

THE SIGNIFICANCE OF EFFICIENT LOGISTICS AND SUPPLY CHAIN MANAGEMENT PRACTICES FOR MACEDONIAN SMALL AND MEDIUM ENTERPRISES

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***Abstract:** Globalization of economy as a process enables a creation of a single market and logistics and supply chain management are important tools in this process. A market with efficient logistical and supply chain management capacities has a comparative advantage over other economies. Trade logistics and supply chain management are critical for developing countries to improve their competitiveness, reap the benefits of globalization, and fight poverty more effectively in an increasingly integrated world. Success in integrating global supply chains starts with the ability of companies to move goods across borders rapidly, reliably and cheaply. In order to connect the Macedonian economy to the world trends and processes and connect the Macedonian market to the European and the world market, the highest priority should be given to the development of logistics and supply chain management in Macedonia. This paper elaborates the current level of logistics and supply chain management development in Macedonian small and medium enterprises.*

***Keywords:** logistics, supply chain management (SCM), Macedonia, small and medium enterprises (SMEs).*

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1. LOGISTICS AND SUPPLY CHAIN MANAGEMENT IN MACEDONIA IN GENERAL

The current level of development of logistics and SCM in Macedonia cannot be evaluated as satisfactory, but Macedonia has a strategic territorial position that offers opportunities to develop effective business logistics and SCM. The main advantages of Macedonia for developing a logistics concept are the favourable geographical position and the level of development of traffic and other infrastructure. A positive trend in the development of logistics and SCM in Macedonia is the entry of the famous logistics companies such as: Logwin, Kuehne + Nagel, Gebruder Weiss, DHL, DB Schenker, Mediterranean Shipping Company (MSC), etc.

The following limiting factors facing the development of logistics and SCM in Macedonia can be identified:

- Macedonia is landlocked country;
- Insufficient foreign trade;

- Existence of a small number of companies offering integrated transportation, logistics and forwarding services. These are only the foreign companies mentioned earlier, while most of domestic companies operate only customs brokerage;
- Bureaucratic and administrative obstacles;
- Lack of support from all previous governments.

Despite the limitations specified, the geographic position of the country enables the function of a bridge across the center of the Balkan Peninsula and it makes it a special place to implement long-term logistics concept within the region. Therefore efforts are necessary to evaluate these favourable factors, and will connect with the modern logistics structures.

2. THE SMALL AND MEDIUM ENTERPRISES IN MACEDONIA

According to the data of the State Statistical Office the number of active business entities in the Republic of Macedonia in 2012 was 74424.

The sectors with the highest share in the structure of business entities were: Wholesale and retail trade; repair of motor vehicles and motorcycles with 27 307 entities or 36.7% and Manufacturing with 8 251 entities or 11.1%, whereas the least represented were the sectors Electricity, gas, steam and air conditioning supply with 134 entities or 0.2% and Mining and quarrying with 182 entities or 0.2%.

The data on the structure of active business entities according to the number of persons employed show that the highest share of 82.0% belongs to business entities with 1-9 persons employed, followed by business entities with no persons employed (or the entities did not provide information about persons employed) with 9.6%, and entities with 10-19 persons employed with 3.9%, the share of entities with 20-49 persons employed was 2.4%, those with 50-249 persons employed participated with 1.7%, while entities with 250 or more persons employed had a share of only 0.3%. [6, p. 1]

Nearly 99% of the companies in Macedonia are registered as small enterprises, employing nearly 55% of the employees in the private sector. According to the main activity registered, the majority of businesses are in the wholesale and retail trade sector (47%), manufacturing sector (13.1%), and the transportation, storage, and communications sectors (approximately 10%). The largest employer is the manufacturing sector, with 35.6% of the total number of employees in the private sector.

The Macedonian Government puts a high priority on the development of the SME sector, focusing on measures and activities to support the development and competitiveness of SMEs, and to improve the business environment in general.

From the aspect of its size and flexibility the SMEs represent the most dynamic but in the same time and the most vulnerable segment in the global economic structure of the country. That's why, the policy makers responsible for SME development, necessarily need a reliable mechanism for systematic follow up and assessment of the condition of the sector. It will further on, help them to select and carry out adequate measures providing the desired level of SMEs development. [1]

Chapman et al believe that SMEs can take advantage of the supply chain management strategy for various reasons: [3, p. 31]

- SMEs are critical links in many supply chains.
- SMEs are very flexible. Many SMEs are still young and developing and it is therefore easier for them to re-engineer existing

business processes and adopt a supply chain management approach than for large organisations with a long-standing organisational structure and culture. The integrated approach is inherently part and parcel of SMEs.

- SMEs follow an integrated approach by nature. Various business functions are usually performed by one or a few persons working together.
- Computer software programmes are more SME friendly. IBM, for example, started the service Smart Start, which allows SMEs to use IBM's expertise with information systems along with their own business expertise to find and implement ERP system solutions that work for their business.
- SMEs can also benefit from global competition. Supply chain management provides a method of addressing the competitive challenges facing business today.

Small businesses are therefore already vital links in the supply chains in which they participate. By virtue of their size, flexibility and expertise they possess advantages that they can use to benefit their supply chain and strengthen their own businesses.

Technology is increasingly affordable and available to help SMEs take advantage of supply chain strategies. Because of the competitive pressures facing small businesses it is critical for them to use supply chain perspectives and associated strategies to create synergies with supply chain partners in order to succeed in the global competitive environment [3, p. 34]. Despite the optimism of Chapman et al there is reason to doubt the general implementation of the supply chain management approach and willingness and ability to implement the approach by small businesses. [2, p. 5]

3. THE SIGNIFICANCE OF EFFICIENT LOGISTICS AND SUPPLY CHAIN MANAGEMENT PRACTICES FOR IMPROVING MACEDONIAN SMES' COMPETITIVENESS

In recent years, effective logistics and supply chain management have been recognized as key opportunities for improving the profitability and the competitive performance of the companies. Also in the last few years, a significant progress in the field of small and medium enterprise development in Macedonia has been seen.

The reason for the existence of the supply chains is that there are very few companies that can produce end products for end-customers from raw materials on their own, without the assistance of other organizations. The company that produces the raw material is often not the same company that sells the end products to the end-customer. In order to provide end products to the end-customers, a network of actors is involved in activities (as purchasing, transforming and distribution) to produce products and/or services. All of these actors add value to the end product. The series of companies that interact to produce end products, and to contribute to the value of end products, is actually the supply chain. [4]

SC performance will be a key indicator of overall corporate success in the upcoming period and core advantage when entering foreign markets and compete with low cost countries.

Consequently, the competition is no longer between companies but between supply chains. The goals of the entire supply chain become the common objective of each company. Cost and service improvements that were not achievable by individual companies will now be attained by cooperating companies. [5, p. 5]

SMEs with efficient logistics and SCM will be able to maximize their profitability and improve their competitiveness.

The large companies in Macedonia, although they exist in small number, have developed logistics and SCM system. This is especially the case with the companies that were privatized during the transition period and where a foreign investor is a dominant shareholder. Usually in these companies the main advantage is that they use the experience, the know-how and the benefits from the already well established logistics and SCM system in the parent company, located in some foreign country.

The successes achieved by organizations that implement the strategic supply chain management approach will certainly have a positive impact on the popularity of the approach and a trend towards implementing the supply chain management approach by increasingly more organizations is to be expected. This trend will undoubtedly influence small and medium-sized businesses (SMEs). Many SMEs are already supplying materials, products and services to large organizations. Hence, the adoption of the strategic supply chain management approach by large organizations in supply chains will have a definite impact on them (SMEs). [2, p. 2]

It is obvious that the position of the SMEs regarding the SCM is not as favorable as for the large companies. If we have in mind the fact the

SMEs dominate in the Macedonian economy, we can say that the development of the Macedonian economy is based on the development of the Macedonian SMEs. That is why this paper is focused on research about the level of development of logistics and SCM in the Macedonian SMEs.

4. RESEARCH FINDINGS

The research was made through a web based questionnaire, which was sent to 68 managers of small and medium enterprises from various industries in the Republic of Macedonia. The sample was chosen on a random basis. The questionnaire was answered by 55 managers and only those answers are included in the analysis.

Out of the 55 interviewed managers, 28% are form SMEs from the manufacturing sector, 44% from the service sector, and 28% are offering both products and services.

It is disappointing that only 37% of the SMEs have a separate logistics department and 63% do not have. From the companies that do not have a separate logistics department, 77% plan to establish one in near future, 13% do not know if they will and 10% do not plan at all. Of course this is an encouraging fact. 54% of the interviewed managers think that there is a need for organizational change for SCM adoption in the company, 33% think that there is no need for organizational change and 13% do not have opinion about this issue.

Regarding the current public policy towards SCM, 34% of the interviewed managers are not satisfied, 27% are satisfied and 19% are very satisfied.

On the question How do you manage your supply chain?, we got the following answers: 34% have close partnership with suppliers, 39% have close partnership with customers, 25% use outsourcing, 23% are holding safety stock, 21% use subcontracting, 14% use Supply Chain Benchmarking, and 12% use Vertical integration. These are the most popular methods among the Macedonian SMEs, while we got negligible percentage (i.e. almost no one) for using other sophisticated methods, such as: Electronic Data Interchange (EDI), e-procurement, Just-in-Time (JIT) supply, Third Party Logistics Providers (3PL), Fourth-party logistics provider (4PL) and similar.

13% of the interviewed managers think that their company is not successful at all in managing its supply chain in general, 34% think that they are just not successful, 28% think they are somewhat successful, 17% think they are successful and only 8% think that they are very successful. These figures

are disappointing, but the managers are aware of the fact that there is a need of implementing different systems in the companies for supporting the Supply Chain Management. More of the half of the interviewed managers believe that the Supply Chain Management in the company will be supported strategically by the implementation of the following systems: Material Requirements Planning (MRP), Manufacturing Resources Planning (MRPII), Enterprise Resource Planning (ERP), Warehouse Management System (WMS), Customer Relationships Management (CRM), Supplier Relationships Management (SRM), E-commerce, Radio Frequency Identification (RFID), Bar coding and Electronic Data Interchange (EDI). Nearly three-fourths of the interviewed managers strongly believe that the companies will achieve great benefits with the implementation of those systems, such as: better quality and quantity of information, reduced lead-time in production, reduced inventory level, better operational efficiency, increased coordination with suppliers and customers and flexibility. But, they are of course aware that the implementation of these systems is very expensive and a long-run project, probably as SMEs they will not be able to implement most of these sophisticated systems, so as a solution for overcoming the unfavourable level of logistics and SCM development in the SMEs, they are planning to implement the following future measures for supporting the company effort in logistics and SCM by raising the awareness of the importance of these topics: More funding and financial support (73%), More formal education (65%), Easier access to vocational training (62%), Better infrastructure (61%), Increased regional cooperation between institutions (59%), Closer cooperation between companies and governments (57%) and Improved information provision (54%).

5. CONCLUSION

Success in integrating global supply chains starts with the ability of companies to move goods across borders rapidly, reliably and cheaply. In order to connect the Macedonian economy to the world

trends and processes and connect the Macedonian market to the European and the world market, the highest priority should be given to the development of logistics and supply chain management in Macedonia. It is obvious that for the large companies it is easier to reap up the benefits of the well established logistics and SCM division. The position of the Macedonian SMEs regarding the SCM is not as favorable as for the large companies. If we have in mind the fact the SMEs dominate in the Macedonian economy, we can say that the development of the Macedonian economy is based on the development of the Macedonian SMEs. That is why this paper is focused on research about the level of development of logistics and SCM in the Macedonian SMEs. Macedonian SMEs must fully understand the supply chain management approach and their role. Large organizations, however must realize that, despite their size, SME suppliers are important partners who can contribute substantially to savings in the supply chain. Only in this way they can increase their profitability and competitiveness and become integral parts of the global supply chains.

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