The unstoppable evolution towards collaborative supply chains

The strength of a business’s internal Supply Chain capability is a result of the need to adapt to ever changing market expectations. To cope with today’s exponential rate of change an increasing number of businesses are relying on external expertise to innovate and exploit supply chain opportunities. Miebach Consulting believes that collaboration is becoming an indispensable component of leading edge supply chains and the factors that need to be addressed to ensure success.

Authors: Xavier Farrés, Principal, Miebach Consulting
Peter Surtees, Associate Director, Miebach Consulting

Imagine the logistics directors of a Consumer Packaged Goods (CPG) company and a Retailer discussing how to improve the joint operation of their supply chains. Both are proud of the fact that they have optimized their internal supply chains and agree that they need to collaborate to identify further optimization opportunities. The agenda for the meeting is to review the movement of a range of product categories from the point of manufacture to the store. Mapping the flow of goods quickly identifies an opportunity; products manufactured in the Benelux are being dispatched via a consolidation platform to the manufacturer’s European DC and then to the Retailers DC in Southern Germany. The Retailer has a cluster of stores in the Benelux area and analysis shows that circa 40% of the product received from the manufacture is delivered to stores within a close radius of the manufacturers’ facility. Obvi-

About Miebach

Miebach Consulting offers consulting and engineering services in the areas of supply chain management, logistics and production. The clients range from medium-sized businesses to global companies that enhance and expand their competitive position with innovative logistics solutions. The Miebach Group, founded 1973 in Frankfurt, today has 21 offices worldwide in Europe, Asia as well as North and South America. With over 320 employees the company is one of the leading international consultants in logistics and supply chain management.
Potential total logistics cost savings in shared supply chains

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Shared Transport</th>
<th>Shared Horizontal Logistics Model</th>
<th>Shared Vertical Logistics Model</th>
<th>New Shared Model</th>
<th>Green Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>18%</td>
<td>26%</td>
<td>39%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Miebach Consulting 2015

However, there are an increasing number of success stories that demonstrate that if you are able to crack the code you can enjoy substantial rewards. No one denies the potential benefits of collaboration, and on the contrary, those benefits are now being identified and realized in more and more cases as businesses learn how to address the challenges.

Projects developed and delivered by Miebach Consulting show that, although horizontal collaboration in transport (between companies in the same level in the supply chain) can bring benefits, it is 360º collaboration, especially between several companies, where it is possible leverage greater efficiencies and deliver significant cost savings.

The collaborative benefit case

Miebach’s research, supported by successful collaborative projects, concludes that the greatest benefits from supply chain collaboration comes from improvements in truck utilization, increased shipment frequencies, inventory reduction and lower waste. Projects have also demonstrated that the biggest potential for supply chain collaboration is with companies that share similar shipping patterns, which in many occasions is the case between competing companies. In such occasions it is important to ensure that the project meets the requirements of the anti-trust legislation and it may be necessary to appoint a Neutral Trustee to manage sensitive information that cannot be shared by the collaborative companies.

Miebach has found collaborative opportunities to reduce costs across the entire supply chain. From simple shared transportation initiatives to more sophisticated projects that require a completely new logistics model where potential savings can be as high as 39% of the combined total logistics costs of the collaborating partners (Image 01).

Why is collaboration so difficult?

One of the UK’s largest retailers, in a midst of a crisis of results and under pressure to improve performance, assembled an external team of consultants supported by an internal multi-disciplinary team, to initiate a project to reduce the costs of its private label supply chain. The results after 2 years of work, developing collaborative projects with a significant proportion of its private label suppliers, was a saving of circa GBP700 Million.

During the post project evaluation the team summarized the main challenges encountered developing collaborative initiatives:

- Agreeing how the financial benefits should be shared
- Building trust and enthusiasm to meet the objectives of all of the participating companies
- Managing cross functional & company processes and communications
- The lack of appropriate technology
- The lack of shared KPI’s to facilitate and measure success

These fundamental challenges explain why collaborative initiatives have such a low success rate and the evolution of collaboration has been slower than expected. Articles published in the CSCMP’s Supply Chain Quarterly estimate that only 20% of collaborative projects have provided significant results, and 35% delivered reasonable results. Why invest the time and effort required when the success rate is so low?

However, as is frequently the case with this type of opportunity, there is no simple solution. The manufacturer wants to deliver full truck loads to achieve internal efficiencies, cost and sustainability objectives. The retailer values the frequency of deliveries to their stores from his DC to achieve his On-Shelf-Availability targets resulting in less than truckload deliveries to their stores. The challenge is to find a mutually beneficial solution that delivers a cost/service benefit case. Further analysis demonstrates that without critical mass, required to deliver the cost and service objectives, the opportunity will be lost. The solution is to invite more of the retailers’ suppliers to join a collaborative initiative to combine logistics flows to retain critical mass and frequency.

It is only when the internal capabilities are optimized; the attention of supply chain leaders gradually shifts towards looking outside their own boundaries for collaboration opportunities. Businesses that have already optimized their Supply Chains are frequently those who also operate lean organization structures and struggle to resource collaborative projects.

During the post project evaluation, the team summarized the main challenges encountered developing collaborative initiatives:

- Agreeing how the financial benefits should be shared
- Building trust and enthusiasm to meet the objectives of all of the participating companies
- Managing cross functional & company processes and communications
- The lack of appropriate technology
- The lack of shared KPI’s to facilitate and measure success

These fundamental challenges explain why collaborative initiatives have such a low success rate and the evolution of collaboration has been slower than expected. Articles published in the CSCMP’s Supply Chain Quarterly estimate that only 20% of collaborative projects have provided significant results, and 35% delivered reasonable results. Why invest the time and effort required when the success rate is so low?

One of the UK’s largest retailers, in a midst of a crisis of results and under pressure to improve performance, assembled an external team of consultants supported by an internal multi-disciplinary team, to initiate a project to reduce the costs of its private label supply chain. The results after 2 years of work, developing collaborative projects with a significant proportion of its private label suppliers, was a saving of circa GBP700 Million.

During the post project evaluation, the team summarized the main challenges encountered developing collaborative initiatives:

- Agreeing how the financial benefits should be shared
- Building trust and enthusiasm to meet the objectives of all of the participating companies
- Managing cross functional & company processes and communications
- The lack of appropriate technology
- The lack of shared KPI’s to facilitate and measure success

These fundamental challenges explain why collaborative initiatives have such a low success rate and the evolution of collaboration has been slower than expected. Articles published in the CSCMP’s Supply Chain Quarterly estimate that only 20% of collaborative projects have provided significant results, and 35% delivered reasonable results. Why invest the time and effort required when the success rate is so low?
In summary, the rewards can be high enough to encourage businesses to invest the time and effort required to overcome the barriers, especially when they have exhausted all of the opportunities to improve internal efficiencies but remain under cost and service pressure.

Collaboration in the future

Whilst the current business environment can explain the recent increase in the number of collaborative initiatives, the pace of change and cost challenges will continue to drive companies to work together. There are five fundamental reasons which explain why collaboration will continue to evolve and grow:

1. **Environmental sustainability**

The climate change conference organized by the United Nations in Paris in December 2015 was a turning point in public opinion. The drive to reduce the carbon footprint will relentlessly put greater pressure on the users of conventional energy resources. Not surprisingly there is already substantial evidence that companies with good sustainability programs are rewarded with higher valuation of their stock prices in the capital markets. This pressure will increase the need for collaboration between companies to further improve the sustainability of their supply chains by reducing empty truck kilometers and the resulting emissions.

2. **Big Data exploitation**

The ability to analyze vast amounts of data generated by current technologies enables business to develop capability to better predict their supply chain challenges. The opportunities are many, but most probably one of the biggest will come from data sharing and analysis. For example: the analysis of shared POS data for different brands of the same product category, will better predict sales patterns and trends. Collaboration will enable the exploitation of the benefits that this new capability will offer.

3. **Technology developments**

Technology is developing at an exponential rate. Digital enhancements will continue to reduce the costs of communication and coordination of activities, and make it easier for companies to find external solutions. In parallel, it is going to be more difficult and cost prohibitive for individual businesses to continually upgrade to the latest technologies from the Internet of Things, sophisticated artificial intelligence algorithms, through to the robotics revolution. This will foster the development of supply chain models with a level of collaboration and even a much more sophisticated “co-creation” of solutions than the one that exist today, these new models will be more effective in dealing with the development of these new technologies.

4. **SKU Proliferation**

The exponential growth of e-commerce and the increasingly transparent pricing of products drive the need for business to find ways to differentiate themselves from their competitors. Product and service differentiation, which is also valued by consumers as part of a trend towards personalization, drives SKU proliferation. (Image 02). Product differentiation is best done close to the customer, at a late stage of the logistics operation. To make these operations cost efficient, companies will need to collaborate to design cost efficient scalable processes and develop shared facilities or 3PLs resources.

5. **The rise of the collaborative economy**

Another unstoppable trend is the development of business models where different actors share resources. In our economies there are lots of underutilized resources which, as an example, has enabled the development of business models based on sharing products and services e.g. shared cars (Getaround), car trips (Sharing Trip) or storage (Share My Storage). It is forecasts that by 2025, the collaborative rental economy will be the same size as the traditional rental model. The implications of the Shared Economy and its effect on the current logistics operations should not be underestimated.

For example Carmaker Daimler, with Miebach’s support, has developed the Car2share Cargo project in which, through smartphones, tablets and on-board applications, they are conducting pilot tests of a type “Uber” service with Mercedes Benz vans for customer home deliveries.

Supply chain collaboration is the future. Businesses that do not grasp and exploit collaborative benefits will be at a distinct disadvantage to their competition, particularly when their customers and consumers are already collaborating.

Photographs: Miebach, Fotolia
Processing: VFV Grafik

www.miebach.com