

## High Quality Human Resources Development to Satisfied the Globalization in Vietnam: Defiances and Solutions

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### Abstract

Human resources, especially high quality human resources play an important role in development of the economy and the society. In a globalization circumstance with a strongly development of "Industries 4.0", Vietnamese government was focusing in building a highly qualified human resources to satisfy the need of development and globalizations; in which, concentrating human resources for industries with high technology content and added value, improving training quality to meet labor market requirements at home and abroad. However, over the past years, Vietnam has faced great challenges, high-quality human resources have not met the requirements of socio-economic development in the current international integration process. Therefore, it is necessary to have a system of solutions deployed synchronously in order to develop more high-quality human resources to meet the development requirements of Vietnam in the international integration process.

**Keywords:** Human, high quality human resources, globalization, Vietnam

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### Introduction

High-quality human resources are an integral part of the country's human resources. Developing high-quality human resources, in essence, is developing and perfecting the employees with professional and technical qualifications for a specific profession, according to the criteria of labor classification of certain professional and technical qualifications; have good professional skills and the ability to adapt to the rapid changes of production and business technology; have good health and quality; able to apply creatively the knowledge and skills that have been trained in the production process in order to bring high quality and efficient labor productivity. They are those who master modern scientific and technological knowledge, have creative thinking, have good practice skills, have industrial style, have an organization and discipline, have good health, contribute to extreme and effective causes of national construction and defense. Therefore, investment in human resources is investment for development in the process of international integration, as Vietnam has affirmed: "Developing and improving human resources, especially high-quality human resources is a strategic breakthrough, is the decisive factor to promote the

development and application of science and technology, restructure the economy, transform the growth model and the most important competitive advantage, ensure the rapid and effective and sustainable development" (The Communist Party of Vietnam, 2011).

In the process of international integration, the development of high-quality human resources has positively contributed to economic restructuring, increased labor productivity, helping Vietnam escape the "middle income trap", step by step ensure the life of workers. However, the economy is still mainly developed in width, economic growth depends heavily on factors of capital, resources, and low-skilled labor, not relying much on knowledge, science and technology, skilled labor. Labor productivity has been slowly improved, much lower than in some regional countries; the quality of human resources is low, the labor structure shift is not corresponding to the shift of production structure, it is necessary to have a system of more comprehensive and comprehensive solutions in the coming time. This is also the main content of this article.

### Literature Review

Developing human resources to meet the requirements of international integration has attracted the research interest of domestic and foreign scientists, in many different aspects and angles. First of all, Asian Development Bank is a collection of articles by foreign scholars from the Asian Development Bank, Institute for Development Studies of Bangladesh, Indonesia, Philippines, Thailand, University of Seoul, Korea on issues related to human resource development in relation to economic development such as population, employment, education - training, health, nutrition, vocational training, use of human resources... (Asian Development Bank, 1990).

Jim Stewart and Graham Beaver mentioned three basic contents including: studies on the characteristics of small-scale organizations and suggestions in the design and implementation of research on human resource development; Research results on approaches to human resource development in small-scale organizations and refers to human resource development methods that small organizations often apply and practice (Jim & Graham, 2004).

On this topic, in Vietnam, there have been many researches. On the basis of the theory of industrial human resource development, the author gives the current status of industrial human resources in Vietnam such as: the current situation of education and technical expertise, the current situation of high-quality human resources of the industry, the current situation of training and fostering industrial human resources. Since then, the author outlines the basic solutions and the role of the trade union in the development of industrial human resources. Vietnam serves the process of industrialization - modernization of the country (Le, 2009).

*Human resource development to meet the requirements of industrialization, modernization and international integration* was a collection of articles by many authors and is divided into three parts: general theoretical issues; domestic and international experience in human resource development; and current situation, recommendations and solutions to human resource

development to meet the requirements of industrialization, modernization and international integration (Vu & Nguyen, 2012).

Pham Minh Hac analyzed the scientific basis of the strategy for comprehensive development of Vietnamese people, the strategic directions for comprehensive development of Vietnamese people in the period of national industrialization and modernization. Another issue in the process of international integration in Vietnam is the issue of intellectual resources and the issue of building and promoting intellectual resources in the process of industrialization and modernization of the country (Pham, 2001). As well as the experiences of building and promoting intellectual resources of Vietnam and a number of countries around the world, from that point out general solutions and specific solutions to build and promote Vietnamese intellectual resources for international integration (Nguyen, 2012).

From the need to associate training with the use of human resources for international integration, the work outlines the situation of linking training and employing human resources, from which a number of suggestions are proposed. the basic solution to link training with the use of human resources to meet the needs of socio-economic development in general as well as the process of industrialization and modernization of the country in particular (Nguyen, 2007).

The above-mentioned works all mentioned and analyzed the human resource development in the socio-economic development process, the achievements, the shortcomings in human resource development. Export a number of solutions to develop human resources in the process of international integration. However, those works are only briefly mentioned, without in-depth analysis of challenges and solutions to develop high-quality human resources to meet international integration requirements in Vietnam.

### Methods

American futurist Alvin Toffler emphasized the role of intellectual work: "Money is spent forever, power is lost; it is only human intellect that, when used, it is not only lost but grows" (Alvin, 1992). There is a dialectic relationship between human resources, capital, natural resources, facilities-techniques, science - technology... in which

human resources are considered endogenous governing other resources and the socio-economic development process of each country. Compared with other resources, human resources, with the leading factor being intelligence, have an outstanding advantage of not being depleted if they can be fostered, exploited and used properly. However, other resources, no matter how much, is only a limited factor and can only be effective when combined with human resources effectively. Therefore, the development of high-quality human resources not only allows to maximize the potentials and strengths of the country, but also creates resilience and competitiveness of human resources at home and abroad. It is an increase of investors looking to develop human resources, improve the quality of work where there are many high-quality human resources living, working and working. At the same time, creating a comparative advantage between our country and other countries in the region and in the world in terms of high-quality human resources will be an opportunity and condition for Vietnam to promote cooperation and development in various fields trades, thereby enhancing the country's position and prestige in the international arena.

In the modern world, when gradually shifting to a knowledge-based economy and in the trend of globalization, international economic integration, human resources, especially high-quality human resources are increasingly possible show decisive role. Recent growth theories show that an economy that wants to grow rapidly and at a high rate must rely on at least three basic pillars: adoption of new technology, development of modern infrastructure and improving the quality of human resources. In particular, the most important driver of sustainable economic growth is human resources, especially high-quality human resources, who are invested and developed, with skills, knowledge, and hands. profession, experience, and creative capacity to become "capital - human capital, human capital". In the context of a volatile world and fierce competition, the victory will belong to countries with high quality human resources, a favorable legal environment for investment and a socio-political environment stability.

International experience has shown that the focus on human resource development is considered the orientation of society to improve labor productivity as well as create a foundation for career development, economic and social stability National Assembly. To develop human resources, a number of countries around the world have started to streamline students very early and are supported to choose appropriate careers and apprenticeships. Typically Singapore, the education system of this country is very flexible and always oriented to the abilities, interests and talents of each student to help them maximize their potential. In addition to the application of new scientific and technological advances in teaching, the training program always focuses on educating personality and national cultural traditions. The State invests in very few public schools to have exemplary quality, has an appropriate credit policy to attract talent training, with the non-public sector, the Government facilitates development and encourages employment connect, link with foreign countries, invite international universities to set up branches...

In the modern world, when gradually shifting to a knowledge-based economy and in the trend of globalization, international economic integration, human resources, especially high-quality human resources are increasingly possible show decisive role. Recent growth theories show that an economy that wants to grow rapidly and at a high rate must rely on at least three basic pillars: adoption of new technology, development of modern infrastructure and improve the quality of human resources. In particular, the most important driver of sustainable economic growth is human resources, especially high-quality human resources, who are invested and developed, with skills, knowledge, and hands profession, experience, and creative capacity to become "capital - human capital, human capital". In the context of a volatile world and fierce competition, the victory will belong to countries with high quality human resources, a favorable legal environment for investment and a socio-political environment stability.

Germany is a highly developed country by doing well in its human resource development

strategy. In Germany, the dual human resource training system is considered the world's leading effective training model. The dual human resource training system, thanks to its focus on the quality of training and good remuneration, attracts high-quality vocational teachers. Teachers are carefully selected on the basis of meeting rigorous standards, such as at least 5 years' work experience, and sufficient pedagogical and professional qualifications to participate in teaching. Professional and pedagogical competency standards for vocational teachers basically include the official profession of the industry certification, 1.5 years of extra training in the evening at the technical school and passing the graduation exam.

Norway is one of the countries with a fairly advanced model of human resource training, effectively meeting the requirements of integration and development. A statistic shows that nearly 90% of Norwegian youths enter vocational schools when they reach the age of 15-16. Once vocational training is completed, students can continue to attend university (with some additional education in general science, such as math, physics, geography...). The Norwegian education and vocational training system is using a 2 + 2 model, i.e. 2 years of schooling and 2 years of practical study in enterprises.

Australia is a country with an excellent method of training high-quality human resources, students can learn with experts, practice in a real working environment in the learning process. In addition, the vocational education system has a good coordination with trade unions to help trainees have practical job experience to facilitate the recruitment process. In particular, at the vocational schools in Australia, the professions and training profession are plentiful and diversified, with many leading industries in the world.

From theoretical issues and world experiences, in the process of international integration, Vietnam has identified: "Develop a human resource development strategy for the country, for each industry, each field, with synchronous solutions, in which solutions for training and retraining human resources in schools are also focused as in the production and business process,

focusing on improving professionalism and practical skills" (The Communist Party of Vietnam, 2011)

*Main Findings:* Every country to develop must always create resources for development. In any society, although developmental levels and natures vary, the resources for development are still means of production (land, resources, machinery, technology, finance...) and labor force. In which, labor power - high-quality human resource is the most dynamic factor, the source of all material and spiritual wealth in society. Therefore, in the process of international integration, the Government of Vietnam has always focused on human resource development strategy, identifying this as the most valuable resource, having a decisive role in promoting the development process.

Currently, Vietnam has become a low-middle-income country and has gained many achievements in developing high-quality human resources. However, in reality, there are special challenges that require the Government to have appropriate solutions and policies to improve the quality of human resources serving the socio-economy in the current international integration process.

*Applications:* Research results can be used to make policy recommendations for developing high quality human resources to meet the requirements of international integration in Vietnam.

## Results

### *Overview about human resources in Vietnam*

Currently, the biggest advantage of Vietnam is its abundant workforce and young labor structure. According to the General Statistics Office (2020), Vietnam has about 94 million workers, of which the labor force aged 15 and over accounts for about 55.7 million people. The proportion of employed workers aged 15 and over in 2019 is estimated at 54 million people, including 18.8 million people working in agriculture, forestry and fisheries (accounting for 34.5%); 14.4 million people in industry and construction (accounting for 26.7%); service sector 18.7 million people (accounting for 37.8%) This is a favorable condition for Vietnam to rotate labor in the region and the world in the integration process.

**Table 1.** Labour force at 15 years of age and above by age group

Year	Total Thous. persons	15-24		25-49		50+	
		Thous. persons	Structure (%)	Thous. person s	Structure (%)	Thous. persons	Structure (%)
2005	44.905	9.168	20,42	28.433	63,32	7.304	16,27
2008	48.210	8.734	18,12	29.973	62,17	9.502	19,71
2010	50.393	9.245	18,35	30.939	61,40	10.208	20,26
2013	53.246	7.916	14,87	31.905	59,92	13.425	25,21
2015	53.984	8.012	14,84	31.970	59,22	14.002	25,94
2017	54.824	7.581	13,83	32.599	59,46	14.644	26,71
2019	55.767	7.159	12,8	3.430	61,5	14.299	25,7

Source: Statistical Yearbook of Vietnam 2019

*About human resources quality.* Labor quality in Vietnam in recent years has also been gradually improved. The proportion of workers aged 15 and over who are working with trained training increases from 12.5% in 2005 to 14.6% in 2010, and 19.8% in 2019. In terms of professional qualifications The technical skills and qualifications of the employees tend to increase at all training levels including vocational training, professional intermediate, college and university and higher (Table 2). In particular, the number of

employees with college and university degrees or higher increased even more. If in 2010, the number of employees with college and university degrees or higher was 8.7% in 2015, in 2019, these rates would be 10.6% respectively. The trained labor has partly met the requirements of the business and the labor market. Vietnam's technical workforce has mastered science and technology, and can handle most complex positions in production and business that previously had to hire foreign experts.

**Table 2.** Percentage of trained labour force at 15 years of age and above by qualification

Unit: %

Year	2015	2016	2017	2018	2019
Primary	3,3	3,2	3,5	3,6	3,7
Intermediate	5,2	5,3	5,3	5,2	1,7
College	3,0	3,2	3,3	3,7	3,8
University and over	8,7	9,2	9,5	9,5	10,6

Source: Statistical Yearbook of Vietnam 2019

*About productivity.* Along with the improved quality, the labor productivity of Vietnamese workers has also improved in recent years. Statistics show that labor productivity has increased from 44 million VND/employee in 2010 to more than 2 times, reaching 102.2 million VND/employee in 2018. On average, labor productivity in the period 2016-2018 increased by 5.77%/year, higher than the 4.35/ year rate of the period preceding 2011-2015; and for the whole period 2011-2018, labor productivity increased on

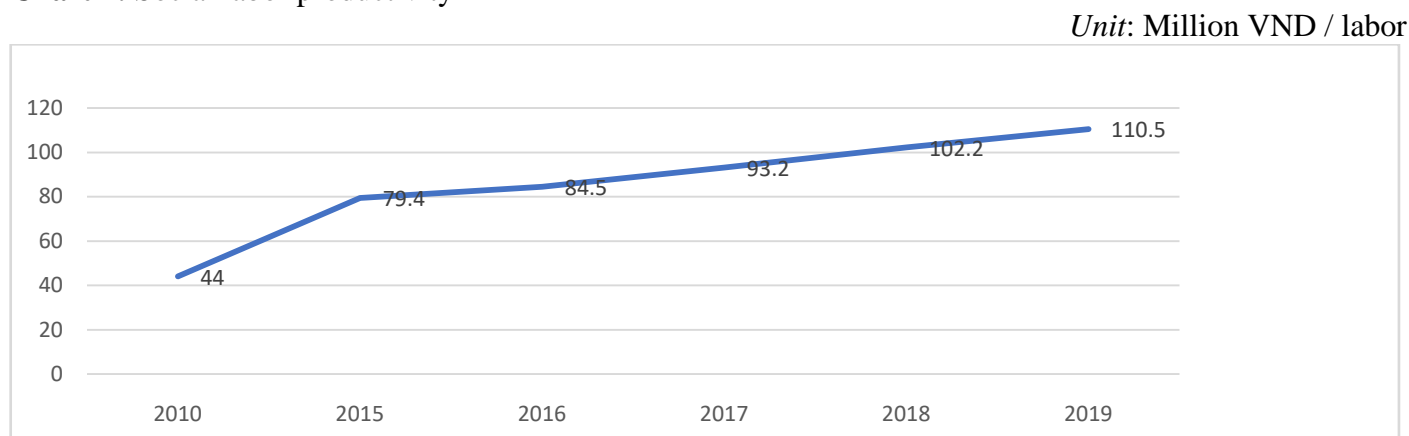
average by 4.88% /year. With such speed, Vietnam has gradually narrowed the gap with other countries in the ASEAN region. If in 2011, labor productivity of Singapore, Malaysia and Thailand was 17.6 times, 6.3 times and 2.9 times higher than Vietnam's labor productivity, by 2018, this gap have been narrowed down to 13.7 times, 5.3 times and 2.7 times, respectively.

According to the 4th annual assessment report on the progress of SDG implementation by the United Nations Sustainable Development



Solutions Network (UN) and Germany's Bertelsmann Stiftung Foundation just announced in July 2019, Vietnam increased by 3 level compared to 2018 in achieving sustainable

**Chart 1:** Social labor productivity



*Source: Statistical Yearbook of Vietnam 2019*

This is partly due to the introduction of a human resource development program that promotes support for startups and private enterprises. The innovative start-up ecosystem in our country has begun to grow. At the same time, the Government of Vietnam has selected 251 professions and trades in 49 key industries and occupations at all levels of 45 schools to support investment, of which 154 occupations in 27 international careers, 60 occupations in 18 occupations and occupations at ASEAN regional level and 37 turns in 28 occupations at national level and schools have received transfer of training for 34 international key occupations (12 occupations from Australia- a, 22 occupations from Germany). The current training scale of the international transfer system is 2,000 students. Graduates will be awarded with Australian or German associate degrees; 682 lecturers were trained synchronously at home and abroad; 45 schools have been assessed by international partners to meet the standards for training organization.

Along with that, the schools meet the quality accreditation standards in the country. In which, 21 schools operate the UK quality management process, 8 international accreditation pilot schools have basically met the standards assessed by British and German experts. Large corporations and enterprises have been interested in and directly

development goals, the quality of human resources in Vietnam ranks 11/12 countries in Asia (Minh, 2020).

participating in vocational training, such as Vingroup, Sungroup, FPT, Samsung, Muong Thanh, Thaco,... Investment projects with high quality human resources have been basically met. Cooperation between enterprises and schools is strengthened in the direction of increasing in-company training, custom training... Most of the high-quality training programs have over 30 in-company training duration %, practice time is over 50% of the program.

In 2020, employment in Vietnam will continue to grow. Among them is the shift from using simple labor groups to highly skilled groups. This is a positive and inevitable transition according to the trend of economic development. According to FALMI statistics, out of 110,172 turns of people wishing to find jobs in 2020, up to 94.78% of trained workers. In which, university and higher accounted for 66.57%, college accounted for 15.82% and intermediate level only 6.72%. These rates are mainly concentrated in the fields of finance - banking, accounting, IT, business administration, management and operation and marketing - public relations. Demand for job hunting in untrained workers accounts for a very modest proportion. Specifically, the rate is 5.22%, primary vocational - technical worker with 5.67% (Kizuna, 2020).

Thus, in the process of international integration, the quality of Vietnam's human resources has been improved more than before, most clearly reflected in the improved labor productivity of the whole society, creating good growth and improving the competitiveness of the economy and the national potential. Contributing significantly to the supply of human resources for growth, increasing labor productivity, helping Vietnam escape the "middle income trap".

***Challenges posed to developing high quality human resources to meet the requirements of international integration in Vietnam***

The development of high-quality human resources in Vietnam in the international integration process still faces many difficulties and challenges, including:

*Firstly, population aging.* One of the top concerns for human resource development in Vietnam today is identifying the challenges brought by the population age structure shift. Vietnam has now entered the population aging stage, we are also one of the countries with the fastest population aging rate in the world, reflected in the increasing proportion of the elderly in Vietnam. In recent years, at the same time, the population entering the workforce has steadily declined each year, heralds a decline in the workforce in the near future. The labor statistics in Table 1 show that, if in 2005, the labor force aged 15-24 was about 9,168,000 people, accounting for about 20.42% of the labor force aged 15 and over of the whole. By 2019, the number of employees in this age group has decreased to only 7,159 thousand people, equivalent to 12.8%; Meanwhile, the number of employees aged 50 and over in 2005 was 7,304 thousand people, equivalent to 16.27%, by 2018, this number had increased to 14,299 thousand people, equivalent to 25.7%.

*Second, the quality of training.* In recent years, although the quality of human resources in Vietnam has improved significantly over time, there are still many limitations.

First, the quality of workers still has a large disparity between regions, especially between urban and rural areas. Although the gap in qualifications and skills of workers in these two regions has narrowed over time, at the time of the

survey in 2019, the proportion of workers aged 15 and over is currently working. Trained jobs in urban areas are still 2.66 times higher than those in rural areas.

At the same time, qualified human resources and skilled workers have not yet met the market demand. Although the proportion of workers aged 15 and over who are working with training has increased, but in general is still low, accounting for only 19.8% in 2019. Among the skills, language proficiency, Specifically, Vietnamese English is still poor compared to workers in many countries in the region, so Vietnamese workers often encounter more difficulties in the integration process, thereby indirectly affecting competitiveness of the economy.

Besides, there is still a large difference between professional qualifications and practical skills in practice, reflected in the fact that workers still need time to adapt, train, and additional training to be able to achieve them highest labor efficiency in an industrial environment. Not only that, the actual feedback from many enterprises also shows that the responsiveness of skills due to technology changes of workers in enterprises is still low. Currently, in companies, mechanical factories, and positions requiring high technology are often undertaken by foreign workers. Not only that, the gap between vocational education and market demand is still very large. Every year, thousands of students graduate from school. However, enterprises are still in a labor shortage in many positions (Kizuna, 2020).

By 2020, Vietnam has up to 75% of the workforce in small and medium enterprises that has not yet received technical or professional training. Meanwhile, human resources are considered as a key factor in the sustainable development of businesses. The quality of human resources in Vietnam is 3.79 points (out of a 10 point scale), ranked 11th out of 12 countries surveyed in Asia. While Korea reached 6.91 points; India reached 5.76 points; Malaysia reached 5.59 points (Minh, 2020). Thus, our country's human resources still lack quality, lack of dynamism and creativity, industrial style.

In the context of the industrial revolution 4.0 and the openness of the economy, business

administrators are forced to quickly adapt in all aspects, in which the selection, arrangement and training of human resources bring efficiency business is more and more active and interested in businesses.

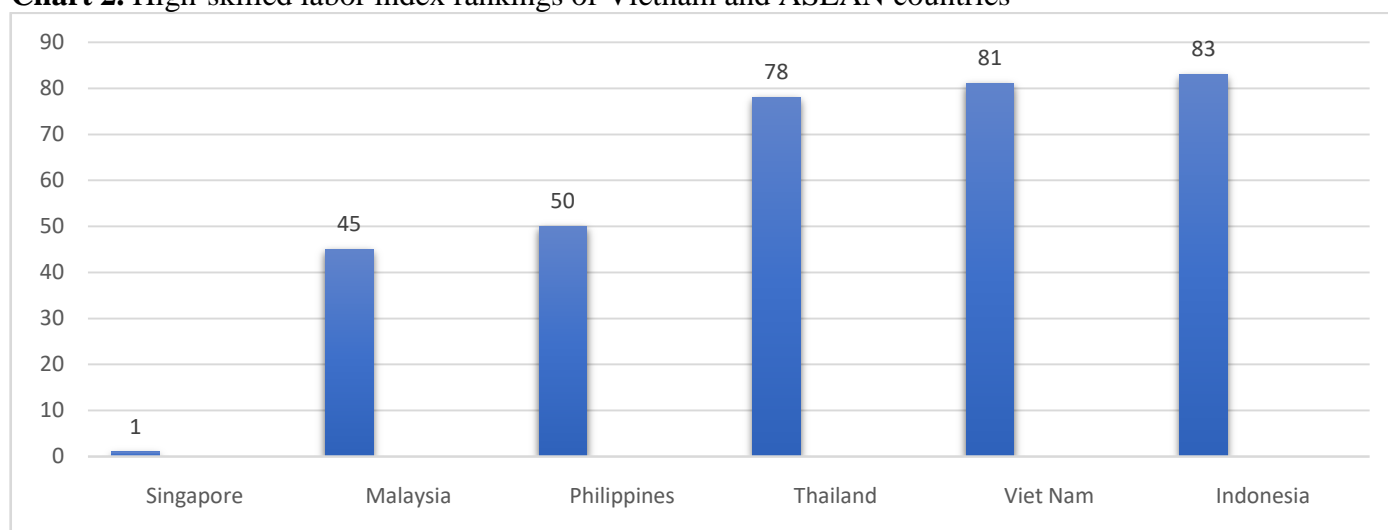
Meanwhile, according to the Center for Forecasting Manpower Demand and Labor Market Information City. Ho Chi Minh City (Falmi), the demand for human resources in businesses is now developing towards attracting high-qualified human resources, trained human resources up to 82.92%. In which, the demand for human resources with university or higher degree accounts for 12.46%; college accounts for 17.04%; intermediate level accounts for 26.04%; primary vocational - skilled technical workers account for 27.38%.

Thirdly, Human resource training is being affected more and more by international integration and the industrial revolution 4.0, especially drastically changing the labor structure and the labor market. The automation system will gradually replace manual labor throughout the economy. At the same time, the shift from worker to machine will increase the difference between return on capital and return to labor, which will affect the income of simple labor and increase unemployment. According to estimates by the International Labor Organization (ILO), up to 86%

of the workers in Vietnam's textile and footwear industries are at high risk of losing their jobs under the impact of technological breakthroughs caused by the industrialization. 4.0. This risk can translate into a small number of losses when industries such as Textile and Footwear have created a large number of jobs for domestic workers, requiring breakthrough solutions in vocational training, from renewing the legal framework and supporting policies of the State to innovation and international integration in training, improving the quality of vocational teachers and raising awareness of parents and students on the roadmap apprenticeship and job opportunities for vocational human resources.

Fourthly, one of the challenges facing developing countries when accessing the digital economy is highly skilled human resources. According to the data in the WEF's Report on the readiness for production in the future 2019, Vietnam ranked in the last group in the ranking of highly skilled workers, ranked 81/100, even after Thailand and the Philippines in the group of ASEAN countries. And also in this report, the ranking of the quality of vocational training in Vietnam is only 80/100, compared to the group of ASEAN countries, only ahead of Cambodia (92/100).

**Chart 2.** High-skilled labor index rankings of Vietnam and ASEAN countries



Source: WEF Readiness for Future of Production Report 2018

The current situation of human resources is difficult to make the best use of the opportunities

that are coming to the country. If we do not quickly overcome this weakness, we will face new dangers



and challenges, which will lead to the lag of the country. If we cannot solve the problem of improving the quality of human resources in the coming time, Vietnam will face the risk of a human resource quality crisis, the consequence of which is a decline in the competitiveness of the economy sacrifice; difficult to escape "middle income trap"; lost opportunities to join the international labor market.

In addition, the low quality of human resources will also be a factor inhibiting the growth rate of labor productivity. Although Vietnam's labor productivity has improved significantly in the past period, narrowing the gap with more developed countries in the region, the reality is undeniable that Vietnam's labor productivity Male is still very low, in particular, the absolute difference in labor productivity when compared with Singapore, Malaysia or Thailand continues to increase.

According to the World Bank, the quality of human resources in Vietnam reached 3.79 points (on a scale of 10), ranked 11th out of 12 countries surveyed in Asia. While Korea reached 6.91 points; India reached 5.76 points; Malaysia reached 5.59 points (Minh, 2020). Thus, our country's human resources still lack quality, lack of dynamism and creativity, and industrial style has affected the competitiveness of the economy.

Thus, the quality of human resources in Vietnam still has many formulas. The proportion of workers in the trained age group is still low, the shortage of skilled workers has not met the needs of labor schools and integration; the gap between the educational profession and the demand of the labor school is growing. At the same time, the transformation model and the economic structure change the supply and demand of labor, while the training branches in the school have not caught up with the trend of employers. At the same time, according to experts, in order to develop high-quality human resources to meet the integration requirements in Vietnam in the short term and for a long time, it is necessary to take into account the quality factor of birth and population fostering. It cannot be said that the human resource develops when the children are broken, weak. Cannot said to the power source develops when energy is not being cultivated. This topic link to the other series

of an element as the main social book, main health, salary policy, infrastructure construction policy... These issues are still not fundamentally resolved. It is impossible to mention high-quality human resources when the quality of higher education is low; infrastructure is still very poor; the rate of newly trained employees is only from 30 to 40%; foreign language skills, ability to use computers, poor information technology...

***Solutions to develop high-quality human resources to meet the requirements of international integration in Vietnam***

High-quality human resources have been and are "vital" factors, playing a particularly important role in the country's economic development. Therefore, it is necessary to have a more comprehensive and comprehensive solution system in the coming time.

*Firstly*, focusing on building and completing an overall strategy, system of mechanisms and policies on developing high-quality human resources: Developing an overall strategy for developing high-quality human resources is a policy. Large and important task, requiring careful research, careful with breakthrough thinking and a long-term vision, consistent with reality. The strategy must clearly define the objectives, scale, roadmap and overall mechanisms and policies. In particular, the strategic goal must prioritize overcoming the conflicts between the development of quantity, quality and structure; determine the size, quantity and structure of each type of human resource accordingly. The strategy also develops a reasonable, highly predictable implementation roadmap, develops and completes specific mechanisms and policies to develop comprehensive and synchronous high-quality human resources. It is necessary to clearly define this is the central political task of the entire political system, in which it is necessary to soon unify awareness among socio-political associations, first of all, the core force that is directly operating in the field of research and strategic planning, policy, the impact of opportunities and challenges for our country since the industrial revolution 4.0.

The renewal and completion of mechanisms and policies to create a driving force for the development of high-quality human resources must be done synchronously in many aspects such as education -training, science - technology,

environment employment, employment, income, social security, insurance, social protection, health care, labor market development, housing, living and settlement conditions... The State should continue to renovate institutions, perfect the legal corridor from the central to local levels in order to create a favorable environment for human resource development, and encourage the development of the high-quality human resource market; market and products of science and technology in the direction of integration, building a legal environment for the development of new business lines in Vietnam are starting to arise from the Industry 4.0.

*Second*, there is a close connection between the training process with the training and the use of highquality human resources. The Government of Vietnam affirms: "Develop human resource development strategies for the country, for each industry, each field, with synchronous solutions, in which focus on solutions to training and retraining of resources human resources in schools". This poses a very high requirement for high quality human resources. Therefore, training institutions must always attach great importance to good management of the quality of "output products" through the forms of assessing trainees' ability to practice in the training process, reviewing training results, graduation results... instead of the current "input product" management.

Training institutions also need to equip students and graduate students with necessary skills such as communication, research of foreign documents, use of information technology, creativity, adaptation, and grasping the development trend of the society... to ensure the close connection between training and use, to meet the set requirements. The selection of sources for training and retraining not only places an emphasis on awareness criteria, but also attaches great importance to foreign languages, informatics, political bravery, professional ethics, and leadership capacity direction, management.

At the same time, to approach international standards and strengthen international cooperation in vocational training. Formulate and promulgate quality assurance conditions in vocational training towards approaching regional standards of ASEAN4 and developed countries in the G20

group; building a comprehensive, complete and reliable database on vocational training in order to well serve research and statistics related to the quality of vocational training and human resources; encourage and support pilot vocational training institutions to implement training programs transferred from abroad to draw experience for mass deployment, creating international-standard human resources for the domestic market and internationally.

*Thirdly*, improve the quality of education and training at all levels, especially universities and colleges. This is an important solution that has decisive significance to the creation of high quality human resources in our country today. Right from the school level, especially the high school education, teachers and students' parents must orient their children's future in choosing a career that is suitable to their own abilities and strengths. Since then, focus on training and fostering in-depth in a field or field that I love, having full knowledge and skills after completing the course.

In particular, in the current digital era, universities also need to research and add vocational training majors in ICT, blockchain, artificial intelligence (AI) to meet the demand human resources in Industry 4.0. In addition, another fact shows that Vietnamese workers are still limited in possessing soft skills, foreign language skills, teamwork, information technology skills and creativity. Many employees have been trained, but when working, they still do not meet the requirements, causing the employer to take time to retrain. Therefore, one solution is to equip students with soft skills right from the university, by including soft skills in training programs and output standards for students. Not only that, it is necessary to encourage and promote students' self-study, increase practical teaching from experts, entrepreneurs... not only 100% of knowledge is teaching teachers.

The reality of high-quality resources in our country is not much, mainly the average resource, that is, labor at the general education level, simple, skilled workers are very few. Therefore, most of the production and use of technology, machinery and equipment are imported from abroad, consult with foreign experts to support. Accordingly, conducting

a review of training programs in schools; increase time for practice, reduce time to study theory; associating the training process with internship activities, sightseeing, embarking on work in each training discipline; promote cooperation activities, joint ventures, links between schools, training majors together, especially with businesses, manufacturers, investors, companies; recruiting students for training must ensure the quality, not chase the quantity; Educational institutions need to further develop into high-quality occupations: digital fields, information technology, energy, new materials, biotechnology... to help employees have can be mastered when the digital revolution explodes today.

*Forthly*, link vocational training with the labor market, sustainable jobs and social security. To promote cooperation between vocational training institutions and job introduction centers, job exchanges and job fairs to assist learners in finding jobs after graduation; to attach importance to linking training with sending workers abroad; enhance communication, raise people's awareness of vocational training opportunities and roadmap, job opportunities and career roadmap for vocational human resources, contribute to promotion and enrollment for vocational training institutions; constantly update new job skills requirements and new vocational recruitment trends, build a portfolio of vocational skills for both present and future as a basis for design, update vocational training programs in accordance with practice; increase information about vocational training programs targeting vulnerable groups, such as ethnic minorities, the poor, out-of-school adolescents, people with disabilities,... to create access opportunities apprenticeship and jobs for all subjects in society, not leaving anyone behind.

*Fifth*, enhance the State's management of high-quality human resources. Regardless of the

conditions and circumstances, it is necessary to ensure the State's management and the Government's administration of production and business activities, using high quality human resources. The State is the person who promulgate mechanisms and policies for remuneration and use of high quality human resources, so the State needs to decentralize and assign tasks to agencies, departments and branches to manage human resources is effectively high quality, not to "brain drain" phenomenon. That is to train to create high human resources but not for the State but for foreign businesses. Develop and promulgate regulations and requirements for high-quality human resource training institutions; require high quality human resources when training but must work in the country, especially the State administrative apparatus, if violating, they will have to compensate, or ask other places not to recruit; set high demands for high-quality human resources to put the interests of the nation first, wholeheartedly, wholeheartedly serving the cause of building a democratic, civilized, rich and beautiful Vietnam have an increasingly high position in the international community; regularly check the process of high-quality human resources, if not meet, they will be discarded, or arranged, arranged in other places.

Create incentive mechanisms for business cooperation with schools to train properly and appropriately, closest to market needs. At the same time, it is necessary to improve the training quality of educational institutions, associate knowledge training with internships and practice in business establishments; to take measures for state management agencies to regularly receive feedback on the satisfaction level of enterprises with regard to the output "products" of training institutions.

the 4th scientific and technological revolution strong impact on nations and peoples. High-quality human resources, with a reasonable quantity and structure, rich in intelligence, rich in will and aspirations, with illuminating revolutionary ideals, will be the driving force for Vietnam to basically become a country soon industry in the direction of modernity, to meet the requirements of the 4th

## Conclusion

Developing high quality human resources is an inevitable trend and requirement of Vietnam today. That not only creates a premise and material and technical foundations for socio-economic development in general, but also to continue promoting international integration in the context of

Industrial Revolution which is taking place strongly today. Therefore, it is necessary to have breakthrough and practical solutions to develop human resources.

## References

1. Alvin, T. (1991). *Power Shift*. Hanoi, Vietnam: Theoretical Information Publishing House.
2. Asian Development Bank. (1990). *Human resource policy and economic development: selected country studies*. Manila: ADB.
3. Duong, V. Q., Banh, T. L., & Trinh, D. D. (2009). *Human resource training for international integration*. Hanoi, Vietnam: World.
4. General Statistics Office. (2020). *Statistical Yearbook of Vietnam 2019*. Hanoi: Statistics publishing house.
5. Kizuna. (2020). Situation of human resources in Vietnam in 2020 and forecast in 2021. Available at: <https://www.kizuna.vn/vi/tin-tuc/thuc-trang-nguon-nhan-luc-viet-nam-va-du-bao-741>
6. Jim, S., & Graham, B. (2004). *Human resource development in Small Organisations - Research and practice*. British: Routledge.
7. Le, D. P. (2006). *Resources and driving force for development in the socialist-oriented market economy in Vietnam*. Hanoi, Vietnam: Theoretical Information Publishing House.
8. Le, T. H. (2009). *Developing industrial human resources of Vietnam in the process of industrialization and modernization of the country and the role of the trade union*, Hanoi, Vietnam: Labor Publishing House.
9. Minh, N. (2020). The quality of human resources Vietnam ranks 11/12 countries in Asia. Available at: <https://vnmedia.vn/kinh-te/201912/chat-luong-nguon-nhan-luc-viet-nam-xep-hang-thu-1112-quoc-gia-tai-chau-a-ec35837/>
10. Nguyen, M. T. (2020). Economic growth with poverty reduction in Vietnam. *Journal of Critical Reviews*, Vol.7, Issue 18, 2020, 2071 – 2079. Available at: <http://www.jcreview.com/?mno=132095JCR>
11. Nguyen, M.T., & Doan. T.N (2021). Impact of Industrial Revolution 4.0 on the Labor Market in Vietnam. *Research in World Economy*, Vol 12, No 1, 94 – 100. Available at: <https://doi.org/10.5430/rwe.v12n1p94>
12. Nguyen, V. K. (2012). *Vietnamese intellectual resources, history, status and prospects*. Hanoi, Vietnam: National Political Publishing House.
13. Nguyen, V.N. (2007). *Basic solutions linking training with the use of human resources in the period of industrialization and modernization in Vietnam*. Hanoi, Vietnam: Agriculture Publishing House, Ha Cabinet.
14. Pham, M. H. (2001). *Regarding human development in the period of industrialization and modernization*. Hanoi, Vietnam: National Political Publishing House.
15. UNDP. (2020). Human Development Report 2019 "Inequality in human development in the 21st century: Not only in terms of income, average and current".
16. The Communist Party of Vietnam. (2011). *Document of the 11th National Delegation*. Hanoi, Vietnam: Publisher National politics, Hanoi, 116.
17. The Communist Party of Vietnam. (2016). *Document of the 12th National Congress of the Party*. Hanoi, Vietnam: Central Party Office.
18. Vu, V. P & Nguyen, D. H. (2012). *Developing human resources to meet the requirements of industrialization, modernization and international integration*. Hanoi, Vietnam: National Political Publishing House – Truth.