

# Human Resource Management of Logistics in Vietnam: Status and Policy Solutions

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Along with the strong development of science and technology and the trend of globalisation, logistics activities from production to consumption play an increasingly important role in the competitiveness of enterprises in the manufacturing industry – both services and the entire economy. Vietnam is one of four Southeast Asian countries with great potential to develop both infrastructure and logistics systems. An action plan to improve competitiveness and develop logistics services was released in Vietnam, with projections to 2025, showing the government's interest in this very important sector of the economy. Indeed, human resources are the most difficult problem of the logistics industry today because, due to rapid development, the human resources of this industry are both insufficient and poorly trained. Therefore, research on issues related to logistics services has attracted the attention of many scientists as well as managers, both at home and abroad. This article provides an overview of the current situation of human resources in the logistics service industry in Vietnam, analyses the causes of the limitations and provides a suggestion for developing human resources for this service industry. It also investigates the real situation of human resources of the logistics industry and proposes solutions to develop human resources to improve the competitiveness of Vietnam's logistics in the global service chain.

**Key words:** *Human resource management, logistics, policy solutions, Vietnam.*

## Introduction

Logistics is seen as part of supply chain operations. The supply chain is an arrangement between companies linked together to bring products or services to market. The function of logistics includes not only forwarding and transport, but also other activities such as warehousing, storage of goods, packaging, rotation of goods and handling of damaged goods. If logistics is done well, it can ensure better service and lower costs, which benefit businesses and the economy. From a macro perspective, human resources are understood as the overall

social labor capacity of a country in general or each locality and organisation in particular (Bukova et al., 2018). Currently, all countries in the world have put the issue of human and human resources at the centre of the national, economic and social development strategy (Hidayati et al., 2019). Researchers and businesses are aware of the importance of building and developing high-quality human resources. Because human resources are a determinant of economic growth, their development is not only a driving force for the development of the knowledge economy, a factor promoting economic restructuring and increasing workers' incomes, but also a driving force for international economic integration (Banomyong, Thai & Yuen, 2015).

Decision 200/QD/Prime Minister outlined a number of specific development goals of the logistics industry by 2025, with a growth rate of 15–20 per cent, the proportion of contribution to GDP increasing from 8 to 10 per cent; the rate of outsourcing rising to 50–60 per cent; logistics costs equivalent to 16–20 per cent; and the national capacity index being ranked from 50 upwards (Thai, Yeo & Pak, 2016). According to the Vietnam Association of Logistics Services Enterprises, there are currently more than 3000 enterprises participating in providing logistics services, of which, 70 per cent are based in Ho Chi Minh City. There are some 1300 active enterprises, including 89 per cent with 100 per cent domestic capital, while the rest are foreign-investment enterprises. However, Vietnam's logistics industry is facing many challenges, especially human resources issues. Human resources currently do not meet the requirements of the logistics service industry, lacking both the quantity and quality of high-quality human resources. There are about 200,000 professional employees among a total of nearly one million people (Tongzon & Lee, 2016).

Human resources in logistics industry lack comprehensive knowledge and ICT skills are limited, not keeping up with the development progress of the world logistics industry. Only about 4 per cent of human resources in the logistics industry are proficient in English, and 30 per cent of businesses have to retrain their employees (Athirah, Musa & Keng, 2019). Meanwhile, the national human resources demand by 2025 is projected to be about 300,000 professional, qualified ICT employees, out of about 1.2 million people working in logistics. English is also needed to meet the requirements of the Industrial Revolution 4.0. According to a survey of 108 enterprises of the business association in September 2017, nearly 50 per cent of companies need to recruit between 15 and 20 per cent more employees in the near future (Dallasega, Rauch & Linder, 2018). There is little cohesion between enterprises and schools, and it does not meet the needs of businesses. The logistics management industry will show a trend of labour-intensive development in the coming years. Students in this field can work in businesses of many disciplines with the task of managing business strategy, planning transportation policies, designing efficient transport chains, performing international business operations, and analysing and planning production and business. Currently, there are many people working in logistics, but due to lack of updated information they are unaware that they



are involved in this field (Zainal & Jeevan, 2019). A survey by the Ho Chi Minh City Development Research Institute on the quality of logistics human resources shows that 53.3 per cent of businesses lacked qualified staff and logistics knowledge, 30 per cent of businesses had to retrain staff and only 6.7 per cent of businesses were satisfied with the expertise levels of staff. This shows that human resources in logistics are of very low quality (Rodríguez-Espíndola, Albores & Brewster, 2018).

The logistics industry is a service industry with a wide range of activities at a global level, so it is necessary to be careful, industrious, hard-working and broad-sighted to cover all issues. Difficulties in the profession also depend on each stage and each job – for example, the stage of documents about the time of completion; the application of new regulations in the process of import, export or transportation; pressure on transparency when producing goods; agent pressure on time zone differences or cultural differences. The Prime Minister's Decision No. 175 QD-TTg of 27 January 2011 approving the 'overall development strategy of Vietnam's service sector to 2020' clearly states: 'Consider logistics as a key factor to promote production development, distribution systems of other services and goods circulation.' This shows that logistics development and logistics human resources have become a national program. Demand for logistics human resources will continue to increase in the future and the field will attract hundreds of thousands of young employees (Nguyen, 2019).

Due to the fact that the logistics service market has only recently developed in recent years, the outstanding human resources are young, dynamic and adventurous, and willing to face challenges and risks (Wang et al., 2018). The young labour market holds great potential for human resources if they are properly and methodically trained. Vietnam has a young population, so human resources are plentiful and relatively cheap (Nguyen, 2019). This is an advantage that businesses operating in the field of logistics need to focus on fully exploiting and promoting. With the Industrial Revolution 4.0 booming in Vietnam, logistics and supply chain management are among the most useful tools to help businesses link different stages internally or between businesses (Chen, Tabssum & Nguyen, 2019). Logistics and supply chain management can be applied in many economic sectors and in any type of business (Tham & Chiadamrong, 2016). Therefore, logistics is an important component of economic development (Hoang & Pham, 2019).

As a backbone industry in the field of logistics, the labour resources in logistics do not meet the development needs of the labor market or the technology development trend of the industry. The article analyses the current situation of logistics human resources in Vietnam to demonstrate that human resource management is a major challenge not only for businesses providing logistics services but also for the entire economy. The authors believe that in order to reduce logistics costs from 18 per cent of GDP to around 11 per cent, there needs to be a focus on the training and improvement of human resources. This is in addition to investing in

technical infrastructure, improving delivery ability, upgrading logistics service quality, improving customs clearance, shortening time and reducing costs. Therefore, solutions to improve the quality of logistics human resources management will be the focus of this article.

## **Literature**

### ***Theory of Human Resource Management***

Human resource management is the science of managing people based on the belief that human resources play a central role in the long-term success of organisations and businesses. An organisation or business can increase its competitive advantage by employing workers effectively, taking advantage of their experience and ingenuity to achieve the set goals. Human resource management aims to recruit people who are competent, quick and devoted in their work, manage their operations, reward their performance and develop their capabilities (Shamim et al., 2016). It is hard to imagine that just a decade ago, the term ‘human resource management’ was rarely used, at least outside the United States. However, it has become familiar and popular globally, and attracts regular research (Huo et al., 2015).

Although there have been a large number of books, newspapers and conferences about human resource management, the field is still in its infancy, so many contradictions and contradictions exist (Zhang, Li & Phuong, 2019). These include issues such as the nature and field of human resource management, characteristics of personnel activities, scope, and the causes and effects of personnel activities. ‘Human resource management is an essential input to increase business efficiency’ (Rodríguez-Espíndola et al., 2018). Under the European Foundation for Quality Management (EFQM) model, human resource management criteria include factors such as planning, management and human resource capacity building; identifying, developing and maintaining the knowledge and capacity of workers; encouraging participation; and empowering workers. All these factors have an impact on business results because human resources are the main fixed assets of the enterprise. Human resource management (HRM) has a particularly significant impact on manufacturing operations. (Sparrow, Brewster & Chung, 2016).

There have been many definitions of human resource strategy management (SHRM), which represent a variety of interpretations of SHRM. Knies and colleagues (2015) consider SHRM to be ‘a system of human resources to meet the needs of business strategies’. Jiang and Messersmith (2018) refer to it as ‘the characteristics of actions related to personnel in order to enable businesses to achieve business goals’. These two definitions move from describing SHRM as a ‘reverse’ management area in which HRM is seen as a tool to implement the strategy, to viewing it as a ‘pioneer’ task in which human resource mobilisation activities can help businesses to formulate business strategies (Chen et al., 2019). The definition introduced by Guest (1987) and Wang and colleagues (2016) is more comprehensive, clearly

demonstrating the relationship between HRM and business strategy. These researchers believe that SHRM integrates HRM policies and actions with a business strategy (Phuong, 2019).

### ***Theory of Logistics***

#### *The concept of Logistics*

Before the 1980s, logistics was understood as ‘physical distribution (PD) and warehouse management activities in the circulation of finished goods and services’. This is the concept of logistics in the narrow sense (outbound logistics), whereby logistics is only associated with activities related to the management of production outputs (final goods and services), such as transport, distribution, storage of goods, inventory management, packaging, sorting and labelling (Lai & Cheng, 2016).

In 1988, the US logistics management concept stated that:

Logistics is the process of planning, implementing and controlling the flow and storage of raw materials of process goods, finished goods and relevant information from the procurement of raw materials to consumption, with the aim of satisfying consumers’ demands.

This definition lists the basic activities of logistics, emphasising that logistics includes a series of uninterrupted activities from the planning stage, to carrying out and controlling the flow of storage, transportation of raw materials, semi-finished products, finished products and information from purchase until consumption. At the same time, it also speaks of the purpose of logistics, which is to satisfy consumer requirements (Wu et al., 2017).

According to the teaching materials of the World Maritime University:

Logistics is the process of optimising the location, storage and transportation of resources or inputs from the point of origin as a supplier, through manufacturers, wholesalers, retailers, to consumers through a series of economic activities. (Pham & Lee, 2019)

This concept emphasises the purpose of logistics activities. The point of optimising location, storage and transportation is the fundamental difference between logistics and other economic activities, so it is reasonable to emphasise this purpose when defining logistics. However, this definition does not cover the whole meaning of the concept of logistics; it lists activities related to inputs and resources, but does not specify the storage and transportation of goods and non-physical factors such as information through each stage of the production process, circulation and reaching consumers (Zhang et al., 2011).

The president of the Logistics Research Institute of Georgia, Edward Frazelle, said that, ‘Logistics is the process of movement of materials, information and currency from the supplier to the final consumer.’ This is a brief definition, emphasising the aspect of information and currency flow in logistics, but such a definition is incomplete. The word ‘supplies’ in the Vietnamese dictionary is understood as the materials, machines and tools needed for production and construction in general, so it is narrower than the object that the logistics implies. Moreover, this definition does not describe the purpose of logistics activities (Montoya-Torres, Muñoz-Villamizar & Vega-Mejía, 2016).

A relatively common definition of logistics is: ‘Logistics is getting the right things at the right place and time’ (Panigrahi et al., 2018). Although used relatively commonly, this is not a standard definition because it does not include the content of activities, or the operation of this concept. (This definition only shows us the purpose of logistics.) This definition is also one reason why logistics has become a vague concept, leading to a lack of understanding and confusion. Article 233, Section 4, Chapter VI of the Commercial Law of 14 June 2005 states:

Logistics services are commercial activities, whereby traders organize one or more stages including receiving goods, transportation, storage, warehousing, customs clearance, other paperwork, customer advice, packaging, marking code, delivery or other services relating to the goods as agreed with the customer for remuneration. (Barata, Rupino Da Cunha & Stal, 2018)

In summary, much controversy has surrounded the definition of logistics. There are so many different concepts about the definition of logistics because logistics is not a single activity but rather a series of activities for the process of production, distribution and circulation. Moreover, over time, along with the development of production and social division of labour, these activities have expanded and developed. The content of the concept of logistics therefore changes across time and space. This has led to the emergence of different definitions of logistics at different times and in different places. The latest definition made by the US Supply Chain Management Professionals Council in 2001 is more accurate and comprehensive, whereby logistics is defined as a part of the supply chain cycle, including planning and implementation processes and effectively controlling the storage and movement of goods, services, two-way information between the starting point and the point of consumption in order to meet the needs of customers (Govindan, Soleimani & Kannan, 2015).

According to this definition, logistics is an integral part of the supply chain, involving all stages from importing raw materials and fuel through producing goods and putting them into circulation, and distribution channels to reach end consumers. In each stage, logistics activities include planning, implementing and controlling to achieve high efficiency. In this definition,

the perspective of 'reverse logistics' appears to have taken a further step to expand the content of logistics compared with the definitions above. Reverse logistics refers to the management and movement of supplies, waste and returned goods back to the manufacturing process. It also refers to the activities of receiving, managing and processing feedback sources from customers – an increasingly important position in the competition.

### *Characteristics of Logistics*

Logistics encompasses a range of operations, from planning, implementation management and storage flow control to transportation of resources (materials, semi-finished products, finished products, goods), finance, information from supplier to warehouse, through factories, factories, warehouses, wholesalers, retailers and to consumers. In order to effectively bring goods and production factors from suppliers to consumers, it is necessary to organise a series of ongoing logistics activities that are organically related: from research, planning, organisation, management, testing and control to accomplishing goals. Logistics management usually includes sourcing and procurement, planning and production schedules, packaging, assembling, managing in and out-of-business transportation, fleet management, warehousing, material handling, order fulfilment, logistics network design, inventory management and customer service. Logistics involves all levels of planning, strategy formulation, action and tactics. Each stage of the logistics process has basic characteristics, but the stages have an interaction, closely related to each other; efficiency in one stage is a premise for deploying activities in the next stage, affecting the overall efficiency of the system. Throughout the process, customer satisfaction and the overall benefit of the business are the key goals. Efficiency is important overall, particularly economic efficiency.

The objective is to impact the inputs and outputs of the production process. This can be tangible elements such as supplies, goods, raw materials, semi-finished products, finished products or waste products, and returned goods, and also intangible factors such as capital, technology, human resources and information. The essence of the logistics process is the process of site optimisation (selecting and arranging infrastructure network) and optimising the motor flow (planning the flow of the above impact objects to meet customer needs optimally in relation to the potential of the business). The general goal of logistics is to get what is needed at the right place and time at the lowest possible cost. In other words, the goal of logistics is to provide the right amount of the right element, at the right place at the right time, for an optimal cost.

Logistics is part of the supply chain, a network of materials, goods, information and currency flows between organisations (Álvarez-SanJaime et al., 2013). This closely linked network includes the actors involved in the flow of goods and services, the infrastructure network (such as factories, warehouses, ports, distribution centres), the means of transport and the information system. These are linked by the process of buying, selling and exchanging products and services. Logistics is the

activities and services deployed to activate that supply chain; it includes activities that connect all the links in the most optimal way to satisfy the needs of customers.

### **Logistics Human Resources Situation in Vietnam**

In the context of fierce competition in international integration, Vietnam's logistics service industry requires the development of high-quality human resources, in terms of skills, professional knowledge and specialised English language. However, human resources in Vietnam's logistics industry are still lacking in quantity and weak in quality. According to a study by the Vietnam Logistics Research and Development Institute in 2017, Vietnam now has more than 3000 businesses operating in the field of logistics (excluding shipping companies, land, sea, air, courier, ports) and, on average, each company has 20 employees. The average human growth is about 7.5 per cent each year. This personnel growth is considered to be lower than the average growth of the logistics service industry, of 15–20 per cent each year. This personnel growth includes technology application as well as management performance improvement. If the growth rate of 7.5 per cent remains constant for the period 2016–30, 117,532 people will need to be trained. If we count the labour force at the shipping companies, land, sea, air, couriers, ports and freight stations, there are about 200 companies. Each company has an average of 400 people with a 50 per cent training rate and a growth rate of 5 per cent each year. At least 100,000 more people will therefore need to be trained in the next 15 years. Thus, the total number of personnel required for training over 15 years is more than 200,000 people (Nguyen, 2019).

Yet available labour for logistics services currently only meets about 40 per cent of demand in Vietnam. Most logistics service companies in Vietnam today are experiencing shortages of highly qualified human resources in terms of skills, professional knowledge and specialised English proficiency. Most workers in this sector have not been properly trained. Therefore, enterprises have to spend a lot of time and money to retrain their staff, not to mention the 'bleeding' of human resources to enterprises based on foreign investment.

**Table 1:** Assessment of logistics human resources of businesses (Yoon & Doan, 2018)

<b>Content evaluation of the business</b>	<b>Ratio %</b>
Lack of qualified staff and logistics knowledge	53.0
Retrain staff	60.0
Satisfied with the staff's qualifications	6.7

The current human resources for logistics services are trained from various sources. The management team are often the key officers assigned to logistics companies. This team is often trained and retrained to meet the management needs of businesses. Most of them lack business knowledge and experience, and they are not updated with new knowledge. Leadership and

management styles do not meet the requirements of the job. Most professional staff graduated from university, but from non-logistics majors. Most people in the direct labour force, such as: loading, unloading, driving, inventorying, etc., have low education levels and have not been trained in a professional manner. According to a survey of the Vietnam Logistics Research and Development Institute (2017), 53 per cent of Vietnamese businesses lack qualified staff and knowledge of logistics, 30 per cent of businesses have to retrain their employees and only 6.7 per cent of businesses are satisfied with their expertise (Nguyen & Nguyen, 2018). VCCI's 2018 PCI report showed that 29 per cent of FDI enterprises said they met demands when assessing the quality of the local labour force, but 67 per cent felt they only partially met demands. Some 74 per cent of businesses said it was difficult to recruit technical staff, while 84 per cent said it was difficult to recruit for supervisory positions.

**Table 2:** Actual situation of logistics training forms at enterprises (Pham, 2019)

<b>Forms of training</b>	<b>Ratio %</b>
Through daily work	80.26
Through domestic courses on logistics	23.60
Through international training courses on logistics	3.90

According to forecasts, in the next three years, logistics service enterprises will need about 18,000 more workers, while manufacturing, trading and service enterprises will need over one million personnel with logistics expertise. Logistics service companies in Vietnam face a shortage of highly qualified human resources. Meanwhile, the current supply of labour for logistics services only meets about 40 per cent of actual needs. Managers are often key people, trained and retrained; however, they lack knowledge and business experience, rarely update knowledge, and their leadership style has not kept pace with needs. With the advantage of being located on a convenient maritime trade axis, Vietnam has favourable conditions to become an international trans-shipment centre for sea freight. Vietnam's ports have invested on a large scale, and are capable of receiving ships of over 100,000 tonnes. There are 70 international routes, making it very advantageous to develop logistics services. According to Vietnam Logistics Business Association research, logistics companies (excluding shipping companies, land, sea, aviation, courier, ports) from now to 2030 will need new and methodical training for about 250,000 employees. Many positions lack human resources from leadership to management, supervision and professional staff (Nguyen, 2016).

The Vietnam Logistics Research and Development Institute (VLI) has conducted a survey of human resources needs for the logistics service industry, focusing on key issues of the industry such as recruiting and training logistics staff. The survey results show that the labour force of logistics enterprises in Vietnam is small (fewer than 50 employees), accounting for 32.4 per cent, and large-scale enterprises (over 1000 employees) account for only a small proportion of – about 10.8 per cent (Wang et al., 2018). In addition, the survey also shows that of the demand

for the job position of logistics staff in enterprises, the highest proportion is still customs broking, with a rate of 70.3 per cent, followed by general freight forwarder position at a rate of about 59.5 per cent. A new position in the logistics industry, the online marketing officer (e-commerce online marketing officer), accounts for 32.4 per cent. The demand for human resources in the field of customs declaration and forwarding still accounts for the highest proportion, and we also need to pay attention to newly developed industries related to the era of technology 4.0.

### **Solutions and Recommendations**

Well-trained and skilled human resources will be the basis for the development of Vietnam's logistics industry in the context of integration, contributing to promoting Vietnam's logistics service sector to overcome current difficulties in order to be able to steadily develop, contributing to the country's economic development in general. In this context, in order to improve the quality of human resources in the logistics service industry, we need to deploy the following strategies.

First, it is necessary to strengthen coordination among ministries, departments and sectors related to logistics services, especially the Ministry of Transport, the Ministry of Education and Training and the Ministry of Industry and Trade. These ministries and agencies need to work closely together to clearly define the roles, functions and responsibilities of each party in the overall logistics development strategy and human resources in logistics services in particular. This will help to create favourable conditions for the development of human resources for the logistics service industry, meeting practical needs in the context of the country's increasingly deep international integration. The government needs a clearer direction for the development of the logistics service sector. First, it is necessary to consider having enough factors to call the logistics service area an independent 'industry', and to decide whether it should develop into an independent industry. There are appropriate directions for this service area, including human resource development plans. Legal documents need to be produced to realise the concept of logistics services in the Commercial Code.

Second, existing training programs need to be expanded and upgraded. Vietnam needs to expand its logistics major at universities with related majors or majors such as law, finance, foreign trade, economics and trade, and so on. It is therefore necessary to revise the logistics training code at the current undergraduate and graduate levels. If logistics and supply chain management are in the current level IV training code, only universities in the industry of industrial management and technical infrastructure can provide qualifications in logistics training and supply chain management. Meanwhile, non-core universities in industrial management and industrial infrastructure do not have the opportunity to train students in logistics and supply chain management. At the same time, separate logistics specialised

training institutions need to be established. In addition, providing advice to students choosing logistics majors when registering for college entrance exams can play an important role. This is a promising industry with a big future and an attractive salary; however, many students and parents do not have enough information and lack an overview of this field.

Universities also need international cooperation on training, curriculum development and curriculum, and reference materials for logistics training and supply chain management. At the same time, schools also need to combine with businesses with long experience in the profession, to create an environment that will help students practise in businesses in this field right from the second and third years. This will give them a better view of career prospects, and grasp the requirements of the profession as well as the provisions of the law and international practices related to logistics activities, as well as develop an intensive program on transport supply chain management to select packages from production to consumption, including many different modes of transport, such as road, rail, sea and air.

It is also necessary to equip students with knowledge about international marketing, supply chains, distribution systems, freight forwarding, strategic management and construction – including the management of warehousing systems and transportation methods. Loads save costs and time in delivering goods. Students should be provided with in-depth specialist knowledge of logistics, human resource management, transportation law, supply chain management, distribution system management, freight forwarding, warehousing, exploiting multimodal transport and specialised English language. Hopefully, after graduation, students can confidently work in multimodal transport service enterprises as well as international and multinational companies in logistics services. In addition, schools need to foster lecturers or cooperate and link with prestigious foreign schools and logistics companies in developed countries such as Japan, Korea and Singapore. They can also train their faculty and students through inviting logistics experts to share experiences in the logistics industry of Vietnam to keep up with the speed of logistics development in the world today.

Third, links need to be established between the school and business. Regular meetings and exchanges should be organised between experts, logistics managers of logistics enterprises, businesses with high demand for logistics and universities with majors related to logistics. Through exchange, schools know the recruitment needs of businesses to build training programs that are in line with those needs. At the same time, businesses in the field of logistics can assist schools to coordinate internships for students. Importantly, it is necessary to strengthen the organisation of seminars and exchanges, and invite leading experts and foreign enterprises to participate in seminars and update knowledge on logistics.

Finally, the role of medium and short-term training programs conducted by institutes, centres, associations and training companies should continue to be promoted. These organisations should be encouraged to plan training cooperation with foreign experts or organisations in

countries with strong and effective logistics service industry. These short courses should focus on specialised areas of work or operations specific to a job task, or the overall knowledge training, or advanced knowledge for middle and senior managers.

In addition, professional courses can help students to apply knowledge immediately to their job as well as introduce a disciplined working style and high levels of cooperation in the logistics service industry. These courses play an important role in the process of quickly adding human resources to the logistics service sector. Advanced courses help managers to gain a comprehensive view of the service supply chain that their business wants to provide, thereby taking measures to improve the service quality of the business. Associations are responsible for seeking regular training funds, attracting foreign partners to participate in training staff for Vietnamese logistics service companies in order to accelerate the number of trained staff. Specialised, professional English is also needed in logistics to meet standards required in the logistics industry in Vietnam today.

## **Conclusion**

The factors needed for logistics are equipment, procedures, IT technology, laws and human resources (also known as hardware). Only when human resources are fully equipped with the foundation, systematic, international standard in the logistics industry will human resources be considered as the ‘software’ of the industry – a sufficient condition to create resilience and sustainable development. The demand for human resources in logistics is very high; however, graduates of universities, colleges and vocational training courses do not meet employers’ requirements for both quality and quantity. Building human resources in logistics in Vietnam requires the active participation and commitment of stakeholders, including the government, local authorities, logistics companies, and universities, colleges and vocational schools.

The twenty-first century is the century of the ocean, and the development of the marine economy is a strategic issue. In particular, human resources play a decisive role in logistics development and the marine economy, in the process of accelerating industrialisation and modernisation. Human resources serving the development of logistics and the marine economy are still limited, and do not fully meet the potential of Vietnam’s marine economic development. However, with the changes in awareness, and a change in thinking about a logistics development strategy and Vietnam’s marine economy, the marine economy will reap rewards worthy of its inherent potential.

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