

# A CASE STUDY ON THE POTENTIAL BENEFITS OF CONSOLIDATION WITHIN TRANSPORT, LOGISTICS, AND FREIGHT FORWARDING CLUSTERS IN THE POMERANIAN REGION

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## ABSTRACT

This paper focuses on the advantages of the companies that act in cooperation/clusters, as an approach to prevent the possible gain of interest for competitive products. Companies operating in the forwarding, transportation, and logistics sector are seeking original methods to become competitive. Price has lost its importance when selecting transportation and logistics services providers. Nowadays, it is the quality of service rates that is considered most important, followed by reliability, flexibility, and the product range. We will examine the rest of the factors influencing customers' choice of freight forwarding, transportation, or logistics operators, in this paper.

Keywords: transportation, freight forwarding, clusters.

## INTRODUCTION

Freight forwarding, transportation, and contract logistics continues to be a developing industry. Although growth is expected to slow, it will still likely outpace the rate of the global GDP—it is a good situation to be in, considering current economic circumstances.

Even so, freight and logistics companies will need to address numerous issues in the years ahead. For example, as trade routes become more competitive and freight rates fall, the industry's traditional bargaining power with its shippers will be challenged. One important strategy to counter this challenge is to use balance sheet strength to acquire niche players in important trade routes and geographies, especially in emerging markets.

It is much more difficult to be competitive in the global, international, or domestic market. Factors influencing customers' satisfaction are changing. Price is becoming a less important factor when selecting transportation and logistics services providers, as the quality of service now rates as most important, followed by reliability, flexibility, and the product range.

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According to Lisińska-Kuśnierz and Gajewska (2010), the following factors are influencing customers' choice of freight forwarding, transportation, or logistics operators (starting with the most important ones):

- timeliness of delivery;
- completeness of deliveries (productive capacity to realization of ordering products)
- accuracy of deliveries;
- promptness of deliveries;
- meeting the conditions of agreement
- accurate invoicing
- flexibility of deliveries;
- transportation conditions;
- conditions provided by terminals (theft protection, work organization, furnishings, etc);
- complexity of services.

All companies operating in the forwarding, transportation, and logistics sector have to seek different ways to address the competition. They must have the abilities to analyze customers' needs and then to respond quickly with differentiated and advanced solutions. It requires a lot of effort to improve the efficiency of their internal processes and to generate analyses that result in deeper understanding of customers' industries and business processes. The focus of this paper is to show the advantages of the companies that act in cooperation, in clusters, as a way to fight the competition.

### **Freight Forwarding, Transportation and Logistics Market - Main Characteristics**

Different types of companies work in transport, logistics, and freight forwarding sectors. They offer various services, from organizing transportation processes through offering transportation services, to managing the whole supply chain. Relations between such enterprises are also complicated. They compete with each other but very often create more or less formal partnerships.

Freight forwarding in its basic form is an asset-light business model in which forwarders buy capacity from carriers (airlines, trucking companies, and ocean carriers) and offer that capacity to their customers as a part of organizing their transportation requirements (Glass, 2013).

Due to the mainly transactional relationship between a freight forwarder and a customer, freight forwarding volumes typically develop in line with trade flows, resulting in a certain volatility of volumes and revenues. Global presence, comprehensive access to handling capabilities at airports/seaports, long standing carrier relationships, and sophisticated IT systems are the key criteria for differentiating international forwarding players. Services such as tracking and tracing, warehousing, customs brokerage and document handling usually complement the offer of freight forwarders.

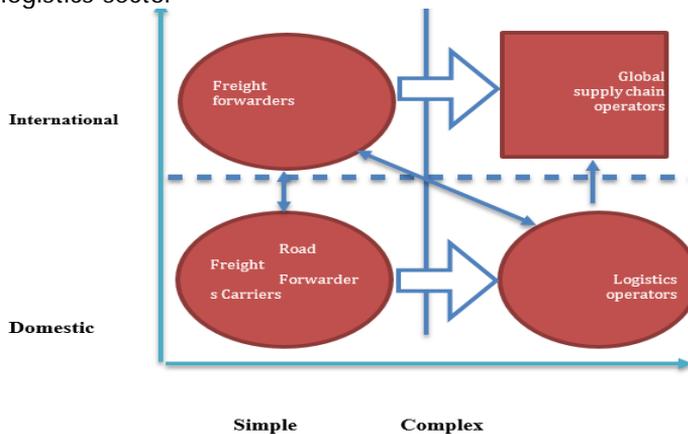
Transportation usually refers to asset-based business models providing transportation of unit load or bulk goods by road or rail. Services are offered by truck or train, as a part of the load or the full load. Road and rail transportation are represented by typically asset-intensive businesses with the highly commoditized road transportation, being particularly fragmented and competitive. In this sector, air and

sea transportation companies are usually large and have corporate structures (Button, 2010). Logistic operators focus on medium and long-term contractual relationships with their customers, typically spanning 2 to 5 years (Waters, 2010).

Contract logistics typically include a variety of supply chain services such as warehousing, packaging, labeling, transportation, quality controls, and many more. By increasing their engagement with clients, contract logistics providers are able to increase barriers to entry and exit as well as deliver integrated logistics solutions to their clients. Switching costs for a customer in a contract logistics relationship are significantly higher than for the more transparent and standardized forwarding services. Contract logistics providers offer customized full-service packages for their customers, leveraging their IT platforms and their human capital. Offering such complex services also entails longer lead-in time for developing and implementing solutions, as well as higher capital commitments for individual solutions, sites, and systems.

Many companies in this sector have developed from road freight or air/sea freight operations into contract logistics. This is a very typical process in the logistic market. Enterprises begin as small operators and then strengthen their position in the market, as they expand the range of their services.

Figure 1. Development and changing roles in the transportation, freight forwarding, and logistics sector



### Trends in Transport, Logistics and Freight Forwarding Sectors

The transportation, freight forwarding, and logistics industry has undergone significant changes. Due to its cross-functional role, it is a critical link between other industries, and thus it also reflects changes taking place in those industries. Globalization has led to geographical and service expansion on the part of many logistics providers, with supply chains becoming more complex and comprehensive. Trade lanes have shifted away from Europe and the US toward Asia, BRIC, and other emerging markets following the shifting of production facilities. Also, logistics providers predominantly follow their customers when setting up new hubs/facilities globally. For contract logistics this is more relevant than ever, since thin margins make it necessary

to secure revenue growth and attractive margin profiles in new markets and geographical locations.

In response to new challenges, freight-forwarding, logistics and transportation companies must consider a number of strategic fits and adopt different strategies to defend against competitive forces and to gain their market share. Porter's model of basic strategies, namely cost, differentiation, and focus (Porter, 1998) is the most popular strategic choice for enterprises.

Strategies based on low cost essentially focus on offering a product or service at a price or a cost lower than those proposed by competitors. Strategies based on differentiation attempt to provide a product or service which is unique, so that consumers are willing to pay more for it. Focus-based strategies attempt to make a product or service which fits a niche or a small market segment where either cost or differentiation is then employed.

Some freight-forwarding, logistics and transportation companies can adopt one of the following strategies:

- differentiation strategies, as a way to achieve differentiation advantage;
- the leadership strategy.

The management of enterprises may also focus on one of the following:

- developing core competencies;
- adopting multiple generic strategies.

Besides the individual strategical behaviour of freight forwarding, transportation, and logistics companies, the key trends faced by this industry are likely to impact the business models and indicate the proper strategy directions. The trends that can impact strategic positioning are as follows (Doll, Friebel, Ruckriegel, & Schwarzmuller, 2014).

- yield decline - shippers and transportation companies seek to exploit volatile freight rates to protect their own profit margins;
- modal split - demand shifts from air freight to predominately ocean and, increasingly, rail to reduce costs of supply chain;
- volatility of freight rates - increasing demands of greater sophistication in steering hedged capacities;
- vertical integration - when the transportation, logistics or freight forwarding companies increase profit pools by joining the other parts of the value chain;
- specialization and value added services - become key factors of complex supply chains which should consist of specialized logistics service providers;
- industry specific solutions - increasingly key solutions, both in terms of IT and know-how, offered to meet complex customer demands;
- contract logistics challenges - the tendency towards shorter contract lifecycles will increase hurdles to achieve an appropriate ROI;
- globalization vs. regionalization - demand will either grow for "global total solutions" or revert back to regionalization.

### **Network Partnership as a Consolidation Strategy**

More and more independent companies find out that it is difficult to function alone in today's industry where they must compete with the multinational corporations and their numerous offices around the world. The way to become more powerful on the

competitive market is to join a special network. Networks consist of different companies of the freight forwarding, transportation or logistics sector, which join their forces to fight in the global space. A good network provides the basis to build strong working relationships where they are required. Belonging to such a network provides:

- increasing exposure resulting in an increase in sales volume;
- a trustworthy source;
- enhanced customer confidence in the abilities of the member companies to handle their requirements;
- a communication network keeping members up to date: from regulation and important industry news to exchanging various information.

True benefits from belonging to logistic, freight forwarding or transportation networks focus on: increased sales through the network, increased security in dealing with other member agents. Different networks also offer (Security Cargo Networks, n. d.).

- security member-to-member payment guarantee program;
- annual international meetings with plenty of time for one-on-one conferences among members;
- ongoing marketing and public relations campaign to promote awareness of the group among shippers and vendors for the enhanced credibility of members;
- access to members' discount contract rates with carriers;
- regular communication among members regarding rates;
- company's profile, personnel and links listed on the network websites;
- prompt resolution of any problems among member companies and enforcement of agreed-upon terms of cooperation;
- recommendations of well-qualified staff available in markets not presently represented due to administrator's extensive contacts with other companies and groups;
- full-time, neutral non-forwarder network administration to take care of member inquiries, needs and interests without delay;
- discounted rates on cargo insurance;
- other discount programs.

### **Clusters - Definition and Characteristics**

It may be observed that industries tend to be geographically "clustered." Well known examples of clusters include the concentration of information technology firms, wineries, finance and investment banking, fashion products, or computer products. It is also very often for corporate functions to be clustered. This phenomenon was originally observed and explained by the British economist, Alfred Marshall (1920), in his classic work *Principles of Economics*.

Marshall (1920) hypothesizes that the development of industrial complexes implies the existence of positive externalities of co-location. He attributed such externalities to three main forces: knowledge sharing and spillover among the co-located firms, development of specialized and efficient supplier base, and development of local labor pools with specialized skills.

Porter (1998) provides a detailed framework for cluster analysis, as well as many more examples of clusters in various industries. Focusing on competitive advantages and the increased innovation offered by clusters, he suggests that clusters affect

competition by increasing the productivity of the co-located companies, increasing the pace of innovation, and stimulating the formation of new businesses.

Joining a cluster means getting a lot of advantages. A company can choose the way to be more competitive by getting bigger and bigger. However, a cluster may be an optimal balance between the complexity and bureaucracy that hamper innovation in large enterprises, and the lack of scale that holds back smaller firms. In a dynamic environment, when innovation and fast market response are the keys to competitive advantage, the tacit communication and trust-building between smaller firms (and between their employees, who share culture and extensive personal contact) allow them to participate in joint learning and adoption of best practices. Yet, the separate and independent decision making in the firms in a cluster may avoid "groupthink," allowing the cluster to adopt new technologies and process innovation, thus, to renew itself and to remain competitive. Consequently, a cluster may be an optimal organizational structure, balancing flexibility and fast decision making on the one hand with the range resource availability on the other hand.

In Porter's (1998) words, "A cluster allows each member to benefit as if it had a greater scale or as if it joined with others formally – without requiring it to sacrifice its flexibility" (p. 32).

The paper is focused on the advantages of the freight forwarding, transportation, and logistics companies cooperating in clusters. In its basic form, such a cluster can include logistics operators, freight-forwarding companies, transportation enterprises, and carriers.

In such clusters the following entities can also work (Sheffi, 2015): warehousemen; customs brokers; specialized consulting and

IT providers; companies with logistics-intensive operations, where value added operations may be small relatives to the logistics-related activities provided by distributors; light manufacturing and kitting companies; and the logistics operations of industrial firms, such as the distribution operations of retailers and after-market parts suppliers.

This is quite easy to define the advantages of participation in industrial clusters. According to van Dijk and Rabelott (2005) the most important of them are as follows:

-trust: it is thus easier to develop trust among organizations and people, leading to lower transactions costs between firms whether they are trading with partners or with horizontal collaborators/competitors.

-exchange of tacit knowledge. Such exchange of tacit knowledge supports discussions over specifications with a supplier; exchanging benchmarking information with a competitor; or supporting a customer – all made easier, faster, less expensive and more effective when conducted within a cluster – using face-to-face and chance meetings.

-collaboration. The concentration of firms in the same industry, with their similar needs and concerns, gives natural rise to joint activities. These include lobbying for the provision of infrastructure, regulatory relief, incentives, and other government largess;

-research and education

-supply base.

From the customer's point of view, a strong supplier base with multiple suppliers bodes well for competitive pricing and supplier innovation, which are crucial for competitiveness.

Logistics, transportation and freight forwarding clusters have several unique characteristics which reinforce their advantages. These can be classified into two categories: operational advantages related to transportation and advantages related to the sharing of assets among companies. According to Sheffi (2015) transportation advantages include economics of scope, scale, density, and frequency of transportation services. Operational advantages of resource sharing focus on shared assets, serving customers when providers change, expansion capabilities, and shared workforce.

In well-industrialized countries, as well as in developing ones, the efficient operation of clusters can be seen. Companies forming clusters can help business entities, small and medium-sized enterprises in particular, improve their competitive edge. Regardless of an industrial sector or branch in which they operate, companies grouped in clusters have better opportunities of development, identification of production niches, access to export markets and recruitment policy than they have while operating alone.

### **Clusters in Pomeranian Region**

In the Pomeranian Region, in the freight-forwarding, logistics and transportation sector there are two clusters: Klaster Morski (the Polish Maritime Cluster) and Klaster Logistyczno-Transportowy Północ-Południe (the North-South Logistics and Transportation Cluster). Each cluster consists of several dozen members, among whom the representatives of scientific and research institutions, state administration offices, transportation, logistics and freight forwarding enterprises and consulting companies can be found. The main difference between the clusters is the fact that in the Polish Maritime Cluster there are more members who represent institutions and state administration offices (there are 25 such members out of 50) than in the North-South Clusters (there are 10 out of 49 such members).

According to Karlsson (2008), the analysis of the potential of a cluster includes the assessment of the following criteria:

- regional conditions, with the consideration of capabilities, natural resources, economic traditions of the local environment, accessibility and mobility of highly qualified labourers, investment attractiveness of the region (attractive investment offers, municipal infrastructure), and an open attitude presented by the local/regional community towards cooperation;

- policy pursued by the authorities which is manifested by the promotion of the cluster and public authorities, financial support provided by public authorities for the development of the cluster, training, education and organizational support for the cluster, and adaptation of changes in the education system to meet the requirements of the cluster;

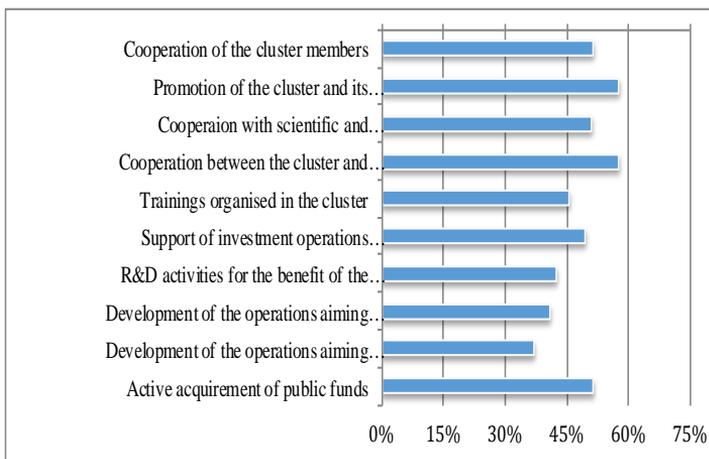
- institutional environment in which adaptation of the training, consulting, and IT services to the requirements of the cluster is analyzed (e.g. loan and guarantee funds, venture capital, seed capital, etc.) and an open attitude towards the cooperation and quality of the science and R&D sector in the region;

-management of the cluster, including leadership of the cluster coordinator, the coordinator's activities aiming at the development of cooperation inside the cluster and operations outside the cluster.

Considering potential benefits which result from the cluster membership for the enterprises operating in the freight-forwarding, logistics and transportation sector, the most important element is the management of the cluster. It mainly consists in the assessment of the activity level presented by the cluster coordinator and the results of such activity manifested by the increase in the competitive edge of the cluster members, achieved in various ways. Among the members of the Pomeranian clusters (entrepreneurs operating in the freight-forwarding, logistics, and transportation sector) survey research has been carried out to identify their expectations connected with the cluster membership and their expectations referring to the assessment of the cluster operation resulting from the activities of its coordinator.

The analysis of the expectations (see Figure 2) reported by the cluster members should undoubtedly come as an information compendium for its coordinator in the reference to the future directions and areas of the managerial processes. The expectations presented by the cluster members are mostly focused on joint initiatives run within the cluster, which refer, first of all, to the promotion of the cluster and its members, the cooperation between the cluster and state administration, and active acquirement of public funds.

Figure 2. The expectations of entrepreneurs operating within the Pomeranian clusters, referring to their membership in the cluster.

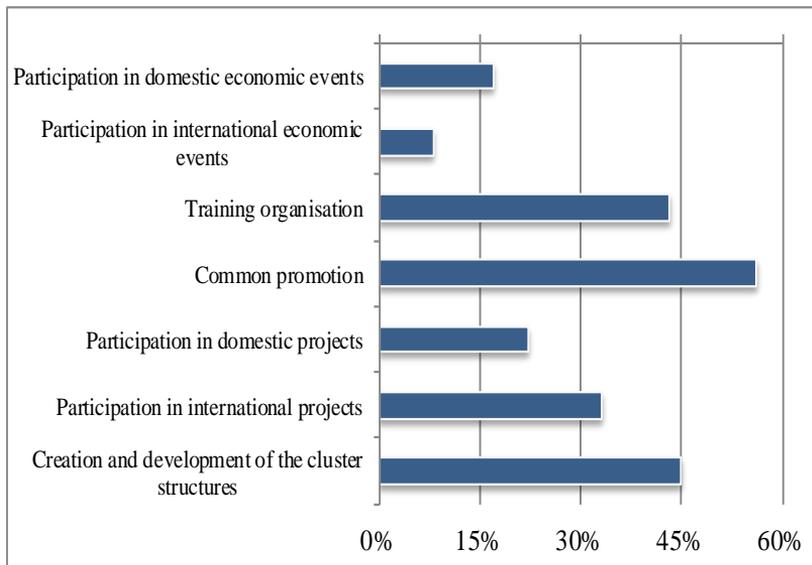


As the members of the cluster, the surveyed enterprises expect at least some support in the development of operations enabling them to enter foreign and domestic markets. Considering the fact that the cluster members attach the greatest significance to the common initiatives run by the coordinators, this aspect of cluster activities has been analyzed (see Figure 3).

The cluster members have stated that common operations run within the framework of the cluster are the following:

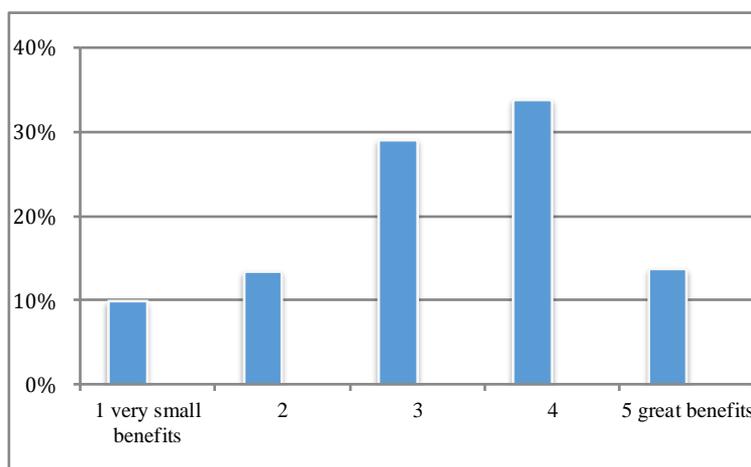
- common promotion of the cluster and its members;
- construction and improvement of the cluster structures; it mainly refers to the active participation of entrepreneurs in the meetings with the cluster coordinator and efforts to obtain the status of the key cluster (the North-South Transportation Logistics Cluster);
- organization of common trainings;
- participation in domestic and foreign projects, and
- participation in national and international economic events organized by the cluster members.

Figure 3. Joint enterprises organized within the framework of the cluster.



The level of satisfaction declared by the cluster members in the reference to the participation in joint initiatives organized within the framework of the cluster determines the future prospects for the cluster operations. The initiatives are supposed to positively affect the competitive position of the cluster members in the market. The cluster members have assessed the benefits resulting from their membership in the cluster (see Figure 4).

Figure 4. The assessment of the benefits resulting from their cluster membership



Note that 47.7% of the surveyed entities have declared that the benefits resulting from their membership in the cluster are significant and great, 29% of the enterprises have assessed the benefits as moderate, and 23.4% have assessed the benefits as modest and very small. The assessment of the benefits obtained by the cluster members can be therefore defined as positive. Almost half of the surveyed entities have declared a significant level of satisfaction. Thus, it is possible to conclude that even if membership in the cluster does not translate into improving the competitive edge of particular entities, it can be attributed to the low satisfaction declared only in some areas, for example those connected with the focus on pro-innovative projects or market expansion.

### Conclusions

This article presents the research on the potential resulting from the cluster membership of business entities operating in the freight-forwarding, logistics, and transportation sector of the Pomeranian region. By incorporating various organizations such as business entities, consulting agencies, representatives of state administration, they try to undertake initiatives which integrate the cluster members into participating in common projects. The study of the cluster members took the form of an in-depth interview; it determined their level of expectation and the degree of satisfaction derived from their membership in the cluster.

The results indicate that the enterprises which join the cluster usually expect to participate in various common projects with the entities operating in the same sector or initiated by the cluster coordinator. Almost half of the surveyed cluster members have declared a high or very high level of satisfaction from their cluster membership. We conclude that clusters and entities which operated within such structures, realize their assumed aims, and there are significant prospects of further development for them.

Theoretical analysis and numerous case studies indicate that the existence of clusters is ensured by a number of phenomena which positively affect the productivity

and competitiveness of economic entities incorporated in such clusters. It is also worth noting that positive effects connected with cluster operation are not limited exclusively to its participants; they also affect the environment of clusters. The spillover effects also have positive influence on the increase in competitiveness and innovativeness of local, regional, and national economy.

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