



# Lean, green supply chains

AXIOM MANUFACTURING SERVICES LTD  
TECHNOLOGY PARK  
NEWBRIDGE  
NP11 5AN

[WWW.AXIOM-MS.COM](http://WWW.AXIOM-MS.COM)

01495 242000

SIMON CREWE

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*In an economic climate where there is increasing pressure to reduce costs, Simon Crewe, supply chain manager at Axiom Manufacturing Services, looks at ways in which manufacturers can ensure they retain an environmentally sustainable supply chain that won't be a burden on the company's bottom line.*

With supply chains expanding in size and complexity, more companies are focusing on managing supply chain risk both within the organisation, with its stakeholders and globally from a sustainability view point.

Many organizations do not commit the time and resources necessary to fully understand costs, and benefits of designing supply chains to better manage risk and to deliver value to their customers.

Within contract manufacturing the challenge is to create flexible and unique supply chains for each customer without compromising the business.

The key lies in adapting the business to the diverse nature of your customers business which can range from a customer who can provide an accurate sales forecast to one that offers its customers a 24 hour turn around on orders.

The Supply Chain Managers role is tie together all of the important pieces, make this meaningful to the organisation, communicating that to its suppliers and ensuring that everyone is fully aligned.

A balance between cost, lead time, MOQ, inventory holding, the cost of holding inventory, providing a flexible solution and low risk is required.

As new customers come on board or the requirements of existing ones alter, supply agreements invariably have to change and by carefully selecting and developing relationship with suppliers where they not only deliver a quality product, on time, at the right price, but also for other value added services and capability much of the risk associated with these changes is minimised.

It is important that the suppliers list is continually rationalised and where you have to choose new suppliers that these are chosen specifically for their capability, flexibility, for their specialist offering and where they fit into your current portfolio.

At the other end of the equation communications with customers is critical as their business model and requirements needs to be fully understood by all parties. Without open and honest communications none of the supply chain would fit together.

Experience shows that the optimum supply chain and minimal risk is only achieved through close collaboration on product forecasting where possible. Therefore, one of the primary functions of the Supply Chain Manager is to work with customers at the earliest stage to establish a forecast that is both robust and as accurate as possible.

In short a Supply Chain Manager needs to work in close partnership with all parties to be able develop a unique and flexible strategy for every customer.



Part of the strategy should include looking back into component suppliers and out through to the requirements placed on you by your end customers. This will ensure that the right stock balances are put in place (whether this is in finished goods, work-in-progress, components or consigned stock) to meet the required flexibility. The development of the supply chain should also include detailed proposals for the use of standard parts that will provide greater flexibility at lower cost and/or risk. The consultant should also focus on materials traceability and work with you to determine the requirements in this area.

In looking at the overall supply chain solution, you should be able to realise the following benefits:-

- Risk reduction
- Cost improvements
- Reducing liability
- Eliminating obsolescence
- Traceability throughout the supply chain back to the supplier
- Minimising inventories
- Economies of scale
- Substitutes
- Standardisation of parts
- Lifetime requirements of the product
- Improved lead times

For many companies when consolidating business costs the view is that outsourcing is an effective option and when they do, sustainable credentials are often high on the list of their priorities.

## GOING GREEN

Several years ago it would have been considered by many that achieving a sustainable supply chain would result in reduced efficiency. But this is no longer the case. In fact, being sustainable is now viewed as a source of competitive advantage and a matter of corporate survival which, in this period of economic slowdown, is paramount rather than a costly inconvenience.

As environmental costs and consequences become factored into policy, regulation and procurement decisions, the economic case for more sustainable and environmentally attractive products and services grows rapidly. "Saving the planet is necessary, but it is also good business."

The transition to a low carbon economy is presenting many challenges for all businesses, led by both legislation and customer demand. The key is to find the balance between addressing environmental issues and long term profitability.

Traditionally those responsible for procuring goods and services have done so at the lowest market prices. However, as we have begun to distinguish between market prices and social/environmental costs, the supply chain is being redefined and now looks at value not just costs. Indeed sustainable procurement can help cut costs by stripping out waste.



Supply chain managers need to look for sustainability across the whole supply chain. They need to look at sustainable innovations in their activities, and identify any opportunities to investigate new processes and technologies that reduce dependency on scarce and potentially expensive resources and those materials that are harmful to the environment as well as looking at logistics methods involved. It's important that sustainability becomes part of everyday business, not just in isolation for certain aspects of the company.

There will however be times when local sourcing is not an option and your supplier will have to go offshore to locate parts which reduces flexibility, increases lead times and places a burden on the environment. Refining logistics by carefully planning schedules and consolidating outbound deliveries is a must when considering cutting carbon emissions costs.

Green supply chain best practices focus on the business results first and clearly demonstrates a company's values and identifies how it will approach and work with suppliers and partners to meet its green guidelines.

Guidelines that outline how an organisation will operate a sustainable supply chain should be developed at board level which will then secure buy-in from the rest of the organisation and other stakeholders.

To help them manage the whole life cost of their products OEM's are increasingly looking for 'complete outsourced solutions' from their partners. And, in an era when Corporate Social Responsibility (CSR) is increasingly important to stakeholders, sourcing to an off-shore provider can carry some risks, such as the cost of logistics and production methods which don't always match the green aspirations of the OEM.

From a contractors point of view it is important never to underestimate reputation in a customer's decision to choose a supplier or partner.

As one of the smaller, more specialist manufacturing companies in the UK, Axiom always tries to source from local suppliers, using standard components wherever possible to ensure purchasing efficiencies, increase product life and reducing the carbon footprint. In addition, by using standard components it removes the issue of what to do with excess stocks, these are simply consumed by other customers.

However, when components from the Far East (or offshore locations) are required, the supply chain department plan the supply so that, in the majority of cases, orders are consolidated to reduce the impact on the environment and transport costs. Axiom also seeks partners who offer consolidated shipments.

**In summary by implementing green and lean practices throughout their production processes and supply chains, manufacturers can; increase productivity, profitability, flexibility and positive reputation in the market.**

## ABOUT AXIOM MANUFACTURING SERVICES



Axiom Manufacturing Services focuses on providing **contract electronic manufacturing services (EMS)** to original equipment manufacturers (OEM's) who do not want to manufacture some or all of their products in house.

A complete range of **electronics manufacturing services** are available from design support, prototyping, new product introduction, PCB assembly, sub assembly, product assembly, test, warehousing and logistics through to aftermarket services which includes repair and rework.

Our focus is on working in partnership with our customers, **providing a total electronics manufacturing solution**. We work with you to help you to retain your competitive edge and profitability. Axiom delivers value throughout the supply chain, whilst helping to lower your total acquisition costs.

**Axiom Manufacturing Services Ltd, Technology Park, Newbridge, NP11 5AN. 01495 242130 (sales), 01495 242000 (main switchboard), 01495 242096. enquiry@axiom-ms.com**