial businesses always need updated information about inventory and the value of goods on the market, consumer goods manufacturing businesses need updated information about raw materials and sales situation through distribution channels, Manufacturing enterprises need updated information about the status of machinery, consumption of raw materials and semi-finished products through production stages... Lack of updated information leads to inaccurate decisions and financial waste. and opportunity.

With the advancement of science and technology, the role of customers and businesses is gradually changing. The division of work in the production and consumption chain is taking place on a global scale. The role of the online world becomes increasingly dominant as more people connect, devices connect, and organizations connect.

In the context of this fourth industrial revolution, businesses cannot stand aside if they do not want to fall even lower in the value chain. According to " *Industry 4.0* " standards , businesses need to reform and improve capacity in three main directions.

Firstly , strengthen vertical integration, by increasing the application of scientific and technical advances in operations such as automation, integration between physical operations and control systems, to increase productivity. , quality, speed of response to requests, speed of completion of business activities.

Second, deploy horizontal, inter-process integration, chaining together puzzle pieces to create complete services and products that can be served to customers.

Third, digitize products and services to meet customers' high requirements for reviewing, evaluating, and experiencing products, and meet the individualization of each customer.

Furthermore, businesses need to pay attention to business culture issues; Research and calculate optimal solutions for information technology investment; change the training and development model of human resources, have policies to arrange human resources when implementing digital businesses, create an innovative and creative environment; Strengthen cooperation and connection, be proactive and enhance the ability to participate in global and regional value chains. Businesses also need to improve their corporate governance and information technology risk management capabilities; Build, manage, exploit and analyze databases; Support to improve knowledge and awareness of customers and regulators about Technology Revolution 4.0. Proactively learn and evaluate the impact of the 4.0 Industrial Revolution on your field and business; Build and implement strategies and business models suitable for the digital age (digital businesses, digital banks). Because, if we do not find out soon and have appropriate adjustment solutions, Vietnamese businesses will fall behind and have a very high possibility of being eliminated from the market. In addition, it is also necessary to actively research advanced technologies of the Industrial Revolution 4.0 and apply them to improve the position in the value chain. In the future, technological innovation will create miracles for service delivery, improving productivity and efficiency in the long run. Businesses must flexibly adjust products according to consumer needs, integrating advanced technologies (artificial intelligence, robotics, cloud computing...) to simplify production processes and reduce costs. delivery time, shortening the product life cycle, but still ensuring production management capabilities and product quality, increasing competitiveness.

For workers, raising awareness in the context of the 4.0 industrial revolution is very important so that they can adapt and take advantage of the opportunities that the new industrial revolution brings. This includes understanding changing mindsets, updating knowledge and skills to suit emerging jobs, proactively learning and embracing new technology, as well as being flexible and willing to adapt. with working situations that are no longer up to standard. Preparing and creating conditions for workers to apply and learn new technology, as well as training high-tech human resources is a practical part of raising awareness and capacity. their.

V. Conclusion

The fourth industrial revolution brings profound impacts to the subject of labour relations. From changing production methods, causing transformations in the traditional labour market, to creating new jobs with different requirements and working environments, this revolution has had a strong impact. to the structure and nature of labour relations. Workers must face the challenge of improving their skills, being flexible and adapting to new technology, as well as having a spirit of learning and being proactive in their learning and career development. Raising awareness and knowledge of workers in the context of the 4.0 industrial revolution is a key factor to help them overcome challenges and take advantage of new opportunities that the revolution brings. Therefore, assessing the impact of the fourth industrial revolution on the subject of labour relations needs to look at both the challenges and potential it brings, while promoting transformation and modernization. modernize the labour structure, thereby improving the competitiveness and sustainable development of labour in today's society.

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