

Collaborative purchasing of logistics services at the Wanxingda Group

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This is a popular scientific version of the Master's thesis with the same name. It was written in the autumn of 2011 and spring of 2012 with the purpose to explore and identify possibilities for the companies in the Wanxingda Group (WXDG) to work together to reduce costs of outbound logistics of finished goods. Throughout the thesis a strong emphasis was placed on feasibility and comprehensiveness when approaching the many challenges faced when independent organizations strive to cooperate.

Introduction

The Wanxingda Group and Honchang Heavy Industries comprise five mid-sized companies with a single common owner in Liaoning Province in Northeastern China. Located in one of China's traditional heavy industries bases, these companies have specialized in products ranging from dry insulation type transformers to enamelled copper wire to steel track shoes for excavators. Facing ever increasing pressure from both domestic and international competitors, the group is looking to increased collaboration to increase its competitiveness.

Horizontal cooperation on logistics activities is a rather immature field compared to supply chain management in general. Research that span all three fields of logistics, collaboration and procurement are even scarcer, making this topic even more interesting.

Problem Discussion

The strong relationships these companies share, the industrial nature of their products and their close geographical proximity to each other indicate not only that there is potential for closer cooperation, but also that many of the adverse factors facing collaboration initiatives spanning independent organizations might not be as prevalent as in other cases.

Logistics and distribution of sold goods have traditionally been handled individually by each company in the Wanxingda Group with minimal coordination on a group level. Also, the group has had issues with finding freight forwarders that can fulfill its needs. Service is neither good nor flexible enough and at the same time too pricey. Smaller freight forwarders are too slow and service is not good enough; medium sized forwarders lack in attitude and service, failing to provide for

the WXDG's special needs; and big forwarders and logistics companies are simply both too expensive and too slow. This appears to be an opportunity to leverage the combined distribution volumes within the group to reach economies of scale and negotiate better conditions, especially so since all three companies are responsible for the distribution of all products sold. Assuming that customers are content with the current prices, then any savings from reduced logistics costs would be a source of pure profit for the WXDG. If not, then a reduction in expenditures would help their product offerings staying competitive.

Methodology

First, a literature survey was conducted to provide a solid theoretical foundation for the study and then a framework was developed for how to best approach an improvement project of this kind. A normative professional study with both a qualitative and a quantitative part was then carried out. It involved a pre-study with a series of open interviews to determine which companies it would be fruitful to include in the study and also the actual scope of the thesis. Afterwards all transport related data and costs were gathered from each company's ERP system. This information was then analyzed and used to create a Request for Quotation (RfQ). This RfQ was distributed to a set of local Logistics Service Providers (LSPs) in order to gather information on prices and possible cost reductions. The analysis of the responses constituted the bulk of the quantitative part of the study. To achieve a better understanding for the attitudes towards collaborating within the Wanxingda Group and find the, for them, most suitable form of cooperation a questionnaire was designed and handed

out to each company's senior management. The qualitative analysis of this data and the accompanying discussion completed the second part of the study and also provided material for drawing conclusions.

Findings

There is definitely potential to reduce costs through increased collaboration, but scheme based solely on purchasing activities is not enough to drive any significant cost reductions. The quotations received from LSPs during the study showed that collaborating on purchasing activities alone would, in the best case scenario, only result in a cost level similar to the current one. The lack of LSPs interested in responding to the RFQ and the level of the prices in the quotations received could possibly be explained by the logistics market in Northeast China not yet being mature enough to accommodate the kind of advanced partnerships that this setup requires. Not only is there a lack of progressive attitude towards working with logistics, but the way of doing business and the communication lack in modernity and effectiveness as well (a very large number of LSPs had to be contacted in person to get any quotations at all while many others relying mainly on fax machines for correspondence).

With the decision to centralize the logistics function the WXDG expects to see significant improvements of several service factors apart from cost alone. It is expected that jointly planning and executing this function will lead to better availability of trucks, less price fluctuations and higher efficiency. Having the new logistics unit act as an interface between freight companies and the companies in the group, many day-

today administrative activities in planning, finding and coordinating transportation for deliveries will become much more streamlined. Better planning would help to increase the forward planning window from as little as 24 hours to upwards a week., greatly increasing bargaining power against forwarders. It is also believed that with the WXDG as the exclusive customer they will receive better service and safer transportation all-round. All of the above mentioned benefits have been major motivators for companies to collaborate on logistics according to contemporary research. Two benefits identified in the theory that the WXDG does not expect to receive from this project are knowledge exchange between companies and reduced tender process throughput time. This divergence might be due to the relatively basic approach towards logistics within the WXDG and the absence of any particularly strong partnerships or contracts that could provide shortcuts when procuring transportation.

As for the issue of sharing any financial gain achieved among those entitled to it is not an easy question. The WXDG will initially implement a very rudimentary reward-sharing scheme. Preliminary 80% will be shared among the companies while the remaining 20% will be used to encourage and motivate the logistics centre. The savings will be split according to either shipment volume or total transportation spend., it is as of yet not decided. It might not be the fairest way of solving the problem, but it is easily understandable. The literature indicates that this is common; simplistic but understandable methods are given preference over more advanced and potentially better allocation schemes due to

their complexity and data requirements. Not only is very specific and quantitative data on costs and profitability needed, something that is not always readily available, but the more sophisticated methods also lack in transparency which presents a challenge during negotiations when a certain allocation needs to be motivated to several other participants.

Another thing that speaks in the favour of implementing a simpler method in the beginning when the effects of the centralization are still unknown is the unique relationship that these companies share. All the theory on reward sharing found during the literature survey assume that the players are individual, selfish entities, the companies in the WXDG share a stronger incentive to work towards solutions contributing to the greater good of the group as a whole. Due to this fact a simple but perhaps not 100% fair method is more likely to be accepted by all parties than in scenarios where competitors or companies connected only through common business interests are involved. That is not to say that this is trivial problem in the context of the WXDG or other groups, but there is reason to believe that it will be easier to come to agreements and that problems other than monetary considerations will take precedence. This seems to be the case, since it was indicated by senior management at the WXDG during the survey that much greater concern was expressed over practicalities and operational efficiency rather than the money, trust issues and information privacy concerns. It is acknowledged in the literature that inter-organizational cooperation has the potential to be of particularly big help to smaller companies due to resource and investment

limitations. Unfortunately the focus is mainly on the creation and cooperation within clusters of independent companies with the context of groups left unexplored. An interesting thing that can be learned from that research is that the most common reasons for cooperation not taking off or ending in clusters are lack of trust, fear of free-riding and leaking of sensitive information. Again, the survey undertaken by this study shows that those issues were of no concern to the management at the WXDG. This also speaks of an advantage when it comes to sharing costs and rewards and all players are part of the same group.

Conclusion

The findings of this study indicate that there are real and tangible benefits to cooperating within groups. Not only reduced costs but also operational improvements such as better planning and increased flexibility. Also, contrary to common theory on the subject, horizontal collaboration initiatives within groups appear to be shielded from the main deterrents, which is very positive. Senior management at the group were far more concerned about practical issues and the actual implementation than free-riding, abuse of trust and leaking of sensitive information. Finally, when undertaking projects of this nature it might be fruitful to investigate a greater scope of cooperation than what might seem ideal at first glance; the WXDG decided to include more companies and more products in their logistics setup than this study and saw this as an opportunity to maximize synergies.