



It is a common understanding that some of the most effective businesses globally devote a great deal of attention to managing and developing their supply chains. In recent years the Government, the CBI, the Automotive Council and the All Party Manufacturing Group have all published important reports and studies of the performance of the UK supply chain and the scope for improvement and expansion. This focus of attention is partly because there are major growth opportunities in the short, medium and longer term thanks to the investment undertaken and planned in various sectors including rail, civil nuclear energy, renewable



Aerospace and medical equipment are two more sectors where the growth prospects are good. But supply chain firms may well not understand these growth prospects or be properly equipped to make the most of them

## **Current Supply Chain Challenges and Opportunities**

The Industry Forum Manufacturing Advisory Group (MAG) met recently to discuss current supply chain challenges and opportunities. They looked at recent data from the premier professional association for supply chain and operations management, APICS, which shows that chronic supply chain disruption persists but is not always easily visible. As a result it is often neglected by management who underestimate the adverse consequences. A survey of over 500 businesses found that 73 per cent experienced supply chain disruption with an average of five incidents. In nearly 40 per cent of cases the disruption originated below tier one in the supply chain. One in five firms experienced losses in excess of one million Euros.

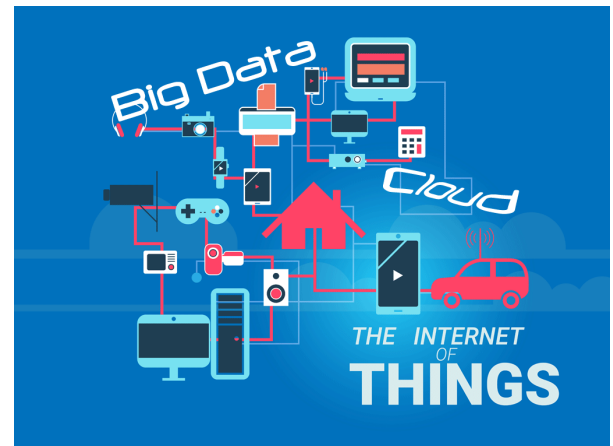
MAG confirmed that there are difficulties in getting supply chain information about 2nd level suppliers and beyond. Difficulties that can have serious impacts on the whole supply chain. Problems are not necessarily a matter of large scale external upheavals although they can be damaging. Common business issues like access to finance with the prospect of insolvency can be major risk factors too. As is in any risk management exercise it is important to gather specific information about the situation under consideration and examine it for significant patterns.

APICS suggest that primary manufacturers often do not realise the extent to which their own behaviour is part of the problem, especially their failure to communicate effectively their actual requirements are. Often this is because these requirements have never been properly specified. There is unfortunately a widespread tendency to place all the accountability for supply chain performance on the suppliers.

Skills gaps are a problem and even where procurement professionals are actively involved there is a tendency for them to see their role narrowly in accountancy terms and to be dominated by short term financial pressures. Higher levels of management are often quite simply unaware of the situation and may lack the background to appreciate the potential seriousness of the situation.

This state of affairs would be of concern if the business environment were static but current and future developments make it more urgent to address the issues. Many commentators believe that competition is no longer company to company but supply chain to supply chain. In some cases stakeholders see this in national terms, as for example competition between the Indian and Chinese automotive supply chains and their ability to support ambitious national medium term goals.

A number of important trends are relevant to the growing importance of supply chain competitiveness including the blending of manufacturing and services offerings (servitisation), the opportunities arising from strategic re-shoring elements of supply and a clutch of digital developments including the emergence of the Internet of Things (IoT) and the insights available from Big Data analytics. MAG emphasise the increasing importance of customer value as a driver especially as customisation becomes a key competitive differentiator. All of this is making supply chains ever more complex as product life cycles are getting compressed in many sectors. Benefits, barriers and bridges to effective supply chain alignment.



MAG stress that effective supply chain management is about much more than materials management or basic purchasing parameters. It is important that supply chains managers are able to think on a broad scale - in terms of the value chain, for example.

This means that quality rather than cost or delivery is becoming the key driver with quality evolving to mean the provision of superior quality through a personalised offer for each customer.

Supply chain management is often introduced to a firm as part of new product development. This is quite understandable but the approach needs to be elevated to company level and integrated into the overall product strategy. This means getting a proper alignment between the marketing strategy and the supply chain approach. Without this degree of integration the scope for productivity growth is limited. It is important that the performance metrics used for the supply chain align with the firm's overall performance yardsticks and those used to drive marketing.

MAG have found that questions of the firm's overall global configuration come to the fore as supply chain management improves. The firm's components and processes should be placed in the localities and countries which offer the best combination of cost and efficiency. This is often a matter of the suitability of the workforce particularly as supply chains become more complex and the capability to respond immediately to changing customer requirements grows in importance. However firms need to recognise that creating a comprehensive supply chain map takes time and resource to construct. Nonetheless the benefits of a full description of the whole global supply chain are substantial.

### **How to embed customer responsive supply chain practices.**

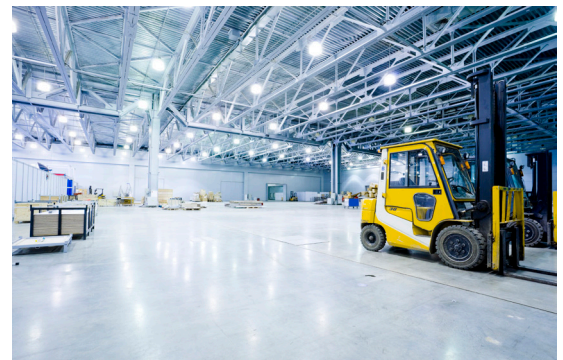
MAG stress that the core of better supply chain management is developing higher levels of trust. An important tool in this regard is a Mutual Value Index which measures the customer value to supplier and supplier value to the customer and provides the overall context for improvement initiatives.

It is vital to stabilize the relationship with suppliers so that there is sustained engaged relationship with suppliers. MAG members have concluded that it takes on average ten years to establish real trust between customer and supplier. It is important that primes are careful with their supply chain during a downturn as a prime will depend on the supply chain when demand picks up again. Sharing cost savings between customer and supplier is also vital.

Any programme of this kind must have high level sponsorship within the business if it is to succeed. This should be expressed in overall corporate objectives and metrics that are aligned to this. A good understanding of the balance between cost and value is essential. This must be at the heart of any New Product Introduction (NPI) programme which is to succeed and value will always be value as perceived by the customer. Suppliers must be involved as early as possible in the NPI programme.

Primes must appreciate that developing a good understanding in the supply chain is as important as upgrading their own staff. Companies throughout the supply chain must understand the value chain forward as well as back. Everyone needs to understand their position in the value chain and the influence that flows from that position, especially the influence that they have on the delivered end product. Better information flows are important and social media are an important new tool for this. Job shadowing is another way of developing better overall strategy understanding along the supply chain.

The global automotive supply chain uses the Materials Management Operations Guideline/Logistics Evaluation (MMOG/LE) as a self assessment questionnaire for suppliers to score their competency in materials planning and delivery. It is designed to validate that a supplier has robust materials planning and delivery processes in place to support business objectives. In the global auto supply chain many vehicle manufacturers require suppliers to use this tool. MAG suggest that this approach might also be useful in other industry sectors.



### **Balancing supply and demand can raise productivity.**

The formal definition of supply chain management is the process which integrates, coordinates and controls the movement of goods, materials and information from a supplier to a customer to a final consumer. More and more sectors are getting to be like automotive where the cost of bought in goods and services are a high proportion of total revenue. This means that the total purchased cost is often a lot larger than added value. This trend alone justifies making supply chain management a priority.

It is vital to assess the costs of different potential suppliers in terms of total landed cost. With customisation and rapidly changing consumer preferences re-shoring can emerge as the most cost-effective solution. When supply and demand are in balance the supply chain is increasingly value driven and this means a greater contribution to added value without unproductive limitations. Higher added value means higher productivity. This way of looking at the supply chain is described as 'holistic'. Adopting an integrated perspective in this way overcomes limitations on productivity growth. This means making planning rather than manufacturing the centre of the management process. The keywords in the best approach are supportive, collaborative, dynamic and flexible.