

# Effective logistics and supply chain management as essential solutions to increase competitive capability of Vietnam goods in knowledge economy

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**Abstract.** The paper discusses effective logistics and supply chain management as essential solutions to increase competitive capability of Vietnam goods in knowledge economy. The fact of logistics and supply chain in Vietnam will be overviewed in general. The effect of logistics and supply chain to competitive capability of Vietnam goods will also be analysed in detail. Being a WTO member, Vietnam will get more opportunities to take part in the global supply chain as well as international logistics chain, however, Vietnam – a just four-year WTO member will face more challenges than others in operating its logistics and supply chain. A new perception of the role of logistics to Vietnam goods as a essential solution to increase competitive capability in knowledge economy will be so important to help not only the government but also the companies make efficient decisions to enlarge the market share of Vietnam companies in the global market.

**Keywords:** logistics, supply chain, Vietnam goods, competitive capability

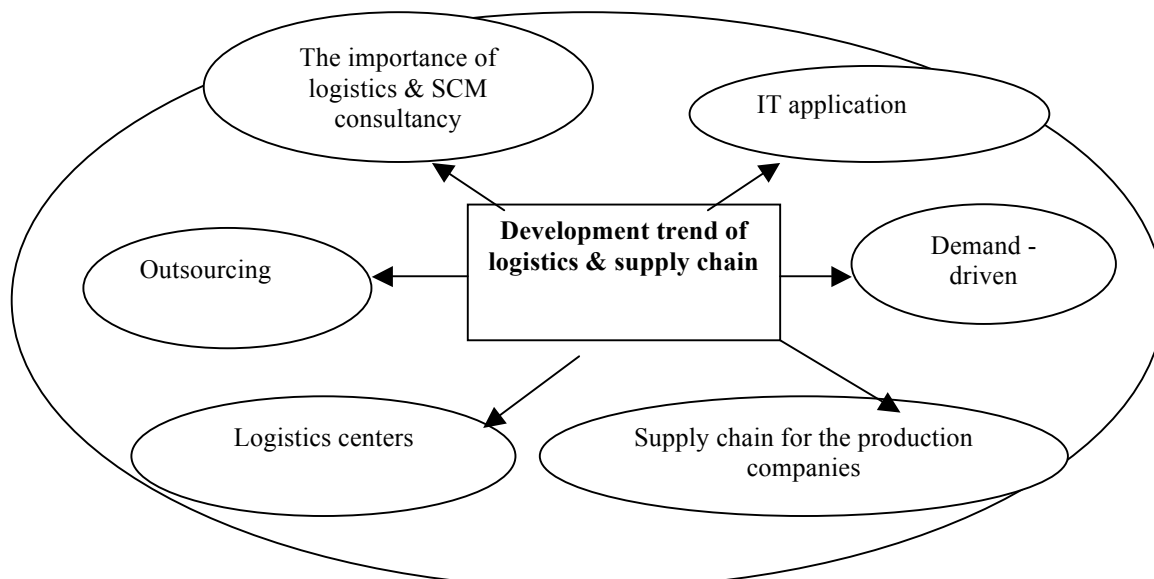
## **1 The development trend of logistics and supply chain management in the world**

Currently, logistics and supply chain have been developing rapidly because of eight main reasons as follows :

- The increase of transport costs
- The new requirements of production efficiency
- The new perspective of inventory (ie. JIT)
- The buyers' power (the replacement of demand-driven supply chain for supply-driven chain)
- The revolution of Information and communications technology (ICT)
- Recycling/ green logistics
- The establishment of regional distribution centers

Logistics and supply chain management in the 21<sup>st</sup> century will continue to focus on the following trends (Figure 1):

***Figure 1: The development trend of logistics and supply chain management***



Source: the author

## 2 Effective logistics and supply chain management as essential solutions to increase competitive capability of Vietnam goods in knowledge economy

In the era of knowledge economy, the competitive tools of multinational corporations as well as enterprises are not only financial capability, human resource, infrastructure or technology but also seamless supply chains for movement flows of goods from the manufacturing sites to the end customers. As a result, logistics and supply chain management has become one of the most essential solutions to increase competence in the macro and micro level of the economy.

Emerging as a dynamic economy in the South East Asia, Vietnam, the 151<sup>st</sup> WTO member, needs to catch the new trends of the global economy and improve the competitive capability of its economy.

### 2.1. The challenges to Vietnam logistics and supply chain management

As a export-based economy, Vietnam needs to improve its logistics and supply chain management to contribute into the development of its economy. However, there are existing the challenges which the government as well as the companies in this field have to identify and overcome as follows:

- only 25% of logistics requirements provided by local enterprises, the remain of market share covered by foreign logistics companies
- the majority of logistics service providers (LSP) are at the level of 2PL or 3PL; intergrated logistics (4PL) or supply chain management are very few and limited by the competence and service network
  - o The annual report of World Bank « *Connecting Compete: Trade Logistics in the Global Economy* » rank LPI (logistics performance index) Vietnam logistics as 53<sup>rd</sup>/155 position based on the criteria such as customs, infrastructure, international shipments, logistics quality and competence, tracking & tracing, and timeliness. The ranking of these criteria of Vietnam and some other countries in the region listed in detail in table 1.

Table 1: Country rankings on the Logistics Performance Index and indicators (2007 & 2010)

Country	LPI	Customs	Infra.	Intl.shipments	Competence	Track&trace	Domes.cost	Time
Cambodia	<b>81 (129)</b>	104 (95)	81 (114)	95 (146)	82 (118)	80 (111)	27	74 (132)
Indonesia	<b>43 (75)</b>	44 (72)	45 (69)	44 (80)	50 (92)	33 (80)	92	58 (69)
Malaysia	<b>27 (29)</b>	23 (36)	28 (28)	26 (13)	26 (31)	28 (41)	36	26 (37)
Myanmar	<b>147 (133)</b>	124 (146)	145 (134)	146 (131)	135 (148)	149 (129)	79	147 (82)

Philippines	<b>65 (44)</b>	53 (54)	86 (64)	63 (20)	70 (47)	69 (44)	19	70 (42)
Singapore	<b>1 (2)</b>	3 (2)	2 (4)	2 (1)	2 (6)	1 (6)	113	1 (14)
Thailand	<b>31 (35)</b>	32 (39)	32 (36)	32 (30)	29 (39)	36 (37)	25	28 (48)
Vietnam	<b>53 (53)</b>	37 (53)	60 (66)	47 (58)	56 (51)	53 (55)	17	65 (76)
Laos PDR	<b>117 (118)</b>	121 (113)	121 (132)	103 (97)	106 (137)	139 (113)	146	102 (89)
Taiwan	<b>21 (20)</b>	25 (25)	21 (22)	17 (10)	23 (22)	24 (12)	42	14 (30)
Korea, Rep.	<b>25 (23)</b>	28 (26)	25 (23)	24 (15)	22 (23)	25 (23)	110	30 (28)
Japan	<b>6 (7)</b>	11 (10)	6 (5)	9 (12)	5 (7)	7 (8)	148	6 (13)
China	<b>30 (27)</b>	35 (32)	30 (27)	28 (27)	27 (29)	31 (30)	72	36 (36)
Slovak Republic	<b>(38)</b>	(47)	(42)	(57)	(41)	(31)		(34)

Source: World Bank (2007, 2010), *Connecting to Compete: Trade Logistics in the Global Economy*.

Note: figure in bracket is for the year of 2010

- Vietnam logistics companies have been facing the challenges of critical competition in the local market when WTO commitments to abolishment completely some restrictions to foreign companies in the field of logistics come into force in 2014.

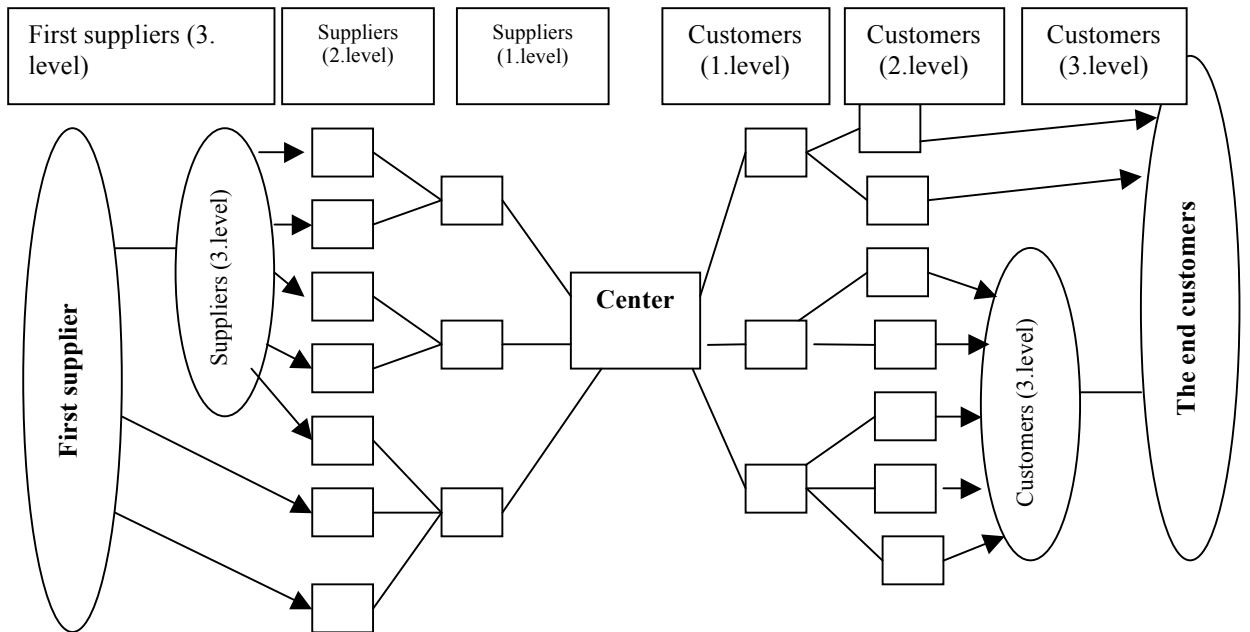
## 2.2. Impacts of logistics and supply chain management on Vietnam economy

Logistics and supply chain management play a very important role in the movement flows of Vietnam domestic and foreign trade goods. As a export-based economy, Vietnam needs to improve the effectiveness of logistics and supply chain management to make the competitive capability for Vietnam goods in the world market as well as in domestic market.

Which benefits to Vietnam economy from effective logistics and supply chain management could be overviewed as follows:

- **Vietnam economy will be intergrated intensively in global market**
  - o By establishing seamless supply chains to cover the whole processes from materials procurement to distribution, the trade mark of Vietnam companies will be confirmed instead of selling products by EXW or FOB terms as currently. Model structure of supply chain network is described in the figure 2.

**Figure 2: Structure of supply chain network**



Source: Douglas M. Lambert, Martha C. Coper and James D. Pagh: *SCM: Implementation issues and research opportunities. The International Journal of Logistics* 9, no.2, 1998, p.3.

- **Total logistics costs will be reduced and as a result the goods price will be more competitive than**
  - o Vietnam logistics contribution is about 25% GDP. In comparison to other economies in the world, Vietnam logistics costs are not effective because of some reasons such as infrastructure, logistics competence, transport costs, etc. The table 2 is presented the logistics share in GDP of some countries in the world.

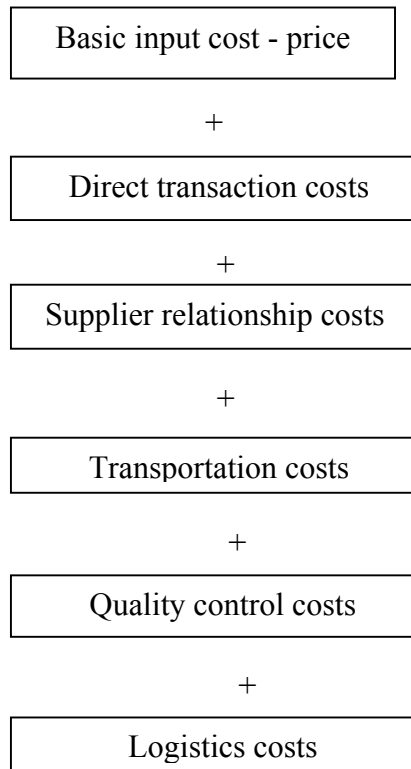
Table 2: Average share in GDP of logistics activities in some countries

Stt	Quốc gia	Logistics (% GDP)
1.	Vietnam	25
2.	China	22.3
3.	South Korea	16
4.	Japan	11
5.	USA	10.1
6.	EU	7.15

Source: CIA World FactBook, Transport Intelligence, Supply Chain Magazine

- o The impact of high logistics costs is to increase the goods prices and reduce competitive capability of the economy. This could be explained by the figure 3.

Figure 3: The components of goods prices



*Source: Coyle J. et al.: The Management of Business Logistics, p.131*

*According to Michael Peskin (spokeman of World Bank): “Transport costs of Vietnam is so high, this cost shares about 30 – 40% product prices, in stead of 15% in other countries”. This reduces competitive capability of Vietnam goods to other countries.*

- **Vietnam companies will be able to face the challenges and obstacles when WTO commitments come into force**
  - o Once companies own professional and effective supply chains with the worldwide network, Vietnam goods will have opportunities to enter the global market not only by tags “Made in Vietnam” marked on products but also by Vietnamese brand names.
- **Logistics and supply chain management will be outsourced to professional service providers (3PL, 4PL, 5PL)**
  - o Companies’ resources will be concentrated on the main activities instead of covering all activities including primary and supporting activities, therefore, its resources will be used directly in the production or businss process. Besides, logistics service or supply chain providers with the large network and professional resource and experience will operate logistics and supply chain activities more effectively and satisfy customers’ requirements with “7-important rights: right customer, right product, right quantity, right place, right time, right condition and right cost”

### 3 Conclusion

Logistics and supply chain management are among the most important supporting service sectors to the Vietnam in the era of knowledge economy. Operating logistics and supply chain effectively will benefit not only for logistics service industry but also for production and business sectors. Logistics costs are managed effectively will make the goods price reduced and as a result, Vietnam goods will be cheaper and competitive capability of Vietnam companies will be gradually improved.

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