

# Unlocking innovation in the supply chain

April 27 2016, by Jinchou Hou

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Ford Rouge Factory Tour. Credit: Nicole Yeary

*Jinchou Hou from the Institute for Manufacturing comments on how members of complex supply chains can form alliances, in order to unlock the innovation that's often hiding within individual companies.*

In order to stay innovative, many leading companies run internal programmes, covering a wide range of subjects from technology innovation to business model innovation. But these programmes, in many cases, fail to generate significant value.

Some companies consider collaboration with others in the supply chain. One obvious benefit of doing so would be the integration of capabilities and skills. But it's almost impossible to integrate different strategies at a large scale, since many companies would be unwilling to share all of their data and information.

Apart from limited innovation, the consequences of locking innovation inside companies are obvious. Knowledge and information are not integrated between companies in the supply chain, so the services and solutions delivered to end customers may not be the best ones. Additionally, supply chains are usually output-focused instead of outcome-focused.

Suppliers seldom focus on the value delivered to end customers. On the other hand, if innovation can't be unlocked in the supply chain, the supply chain is not efficient. Suppliers, contractors and clients have to discuss back and forth several times before final decisions are made.

In some industries in the UK, such as the utility industry, the regulator has triggered the change to unlock innovation in the supply chain, by directing the industry to be outcome focused and customer focused. Companies are incentivised to explore new models to engage suppliers for innovation. One approach is the formation of a strategic alliance, where suppliers/contractors and the client companies can work together within one organisation, and team up to deliver services and solutions to end customers. Suppliers are contracted on outcomes instead of on outputs, so that they consider the end customers as well as the closest step in the [supply chain](#).

The shift from output based model to outcome based model and the formation of a strategic alliance to engage suppliers and clients can bring benefits for key stakeholders. For customers, when suppliers are contracted on outcomes and get rewards when customer experience is

improved, they will pay attention to end customers, so that customers are expected to get better services. For client companies, in outcome-based contracts, they can transfer some of the responsibilities and related risks to suppliers, and risks and rewards are shared with suppliers. And for suppliers, since they are contracted on outcomes, they will have certain flexibility to choose among possible solutions. In this situation, they are incentivised to innovate and to come up with more efficient and effective solutions.

However, the challenges and barriers are enormous. Partners in the alliance have different business models, and conflicts can arise when they are brought in under the same outcome-based model. Also, partner companies have very diversified backgrounds. Some of them may be competitors outside the strategic alliance, and some of them may not have had smooth relationships previously. If trust and collaboration in the alliance are limited, failure is likely. When the whole industry is still output focused, extended suppliers may have neither the capabilities nor the confidence to be contracted on outcomes. And if the atmosphere in the whole industry is not collaborative, it is challenging to form collaborative and trusting relationships.

We observed this new model closely and worked together with people from industry, aiming to find key points that can ensure the success of an outcome-based model with a strategic alliance approach where suppliers and clients partner with each other to deliver services and solutions to end customers.

In the resulting report, co-authored with IBM, we conclude that there are three areas that partners in the strategic alliance should work on. These three areas are commercial solutions, collaboration and operational design. A commercial solution that is accepted by all partners lays the foundations of working together. Collaboration ensures that partners start to integrate their skills and capabilities, and design and deliver

solutions collaboratively. Process design aims to ensure the smooth operation of the strategic alliance.

## **Commercial Solutions**

Since partners are measured against outcomes, a commercial solution should address the risk and reward sharing mechanism and the benefit realisation framework. The risk and reward sharing mechanism needs to solve these problems: how benefits and rewards are shared among partners based on contributions, how risks are shared among partners based on accountability, and to what extent the alliance should be measured against end customers' outcomes. The benefit realisation framework needs to solve the following problems: how to decide on the final solutions among many possible capital solutions and operational solutions; how to solve conflicts between return on investments and customer outcomes; and how to solve conflicts among partners regarding their preferences on solutions, etc.

## **Collaboration**

Collaboration should be built from four aspects: strategic objectives, organisational culture, trust and communications. With shared strategic objectives, partners can work towards the same direction. A collaborative and innovative organisational culture needs to be formed within the strategic alliance, collecting the best parts of partners' organisational cultures. Trust can ensure that partners are willing to share data, knowledge and information, and trust other partners' decisions. Consistent and efficient communication rules need to be followed, and educational communications will be helpful to deliver the concepts of outcomes and collaboration to every employee.

## **Operational Design**

Operational design includes continuing education, information platforms, process design and metrics and measurements. Continuing education is important to ensure that employees understand the strategic objectives of the alliance and that everyone talks on the same tune. Information platforms help to integrate knowledge and capabilities from partners, and that data and information can flow efficiently. Also, data security needs to be addressed. Process design such as decision-making process, risk management process, culture change process, etc. can facilitate the smooth operations of the alliance. Metrics and measurements that measure the contributions of [partners](#), behaviours of individuals, financial status and the achievements of outcomes also needs paying attention to in everyday operations.

Firms that would like to engage suppliers for innovation can consider forming a strategic alliance, combining [suppliers](#) and client companies, while focusing on delivering outcomes to end customers. However, they should be fully aware of the challenges and barriers in this model, and make decisions carefully to ensure success.

Provided by University of Cambridge

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