

# The Role of the Intellectual Hierarchy in the Context of the Industrial Revolution 4.0 - The Case of Vietnam

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**Abstract** The contingent of intellectuals is an important intellectual resource for socio-economic development for each nation as well as international community. They play a great role in creating spiritual and cultural values, bringing about important achievements of science and technology, social sciences and humanities, contributing to promoting social progress. Especially in the context of Industrial Revolution 4.0, science and technology are developing like a storm, the digital age and the internet connecting everything with artificial intelligence, the role of the intellectual team is becoming increasingly be more important than ever. This work clarify four characteristics of Vietnamese intellectual hierarchy in promoting market economy development with socialist-orientation.

**Keywords:** *Industrial Revolution 4.0, intellectual hierarchy, Vietnam*

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## 1. Introduction

Ever since the era of industrialization began in the eighteenth century, each industrial revolution played its own essential role in the advancement of human's development. In the eighteenth century, mechanical looms were first introduced which were driven by the power of water and steam on mechanical equipment and replaced the agricultural sectors, further promoting the structure of economic. The Second Industrial Revolution occurred in seventies of the nineteenth century, where electrical energy was introduced which created a major system known as mass production. These revolutions relied on the number of human capabilities to achieve more. During the seventies of twentieth century, the Third Industrial Revolution happened with the rise of electronics. The innovation of technology from analogue electronic and mechanical devices to nowadays' digital technology available is referred to as Digital Revolution. Recently, the Fourth Industrial Revolution has been built upon the Digital Revolution where technology and people are connected closely than ever. The technological breakthrough has discovered new means of demonstrating its abilities by blurring the lines between the physical, digital and biological entities (see [1]). All the three dimensions of sustainability; social, economic and environmental, values in the creation of sustainable industry by using industry 4.0 (see [2]). The key factor that inspire the achievement of social, economic and environmental successfulness is exactly the intellectual hierarchy.

For the situation of Vietnam, the impact of Industrial Revolution 4.0 has created both favorable conditions and great opportunities for development, while creating difficulties and challenges in development. On one hand, the advantages and opportunities for development can be listed here:

Firstly, from the macro perspective, the Industrial Revolution 4.0 contributes to promoting labor productivity and economic growth, creating favorable conditions for realizing social progress and justice and improving quality of life of the people.

Secondly, on the micro aspect, the Industrial Revolution 4.0 leads to the re-realization of some values, reshaping industries, services opening up "gaps" and "new space" in new business production and services. And thus, creating conditions and opening up opportunities for Vietnamese businesses to both "line up" and "squeeze" and "encroach" into the global value chains of new industries and services.

Thirdly, the Industrial Revolution 4.0 deepens the process of globalization and, together with globalization impact, promotes the transformation of all areas of social life, especially the economic sector. It is also an opportunity for Vietnam to accelerate the equitization of state-owned enterprises, develop and perfect the socialist-oriented market economy.

Fourthly, the Industrial Revolution 4.0 creates conditions and opportunities for each person and each family to organize their lives, work, study, activities and entertainment better and increasingly quality.

On the other hand, there exist difficulties and challenges in development, such as:

Firstly, the biggest difficulties and challenges are that if Vietnam is slow in preparing necessary conditions (physical, mental, mechanisms, policies, human resources) to absorb and immediately applying new technologies of Industrial Revolution 4.0, Vietnam may "miss an appointment" with the opportunities that the Industrial Revolution 4.0 offers. And this leads to lagging not only further in economics, but also in terms of science - technology, security potential, national defense and digital sovereignty compared to other developed countries in the region and the world.

Secondly, the impact of Industrial Revolution 4.0 is objective and indispensable (even in the case that Vietnam has not yet prepared the necessary conditions to actively acquire and apply new technologies), because in a certain space and time, unemployment will occur (due to mechanical labor instead of human labor), the increase in poverty and widening the gap between rich and poor. Currently in Vietnam, paper and video newspapers are degraded, 87% of students do not have the habit of using television; many agencies, companies and households do not use desk phones, fax machines. In prediction, up to 86% of workers in the garment and footwear industry lost their jobs within the next 15 years.

Thirdly, the Industrial Revolution 4.0 impacts and creates difficulties in recruiting high quality human resources to meet job requirements; can create bankruptcy of some companies due to not competing in the market (technology, human resources).

Fourthly, the Industrial Revolution 4.0, especially the Internet communication, poses challenges for information security for individuals and the whole social community system; especially national economic and political security.

The contingent of intellectuals is an important intellectual resource for socio-economic development for each nation as well as international community. They play a great role in creating spiritual and cultural values, bringing about important achievements in science and technology, social sciences and humanities, contributing to promoting social progress. Especially in the context of Industrial Revolution 4.0, science and technology are developing like a storm, the digital age and the Internet connecting everything with artificial intelligence, the role of the intellectual team is becoming increasingly be more important than ever. The role of intellectual hierarchy in different country with variety of political regimes, civilization levels and culture diversities. This topic in the situation of Vietnam is still a gap in the literature review. This study is devoted to clarify the important role of intellectual hierarchy in the successfulness of social security, economic development and environmental protection.

The methodology in this paper is qualitative method with summarizing the most important content in international and domestic classic and modern studies combining the official analysis. Some concrete evidences are added to support the arguments presented.

The structure of the study is as follows. Section 2 discussed the literature review. Section 3 described the role of the Vietnamese intellectual hierarchy in the context of the Industrial Revolution 4.0. Section 4 covers the conclusion.

## 2. Literature Review

### 2.1. The Importance of The Industrial Revolution 4.0

The Industrial Revolution 4.0 was developed based on three basic pillars: biotechnology, physics and digital: (1) In the field of biotechnology, the Industrial Revolution 4.0 focuses on research, making breakthroughs and leaps in medicine (new drugs and treatments), agriculture and fishery, genetically altering, creating new plant varieties and animal breeds, real processing products (high quality, clean and safe), environmental protection and renewable energy; (2) In the field of physics, Industrial Revolution 4.0 focuses on researching and manufacturing new generation robots, 3D printers, self-driving vehicles (vehicles, airplanes, ships), materials new (ultralight, ultra-thin, super-durable materials), nanotechnology; (3) In the digital field, the Industrial Revolution 4.0 focuses primarily on the invention, creation, and development of Artificial Intelligence (AI), Big Data and Big Connected Things (Internet of Things). Artificial intelligence (AI) is understood as an area of computer science directly associated with the automation of intelligent behaviors. Specifically, AI is a human-made intelligence to help computers automate intelligent behaviors such as those in the human brain (artificial intelligence can think, reason, and distribute itself) analyze, compare and summarize decisions (measures, methods) solve problems quickly). In addition, AI also knows how to communicate, speak, learn, adapt and express themselves preferences, desires. Big Data is understood as an information asset with a large, abundant and varied data volume at high speed, requiring new technologies, to process quickly and effectively (discoverable) important factors hidden deep in the data and optimizing the data) in order to make timely and effective decisions. Internet of Things (IoT) is understood as the world of everything connected to the Internet (or network of devices connected to the Internet), in which each object, each person has its own format and all have the ability to give exchanging and transmitting information and data through a single network (without the need for direct human-to-human interaction or computer-to-computer connectivity, wireless technology, mechatronics technology and the Internet. In short, it is a collection of devices capable of connecting with each other, with the Internet and with the outside world to perform a certain task.

For example, in Europe, the danger of an aging society has been revealed, so that each nation faces a decline in its workforce (see [3]). Power-generating technology such as robotization and automation has developed. The Internet, however, revolutionizes process organization by networking robotic and automated devices. The development of the Internet and technology help to create a steady and continuous network connecting people all over the world, machines and companies, and through the continuous sharing of value-creating processes, it is now possible to produce a competitive, fully customized product for the buyers. By Industrial Revolution 4.0, we

mean the intelligent networking of industrial products and processes. In 2013, the Fraunhofer Institute reviewed the productivity and growth potential of companies using Industry Revolution 4.0 technologies. Its principle influences come from five technology areas: Embedded systems, smart factories, strong networks, cloud computing and IT (Information Technology) security (see [4]). According to Hermann and his colleagues, thanks to their analysis of 50 studies, identified four basic tools needed to implement Industrial Revolution 4.0 within the company. These are CPS, IoT, the Internet of Services and the Smart Factory. These are, in themselves, comprehensive categories, and do not specify the technical tools needed to operate the CPS (e.g., sensors) (see [5]). In summary, it can be concluded that Industrial Revolution 4.0 penetrates the entire value chain of the corporation - despite of the fact that most of the value chains are interpreted as production-based, possibly supplemented with the logistics operations. The scope of Industrial Revolution 4.0 can grow at the company's borders, covering the supply chain or, more broadly, the supply network. It builds on new network-linked technology (e.g., sensors, RFID), and requires new procedures (e.g., data analysis software, cloud, programming) that require new broad capabilities from the company (e.g., continuous innovation, life-long learning, trust, data sharing) and this may even require new modern business models to be developed. Industrial Revolution 4.0 is therefore a phenomenon that, by means of technology assets and activities, maximizes the transparency of processes by exploiting the possibilities of digitization and integrates the corporate value chain and the supply chain into a new level of customer value creation.

In this era of the knowledge-based economy, many enterprises employ intellectual capital to create their core competences. Many of the previous studies only proposed indicators for evaluating it. Even in order to objectively measure the value of a corporation's intellectual capital, an evaluation process using fuzzy Analytic Hierarchy Process (fuzzy AHP) was proposed in a study conducted by Chen (see [6]). This emphasized the great role and contribution of intellectual hierarchy in every countries. Developing this interesting idea, Simona and Alina presented a new perspective on modeling intellectual capital's development using the Analytic Hierarchy Process (see [7]). Therefore, in order to properly establish the strategies that can be implemented for developing one or another dimension of intellectual capital, it is important to quantify the influence that each of the three above mentioned integrators may exert on each of them. In order to reach this objective, it is applied the mathematical method of analytical hierarchy process, which allows the hierarchical structuring of the model on three levels: the first level is represented by the main objective, namely the increase of organizational performance by developing the organizational intellectual capital; the second level is represented by internal factors (called criteria within the AHP terminology) that might determine the development of intellectual capital, namely leadership, management and organizational culture; the third level is represented by several options (called alternatives within the AHP terminology) available to increase the intellectual capital,

namely by fostering the development of human, structural or relational capital. Thus, there have been obtained essential clues regarding the possibilities of modeling the organizational intellectual capital, whose development level is generally directly and positive related to the competitiveness level and the overall development of countries.

## 2.2. Intellectual Hierarchy in Vietnam

Considering high quality human resources, or improving the quality of human resources, first of all the intellectuals, politicians and businessmen are the three most important parts, deciding the quality of human resources and development quality of the country. The contingent of intellectuals here includes a highly skilled workforce - some called technocrats. The political class includes both politicians and middle and senior managers, otherwise known as the management class. Business class includes medium and large business people. The trio of these elites are the high quality human resources of modern society. A modern nation cannot develop without one of the three vertices of this human triangle. Only after obtaining this human triangle, can other resources be exploited well (see [8]).

So far, the concept of intellectuals in Vietnam has not had a unified understanding. The discussion on intellectuals has been quite lively but has not been completed. Therefore, it has not been able to provide a way of understanding that Vietnamese intellectuals can be widely accepted. Intellectuals are intellectual workers, highly educated in a specific field of expertise, capable of independent thinking, creativity, spreading and enriching knowledge, creating sophisticated products. Vietnamese intellectuals come from many classes and strata, especially from workers and peasants; the majority of adults in the new society, is formed from many sources of training at home and abroad, with many successive generations, including the overseas Vietnamese intellectuals (see [9]). In another opinion, intellectuals are a social class of complex intellectual workers, highly educated and specialized, who are able to create new scientific knowledge, and at the same time spread and apply knowledge. This has put into practice, greatly contributed to the development and civilization of humanity (see [10]). Additionally, intellectuals are not only people with university or graduate knowledge, but also people with in-depth knowledge through reading and exposure experience. In fact, the essential thing worth mentioning is not the intellectual capital but the intellectual attitude to these knowledge capital (see [11]).

The conception of intellectuals of thinkers and scholars has all had reasonable content, reflecting the basic, general and universal characteristics of this social class from different perspectives. Intellectuals are creative workers who have higher levels of education and expertise than other classes. They are capable of creating change and development in many specified field. Consequently, they promote the development of society. Intellectuals form a class of knowledge, intelligence of society, independent thinking, creativity in professional work, independent attitude based on their understanding of the problems of

nature, society; Intellectuals create, disseminate, propagate and show how to apply knowledge to promote the development of certain aspects, fields and scopes of society.

Historically, intellectuals were born when the society had a division of labor into intellectual labor and manual labor. This class of intellectual labor appeared only when society had developed to a certain extent, when it was possible to split labor into cognitive labor into an independent form of labor in a commune class. Intellectual appearance was not associated with property but with division of labor. Therefore, the first characteristic of the intellectual was a social class. In previous societies, this class did not own the means of production. But they were the leading force, pioneering in the creation of knowledge, they possessed the intellect and the knowledge. In the era of scientific and technological revolution (Science and Technology) today, the intellect and scientific knowledge are very important labor tools, a direct production force. So the role of the intellectual is changing very strongly. Production and social life change according to the trend, scale, speed depending on the achievements of the scientific-technological revolution. Once they become an independent class, possessing social means of production and using it to profit, they become the ruling class.

Intellectuals are intellectual, creative workers, based on academic background and high professional knowledge and professionalism. This is the second characteristic of intellectuals. Intellectual labor is available in a number of different social strata. Carrying out the leadership, management and administration of society also contains intellectual labor, many other types of labor activities in modern society cannot be without intellectual labor. But for the intellectuals, especially the intellectuals in the era of scientific and technological revolution, their intellectual labor is the professional intellectual labor, associated with creation, accumulation and dissemination of knowledge. Therefore, it is not possible to classify to the intellectual class with advanced degrees as some people in the present conception. It is also not possible to view all people with postgraduate qualifications, or higher education as intellectuals. Intellectuals may work in many fields. They may not create intellectual products but products in other forms such as direction, administration, management or specific consumer products. In my opinion, intellectual labor is that creates intellectual products, with the intellect and that labor is a professional one.

Intellectuals are people with social intelligence, independent and creative minds. Unlike other classes, they store vividly, understanding the knowledge, representing the intelligence that society has created. This is the third characteristic. Folk have often said that the intelligentsia that represents the intelligence of society in this sense. By bringing, holding and understanding the accumulated knowledge of society that they have independent thinking and judgments separately on a grounded basis. They are able to create new knowledge in a proactive, fast and professional way. This is the positive attitude of this social class to the knowledge and issues posed by society. By doing so, they demonstrate their social activism not only by creating new knowledge, but also by being

aware of responsibility, by creating thinking, ideology, strengthening and developing value of society - the spiritual foundation for society to campaign and develop. They are the intellectual class of society, intellectual labor, so they must have social responsibility and creativity as an indispensable condition. For the intellectual class, creativity is the intellectual creation, creating knowledge and values for society.

Intellectuals are mainly those who have high education and professional qualifications. This is the fourth characteristic. But it should be noted further that intellectual often have a high level of education and expertise in society, but not every high degree is intellectual. Not everyone with a postgraduate or bachelor degree is considered an intellectual. On the contrary, it is not without knowledge. There are people who, due to different conditions, do not have a high-level diploma, but their labor is intellectual, creative and professional. Therefore, in history there were people with advanced degrees, but not considered by society as intellectuals. There were people who did not have high degrees were still honored as intellectuals. The more society develops, the more science, technology and technology develop at the current speed. Education and high professional qualifications must be associated with creativity and professionalism in labor. The more professionalism makes education and expertise constantly improved.

Intellectuals are people who create, propagate and apply knowledge into practice smartly. In essence, intellectuals must always be those who firmly grasp and understand specialized knowledge in a specific field. They hold, have the role of transferring knowledge to other people and generations, they show how to store, transfer and manipulate, develop that knowledge in specified conditions and scope. In the era of scientific and technological revolution, the creation of knowledge is still very important, but the point of showing and transferring the method of using knowledge and technology has become a prominent role in the structure content into the characteristic of modern intellectuals. This is a very important characteristic, showing professional, creative and professional labor. Without it, society will not develop quickly, the next generation cannot absorb the intellectual achievements of the previous generations.

In the history of the nation, in the subconscious and social consciousness, intellectuals had sometimes been at the forefront, the important role of intellectuals for the survival or prosperity of the country is mentioned from very soon: "at first was intellectual class, at second was the farmer". In 1484, Than Nhan Trung wrote on his doctorate stele in Quoc Tu Giam that talented people were the national essence. Le Quy Don also emphasized that without intellectuals, it may lead to lose the country. President Ho Chi Minh has paid great attention to discovering, fostering and appreciating intellectuals, talented and virtuous people. After the country had just gained independence, he wrote: "The country needs to be built successfully, necessity requires talents" (see [12]).

In this study, we show how Vietnamese intellectual hierarchy contribute their ability in promoting the social security, economic development and environmental protection.

### 3. The Role of the Vietnamese Intellectual Hierarchy in the Context of the Industrial Revolution 4.0

Entering the twenty-first century, a new production revolution is taking place on an international scale. This makes a strong impact and leading to qualitative leaps in the development of production forces and transforming the economy. Internationally, many prospects for the great progress of human civilization have been carried out. In this context, the intellectual team has increasingly asserted its important role.

Firstly, the intellectual team builds scientific arguments which make an important contribution in planning, reviewing and completing the Party's lines and policies, the State's policies and laws. The sixth Congress of the Party officially adopted the comprehensive renovation policy of the country. The line has been constantly improved and supplemented in the Party's resolutions and documents for over thirty years. It is truly the crystallization of the intellect and creativity of our entire Party and people, including significant contributions from intellectuals in all fields of economics, political, culture and social life. Comprehensive renovation of the country is really a revolution, an indispensable requirement, requiring the Party to gather and promote all resources, especially in context of the current Industrial Revolution 4.0. When formulating directions and strategies for national development in the renovation period, the Party has correctly assessed the role of scientific knowledge, which is a scientific basis for properly evaluating the role and position of national intellectuals in the new era. The sixth Congress of the Party affirmed that for the intellectuals, the most important thing is to guarantee creative freedom. Assessing the capacity and creating conditions for the capacity to be used properly and developed (see [13]). The affirmation and appreciation of the role of the intellectual staff in the renovation period has been agreed throughout the Party's General Meetings and Conferences on education and training, science and technology. The twelfth Congress of the Party held in January 2016 affirmed that developing and implementing a policy of training, retraining, utilizing, treating and honoring science and technology staff, especially those who are good experts have many contributions. Creating favorable environment and material conditions for science and technology staff to develop with talents and enjoy benefits worthy of the value of their creative labor. Practicing democracy, respect and uphold the freedom of thought in scientists' research, creation, consultancy and critic activities (see [14]). During the renovation period, many intellectuals were directly involved in the preparation of decisions of the Party and State. Many useful comments have helped in making strategic and policy-making more accurate. In the atmosphere of democratic activities of the country, the activities of the intellectual team have had many innovations. The Party and the State encourage discussion, get comments to provide theoretical explanations and practical, feasible, and most appropriate practical solutions. Therefore, in building and perfecting the platform, guidelines, policies, laws, and planning the socio-economic development

strategies of the Party and the State, there are positive contributions of scientists included in the intellectual hierarchy. For example, the consultancy groups of Vietnamese government includes professors, associate professors, doctors in specialized areas of economic, social science, medicine, etc. They are usually success professors at some universities who provide reliable advises to the government and policy makers.

Secondly, the intellectual hierarchy is a highly intellectual labor force, making a significant contribution to the process of accelerating industrialization and modernization of the country. Vietnam is entering a period of continuous industrialization and modernization. This is a work of great significance to the development of the country. This is also the central task of the renovation period. The seventh Conference of the twelfth Plenum held in May 2018 identified that Vietnam would like to become an industrialized country towards modernization by 2030, with a vision to 2045 becoming a modern industrialized nation, oriented to the commune nationalism, for the sake of the rich people, strong country, democracy, justice and civilization, increasingly prosperity and happiness (see [15]). Facing great demands, in order to meet the goals, the contingent of intellectuals and scientists and technologists must play a motivating and leading role in research and application new scientific and technological advances in many different fields. In production management, the intellectuals are the ones who implement renovation of management mechanisms, contributing to reorganizing and guiding other labor forces to bring scientific advances into production to improve labor productivity and efficiency economic results. Science workers have become direct production forces in the fields of research, application and deployment of advanced technologies and other scientific and technological services. More than anyone else, they must have the responsibility to continuously improve their capacity and professional qualifications to acquire and apply creatively advanced scientific and technological advances in the world. This help combine people's strength in the race with the power of the times to accelerate the process of industrialization and modernization of the country. According to the orientation of the tenth Congress of the Party, to promote industrialization and modernization of the country, Vietnam needs to take advantage of favorable opportunities created by the international context and the country's potential and advantages. The whole resources have to shorten the process of industrialization and modernization of the country along the socialist orientation associated with the development of the knowledge economy. Knowledge economy must be considered an important element of the economy and industrialization and modernization; strongly develop economic sectors and economic products with high added value based on advanced knowledge (see [16]). Therefore, with the way of combining industrialization and modernization with the knowledge economy, strongly developing science and technology and enhancing the development of education and training, the intellectualization of labor resources will take place strong in the whole society as well as in all forces involved in the production process. More than ever, the contingent of

intellectuals must promote their great role in the process of accelerating industrialization and modernization of the country. The basic political task is to promote the motive role of science technology in the process of industrialization and modernization. This leads to the research and application of advanced techniques and new technologies, and at the same time renovating production and business management mechanisms. It is needed to contribute to the direction of guide and organize the labor mass movement to advance into science and technology, promote creativity, improve techniques, rationalized production in order to raise labor productivity and economic efficiency. Expanding and strengthening the creative activities of workers in the production process to both increase employment opportunities. This contributes to solving unemployment, and create fast and sustainable development for the society; thereby creating practical abilities for people to develop comprehensively. For instance, in Vietnam recently, Maritime bank is a pioneer bank in applying artificial intelligence in finding and evaluating potential customers for credit card products. Another example, Viettel Technology Group has developed a technology network which help patients can use the phone app to take pictures and fill out information sent to an artificial intelligence system and almost instantly the standard results and treatment can be returned. This is an efficient way that help Vietnam control the Covid-19 disease.

Thirdly, the contingent of intellectuals is a force with an important and decisive role in the cause of education and training, science and technology, raising the intellectual level, training human resources and fostering talents. Practically proven, the development of modern economy, successful implementation of industrialization and modernization of the country needs modern people. The contingent of intellectuals has a great role and responsibility in promoting the renovation of education and training, science and technology in order to raise the intellectual level, train human resources, foster talents and train. It turns out that people with high qualifications and good moral qualities meet the current labor needs. At the same time, in order to have a team of intellectuals and high intellectual human resources to meet the requirements of the cause of national renewal, education must first be built towards the goal of raising the intellectual level, training human resources and fostering talents. In this age, without the intellectual resources, there will be no sustainable development. Intellectual resources reside in every human being and especially in the treasure of human knowledge. The race between countries in the twenty-first century is in the educational loop, raising the people's intellectual level, enriching intellectual resources and forming a talented team. The intellectual potential lies in the people, in every worker, in which the intellect is a part crystallizing the typical intellectual values of the entire nation. Therefore, in order to make the intellectual team of the people become large in number and high in quality, the basic foundation is to have a high intellectual level and sufficient human resources to implement strategies development. On the high ground, newly built intellectual buildings, culminating in outstanding talents. Talent is the intellectual peak of society. The emergence of talented people is the process of striving for the nation's

rise in the development process. The process depends not only on the subjective efforts of each person but also on social policies for education, training, science and technology. For example, once again, the professors, associate professors and doctors at universities contribute much in education and research. Recently, in the April 2020, National Economics University published Covid-19 Impact Assessment Report on Economy and Policy Recommendations, which was greatly useful for agencies and ministries to carry out policy recommendations to respond to Covid-19.

Fourthly, the contingent of intellectuals is the force directly contributing to maintain and promote the fine cultural tradition of the nation, to acquire the cultural quintessence and civilization of humanity. The role of the intellectual contingent is, of course, expressed not only in the field of creation of material wealth, but also in the field of creation of values of spiritual life. The country's renovation has directed all intellectuals to promote creative labor in all areas of social life. The whole society strive to overcome the intellectual, cultural, information and scientific poverty, so that technology, education, culture, art could be brought to all working people across the country. This helps them expand knowledge, exchange cultural activities and make their spiritual life richer. To accomplish that task, the intellectuals on the cultural front must be truly pioneering soldiers, through their works, contributing to affirming the beautiful values of the Vietnamese people. At the same time actively criticizing negative cultural factors, hindering the country's development path. As people representing the intellect of the nation, the intellectual team has contributed to maintaining and promoting the fine cultural traditions of the nation, actively participating in building new lifestyles and families. cultural; combating old and toxic cultural remnants; eliminating custom, backward lifestyle, social evils that affect the traditions and customs of Vietnamese people, directing people to the values of truth, goodness and beauty. Intellectuals in the field of culture and arts are people who directly create, participate in cultural development and dissemination. They preserve the national cultural identity and at the same time absorb the quintessence of human culture. They also preserving historical values, tangible and intangible cultural values to educate the people about patriotism and national pride, historical and cultural traditions. At the same time, they continue to create new cultural values that reflect the height of the age and depth of traditions and national cultural identity. Finally, they fight against the tendency to be conservative and the tendency to lose its roots and dissolve. For instance, annually, Vietnam summarized culture activity and awards which is contributed by many domestic intellectual hierarchy. Such as in 2019, Vietnam hosted international tourism events. The ASEAN Tourism Forum (ATF 2019) took place on January 14-18 in Ha Long City, the northern coastal province of Quang Ninh. Under the theme 'ASEAN - The Power of One', delegates discussed plans for tourism development. The forum also included TRAVEX - the world's largest ASEAN destination, product and service showcase. In the same year, Vietnam was honored with various tourism awards. At the 26th World Travel Awards (WTA), Vietnam was honored as the World's Leading Heritage Destination

2019. The country was also chosen as Asia's Leading Culinary Destination at the WTA awards for Asia and Oceania in October and received the World's Best Golf Destination 2019 award at the international World Golf Awards held in the UAE the same month. Alongside, dozens of other international awards went to tourist attractions in Sapa, Phu Quoc and Da Nang. Another remarkable event was UN Day of Vesak 2019 held in Ha Nam Province. More than 1,650 international delegates from 112 countries and territories and more than 20,000 Vietnamese Buddhist dignitaries, monks, nuns and followers attended the 16th UN Day of Vesak from May 12-14 at Tam Chuc Pagoda in Kim Bang District, northern Hà Nam Province. This is the third time Vietnam has hosted the UN Vesak celebrations.

#### 4. Conclusion

Currently, in terms of the new industrial revolution - Industrial Revolution 4.0, the transformation of science and technology fields takes place strongly, creating breakthrough development in all areas of life-society. Under these conditions, the nation's elite intellectual team has played an increasingly important role in promoting the cause of innovation and further industrializing and modernizing the country. In the new context, the Party and State of Vietnam must continue to promptly set forth guidelines, policies and measures that are both long-term and concrete in order to further promote the role of the intellectual staff. It is also a core measure for our nation to soon realize the goal of the rich, the strong, the democratic, just and civilized people are increasingly prosperous and happy. The four key roles mentioned in section 3 are just like needle and thread for Vietnamese intellectual hierarchy to dedicate their knowledge and youth to develop the country in all areas.

Recently, even though on a national scale, the intellectual team has trained a fairly large number of high quality human resources. But facing the country's development requirements, high-quality human resources are inadequate and weak compared to the needs of social development. The education and vocational training system is still outdated, especially at the undergraduate and postgraduate levels, which are inadequate and unable to meet the demand for the quality of high-quality human resources. It is resulted in the status of training products which are just redundant, lacking, weak, out of sync and not close to social needs. The professionalism, qualification and thinking capacity, cultural capital of high quality human resources are also not high, not meeting the

new requirements of the development of localities and the whole country, not meeting the requirements of demand to improve practical activities. In conclude, Vietnam is in need of training political thought, morality, following leadership style, modern management to promote the positive and creative characteristics of Vietnamese intellectual hierarchy in the context of the Industrial Revolution 4.0.

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