

THE ROLE OF ORGANISATIONAL FIT IN INCREASING PERFORMANCE THROUGH LOGISTICS CENTRAL PROCUREMENT

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Abstract: Partly due to globalisation, for FMCG companies it is beneficial to leverage volumes of goods and services bought through a central sourcing entity. A competitive supply chain is a unique supply chain, comprising of unique links and collaborations that provide a customer with more added value to a lesser cost than a competitor. Logistics optimisation is a technical optimisation however forms an important link between the different parties in the supply chain. How can increased performance to logistics innovation be analysed. Both the technical flow optimisation as well as the central role in the organisation should be taken into account to be able to assess the possible increased performance by implementation of an innovative alternative.

Keywords: *collaboration, central sourcing, logistics, performance, innovation*

FMCG companies are continuously looking to increase their performance through supply chain optimisation (Hult, Ketchen Jr, & Arrfelt, 2007). Increasing globalisation of these multinational companies and increasing pressure on high customer service, lead to a more complicated supply chain (Ellram & Cooper, 2014). Not only is there a constant pressure of achieving financial and logistical performance within a company and from the market situation, there are also external pressures which are less related with financial performance. Both governmental policy measures and brand reputation are deemed important factors to make the supply chain more sustainable (Campbell, 2007).

An established strategy among FMCG companies is to install a central sourcing entity that is able to leverage the volumes of a product needed company-wide, rather

than having all separate business units source similar products by themselves. This strategy well-aligns with the trend of globalisation (Trent & Monczka, 2003). A central sourcing entity performs an important role within a company regarding security of supply, responsible sourcing decisions and alignment of requirements of the various business units. Often, central sourcing entities do not only source tangible products such as ingredients and packaging materials, they also source services, such as, HR, factory equipment and logistics (Smart & Dudas, 2007). Logistics as any other division aims to increase their performance and optimise the management of transport, warehouses and other logistic activities (Fugate, Mentzer, & Stank, 2010). Financial performance is driven by successful negotiation in procurement (Trautmann, Bals, & Hartmann, 2009). However, supply chain performance can also stem from

(technical) innovations (Damanpour & Evan, 1984). Decision-making is often regarded on three levels; strategic, tactical and operational level (Stock, Greis, & Kasarda, 2000). The optimisation of transport, i.e. finding the most efficient way of transporting a fixed quantity of goods from one to another location is typically linked to tactical decision making and therefore submitted to both implied decisions made on strategic level and affecting the operational level with tactical level decisions (Schmidt & Wilhelm, 2000). Transport optimisation can be regarded as a technical innovation on a tactical level.

This leads to the following question: how can a technical innovation in a central sourcing company be analysed on performance? To answer this question, first a review of literature concerning the relation between organisational fit and performance will be given. Secondly, it will be described how for a technical innovation the organisational context should be taken into account. Thirdly and lastly, a proposed method for analysis will be proposed.

Organisational fit

Innovation leads to a change that may both fit in the current institutional context that surrounds an organisation, or may require it to change to a certain extent (Schot & Geels, 2008). The institutional context as is comprises formal or regulative institutions such as laws, contracts and policy standards, normative institutions that concern for example incentive structures and cognitive

institutions which can be cultural or social influences (Geels, 2002). Organisational fit of innovation in research often focusses on internal integration and on the institutions the organisation is submitted to. The organisational structure is a normative institution that can be of large influence on the organisational fit of an innovation. For example, alignment between departments on initiatives. A factory aims to be as flexible as possible in order to be able to fulfil demands. This leads to most profit as it key selling strategy to customers. However, logistics is looking for economies of scale by optimizing truck loads, which results in increased efficiency and profitability for transport, however to a decrease in flexibility and reduced profitability for the factory. This leads to both conflict and contra productive behaviour (Ellegaard & Koch, 2012). For this initiative there is clearly a possible increase in performance from a technical point of view, however as there is no organisational fit, it does not work.

A similar example, is that a material buyer who aims to increase the flexibility and make arrangements for the possibility of having shorter-term call-offs at the same supplier where a logistics department is trying to find economies of scale by reducing the number of pick-up moments and increasing the fill rate, might lead to a damaged relationship with the supplier and with that diminish the possibility of future cooperation on initiatives (Ellegaard & Koch, 2012). Internal alignment of performance and objectives can lead to successful implementation of

initiatives and therefore to increased performance (Barratt, 2004).

Organisational fit is also important to consider in external integration. The external and internal organisation need not necessarily have the same culture, size or power, however they should be compatible. Compatibility can be created through aligning on goals and having meetings while the integration exists. This is important as trust and openness will result in more positive outcomes and reduce the risk on any uncertainties and conflict. (Cadden, Marshall, & Cao, 2013). However, even if goals are aligned, alliance through external integration is usually not an equal relationship. Improvement on performance indicators is usually different for both parties. This is due to the fact that the difference between their goals. In the earlier example of buying the product at a shorter call-off time to be able to deal with dynamic demand in the factory, will lead to an increase in uncertainty for the supplier following the bullwhip effect (Holweg, Disney, Holmström, & Småros, 2005; Whipple & Frankel, 2000). However the ability to fulfil this requirement of the buyer is an important selling tool and will give them advantage on competitors

The key point for successful integration is the alignment of different parties that are involved in the integration initiative (S Chopra & Meindl, 2006; Whipple & Frankel, 2000). It is not always obvious to align on goals effectively due the conflicting nature of

the task and the inherent context. De Brito & Van der Laan, 2010 increasing sustainability has a complex nature and therefore may. The inherent context of supply chain is often operations while it does not take environmental and social aspects into account.

Schoenherr & Swink (2012) validate Frohlich & Westbrook's work (2002) on theory of integration and demonstrates that indeed significant benefits can arise from strategic external integration. External integration is often aimed to increase both logistics and financial performance (Germain & Iyer, 2006). The extent to which this is done may be by using performance indicators that measure across supply chain relationships (Stank, Keller, & Daugherty, 2001). However, external integration may not have the expected impact on performance due to a lack of internal integration. Internal integration concerns both cross-functionally integrated logistics operation and planning databases (Closs & Savitskie, 2003). As well as higher level strategic planning integration (Sanders & Premus, 2005). Flynn, Huo, & Zhao (2010) agrees that the success of external integration, whether this concerns supplier or customer integration, is founded upon internal integration. Through successful internal integration the information can be shared effectively intra-organisational i.e. with suppliers and/or customers. (Rodrigues, Stank, & Lynch, 2004). Zhao, Huo, Selen, & Yeung (2011) agree that external integration is enabled by successful internal integration of systems,

data and processes. Generally, it can be concluded that literature states that in order to assure successful implementation of any external integration, the internal integration should be adept (Schoenherr & Swink, 2012).

A unique supply chain

Following from the previous paragraph, it can be concluded that the combination of successful internal and external integration leads to increased performance. However, it is not entirely clear what performance entails. Performance here is deemed to be linked closely to competitive advantage. Competitive advantage equals fulfilling the customer requirements at a lower costs than that of a competitor (Govindan, Soleimani, & Kannan, 2014). Competitive advantage does not only arise from a lower costs of production of a product that fulfils the requirements of the customer, it also arises from having a distinguishingly different supply chain than a competitor in a way that it adds value to the customer or its environment (Oliver, 1997). Providing this added value to a successfully internally and externally integrated supply chain, makes it not duplicable and therefore unique (Whipple & Frankel, 2000). One can therefore say that both horizontal and vertical collaboration is a key factor of creating a unique and performing supply chain as successful collaboration leads to more intense integration (Barratt, 2004).

This theoretical notion of collaboration and integration is especially applicable to logistics, as logistic activities form the links

between the different locations of nodes supply, production and consumption (Aschauer, n.d.). Logistics therefore is already a physical connection between the different parties in the supply chain, it may also facilitate to form collaboration links between parties through innovations. Logistics can therefore have an important role in external integration and with that in supply chain performance. As earlier stated, logistics as a centrally sourced service also has an important integrational role internally in the company by connecting planning, operations, buyers and factories.

Mixed Method Approach

Logistical innovation is typically a technical optimisation on a tactical decision level, i.e. the transport flows in a network are optimised to use to their full capacity (Chaovalitwongse, Furman, & Pardalos, 2009). The role of logistics in the physical supply chain, i.e. forming the links between suppliers, factories and customers, as well as forming an important basis of successful alignment between internal parties such as operations, factories and buyers, makes it also an important subject for organisational fit (Sunil Chopra & Meindl, 2001). Due to these two aspects of logistics in a central sourcing entity, it is important that both the technical and the organisational aspects are taken into account when performance is analysed.

An example of a case study executed at a central sourcing entity of a multinational FMCG company, provides a mixed method

approach on the assessment of performance of alternatives in the organisation of inbound to manufacturing transport (Verwijs, 2015). The alternatives considered concern the combination of multiple truck loads in order to optimise the transport efficiency through better vehicle utilisation and increase performance. To fully grasp the impacts of a possible combination of loads, performance is defined as transport efficiency, to what extent is there empty space in the vehicle or is the vehicle driving empty, transport costs, emissions due to transport, the travel time of the vehicle and the operational feasibility. The last performance indicator is not just an indicator of logistic performance, it is rather an indicator of the organisational fit as it considers the possibility to implement the alternative in the current information processes and physical chain. In this case study, the operational feasibility is not the only qualitative parameter that defines the organisation fit.

There are several internal parties involved, for example central buyer is responsible for the procurement of the raw and packaging material at the supplier, she/he aims to procure in a manner which is most profitable for his stakeholders, which are the factories which depend on the materials coming in. The factory likes to increase profitability by minimize uncertainty in planning by e.g. reducing or fixing lead times, and maintaining (un)loading slots.

Concerning external parties, the transport is currently organized by the supplier. Two

types of external integration are proposed. An informal project alignment where the responsibility of transport stays with the suppliers (under terms of Delivery Duty Paid) or a formal change of responsibility in contract to the buyers account (under terms of ExWorks). The initiative owner would like to increase profitability and sustainability through the proposed integration. Therefore, the analysis places the proposed operational changes in the defined institutional context with that highlighting possible conflicting aspects as well as the enabling elements.

Due to the combination of a multi-objective performance approach of the possible changes implied by the logistics innovation and testing the same innovation in the institutional context, a fully integrated approach is executed (Bruijn & Herder, 2009).

The case study confirms that the logistic performance and the financial performance do not always align with the operational feasibility. The most advantageous case of physical integration, concerns the integration of multiple suppliers i.e. external parties. However this integration, requires an intensive external operational coordination as well as internal information sharing between different buyers and factories. While the case of combining an inbound transport of R&P with downstream finished products, can be highly beneficial, it requires coordination between different planning departments and with that

decreasing the internal operational feasibility.

Concerning the institutional context, it can be found that indeed the objectives of both internal and external parties are not aligned. In the option where the supplier is in control of organizing the transport, he has the opportunity to participate in the project and agree on the characteristics, while in the case where the buying company procures the transport, the supplier loses his profit margin he has on logistic costs however he is maintaining his supplier role for the specific company. Also he may be imposed to project characteristics to which he has no say, such as the combining of his product with different products and more flexible loading hours.

Discussion

The need for inter-functional and inter-party coordination is less if the integration concerns very static actions, as may be the case in certain supply chains (Chopra & Meindl, 2006). In the single case study provided, a dynamic supply chain of perishable goods is considered. The specific results on this case study may not be applicable to another case study. Also no

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results are presented of other case studies in different departments or showing contradicting or similar results.

Conclusion

It can be concluded that as external integration is based on suitable internal integration, a successful combination of both can lead to increased performance. Especially, in a central sourcing entity where the procurement of goods and services form an important core element of an organisation, it can be stated that, for a technical subject as logistic flow optimisation it is applicable to use a Mixed Method Approach. Performance of innovations or other changes is highly dependable on the organisational fit.

Further research recommendations

Future research could compare more case studies that have been analysed by a Mixed Method Approach to compare approaches and see which elements are taken into account. Also, it would be valuable to analyse whether the Mixed Method Approach provides a good prediction of possible increased performance of an innovation after it has been implemented.

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