Supply Chain Management

Managing the business from top to bottom

In the new globalised marketplace, it is the companies that excel at supply chain management that will succeed – and outsourcing will allow them to concentrate on their core skills. Barry McCall reports

UPPLY CHAIN management may not be a term to set the heart racing, but it s playing a central role in the ability of modern companies to compete. This is because it has evolved from simply organising supplies of raw materials and the distribution of products to something that encompasses almost every part of the product life cycle, from design through to

"It's a phrase that's often wrongly used," says Martin Christopher, professor of marketing and logistics at Cranfield Business School in the UK

"We used to talk about it as distribution and logistics, and in the past, we typically talked about optimising our activities. But organisations are now operating within much wider networks which are a lot more complex

"Modern supply chain manage-

relationships in that network." The focus has also changed. "The traditional way of viewing supply chain management was as a means of controlling costs," says

"But now it is seen as something that can create value and serve the customer. At the end of every supply chain is a customer, and we have to make it more responsive to customer needs in a changing mar-

Christopher.

This change is leading to a move BMW, among others. towards more flexible - or agile, as Christopher says – supply chains. "We're looking at flexible supply chains that can do lots more at low cost," he says. "This used to be seen as a trade-off, that increased service meant increased cost, but it is no longer possible to increase prices like that.

He cites the example of a supplier to the grocery trade. The dominance of large retail multiment is about the management of ples means that the customer is

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customer

firmly in the driving seat. He also argues that markets are moving so quickly that the entire supply chain is being re-engineered.

"Companies used to design products and optimise their processes to meet their own needs. Now they have to do it for the customer - the supply chain has to be organised from the customer backwards.

What he is referring to is the mass customisation manufacturing techniques being used by

Customers are able to order their cars with an almost limitless number of personal specifications and the production line is able to accommodate that, with the car delivered according to normal

"It is no longer acceptable to behave like Ford, years ago: Model Ts in any colour, so long as it was black," says Christopher. "The car industry is moving from a model where it made forecasts of demand and manufactured accordingly, to one where it is assembling to order.
"And customers won't wait

three months for their car – they'll go somewhere else. This requires an agile supply chain.

The agile supply chain is one which can respond rapidly to changes in the marketplace. of the National Institute of Trans-

agility will be a key success factor.
"We have done a lot of work in looking at what will be the successful business models of the future," he says.

"And what we have found is that the key areas will be new product introduction, marketing and supply chain management. Businesses that are good at all three will be successful.

By new product introduction, he According to Edward Sweeney means the process of developing and designing new products. Mar-

the relationship with customers. "If you are communicating with your market and your customers, you will know what they want," he

"If you do new product introduction well, you'll get those products to the market in a timely fashion. But you won't be able to do this if you don't get your supply chain management right.

explains.

This has opened the way for the creation of the so-called virtual corporation – one that designs and

sells manufactured goods, but doesn't actually manufacture any-

Sun Microsystems was among the first to take a strategic decision not to engage in volume manufacturing, instead devoting its energies to management of a highquality supply chain of trusted partners who did everything, from the manufacture of components through to the assembly and delivery of finished products.

IBM quickly followed and, during the early 1990s, got out of

Today, Apple's iPhones and iPods are made on its behalf in Taiwan while it concentrates on product development and marketing.

And in this lies a significant opportunity for Ireland. With supply chain management now seen as such a key competitive differentiator, many companies are looking to buy in the skills needed through outsourcing.

"For small and medium-sized good solution – they are buying in challenges for our economy.

Effective supply chain management ensures that a company has control over every facet of its operations Illustration: Getty Images

a competency that they don't have," says Peter Smyth, head of supply chain with Accenture in Ireland. "It's a bit like a small Irish company exporting to Europe buying space on a container rather than buying a truck themselves.

For larger companies, it's a question of where they see their core competencies. But whether they keep it in-house or choose to outsource, Ireland is a good location for this activity.

"There are real opportunities for basing strategic supply chain management functions here," says Kevin Vaughan of supply chain management outsourcing specialist, Sercom Solutions.

"We have customers in the US who are selling to UK customers. We source product in China for them from Ireland, and have it delivered to those customers. This is the concept of the virtual factory, which allows companies to concentrate on their core skills while companies like Sercom manage the supply chain for

In other words, it matters little where products are manufactured - the supply chain management is located wherever the expertise lies. In this case, it is Ireland.

And it looks like the need for

this expertise will keep growing, thanks to rising oil prices.

"As oil heads for \$200 (about €127) a barrel, all the rules are changing," says Smyth. "A \$10 (about €6.40) increase in oil adds four cent per mile to distribution costs in the US and between seven and nine cents per mile in Europe. This means companies are going to manufacture more product closer to their customers and have more distribution centres to serve them.

In the case of a European company, supply chain costs would rise by 14 per cent if oil prices rose from \$100 to \$200 and they did nothing about it. However, by changing their manufacturing strategy and increasing their number of distribution depots they could reduce this to just 3.5 per cent. And this increase includes the costs of putting in extra production lines.'

These changes are driving the need for increased agility, and with Ireland already home to the supply chain management bases of many major multinational companies as well as specialists like Sercom and PCH International, this may companies, outsourcing can be a present more opportunities and



Apple is a modern-day Cinderella story of supply chain management excellence, and a model for the future of Irish business. Barry McCall reports

PPLE COMPUTERS was recently named the world's Ltop supply chain manager by international research firm AMR Research. The iconic computer and high-tech device maker topped a league that included household names such as Nokia, Dell, Procter & Gamble, IBM, Toyota, Tesco and Nike.

Having come in second to Nokia last year, Apple swapped places with the Finnish phone maker thanks to its handling of the potential supply chain headaches that followed the introduction of the

"With its iPhone, Apple could have stumbled meeting demand, or failed on quality. It did neither. Behind-the-scenes moves like tying up essential components well in advance and upgrading basic information systems have enabled Apple to handle the demands of its rabid fan base without having to fall back on their forgiveness for mistakes," the AMR report said.

Indeed, there are many out there who wish Apple hadn't been so good at this. In the immediate aftermath of the US launch of the iPhone, speculators attempted to buy as many handsets as they could in the belief that a market shortage would drive up the price on the resale market. Sadly for them, Apple's supply chain managers ensured that no such shortages occurred, and prices actually fell following the launch.

However, Apple's supply chain excellence is about more than just accolades and product availability. Many industry insiders believe it is



Timothy Cook, under whose stewardship Apple's processes have been transformed



excellent supply chain management ensured that no shortages of the iPhone occurred after its US launch, and the product fell in price following its release. Photograph: Getty Images

How Apple bit back

central to its resurgence and transformation in recent years.

It may seem hard to believe now, but the maker of the iPod and the iPhone was seen as an industry basket case in the 1990s. In 1997, Apple reported losses of almost \$2 billion and its share key areas of new price languished around the \$10 mark. Two years later, it was turning in profits of over \$300 million and its share price had almost quadrupled.

Many Apple disciples attribute this near miraculous turnaround to the return of its talismanic founder, Steve Jobs, in 1997. And it is true that Jobs deserves a fair share of the credit. When he retook the reins, Apple was manuslashed 15 of these lines, cut thousands of jobs and closed production plants around the world.

But he also made some additions. Many consider the most vital of these his recruitment of chasing executive Timothy Cook. matching production to demand. huge stocks that later had to be written off at a crippling cost.

Apple is a classic example of a company that started to get the three product introduction, marketing and supply chain management right at the same time

Cook set about tackling the evils of excess stock and insufficient supply. When he took over, the company had five weeks of invenfacturing 19 different product lines tory in its plants and was turning it - many of them, like the Newton over 10 times a year. This wasn't PDA, chronic loss makers. Jobs far out of line with the industry, but Dell was way ahead with a turnover of 40 times a year. That was set as the benchmark for Apple now reached.

Under Cook's stewardship, the company's processes have been former Compaq computer pur- transformed. While Apple prod-Supply chain had been one of California, the company makes the company faring poorly in products are made in Taiwan and As a result, the company either directly to customers. The trick is couldn't fulfil demand, or piled up facturing activity all goes to Apple

ucts state that they are designed in Apple's greatest weaknesses, with next to nothing. Almost all of its other Asian locations and shipped missed out on sales because it that the value add from this manuin Cupertino, California. "The role of supply chain man-

oped until now and how we might only been an overnight success

"Apple is a great case study, almost a microcosm of the Irish economy: how things have develmake things better through engaging in higher value activity," he adds. "Some people look at Apple today and think it has been an overnight success. But it has after more than five years of hard work on transforming its entire supply chain.

agement in Apple's recovery is not

spoken about at all enough," says Edward Sweeney of the National

Institute for Transport and Logis-

tics (NITL). "Apple is a classic

example of a company that started

to get the three key areas - new

product introduction, marketing

and supply chain management

right at the same time. The company now concentrates on the

higher-value activities of new product design and marketing, through excellent supply chain

Apple's Cork plant has seen a

similar transformation. "When we

set up the NITL in 1998, one of our

first meetings was with Apple in

Cork and we have maintained

close contact ever since," says Sweeney. "Back then, the plant

was all about manufacturing. Now,

there is almost no manufacturing

there. It is now engaged almost

entirely in innovation and supply

chain management.

management.

