

Superfast Business Wales



Business Guide

Supply Chain Management

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Supply Chain Management

Most business operations are part of one or more supply chains (also sometimes referred to as value chains). Dependent upon your position in the chain, you are likely to have a chain that operates in two directions:

- Customers, who may also have customers of their own—known as the ‘downstream’ chain
- Suppliers of goods and services who will also have suppliers – known as the ‘upstream’ chain

Each link in the chain potentially adds both cost and value as goods and services are transformed. Increasing the value added and reducing the costs in order to achieve customer satisfaction are the main objectives of Supply Chain Management.

To do this, supply chain partners work together, collaborate on operations and share information in order to streamline and optimise the processes and achieve the objectives of providing the right goods, at the right price, at the right time and place to meet customer needs and expectations.

Some industries, for example automotive, operate to timed deliveries based on shared forecasts of demand with the intention of driving stock out of the chain and thus reducing costs.

Building an information flow between supply chain partners gives the whole chain visibility of changes in demand in time to plan for a smooth flow of products from raw materials to the consumer. Everyone wins.

Collaborating effectively with your supply chain can be significantly enhanced with Superfast Broadband. This enables the fast transfer of valuable data between trading partners and, where appropriate, the integration of systems at a more fundamental level. Examples might be stock control, logistics and sales forecasting systems. See also our [Guide to Integrating Systems:
http://business.wales.gov.uk/superfastbusinesswales/integrating-systems](http://business.wales.gov.uk/superfastbusinesswales/integrating-systems)

Understand

What Does The Technology Do?

Supply Chain Management is the coordination of material, information, and financial flows between and amongst all the participating enterprises in a business transaction:

- Material flows involve physical products flowing from suppliers to customers through the chain, as well as reverse material flows, such as product returns, servicing, recycling and disposal
- Financial flows involve credit card information, credit terms, payment schedules and consignment and title ownership arrangements
- Information flows involve demand forecasts, order transmissions and delivery status reports

Information sharing needs to be accurate, timely and relevant and can be achieved by file transfers, shared systems or third party data stores in order to ensure benefits can be achieved. When automatic



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Adopt

How do I get started?

Establish links with key businesses in your downstream and/or upstream chain

It is important to involve a wide range of functions within your own and partners' businesses. Maybe use conference calling to establish and maintain the connections and keep them up to date.

Analyse and document the business process flows between your business and your customers and suppliers

For some requirements, such as sustainability of certain natural or food products, you may need to have full understanding and traceability of the process back to the raw materials supplier. Collaborative Business Process Mapping can identify duplication of processes as well as processes which are not being adequately performed and allow the process flow to be improved, saving time and cost, and eradicating error.

Identify the value add and cost add of each stage

If value add is low, consider alternative approaches. If cost is high, consider cost reduction methods.

Identify duplications

For example of processing or of stockholding. Decide where these activities will be performed

Optimise stockholding requirements where possible

Use forecast demand, effective replenishment quantities and lead times, and optimum batch size and lead times to manufacture.

Agree information flows and frequencies between the parties

This will ensure that the necessary information is available where and when needed.

Consider sharing information across multiple suppliers and customers

Choose standard approaches where possible to reduce the costs of acquiring and maintaining systems. Areas might include:

- Customer service management
- Procurement
- Product development and commercialisation
- Manufacturing flow management/support
- Physical distribution
- Outsourcing/partnerships
- Performance measurement
- Warehousing management



Run initial pilots for downstream and/or upstream partners

Monitor, review and modify the systems as experience is built. Choose a scale for the pilot that reflects capability—don't bite off too much in one go.

Document the processes, integrate them into your internal systems and then begin to roll them out to further partners

You may need to persuade partners to change their working methods. Make the process as standard for your industry as possible and provide education/sales material that applies to them.

The incremental cost of implementation should reduce as you progress

It's worth checking that it does. The real savings will kick in once 100% of your chain is operating this way—though the 80/20 rule often applies.

Exploit

What Business Benefits Can I Expect?

Correct product and service specification by sharing information across the chain

Adopting standard product codes and descriptions mean that sharing is much easier and partners have a shared understanding of the product and quantity being referenced. Different industries have their own standards.

The EAN system (<http://www.gs1uk.org/what-we-do/GS1-standards/Pages/default.aspx>), for example, applies to retail supply chains and defines data transfer standards as well as automated data capture approaches such as bar codes.

Demand is understood in advance allowing effective planning

Knowing what your customer expects to require in the way of raw materials, assemblies and finished goods enables you to plan your production processes and to share your forecast demand with suppliers.

Optimum stockholding and Just in Time (JIT) replenishment

Variations in data accuracy and in decision making can cause extremes of stockholding and availability to occur. Too little stock leads to consumer dissatisfaction and lost sales whilst too much stock adds cost and waste. The equivalent lack of availability in other supply chains is also a major problem. Potential savings from collaboration complement those achieved from consistent identification (e.g. EAN.UCC numbering) and one-way data sharing (e.g. EDI ordering). A benefit of knowing demand is that stockholding can be optimised to hold just enough to meet demand in a timely fashion. Lean or Just in Time approaches can be applied to reduce excess stockholding, driving out waste and cost.

Production processes run as planned

Good quality demand information can be applied to production planning processes to ensure that processes are optimised for timing and for batch sizes, thereby allowing the most effective use of machines and manpower to meet customer needs at optimum cost.



Costs and quality are properly managed

The eradication of short runs or emergency batches through demand smoothing, ensure that costs can be controlled and errors and wastage are reduced.

Payments are accurate and timely

By tracking goods through the supply chain, both parties are aware of which products and services have been provided and when. Invoicing and payment can then also be automated. In some industries, the customer raises their own invoice and payment as part of an automated process triggered by arrival of goods. This can remove steps from the process resulting in time and cost removal.

Top Tips

Planning and preparation is crucial

Where several companies are involved in the process, it is essential to agree and document approaches and expectations from the outset.

Collaborative working requires trust and perseverance

Build strong relationships from the start by sharing values and outcomes. Understand your partners' objectives from the process and help to achieve them.

Automatic Data Capture saves time and increases accuracy

Investigate bar coding, RFID and other data capture technologies to capture data 'in the flow'.

Supply Chain Systems generate large quantities of data

Consider storage and access issues. Cloud data centres may be a good solution here and will allow secure access from many locations. Superfast Broadband will provide the backbone for this access.

Manage exceptions

With such large datasets, filtering and alerting is critical to ensure that you see the important and relevant data in a timely way. Users can then access and drill down into the data to investigate exceptions to normal processing. Regular reports can provide assurance that processes are operating to expectations.

Hold regular meetings internally and with partners

Use them to review progress and to confirm or change action plans. The flow of information between the key people involved is as important as the automated data flow in ensuring trust is built and maintained.

Set up a benefits model and monitor it regularly

An activity of the scale of Supply Chain Management has the potential to deliver powerful benefits but they need to be monitored, variances need to be investigated and actions taken to ensure that optimum benefits are achieved.



NEXT STEPS

1. Register to attend a fully-funded Business Development Workshop.
www.business.wales.gov.uk/superfastbusinesswales/events
2. Make an appointment to see a Business Advisor who will help you create a personal action plan to grow your business.
www.business.wales.gov.uk/contact-us

For further information on Supply Chains take a look at:

See how other businesses in Wales have exploited Superfast Broadband
www.business.wales.gov.uk/superfastbusinesswales/superfast-success-stories

Find out how much your business could save with our
www.business.wales.gov.uk/superfastbusinesswales/savings-calculator

Other business guides that may interest you include:
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