

Existings Need To Concentrate Wood Works To Develop Human Resources In Digital Transformation In Vietnam

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Abstract

Digital transformation not only helps increase productivity, reduce costs, but also opens up new development spaces, creating new values in addition to inherent traditional values. Digital transformation in Vietnam starts with the vision of businesses, the policy of the government, the experience of the people and is entering the acceleration phase. In the implementation process, the decisive factor is the preparation of human resources. Human resources are the main force to deploy and realize digital transformation in Vietnam. The article analyzes and clarifies the existing problems that need to be resolved in order to develop human resources in digital transformation in Vietnam today. The article also summarizes the views of the Vietnamese Government on human resource development in digital transformation, according to which the policies and views of the Vietnamese Government in recent years have also made an important contribution to the development of human resources, helping Vietnam achieve positive results, including changes in awareness, digital transformation actions, strategy formulation, and improvement of institutions and policies in general, including human resource development in digital transformation. change number. The study also pointed out the shortcomings related to human resource development in digital transformation in Vietnam such as: not adhering to the principles of human resource development; lack of necessary skills to fully master digital transformation programs and other issues related to: quality of training in information technology; fierce competition among digital technology enterprises in attracting human resources; have not yet attracted high-quality human resources; lack of human resources for information security. The limitation of this study is that it has not yet analyzed the tasks and solutions for human resource development in digital transformation in Vietnam.

Keywords: Human resources, human resources, digital transformation, Vietnam.

Introductions

In forecasting the situation of the world and the region, especially new factors, new and important characteristics, will have a great influence on the development of Vietnam's land in the coming years, Industry 4.0 said. In general, digital technology and digital economy in particular are always emphasized factors. The political report of the 13th National Congress of the Communist Party of Vietnam has an assessment: "The Fourth Industrial Revolution, especially digital technology, has developed strongly, creating breakthroughs in many fields, creating both opportunities and challenges for all nations and peoples"[12,106]. The 10-year socio-economic development strategy report 2021-2030 has an assessment: "Science - technology, innovation and the Fourth Industrial Revolution are evolving very rapidly, with breakthroughs and impacts. Science - technology and innovation are increasingly becoming decisive factors for the competitiveness of each country. Digital technology will promote economic development. digital society, changing the mode of State management, production and business models,

consumption and cultural and social life"[12,208]. In the current context, Industry 4.0 is a journey with breakthroughs of digital technologies leading to the intelligence of all aspects of society. Digital transformation is the way to go in the development of the 4.0 industrial revolution, and an invaluable opportunity to develop the country.

In Vietnam, digital transformation models are also creating useful services for the people and effectively utilizing the idle resources of the society. However, they also create contradictions and fundamental changes with the traditional business model. New technology strengths are helping startups gain an edge over traditional industrial sectors. This trend creates important changes in industry value chains as well as global supply chains. In the context of the current digital economy, it requires individuals, organizations, businesses and traditional models to make drastic changes in order to continue to exist and develop. With a population of 96 million people and the second fastest growing economy in the region, a dynamic young population and the ability to quickly access high technology, experts estimate that Vietnam has great potential. big in digital transformation. In that context, recognizing the shortcomings that need to be focused on solving to develop human resources in digital transformation in Vietnam is a matter of urgent significance.

Research question

Question 1: What is the Vietnamese Government's view on human resource development?

Question 2: What are the shortcomings that need to be addressed to develop human resources in digital transformation in Vietnam today?

Research purposes

The purpose of the article is to analyze and clarify the existing problems that need to be resolved to develop human resources in digital transformation in Vietnam today.

Research Methods

- Group of theoretical research methods: using methods of analysis, synthesis, and systematization of theories to identify instrumental concepts and build a theoretical framework for the article.

- Group of practical research methods:

- + Observational method: Observe the shortcomings that need to be focused on solving in the development of human resources in digital transformation in Vietnam today.
- + In-depth interview method: Collect opinions from managers, businesses, and researchers to find out the shortcomings that need to be focused on solving in the development of human resources in digital transformation in Vietnam today. .

In addition, the article also uses a synthesis of specific research methods such as: deductive and inductive, logic and history, comparison and contrast between theory and practice.

Results and Discussion

The Vietnamese Government's perspective on human resource development in digital transformation

In Vietnam, the concept of "Digital Transformation" is often understood to mean the process of changing from a traditional business model to a digital one by applying new technologies such as Big Data.), Internet of Things (IoT), cloud computing (Cloud)... to change operating methods, leadership, working processes, and company culture. In some cases, "Digitalization" can easily be confused with the concept of "Digitizing". To distinguish these two concepts, it can be understood that "Digitalization" is the process of modernizing, converting conventional systems to digital systems (such as switching from paper documents to soft files on the Internet). computers, digitizing television to switch from analog broadcasting to digital broadcasting...); while, "Digital Transformation" is about exploiting the data obtained from the digitization process, and then applying technologies to analyze, transform that data and create new values. "Digitalization" can be viewed as part of the "Digital Transformation" process. Digital transformation is increasingly changing the perception of leaders, who have the ability to determine the direction and ability of successful transformation of the organization. The government apparatus of many countries, after realizing the importance of digital transformation in increasing

operational efficiency and ensuring national security, immediately entered a new "race" in the application of digital transformation. Digital transformation is not an exception for Vietnam.

Currently, digital transformation in Vietnam is happening at an unprecedented speed. The actual implementation in the past time shows that one of the factors to promote digital transformation is: Awareness; Institutions; Digital infrastructure; Digital platform; Ensuring network safety and security; International cooperation, research, development, innovation in the digital environment and issues related to human resources. In Decision No. 749/QĐ-TTg dated June 3, 2022 of the Prime Minister of Vietnam on approving the "National Digital Transformation Program to 2025, with orientation to 2030, the Prime Minister of Vietnam Nam has emphasized on preparing human resources for digital transformation to develop digital society. emphasized the promotion of training and human resource development to meet the requirements of political stability, socio-economic development, national defense and security, social order and safety. Decision No. 99/QĐ-TTg dated January 14, 2014 of the Prime Minister approving the Project on Training and developing human resources for information safety and security up to 2020 (Project 99). After the end of Project 99, on January 6, 2021, the Prime Minister signed Decision No. 21/QĐ-TTg approving the Project "Training and developing information security human resources in the 2021- period" 2025". Decision No. 392/QĐ-TTg dated y March 27, 2015 of the Prime Minister approving the "Target program for developing the information technology industry to 2020, with a vision to 2025". In which, there is a group of tasks on information technology human resource development: Strengthening capacity and improving the quality of information technology training for information technology training institutions, giving priority to training institutions. create focus; Closely linking training institutions with organizations and enterprises; Support to organize short-term training courses to improve management skills, knowledge, professional skills and soft skills for human resources; Develop and implement the application of information technology human resource standards. Resolution No. 26/NQ-CP dated April 15, 2015 of the Government promulgating the Government's action plan to implement Resolution 36-NQ/TW dated July 1, 2014 of the Politburo of the Central Committee The Communist Party of Vietnam on promoting the application and development of information technology to meet the requirements of sustainable development and international integration. The Resolution has set out many tasks, including developing information technology human resources of international standards, promoting research, application, acquiring, mastering and creating new technologies, and formulating policies. attraction and treatment, special allowances for cadres, civil servants and public employees working in information technology in state agencies. The above resolution has shown the importance of developing IT human resources as one of the key requirements if Vietnam wants to continue to develop and grow the IT industry as well as to promote innovation. creativity and entrepreneurship. A well-trained IT workforce will also help Vietnam transition to an advanced knowledge-based economy. Resolution No. 41/NQ-CP dated May 26, 2016 of the Government on tax incentives to promote the development and application of information technology in Vietnam, bringing the tax incentive policy solution "50% reduction personal income tax payable on incomes from salaries and wages of individuals with high technology working in the field of information technology...". Directive No. 16/CT-TTg dated May 4, 2017 of the Prime Minister on strengthening the capacity to access the Fourth Industrial Revolution, one of the important solutions is to focus on promoting human resources. information and communication technology and drastically change the policies, contents, and methods of education and vocational training in order to create human resources capable of receiving new production technology trends, in which it is necessary to focus on focus on promoting training in science, technology, engineering and mathematics (STEM), foreign languages, and informatics in the general education curriculum; promote autonomy in universities and vocational training; piloting regulations on vocational training and university training for a number of specific disciplines. Turn population challenges and golden population values into advantages in international integration and division of labor. Decision No. 749/QĐ-TTg dated June 3, 2020 of the Prime Minister approving the "National Digital Transformation Program to 2025, with orientation to 2030" has identified the task of "Selection and training , training a team of at least 1,000 experts on digital transformation for industries, fields and localities, and these experts continue to re-train relevant staff in their agencies and organizations and become a key force. to lead, organize and spread the national digital transformation process". Decision No. 146/QĐ-TTg dated January 28, 2022 of the Prime Minister approving the Project "Raising awareness, universalizing skills and developing human resources for national digital transformation to 2025, orientations to 2030" in order to create a strong change in awareness and actions to promote digital transformation; universalize digital skills for subjects participating in the national digital transformation process, and at the same

time improve the quality and effectiveness of training and development of digital transformation human resources in each industry, field and locality. Most recently, on April 22, 2022, Vietnamese Prime Minister Pham Minh Chinh issued Decision No. 505/QĐ-TTg on the National Digital Transformation Day, taking October 10 every year as the National Digital Transformation Day. number of countries. 2022 is the first year the National Digital Transformation Day is celebrated.

Thus, the view of the Government of Vietnam is very concerned and focused on human resource development in digital transformation. The guidelines and viewpoints of the Government of Vietnam in recent years have also made an important contribution to helping Vietnam achieve positive results, including changes in awareness, digital transformation actions, and building strategies. strategies, perfecting institutions and policies in general, including human resource development in digital transformation.

Shortcomings that need to be focused on solving to develop human resources in digital transformation in Vietnam today

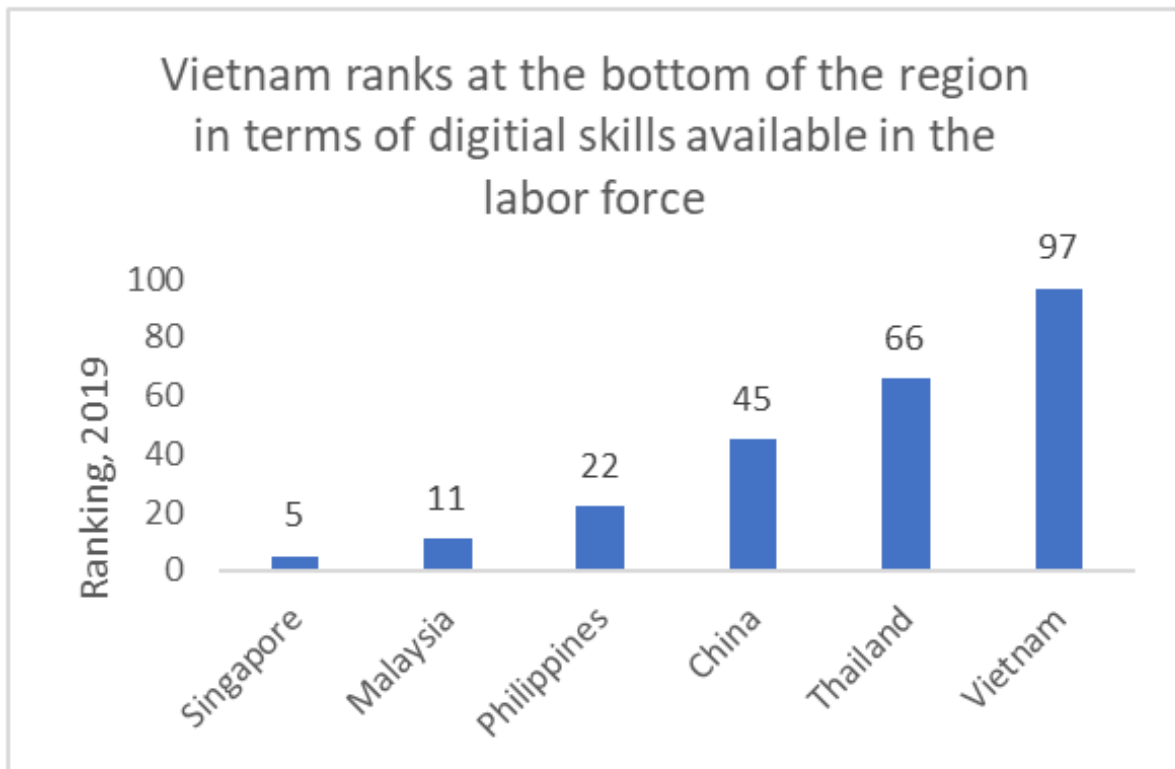
Each economy requires a corresponding production force in terms of its level, especially human resources. Therefore, corresponding to the digital economy, there must be digital human resources to deploy, organize and operate it. The shortcomings related to human resource development in digital transformation in Vietnam, in our opinion, are related to three basic contents: not adhering to the principles of human resource development; lack of necessary skills to fully master digital transformation programs and other issues related to: quality of training in information technology; fierce competition among digital technology enterprises in attracting human resources; have not yet attracted high-quality human resources; lack of human resources for information security.

Firstly, have not adhered to the principles of human resource development

Well-developed human resources to create a national advantage in the digital transformation process in Vietnam is a requirement that has been and is being set. In fact, countries with good human resources have been having great advantages in sustainable socio-economic development of the country. From a less developed country, Singapore rose to become an industrial power thanks to its interest in education and human resource cultivation. Or in the United States, the focus on investing in education has helped this country have high-quality human resources, thereby enhancing its economic, political and social position in the international arena. In order to develop human resources in digital transformation in Vietnam today, Vietnam needs to ensure three principles: (i) Sticking more closely to the actual needs of the market, ensuring the balance between supply and demand for skilled labor career, closely linked with vocational education institutions and enterprises through mechanisms, policies, incentives, encouraging enterprises to participate in the entire vocational education program; (ii) Developing vocational training with international standards and quality to meet the high requirements of domestic and foreign enterprises, so that trainees have professional skills and soft skills suitable for challenges. integration; (iii) Quickly grasping and forecasting the high-skilled human resource needs of enterprises and the digital economy in the coming period is necessary to help guide cooperation between businesses and schools. In the industrial revolution 4.0 with the development of automation, digitization, the demand for skills changes rapidly, some professions will disappear, others appear and others change. Human resources must also be prepared earlier, faster, more up-to-date and in a more realistic approach. Human resource development, especially high-quality human resources, has been and is a "survival" factor, playing a particularly important role in the current digital transformation in Vietnam. It is necessary to identify opportunities and challenges from the industrial revolution 4.0 to the labor market, expanding international integration and digital transformation is an inevitable trend. Employees need to adapt by actively learning and training to have the necessary professional competence and soft skills to catch up with new techniques and technologies applied to the smart economy and industry chemical.

In addition, there is still the situation that digital transformation in some specific areas in society takes place unevenly across regions, regions, and regions, while the digital transformation process requires changes for employees in all areas. all job positions. This will lead to a number of challenges emerging in digital transformation such as: changing working habits; lack of information technology human resources; training and skills development (specialization – technology); employee responsiveness; Information technology infrastructure lacks synchronization and connectivity. The reality also shows that the legal corridor for digital transformation of Vietnam's operational fields still has many gaps, not to mention a number of other inadequacies and intertwined challenges such as: databases; lack of a national database of specific expertise with the national database system

of other socio-economic fields (population, traffic, development of industrial zones, special economic zones) ...); the role and participation of stakeholders has not been clearly demonstrated in any activities; there are no specific regulations and mechanisms in sharing and linking data for digital transformation between related industries and fields; lack of specific and appropriate digital transformation-oriented priorities for each specific sector of society; lack of synchronization and systematic linkage for software; there is no synchronization and connection in the system of reporting and systematic interaction.



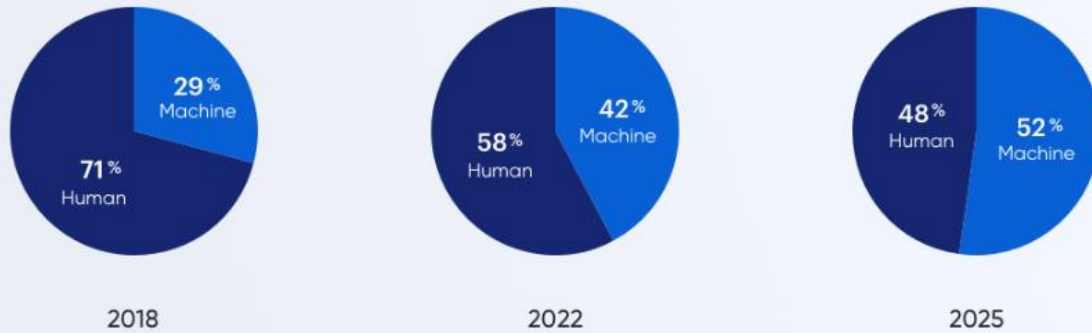
Source: World Economic Forum Competitiveness Report, 2019.

Second, skills and knowledge for employees

Digital transformation not only causes workers to lose their jobs but also creates new ones. Jobs are lost in industries where technology can replace people, but new jobs are created in industries that need the reciprocal complementarity of modern technology and skilled labor. This affects and changes the labor structure and the labor market. In the process of digital transformation, automation systems will gradually replace manual labor, but access to newly created jobs is more or less limited because the domestic workforce is not qualified. equipped with the necessary skills. New skills take time and resources to train, so gaining a new job takes time, while job loss can happen instantaneously. Objectively, in the current context, Vietnamese workers are not really ready for digital transformation and the Vietnamese workforce lags far behind major competitors in the region. on digital skills as well as other soft skills.

Rate of automation

Division of labour as share of hours spent (%)



The working time of machines will increase in the coming years. Source: World Economic Forum. 2020. Davos 2020: Here's what you need to know about the future of work

Therefore, it is necessary to act sooner and more drastically to solve the current problems of labor in digital transformation. First of all, it is necessary to focus resources to address the immediate needs of human resources for priority sectors/areas identified in Decision 749/QĐ-TTg, but in the long term, a training strategy is needed. and re-trained to provide sufficient quantity and meet the requirements of enterprises' increasingly high quality of skilled labor. The types of essential competencies that Vietnamese workers need in the digital transformation process will be:

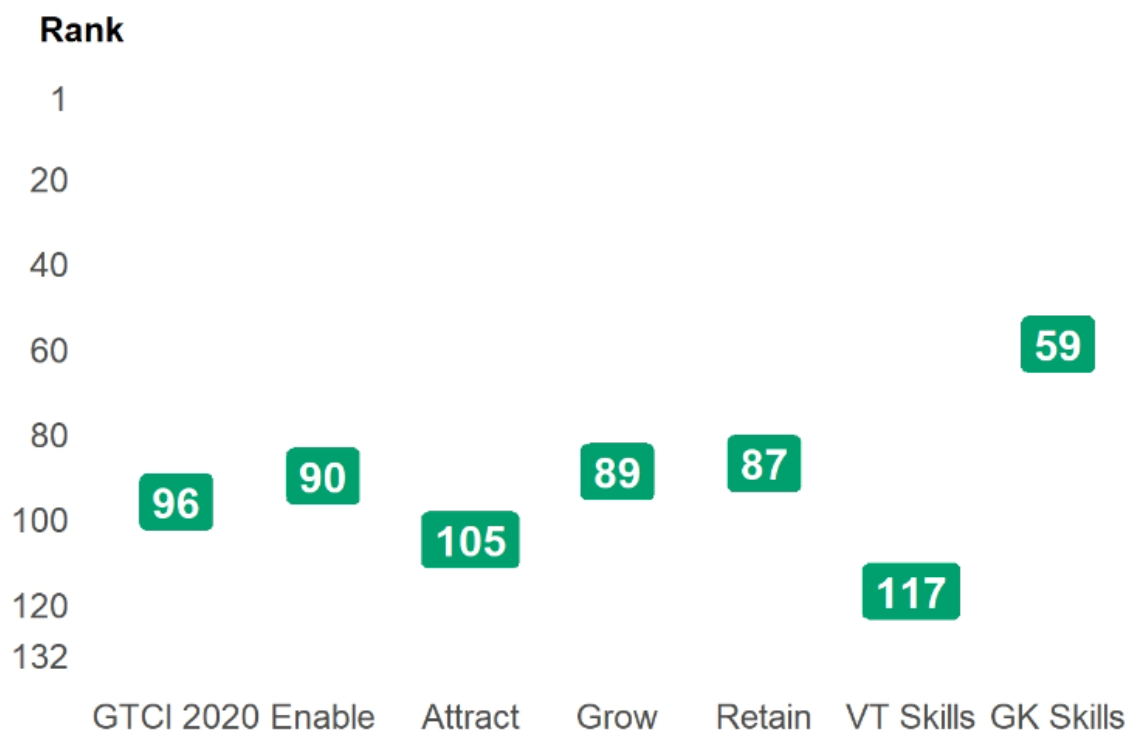
- Leadership: Leadership plays an extremely important role in setting the organization's digital transformation strategy. Possessing a transformative leadership ability means leading people on a new journey, a path with unexplored practices, risks, and opportunities. Businesses with excellent digital leadership have the following common characteristics: Clarity; flexible and steadfast.
- Professional competence: Because digital transformation is driven by systems, competencies in the digital age need to be multi-disciplinary, proficient in digital technology, and need to ask the question of how to apply it. use them effectively for the organization. Ecosystem approach; background thinking; AI and cognitive services; Data science are multidisciplinary competencies that need attention and focus in the process of adapting to digital transformation.
- Competency: To be able to handle disruption in the digital age and adapt to change, mental and emotional traits will shape the way people work in the future. The main way to improve is through: Holistic design thinking; empathy; growth mindset



Top 9 skills of a digital leader. Source: World Economic Forum. 2020. These are the top 10 job skills of tomorrow – and how long it takes to learn them.

In general, the labor market will adjust gradually over time because once the demand for skilled workers increases, the relative wages will increase, thereby encouraging workers and businesses to increase investment in

labor, education and training. But international experience has shown that this adaptation has a certain delay. What about workers? They may not have access to information or the funds to invest in longer-term training programs. Meanwhile, businesses may not want to invest in employee training because it is likely that when their skills improve, they "jump" to another competitor. Acquiring new skills requires investment from both individuals and groups of workers and businesses, but the Government also plays an important role in it. Specifically, the Government should focus strongly on equipping current and future workforce with the digital skills needed to access digital opportunities, through digital skills training programmes, area-specific, increasing opportunities for apprenticeships related to science, technology, engineering, and math (STEM), while placing greater emphasis on "soft skills" in the kindergarten through curricula, grade 12. The labor market needs to be designed to be more flexible, allowing workers to easily move from one field to another. Authorities should provide workers with adequate information on labor market trends and needs to help them make decisions. Technical and vocational education programs need to be improved. In addition, it is necessary to create favorable conditions for highly skilled workers to join or return to work, and to support businesses and workers financially in the process of training new skills. Many countries around the world have adopted one or several solutions to support these actions, and the most successful, such as Singapore or South Korea, have implemented all of them simultaneously. In addition, in order to solve the bottleneck in human resources, it is necessary to have more refresher courses, training courses and seminars to spread information, concepts and knowledge about the digital economy to all audiences; There must be programs and plans to foster and spread knowledge of the digital economy so that everyone is aware of the digital economy from the management team to the implementers. When there are certain insights, there will be a change in thinking and a better digital economy development. At the same time, there should be a strategy for human resource development, the development strategy must come from the central level and the Ministry of Education and Training plays the leading role. Although the potential of Vietnam's digital economy is predicted to reach tens of billions of dollars, if the government does not promote mastery of digital skills and human resources on a mass scale, a wide range of traditional occupations will have potential. The most productive sectors such as agriculture, health care, education, consumption, manufacturing, and banking and finance will experience a serious shortage of human resources and Vietnam will not be able to make good use of this opportunity.



Vietnam's global ranking (GTCI sample of 132 countries)

Third, other related issues

- The quality of training in information technology is not uniform

Although the number of information technology training institutions is many, the quality is not equal. Many schools have small size, weak capacity, facilities, and insufficient teaching staff in both quantity and quality, leading to low quality of training, training students do not meet the training requirements. return or change jobs, causing a great waste of social resources. There are not many training institutions with sufficient capacity, equipment and training methods to meet international standards, and the quality has not met the demand. New graduates lack soft skills, English, open thinking, self-study skills, teamwork skills... In addition to some leading universities, research and teaching activities in universities. Research is still limited, not tied to reality, not many scientific research results have been commercialized and marketed, and funding for scientific research by universities is still limited. The international cooperation of universities in research and teaching is still formal and less effective. Most universities still lack international scientists.

- Fierce competition among digital technology enterprises in attracting human resources

Digital technology enterprises often compete fiercely in attracting human resources by paying high salaries, pushing up the salary level of human resources in information technology. This leads to a situation of job-hopping workers, a lack of people in enterprises when implementing projects, reducing the competitiveness of Vietnamese IT human resources compared to other countries in the region.

- Failing to attract high-quality human resources

Many agencies and organizations have not really paid due attention in training and human resource development to create digital human resources in quality and synchronous digital transformation from central to local levels. The development of high-quality digital human resources in state agencies is still limited, especially in localities. This, on the one hand, comes from the state environment that has not yet created an attractive attraction for high-quality digital human resources. On the other hand, the source of income and remuneration for human resources in state agencies is very low compared to private organizations and enterprises. The treatment solutions for information technology human resources in state agencies have not yet been concretized by the policies and regulations of the State.

- Lack of human resources for information security

Funding for the implementation of training and development tasks of cyberinformation security human resources under the Project on training and developing information security human resources is limited. Although the investment has been interested, however, the annual funding is still low, not enough to meet the actual needs. This is also part of the reason why it is difficult to send lecturers and researchers to study abroad.

Although, the number of students graduating every year is quite large, however, quality is a matter of concern. This comes from a number of objective and subjective reasons such as: The quality of training and the quality control of graduates are not uniform; technologies are constantly changing, requiring information security training to change accordingly; there has not been a large enough connection between training institutions and organizations and enterprises with human resource needs; For high-quality information security training, schools need to invest in technology systems and laboratories that require high costs. Information security is a difficult field, to become a high-quality engineer or bachelor, students need to have good skills and background. In addition, students majoring in this major, if they do not have an early career orientation, are not educated in professional ethics right from the time they are at school, may cause negative effects. Many agencies and organizations have not really paid due attention to the training and development of human resources to create quality and synchronous information security human resources from central to local levels. The development of high-quality cyberinformation security human resources in state agencies is still limited, especially in localities. This, on the one hand, comes from the state environment that has not yet created an attractive attraction for a high-quality workforce. On the other hand, the source of income at state agencies is still low compared to private organizations and enterprises. Currently, the remuneration level for information security personnel at non-state organizations and enterprises is relatively high.

Conclusion

In the modern world, when gradually shifting to a knowledge-based economy and in the trend of globalization, international economic integration and argument shifting, human resources increasingly play a decisive role. Recent growth theories indicate that an economy that wants to grow rapidly and at a high rate must be based on

at least three basic pillars: the adoption of new technologies, the development of modern infrastructure, and the development of modern infrastructure. improve the quality of human resources. Vietnam has also achieved many outstanding results in building a digital government, digital economy, and digital society. Awareness of the importance of digital transformation continues to change relatively clearly at all levels and sectors, especially the heads. From transforming awareness leading to stronger action, most ministries, branches and localities have issued resolutions of committees, 5-year and annual government plans on digital transformation; The Digital Transformation Steering Committee of all 22/22 ministries, branches and 63/63 localities was established and put into operation. The transformation of State management activities from the traditional method to the application of information technology, from paper documents to the digital environment has been promoted and achieved initial results that are very respectable; Many practical products and services are offered to serve people and businesses in a timely and effective manner. The work of perfecting institutions, mechanisms and policies has received attention from leadership and direction, achieving positive results, creating a legal environment for digital transformation. The Government and the Prime Minister have issued 8 important documents on digital transformation (6 Decisions, 1 Directive, 1 Decree), including approval October 10 every year is the National Digital Transformation Day. family. Information technology infrastructure and digital platforms continue to be developed from the central to local levels, meeting the increasing demand for digital transformation. Human resources for digital transformation are focused on developing, diversifying forms of training, retraining and training. This study was conducted in order to analyze and clarify the existing problems that need to be resolved in order to develop human resources in digital transformation in Vietnam today. The article also summarizes the views of the Vietnamese Government on human resource development in digital transformation, according to which the policies and views of the Vietnamese Government in recent years have also made an important contribution to the development of human resources. helping Vietnam achieve positive results, including changes in awareness, digital transformation actions, strategy formulation, and improvement of institutions and policies in general, including human resource development in digital transformation. change number. The study also pointed out the shortcomings related to human resource development in digital transformation in Vietnam related to: not adhering to the principles of human resource development; lack of necessary skills to fully master digital transformation programs and other issues related to: quality of training in information technology; fierce competition among digital technology enterprises in attracting human resources; have not yet attracted high-quality human resources; lack of human resources for information security. The limitation of this study is that it has not yet analyzed the tasks and solutions for human resource development in digital transformation in Vietnam.

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