Recommendations Enhancing the Efficiency of the Logistics Management in Vietnam

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Abstract: The need of the logistics development, it is necessary to develop into the group of companies which are domestic companies, import-export companies and foreign invested companies. According to the World Bank, Vietnam has a relatively low logistics industry and still promises high potential with high growth. The high level of imports and exports are developing and the high level of retail sales show that these are factors that strongly promote the development of logistics. As foreign invested enterprises have been occupied by foreign logistics enterprises, the market contains the demand that Vietnamese logistics companies can occupy are domestic enterprises and import-export companies. Paper objective is to be able to discover and give recommendations for the logistics market, it is very important that local companies need to increase their awareness of the benefits of logistics services. The study results showed that there were 200 the managers of enterprises in logistics services in Vietnam who interviewed and answered about 13 questions. The results showed that there were three factors following human resource, Economic environment and information technology. In addition, all of three components affecting the efficiency of the logistics management in Vietnam with significance level 5 percent. The research results processed from SPSS 20.0 software. The researchers have recommendations for improving the efficiency of the logistics management in Vietnam in the future.

Keywords: Industry 4.0, IT, logistics, management and LHU

INTRODUCTION

Developing logistics service is a very important requirement as most of Vietnam logistics companies that focusing on exploiting small areas in logistics supply chain, which is the most common form of freight forwarding. This is a very small part of the whole logistics value chain. Enterprises need to develop more diversified services such as air freight forwarding, maritime logistics, fast consolidation, order management... In order to approach the supply of new services, logistics companies need to ensure service quality and cost reduction of the services provided such as upgrading old infrastructure, purchasing new specialized equipment, applying advanced logistics management methods, applying modern quality standards during the operation and development on logistics management.

Besides, the logistics enterprises are small, the capacity is limited, so the majority of Vietnamese enterprises provide services in a single way. Therefore, in the coming time, enterprises need to strengthen joint ventures and partnerships with foreign partners when providing services so that the process of providing logistics services is complete according to a standard procedure. Jointing ventures with foreign partners will bring many benefits for enterprises, helping enterprises learn management experiences, methods of managing logistics systems, gaining support and financial support, broader market access...

Vietnam with the advantage of being located on the axis of cross-border trade, Vietnam has favorable conditions to become an international cargo transport hub. Besides, Vietnam is due to the hot development, the supply of human resources to the logistic market in Vietnam is now seriously deficient. Logistics manpower is now trained from a variety of sources. The management team is usually the key personnel to be dispatched to logistics companies. This team is trained and re-trained to meet management needs. Most of them lack knowledge and business experience, little update new knowledge, leadership styles and management have not met the requirements. Most of the graduates are from the non-logistics sector, but young people have not been involved in policy making. Direct labor force such as loading and unloading, loading, unloading, driving, tallying goods are most of them have low education level, not trained professionally.

Moreover, Vietnam is to diversify types of logistics service providers in terms of forms, sizes and methods of operation. It is necessary to simplify the administrative procedures as well as conditions for joining and withdrawing from the market so that the more mobilized investors and businesses participate in this market. Facing this situation, the researchers had chosen topic “Recommendations enhancing the efficiency of the logistics management in Vietnam” as a paper. The paper purpose helps policy makers of the logistics services who apply them for improving policy on the management of the logistics management in Vietnam for the future.

LITERATURE REVIEW

Human resources are the people who make up the workforce of an organization, business sector, or economy. "Human capital" is sometimes used synonymously with "human resources", although human capital typically refers to a narrower view (i.e., the knowledge the individuals embody and economic growth). Likewise, other terms
sometimes used include "manpower", "talent", "labor", "personnel", or simply "people".

A human-resources department (HR department) of an organization performs human resource management, overseeing various aspects of employment, such as compliance with labor law and employment standards, administration of employee benefits, and some aspects of recruitment and dismissal. Human resources are key elements that contribute to the success of a firm’s performance. HRM practices are intangible resources that contribute to sustained competitive advantage by enabling the development of knowledge that is embedded in the firm’s culture and history, and by virtue of this context-specificity, is largely inimitable. As a lack of logistics expertise has become a critical issue in the logistics service industry in Vietnam, making improvements in recruiting, training and retention is not only essential factor to tackle the skill shortage problem, but also an important means to build competency internally. (By Heneman III, Herbert; Judge, Timothy A, 2005).

**Human resource (HR):** It play an important part of developing and making a company or organization at the beginning or making a success at the end, due to the labor provided by employees. Human resources are intended to show how to have better employment relations in the workforce. Also, Human resources are to bring out the best work ethic of the employees and therefore making a move to a better working environment.

Besides, the development of human resources is essential for any organization that would like to be dynamic and growth-oriented. Unlike other resources, human resources have rather unlimited potential capabilities. The potential can be used only by creating a climate that can continuously identify, bring to surface, nurture and use the capabilities of people. Human Resource Development (HRD) system aims at creating such a climate. A number of HRD techniques have been developed in recent years to perform the above task based on certain principles. This unit provides an understanding of the concept of HRD system, related mechanisms and the changing boundaries of HRD (By Kaufman, Bruce E. 2008).

**The economic environment** consists of external factors in a business market and the broader economy that can influence a business. You can divide the economic environment into the microeconomic environment, which affects business decision making - such as individual actions of firms and consumers and the macroeconomic environment, which affects an entire economy and all of its participants. Many economic factors act as external constraints on your business, which means that you have little, if any, control over them. Let’s take a look at both of these broad factors in more detail.

Macroeconomic influences are broad economic factors that either directly or indirectly affect the entire economy and all of its participants, including your business. These factors include such things as: Interest rates, taxes, inflation, currency exchange rates…

Microeconomic factors influence how your business will make decisions. Unlike macroeconomic factors, these factors are far less broad in scope and do not necessarily affect the entire economy as a whole. Microeconomic factors influencing a business include: Market size, demand, supply, competitors, suppliers, distribution chain, such as retail stores… (By Krugman, Paul; Wells, Robin, 2012).

**The information technology (IT):** It is the discipline whereby all of the information technology resources of a firm are managed in accordance with its needs and priorities. These resources may include tangible investments like computer hardware, software, data, networks and data center facilities, as well as the staffs who are hired to maintain them.

Managing this responsibility within a company entails many of the basic management functions, like budgeting, staffing, change management, and organizing and controlling, along with other aspects that are unique to technology, like software design, network planning, tech support etc. By JaanaAuramo, JouniKauremaa, Kari Tanskanen, (2006).

**Efficiency** refers to the internal functioning of logistics and generally is considered best represented through some ratio of normal level of inputs to the real level of outputs. Specifically, it is the ratio of resources utilized against the results derived. It is considered the ability to provide the desired products/service mix at a level of coat that is capable to customer. In broader sense, it is the ability of logistics function to manage resources wisely. Thus, we adopt the definition of efficiency as the measure of how well the resources expended are utilized. By Brian et al., (2010).

**Logistics management:** It is that part of procurement management that plans, implements, and controls the efficient, effective forward and reverses flow and storage of goods, services, and related information between the point of origin and the point of consumption in order to meet customer’s requirements. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply or demand planning, and management of third party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service. It is involved in all levels of planning and execution strategic, operational, and tactical. Logistics management is an integrating function which coordinates and optimizes all logistics activities, as well as integrates logistics activities with other functions, including marketing, sales, manufacturing, finance, and information technology (Morris & Imrie, 2012).

**Logistics management** deals with the planning and control of material flows and related information in organizations, both in the public and private sectors. Generally speaking, its mission is to get the right materials to the right place at the right time, while optimizing a given performance measure and satisfying a given set of constraints. Logistics
is one of the most important activities in modern societies. It is constructed on subsystems which in turn contain a collection of interrelated components. The relationship between the subsystems and components takes the form of coordination and exchange of materials and information. The aim of the system is to supply customers efficiently with their required products. Each subsystem controls the size of the flow of materials through the system via storage, transportation and various stages of handling and value adding. The logistics systems do not only consist of flows of materials, components and products which are processed and distributed to customers, but also include supply chain flows of spare parts and return flows of defective and used products and packaging (Jonsson, 2008).

METHODS OF RESEARCH

In this research, the observations can be done while letting the observing the managers of enterprises in Vietnam. Observations can also be made in natural settings as well as in artificially created environment. After preliminary investigations, formal research is done by using quantitative methods questionnaire survey of 200 the managers of enterprises in Vietnam who related and answered nearly 13 questions. The reason tested measurement models, model and test research hypotheses. This research has 7 steps of the research process following:

Factor analysis explored (remove the variable low load factor < 0.50). The hypothesis was tested through multiple regression analysis with linear Enter method. Data collected were tested by the reliability index (excluding variables with correlation coefficients lower < 0.30 and variable coefficient Cronbach’s alpha < 0.60), factor analysis explored. Descriptive analysis conducted and this included the weighted means, standard deviation, relative frequencies and percentages. Statistical tools such as SPSS 20.0. The hypothesis was tested through multiple regression analysis with linear Enter method. Finally, regression analysis is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables.

Y = β0 + β1X1 + β2X2 + β3X3


β0 – β3: Regression coefficients.

X1 – X3: Factors affecting the efficiency of the logistics management (ELM) in Vietnam. Independent variables are following: Human resources (X1), Economic environment (X2), Information technology (X3).

RESEARCH RESULTS

Table 1: Cronbach’s Alpha for factors

<table>
<thead>
<tr>
<th>Human resources (HR)</th>
<th>Source</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR1: Vietnam enterprises’ human resource quality is sufficient to needs for customers and our transport and distribution network that helped customers achieve cost saving</td>
<td>Kaufma, Bruce E.</td>
<td>0.887</td>
</tr>
<tr>
<td>HR2: Vietnam enterprises are capable of providing customers with logistics expertise in a range of industries and widespread or extensive distribution coverage in Vietnam</td>
<td>Kaufma, Bruce E.</td>
<td></td>
</tr>
<tr>
<td>HR3: Vietnam enterprises are capable of arranging a flexible delivery schedule to fit with customer’s production schedule and rapid response to customer requests</td>
<td>Kaufma, Bruce E.</td>
<td></td>
</tr>
<tr>
<td>HR4: Vietnam enterprises are capable of accommodating unique requests by implementing pre-planned solutions and innovative supply chain solutions</td>
<td>Kaufma, Bruce E.</td>
<td></td>
</tr>
</tbody>
</table>
Table 2 showed that all of variables surveyed Corrected Item-Total Correlation greater than 0.3 and Cronbach’s Alpha if Item deleted greater than 0.6 and Cronbach’s Alpha is very reliability. Such observations make it eligible for the survey variables after testing scale.

Table 2: Descriptive Statistics for factors affecting the efficiency of the logistics management (ELM) in Vietnam

<table>
<thead>
<tr>
<th>Code</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT1</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.924</td>
<td>1.3455</td>
</tr>
<tr>
<td>IT2</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.908</td>
<td>1.2933</td>
</tr>
<tr>
<td>IT3</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.983</td>
<td>1.3812</td>
</tr>
<tr>
<td>EE1</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.897</td>
<td>1.5086</td>
</tr>
<tr>
<td>EE2</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.973</td>
<td>1.4043</td>
</tr>
<tr>
<td>EE3</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.768</td>
<td>1.3497</td>
</tr>
<tr>
<td>HR1</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>3.010</td>
<td>1.0292</td>
</tr>
<tr>
<td>HR2</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>3.091</td>
<td>1.0640</td>
</tr>
<tr>
<td>HR3</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>3.225</td>
<td>1.0040</td>
</tr>
<tr>
<td>HR4</td>
<td>186</td>
<td>1.00</td>
<td>5.00</td>
<td>2.919</td>
<td>1.0287</td>
</tr>
<tr>
<td>ELM1</td>
<td>186</td>
<td>2.00</td>
<td>5.00</td>
<td>3.290</td>
<td>.5987</td>
</tr>
<tr>
<td>ELM2</td>
<td>186</td>
<td>2.00</td>
<td>5.00</td>
<td>3.349</td>
<td>.7508</td>
</tr>
<tr>
<td>ELM3</td>
<td>186</td>
<td>2.00</td>
<td>5.00</td>
<td>3.424</td>
<td>.6875</td>
</tr>
<tr>
<td>Valid N</td>
<td>186</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 showed that the descriptive statistics is to describe and understand the features of a specific data set. The most recognized types of descriptive statistics are the mean, max and min, std. deviation which are used at almost all levels of math and statistics. However, there are less-common types of descriptive statistics that are still very important. Mean is around 3.0 and Std. Deviation (S.D) is around 1.0. This showed that the Data is very good for the next research.

Table 3: Bootstrap for Coefficients for factors affecting the efficiency of the logistics management (ELM) in Vietnam

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Bootstrap*</th>
<th>Std. Error</th>
<th>Sig. (2-tailed)</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bias</td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.791</td>
<td>.005</td>
<td>.137</td>
<td>.000</td>
<td>1.556</td>
</tr>
<tr>
<td>X1</td>
<td>.265</td>
<td>-.001</td>
<td>.036</td>
<td>.000</td>
<td>.191</td>
</tr>
<tr>
<td>X2</td>
<td>.138</td>
<td>.000</td>
<td>.024</td>
<td>.000</td>
<td>.087</td>
</tr>
<tr>
<td>X3</td>
<td>.121</td>
<td>.001</td>
<td>.026</td>
<td>.000</td>
<td>.069</td>
</tr>
</tbody>
</table>

a. Unless otherwise noted, bootstrap results are based on 2000 bootstrap samples

(Source: The researchers’ collecting data and SPSS)
Table 3 showed that the smaller significance level 0.05 and the regression coefficient is positive. This means that the impact of the independent variables in the same direction with the efficiency of logistics management (ELM) in Vietnam. Besides, there are bootstrap results are based on 2000 bootstrap samples and bias of coefficients is zero.

**CONCLUSIONS AND RECOMMENDATIONS**

**CONCLUSIONS**

Logistics contributes significantly to the process of distributing goods from place of production to consumers and is a bridge to global trade. Today's logistics activities are not only associated with logistics, freight forwarding, but also planning and arranging raw material flows from suppliers to manufacturers. In the end, the production process will be carried out to the end-user, creating a connection in the whole society in the form of optimization, reducing the cost of rotation and storage. Besides, logistics services are commercial activities whereby traders organize one or more jobs including receiving, transporting, warehousing, warehousing, customs clearance, procedures other papers, customer consultation, packaging, marking, delivery, handle damaged goods or other services related to the goods as agreed with the customer for remuneration. Good logistics will ensure better service, lower cost but more effective for both enterprise and development economy. And after many years of Vietnam joining the WTO, the logistics market in Vietnam has seen positive changes with the number of enterprises operating in the fast-growing and high-growth industries. Looking at the pace of trade development in Vietnam, also the development objective of the logistics industry, will see the import-export turnover has increased in 2017. Moreover, the study results showed that there were 200 managers of enterprises in Vietnam who interview and answered about 13 questions but 186 managers processed, lack of 14 samples. The paper had been analyzed KMO test, Cronbach's Alpha and the result of KMO analysis which used for multiple regression analysis. Managers' responses measured through an adapted questionnaire on a 5-point Likert scale (Conventions: 1: Completely disagree, 2: Disagree, 3: Normal; 4: Agree; 5: completely agree). Data collected from July 2016 to December 2017 for enterprises in Vietnam. The results showed that there were three factors, which included of factors following human resource (X1), Economic environment (X2), information technology (X3) with significance level 5 percent. In addition, all of three components affecting the efficiency of the logistics management in Vietnam with significance level 5 percent. The research results processed from SPSS 20.0 software. The researchers will give recommendations to improve the logistics management in Vietnam in the future.

**RECOMMENDATIONS**

**Recommendation for human resource development in the logistics service sector**

Based on the human resource (X1) affecting the efficiency of the logistics management in Vietnam with significance level 5 percent as mentioned above. High quality human resources will be the prerequisite for the development of Vietnam logistics companies in the context of integration before and after World Trade Organization (WTO), HR contributing to promoting Vietnam logistics service sector in excess. The current difficulties, in order to be able to firmly develop and contribute to the economic development of Vietnam, affirm the position of Vietnam in the region and the world. In order to develop human resources for logistics service in our country, the following solutions should be implemented: First of all, the Government should have a clearer direction for the development of the logistics service sector. It is necessary to consider whether the logistics service sector is an independent "sector" and whether it should be developed into an independent industry. From there, there are appropriate directions for this service area, including the human resource development plan; addition of legal documents to realize the concept of logistics services in the trade code. Secondly, there is a need for closer cooperation between the relevant departments and departments in the logistics service sector in order to clearly define the ability and responsibility of each party in the development of the logistics service sector, among them is the development of logistics human resources. Thirdly, the role of medium and short term training programs should be further developed by institutes, centers, associations and training companies. Encourage these organizations to plan collaborative training with foreign experts or organizations in countries with strong and efficient logistics services. These short courses should focus on specific business or operational areas for a particular job task, or to provide general or advanced training to middle and senior managers. Business courses are courses that help students apply knowledge right at their jobs, as well as introducing disciplined and highly cooperative work of logistics. As such, these courses play an important role in rapidly replenishing human resources for the logistics service sector. Advanced courses help managers to have a comprehensive overview of the service chain that their business is seeking or want to provide, thereby improving the quality of their services. The associations are responsible for finding regular training resources, attracting foreign partners to train staff of logistics companies in Vietnam to accelerate the number of trained staffs. Fourthly, logistics companies need to have a specific resource plan, starting from the planning stage, appointing people to visit, learning abroad, having a good treatment policy and deserving employees, professional, technical skills. It is advisable to develop early and recruiting plans to recruit qualified people (eg take final year students in the field of specialization or specialization close to the company internship to have more personnel choices). Logistics companies are to train and retrain existing resources, attract laborers with relevant qualifications, be knowledgeable in foreign languages, have knowledge of geography and foreign trade, regularly update new techniques in transportation and communication. International load. Fifth, in order to have good human resources, large logistics service companies need to have internship programs to attract students to their companies, thereby increasing the chance of choosing good people. Organizing presentations on current practice in Vietnam and in the world for students so that students have orientation before graduation. Logistics companies should associate with a number of prestigious universities to participate in the
training and fostering process as well as the right to presentations and recruitment opportunities at these institutions. In such a case, logistics companies need to set up a training fund at the universities and provide technical support to the universities if they want the best and most qualified students. Finally, workers should also have a job orientation when they are in training. Students should be more active in the process of seeking and approaching logistics service companies if they want to work in this service sector, then they should actively learn professional skills and work skills to get there. Can catch up with work immediately after graduation. The direct labor group needs to be trained not only in working skills, but also in the spirit of work, as well as the attitude of working discipline.

RECOMMENDATION FOR IT

Based on the economic environment (X2) affecting the efficiency of the logistics management in Vietnam with significance level 5 percent as mentioned above. Logistics is really the key to enhancing competitiveness and increasing the value of commerce. remove difficulties - promote the linking of logistics and import-export businesses, we need to do things following: (1) Restructure the supply chain to enhance value added, competitiveness of Vietnamese trade, especially export and active participation in the global supply chain. The restructuring of the supply chain of import-export businesses will link, facilitate and strongly promote the development of logistics services. The logistics business enterprises in Vietnam now have the capacity and professional to advise customers the best logistics solutions tailored to each customer's supply chain. (2) Logistics companies need to take the initiative and take advantage of the outsourcing of logistics. It also helps the trading and import-export enterprises to cut costs, save unnecessary investment and human resources for the conditions of training. Concentrate on your core business. (3) Modernization of the customs system by IT, the implementation of one-stop shops, e-customs, including the strong development of the customs agent by increasing the number of customs agents and building the preferential regime. Customs clearance procedures for import and export consignments by customs agent, such as exemption from inspection and exemption from cargo check for declarations issued by customs agents, stamped on IT. (4) logistics companies are to ensure the uniformity, transparency and consistency of legal regulations governing the business of logistics services in order to better serve the facilitation and raising the competitiveness of trade. (5) Establish effective linkages between import and export businesses and logistics. In order to have regular and effective linkages, logistics enterprises need to be proactive in mastering the trade specialized services, rules and bilateral and multilateral trade agreements signed by Vietnam. Regular exchange of relevant information to help import and export businesses and logistics to capture the situation, support professional to build logistical transaction portal in each service area. (6) In addition to the effort and initiative of enterprises, it is necessary to have a state organization to manage and direct the unified logistics activities for trade throughout the country, including enterprises Vietnam and foreign invested enterprises. That is the formation of the National Logistics Committee. This organization is really a bridge between enterprises and the state in the planning of strategies, policies and action programs to develop our logistics industry associated with the development of production, trade and import and export. Vietnam approved the overall strategy for development of the service sector of Vietnam up to 2020 was issued in which Vietnam has the first logistics service strategy. Annually, the ministries issue many documents to guide, regulate, reduce troublesome procedures, promote the logistics and logistics services.

RECOMMENDATION FOR IT

Based on the IT (X3) affecting the efficiency of the logistics management in Vietnam with significance level 5 percent as mentioned above. The logistics companies need to look at the role of IT as one of the factors contributing to customer satisfaction and contributing to improving the quality of logistics services. Attention should be paid to the development of IT strategies as an important part of the business strategy of enterprises. (1) IT infrastructure needs to be improved and newly built, especially the modern IT system, in order to gradually transfer data and digitize data. A part of the business budget should be used to invest in IT to effectively use the new software required for logistics operations such as Logistics Cloud, etc. In particular, the logistics companies can target collaboration with software companies to order specialized applications for the company to take advantage of each application. (2) The logistics companies need to respect the recruitment, training and training of IT personnel. Combined with human resource training centers or universities to train IT staffs with logistics knowledge. Tailor-made training courses can be used to ensure that IT personnel are trained to the job's specifications. (3) The State needs to pay attention to invest in IT infrastructure and have incentive policies as well as financial support so that small and medium enterprises that can invest in IT. Promoting the process of electronic customs clearance that creating motivation for logistics services to actively upgrade infrastructure and apply IT appropriate. (4) The State needs to pay attention to give the strategy of IT development for the entire industry: long-term along with the strategy of logistics development to 2020, orientation 2030. The policy of the enterprise leaders is to: "ASEAN common window” to ensure to ensure the compatibility of each country's IT network with international standards and to integrate and integrate all ASEAN. Shorten processing time and create special transparency with customs clearance. Therefore, the establishment of a comprehensive IT network connected from the state management agencies, customs, logistics enterprises and shippers is extremely urgent. (5) The State should issue policies to support and encourage software companies to invest in IT research in accordance with international standards. This will create favorable conditions for domestic logistics companies to access IT applications in line with their financial capability. And enhancing international cooperation in the field of scientific research and transferring IT applications in line with the realities of logistics enterprises, especially SMEs.
REFERENCES


