The Development Strategy of Logistics to 2020 and Lesson for Vietnam

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Abstract
The development of global trade when Vietnam joins the WTO, logistics services play an increasingly important role. Efficient logistics will help reduce costs, improve competitive capacity, and effectively manage inbound and outbound distribution. In recent years, although more and more Vietnamese enterprises have involved in logistics sector with various forms and sizes, their competitiveness still remains limited. Logistics costs are high compared with those of other countries in the region and the added value stays low. In particular, Vietnamese logistics enterprises currently lose their advantage at their own domestic market with only 20% market share. This paper, after a general introduction about logistics, will analyze the current situation of Vietnam logistics as well as the experiences of some countries in the region in order to give some recommendations for the logistics sector in Vietnam.

Key Words: Logistic, transportation, forwarding, warehousing, supply chain
1. Introduction

 Logistics plays an important role in national economy and international trade, has contributed positively to economic reinforces high in the last few decades, thus contributing to hunger radication, poverty reduction through better connections to production-consumption markets. The development of logistics services has great significance to ensure the development of production, business, services, meet the quality of service. Logistics will bring good development potential to reduce costs, improve product quality and service. Today, logistics is recognized as an essential economic function, a useful tool to bring success to businesses in manufacturing, sales, distribution, service, even in distribution manufacturing, consumption. However, in recent years, logistics in Vietnam has not developed properly. This section will present an overview of logistics which plays as the basis for the analysis of current situation and some solutions for development of Vietnam logistics industry. The concept of logistics has not reached a consensus. According to Council of Supply Chain Management Professionals, logistics is part of the supply chain management processes that plans, implements, and controls efficient, effective forward and reverse flow, storage of goods, services, and related information between the point of origin and the point of consumption in order to meet the customers' requirements. In Germany, logistics is the integrated planning, coordination, implementation and monitoring of the flow of goods in and between enterprises. The goal of logistics is to delivery goods at the right time, right place with the right quantity and right quality. The operational activities such as transporting, handling / picking and storage are subsumed under the term "TUL-logistics". Furthermore, logistics is also referred to as flow management, dynamic aspects of mobilisierens and flow of objects in network to be stressed with it. In Vietnam, the Commercial Law dated 14/6/2005 provides "Logistics services are commercial activities whereby traders implement one or several stages including receiving, shipping, warehousing, storage, customs, other procedures, client consultation, packaging, coding symbols, delivery or other services related to the goods as agreed with the customer to be remunerated. However, this law does not define logistics but only mentions logistics services, so logistics is not considered as a continuous chain of activities in the supply chain. It is undeniable that companies are placing much more emphasis on logistics for several reasons. Actually, logistics help them optimize operations to save resources, costs and time. In some areas, low logistics operation cost can become firms’ competitive advantage over their rivals in the market. Also, in the process of globalization, the production, trade and distribution across different countries are making production process and goods flow become more complicated.

2. The situation of logistics in Viet Nam

ASIAN Economic Community (AEC) will be formally established in 2015. Narrowing the gap between Vietnam and other countries in AEC is still a priority issue. This section will
clarify the Vietnam logistic situation over years by using SWOT analysis and give propositions for Vietnam logistics development and integration in AEC.

2.1 Strength

- According to the World Bank report 2016, Vietnam had the pretty moderate Logistics Performance Index (head of low-income countries) and high Global Connectedness Index (one of the 5 countries having the highest speed of connection to global network throughout the last few years). In 2016, Vietnam’s logistics sector was ranked 64 th over 160 countries in the world in logistics capability index and ranked 5th in ASEAN.

By the end of 2012, there were 6 active logistics centers, 4 are in the process of developing or newly licensed, heavily concentrated in the Southeast region with a total land area of 279.8 hectares, of which the center in the South accounted for 94.7%. Most small scale (less than 10 ha), except one large center (over 250 ha). According to the capital structure: 2 centers by a joint venture company, 2 centers 100% owned by foreign company, 2 centers by domestic company investment. According to the criteria of importance: national level (level I), regional level (level II) and local level (level III), the now only 1 at level II centers, remaining are unqualifying standings. Distribution by province, city: 3/6 in Binh Duong province, the rest is Hai Phong, Quang Ninh province, Ho Chi Minh City, each locality 1 center. By region: 2 centers in the Red River Delta, 4 centers in the Southeast. Back to business service providers: the number increased from 600 - 700 in 2007 to 1,000 - 1,200 in 2012 (accounting for 0.2 % of numbers of the whole country companies).

- It has a large number of enterprises established and operated in the logistics industry. According to the Association of Logistics Enterprise, there are currently more than 1,200 logistics providers, mainly for freight, forwarding, warehousing, loading and unloading services, transport agents, etc and focusing in Hanoi and Ho Chi Minh City. In particular, the world leading multinational logistics company (top 25 or 30) also have operated in Vietnam.

- It diversified in terms of forms of foreign companies particularly in providing 3PL services with professional and modern technology as in developed countries. Vietnam logistics services currently focus on the areas as illustrated in the following figure:
Modern technology for managing supply chain has also been applied widely in Vietnam logistics industry such as warehouse distribution system, ICD, CFS, the modern cargo terminal at the airport as TCS, SCSC (Tan Son Nhat International airport) and NTSC, ACS (NoiBai Airport). Customs have applied e-custom in specific stages in order to reduce clearance time, simplify administrative procedures. - Infrastructure for logistics has increasingly been completed with more than 30 ports. The cargo volume cleared in the ports increases from 181 million tons (2007) up to 300 million tons (2012). Container transportation volume has increased rapidly by an average 10%/year. Vietnam marine transportation system has 2,365 ships. With over 51 airlines operating in Vietnam, the output reached 320,000 tons in 2013, an average growth rate of 10%/year. Vietnam has been investing to build Cai Mep deepwater port, Van Phong international transshipment port, Long Thanh International Airport, East-West road corridor, the Hanoi - HaiPhong - Ha Khau - Kunming expressway system, the trans-Asia railway... and 8 logistics center, focused primarily in the southern industrial park.

2.2 Weakness

There are 3 weaknesses of Vietnamese logistics companies: low starting point, 15-20 years slower than other countries in the region; Enterprises in this area are not connected globally and weak in applying information technology; logistics infrastructure has not developed yet. Vietnamese enterprises operating in the field of small and medium logistics
are limited in terms of technology, management level, capital size leading to low quality only participate in small supply chain in the territory of Vietnam. There are very few Vietnamese companies involved in international transport, so most hire foreign companies. With a large and rapidly growing export turnover, it is a big loss for domestic logistics firms to reach international transport.

- The competitiveness of Vietnam logistics services is low. Having such a large numbers of logistics enterprises but logistics operation is fragmented, lack experiences and professionalism.

- Currently, logistics costs account for only 9-15% of GDP, while Vietnam accounts for nearly 21%. Lower logistics costs will reduce the burden on businesses as well as improve the business environment. To do this, we have to invest more synchronous infrastructure, reduce the cost of roads ... help transportation companies reduce costs. Enterprises should pay attention to the exploitation of waterway transportation. Provinces and cities in the planning of industrial zones should pay close attention to the nearby ports and waterways. In addition, logistics companies investing in modern technology will reduce the cost of hiring labor.

- Vietnamese logistics enterprises only provide basic services as freight, storage, forwarding or customs services without integration of value-added services in the supply chain. Currently, the percentage of Vietnam Logistic enterprise’s outsourcing is very low, ranging from 26% to 32%, while China's is 62.5% (2016), Japan and European countries, USA are over 41%, so Vietnam's logistic has little added value. The business provides logistics services in Vietnam primarily as agents, or undertaking each stage as a subcontractor of international logistics enterprises in the logistics process.

- Because lacking efficiency in technical and implementation of logistics activities, it losses the credibility throughout the supply chain connecting Vietnam with the rest of the world

- Lacking a combination of different modes of transport (multi-modal transport) to take advantage of mass, inexpensive transit as well as the advantages of each mode of transport. Currently, transportation in Vietnam is mostly by road with star logistic model or ring logistic model.
In fact, stars logistic model is not widely used because it is only suitable for high value products or for companies operating in particular region. The use of stars logistic model in Vietnam increased transportation costs and created waste, inefficiency; increased the road density which reduces the quality of roads and bridges in Vietnam rapidly (90% of road vehicles transporting exceeds allowed loading volume). Therefore, Vietnam has high unofficial business cost (with costs "slippery" in the transport and related issues such as road safety, road loading regulations...).

- Logistic centers in Vietnam are not adequate and well equipped. These centers have small scale and scope, mainly serving provincial or certain businesses in the industrial park area, not suitable to serve an economic sector or region. Most of center’s investments scale are not synchronized, so it limits the role as well as the basic functions of a logistics center. The Vietnam logistics centers lack many unique services to create high added value for customers using the center's services. Small number of customers served together with companies limited size and weak service quality is the main causes demotivating domestic and foreign investors.

- Potential of Vietnam logistics enterprises is limited:

  + Vietnam logistics workforce is in shortage of skilled manpower, because the lack of sufficient training and education in the field. Currently, the ratio of formally trained human resources in logistics accounts for the relatively low rate (only about 30%) and the rest are improving skills and knowledge by self- studying (Efficient Logistics A key to Vietnam Competitiveness, 2014).

  + Vietnam logistic enterprise’s financial potential is not strength. Except for state enterprises being privatized, most small and medium businesses have the average capital ratio of 4-6 billion, specifically, 80% business established with capital less than 1.5 billion.
+ The global network of Vietnamese logistics enterprise was not well.
+ Information technology has not developed and received effective support. Using the Electronic Data Interchange system (EDI) in management plays an important role for the movement of goods and documents. However, Vietnam does not have many enterprises implementing EDI while EDT requires synchronization.

2.3 Opportunities

- In terms of Vietnam’s overall strategy to improve services until 2020, logistics is considered as a key factor promoting the development of other services’s distribution systems, import and export.
- Size of logistics market is small (about 2-4% of GDP) but the growth rate is expected to remain high (around 20-25% per year) in the next 5 years. More and more multinational corporation as Nike, Nokia, Samsung, etc have been investing in Vietnam creating a great opportunity for local forwarding and warehousing development. - Demand for transiting the high-quality products has been growing. Exports, imports and retail sector’s turnover have a high growth rate. Cargo volumes through the ports in 2015 is expected to reach 500-600 million tons, 900-1100 million tons in 2020, and 1600-2100 million tons in 2030.
- Vietnam has been planning more capital sources to invest in improving infrastructure such as deep-water port, an international transshipment ports, international airports, corridors road, high speed road, railways...
- The related procedures such as customs and administrative procedures are reformed and simplified to facilitate logistics and accelerate the process of regional and global integration.

2.4 Threats

- Because Vietnam’s logistics legal system behinds its development practices, its had not adjusted effectively relations in its industry. In times of regional and international integration, a number of laws about logistics are inappropriate, or unclear, asynchronous, outdated, leading to the lack of the transparency and fair competition in the logistics market.
- According to WTO commitment, Vietnam logistics industry is set to include several segments in logistics sector such as container loading and unloading service, warehousing service, freight forwarding and other service. Therefore, Vietnam logistics enterprises will face competition from foreign logistics enterprises having strong financial resources, extensive network, quality and experience human resources...
- Administrative procedures, especially customs procedures, are complicated and not transparent as can be seen in the table below which compares the number of steps, time, and customs inspection content between Vietnam and other countries in the region.
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Source: Summary from LPI Report, World Bank, 2016

- Infrastructure investment has not yet developed properly in pace with countries’ development. Structural infrastructure, transportation is underdeveloped, asynchronous, especially not create corridors for multi-modal transportation while transportation costs account for 40 to 50% of the product price (this rate in other countries is 15%). Roads and railways network is inefficient and in low quality condition. Whilst, ocean and air transportation are characterized by higher costs and longer transit time as compared to those of neighbor countries.

  + The road transport does not meet all the requirements of logistics. The traffic network is not convenient and narrow. Vietnam has a small number of highways, especially, no standards highway, poor quality roads, relatively low traffic speed and regular traffic congestion. Almost roads are not designed for transporting containers. Also, many trucks are old and not in will operation condition. All things have hindered the circulation of goods. Moreover, the prohibition of trucks operating in major cities as Hanoi and Ho Chi Minh City also causes a lot of difficulties in delivering goods from door to door, lengthening the distance and increasing time and transportation costs.

  + The rail network, which Vietnam has built and exploited for more than a century ago, has remained backward and had many intersecting lines so rail transport capacity is low. According to the General Statistics Office (2013), the volume of goods transported by rail accounted for 15% of goods in circulation. According to the ADB (2013), 44% of Vietnam rail is insufficient capacity to load as sleepers are too old and bridges are too weak (the average speed of the freight train is 15 -20km / h). The railway line to the industrial park or modernized and specialized transportation lines are inadequate. In addition, the train's loading capacity is limited with only about 500 carriages for transporting container and only a few stations having equipment handling container.
After Vietnam joined WTO (2007), the volume of cargo through the ports has increased rapidly. The congestion situation which often occurs at the port of Saigon and Haiphong shows the asynchronous development of the port system in the key economic areas of the country. Currently, most of Vietnam's international port have not been equipped well to handle freighters having tonnage of 50,000 DWT or 2,000 TEUs, excepted for Tan Cang – Cai Mep Container ports for larger tonnage but still low loading capacity. Besides, poor fleet is one of the issues affecting the development of Vietnam's logistics. Most of Vietnam's ships are small and can not carry goods in large quantities while cost per shipped unit is high and hinders for setting a comprehensive logistics cycle. In addition, the fleet structure is irrational, mostly synthetic vessels, lack of specialized vessels, particularly container ships.

+ The river freight is less common due to the lack of river ports for gathering and delivering goods as well as lacking warehousing and modern system of river ships to haul container. It is efficient for small vessels, particularly suitable for the type of low-value commodities such as coal, rice, sand, stone and other materials. Vietnam’s river transport has not been used effectively due to regular dredging condition, especially in the dry season.

+ For air transport, Vietnam currently has 20 airports, including 6 international airports (Noi Bai - Da Nang - Tan Son Nhat - Phu Bai - Cam Ranh Bay and Cat Bi). Among them, only Tan Son Nhat and NoiBai International Airport is suitable for the international cargo planes landing. Although it has been improved, the technology of most airports have small scale and outdated. Vietnam mostly leased large aircraft (only 20% of the plane is owned by Vietnam) and no freighter aircraft. + Lacking supporting logistics distribution centers for seaports and airports can result in increased inventory and idle time for trucks, ships, and planes. - The domestic enterprise’s practice of purchasing CIF and sales FOB makes the link between the import and export businesses and logistics business limited.

3. The experiences in developing logistic in some countries

Currently, a number of countries in the region such as Singapore, Thailand and Malaysia have better logistic system in comparison with Vietnam.. This section will study the experience of these countries in developing logistic in order to draw lessons for Vietnam logistics industry.

3.1 Experience of Singapore

In 2016, Singapore was ranked as Logistics Centre No. 5 in the world by the World Bank (2016). This success was resulted from the following reasons:

- Since 1980s, with the policy for Singapore to become the cargo hub in the region, the Singapore government has facilitated to develop the logistics in Singapore.

- Infrastructure system has been invested modern in all modes: road, rail, sea and air transport from the 1980s, and has been upgraded and modernized constantly. Singapore has
built the storage system distributed widely throughout the country and modernized constantly with high standards - a key factor for the development of Singapore's logistics. The modern investment in infrastructure, airports, roads, ports, warehouses has contributed much to cutting logistics costs, accelerating the optimization process from input to output of logistics operations in Singapore.

- Singapore has the up to date process for managing warehouse management with quick and simple procedure. Utilising e-commerce Powerful solutions have helped Singapore’s warehouse system which provides maximum capacity of logistics services and allow customers easily track cargo. Moreover, the Singapore warehouse cost is also considered to be relatively low compared with the other countries’.

In addition, the warehouses in Singapore also provide additional services such as receiving and picking up goods and packing, shipping by sea or air, inventory management, etc. The Singapore's warehouse is improved regularly to provide better and faster service and to create the most favorable conditions for international logistics in transiting temporarily imported goods for re-export.

- The Singapore’s policies about customs procedures are transparent with clear and tight define and quick effect. In addition, via the Net Trade, the customs process is automated making cargo clearance to be easier, reduce storage time and cost in port thus create favorable conditions for international trade and transshipment in Singapore.

3.2 Experience of Malaysia

When the economy basing on agriculture, Malaysia did not pay much attention to improving logistics. Until planning export-oriented trade, Malaysia recognized the importance of having a less costly distribution system and more effective distribution strategy. So Malaysia has focused on developing logistics with huge support from the Government. Firstly, the Malaysian government put great efforts in expanding and developing infrastructure. Malaysia has maintained continuously infrastructure development and has achieved many successes. At present, Malaysia is having the most developed infrastructure systems in the newly industrialized countries of Asia. Secondly, beside constantly upgrading and modernizing infrastructure, information, and telecommunications, the Malaysian government has focused on building container station and Inland Clearance Depot (ICD). The development of ICD has played an important role in upgrading and associating transport facilities to improving efficiency in distributing goods. Thirdly, Malaysia has constructed Free Commercial Zone (FCZ) to support major ports becoming transshipment hub in the region. Fourthly, the charge relating to logistics activities are continuously adjusted to facilitate transport operations.
3.3 Experience of Thailand

With the purpose of improving export volume and competitiveness of products, since 2001, the Thailand government has realized the importance of logistics development as a national priority. Under competition pressure from international market as well as domestic market, logistics has become an urgent problem and need to be improved effectively in both macro and micro level. Therefore, Thailand’s government considered developing logistics as a key solution to increase the competitiveness of Thailand and an engine of economic growth. Since 2005, the Thailand government has taken strong measures to promote the development of logistics. The very first strategy is to develop the traffic infrastructure system, including public transport.

- Thailand has developed a quite large road infrastructure system which has more than the total length of 4.100km consisting of interconnected roads, highways and expressways having lots of multi-means intersections for the air and sea transport to support and facilitate in transporting commercial goods. These nodes include: Terminals Truck, Off-Dock Container Freight Station (CFS), Inland Container Depots (ICDs), Container Yards, and Product storage Areas...

- Railway: Being aware of the weakness in rail transport ( inaccurate timing ;low quality of tractors and wagons; inefficient rail system, 83% the volume of goods transported via road, constantly more costly gasoline, etc.) together with the important role of rail transport in developing multimodal transport., the Thailand government has invested more in rail infrastructure. Thailand has upgraded and repaired the whole railway system to move the heavy transport operations from the road (truck) to the rail network to achieve high efficiency for long-distance travel as well as save logistics costs.

The Thai government has been planning to deploy four main rail lines that beginning from Bangkok - central of Thailand - to the regions. Two large projects received special attention in China is the Bangkok-Chiang Mai route, northern of Thailand bordering Myanmar 745 km long, and Bangkok-NongKhai, northeast of Thailand bordering Laos 615 km long which these rail line’s gauge is 1.435-m gauge and commercial speed is 200km respectively/h and 160km/h.

4. Conclusion

Study of orientation on development of Vietnam logistics services has an important role in economic development in particular, developing countries in general, because the logistics accounts for most of the previous manufacturing process, manufacturing, services, distribution products; logistics costs account for a high proportion of production costs; GDP contribution of logistics in our country is low, while costs in GDP is relatively high. The orientation, strategic development planning properly for priority projects, appropriate steps
will be taken specialized logistics service integration roadmap, to bring Vietnam into an industrialized country by 2020 and the years later. The main causes are poor infrastructure, slow development of communication technology information and information technology; weak human resources and complicated administrative policy. From the experience of other countries, it is clear that investing in infrastructure for logistics should be the top concern of Vietnam. Some recommendations are as follows:

- Planning to develop a long-term infrastructure and implementing soon. Due to limited resources, it is difficult for Vietnam in this period to invest in developing overall infrastructure system. To be more specific, Vietnam should learn from Thailand’s experience in railway development to take advantages of rail transport in reducing logistics costs. A good rail system will contribute to implementing the multimodal transport better. Vietnam can follow the “Hup-and-spoke” logistic model instead of starmodel. Vietnam should prioritize to upgrade the railway section having larger flow of goods such Ha Noi - Quang Ninh, Ha Noi - Hai Phong, Ha Noi - Thai Nguyen, Ha Noi - Ha Nam, Hanoi - Vinhphuc, Ha Noi – Thanh Hoa - the main railways connecting Ha Noi with the main industrial zone in North of Vietnam. It needs to upgrade and maintain railways from Da Nang - Phu Yen in the central region, the Ho Chi Minh - Binh Duong in the South of Vietnam.

- Restructuring the supply chain to enhance the added value. Thus, it needs to establish an effective link mechanism between the import and export business and logistics. In order to be effectively, logistics enterprises should grasp actively acquire knowledge, trade rules, bilateral or multilateral agreements which Vietnam has signed to exchange regularly relevant information for export, import and logistics enterprises, beside assisting professional towards construct the port for transaction logistics information in each service area. The Vietnamese logistics enterprises should advise customers about best logistics solutions that matches specific supply chain of each customer.

- Upgrading the logistic centers to meet the requirements of a logistic hub such as communications infrastructure, storage systems, specialized warehouses (cold storage, petroleum storage, and dry storage). The methods managing logistic center should also be learned from other countries in the region, especially Singapore.

- Human resources is the key for success, therefore, in the logistic development processes, it must improve the quality of managers and employees team in parallel with the process of upgrading infrastructure. It is also necessary to hire new experts from other countries in the region to train personnel for logistic industry.

- Applying applicating e.freight services in the future as Malaysia case.

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