China in our hands

China may be overshadowing Irish and European manufacturers but it also presents opportunities for supply chain managers, writes **Barry McCall**

An employee at a textile factory in Suining, Sichuan province, China: 'Always insist on being in the factory when product is being manufactured for the end customer' Photograph: Reuters

THE SCALE of the Chinese economy and its manufacturing sector is staggering. The country's gross domestic product for 2009 was €3.6 trillion having increased 8.7 per cent during the year. To put this in context, that growth figure for 2009 is more than twice Ireland's total GDP.

In terms of trade, the EU remained China's biggest partner with a total of around €260 billion in business done during the year; the US is second with trade of €213 billion.

Of most concern to European manufacturers, however, is the low-cost manufacturing base China offers due to its low hourly wage rates. While some claims are wildly exaggerated, such as those which contend workers are paid as little as $30 per month, the fact remains that wage rates are very low compared to European levels.

In a recent study of the Asian textile industry, American consultancy Jassin-O'Rourke Group found Chinese garment workers are paid $0.86 (63 cent) per hour. This is quite high by Asian standards but is miniscule compared to the national minimum wage €8.65 per hour in in Ireland. Some workers in higher-value sectors such as microelectronics get paid more, but still well below European averages.

This certainly poses a threat to manufacturing in Ireland. Edward Sweeney, director of learning with the National Institute for Transport and Logistics (NITL), agrees. China and other relatively low-cost locations represent a threat to traditional manufacturing activity and jobs in Ireland and elsewhere in the developed and, therefore, relatively high-cost world," he says. "The reality is that there are now few products which it makes sense to manufacture in Ireland.

"Exceptions to this may be products which are capital intensive rather than labour intensive, where labour costs represent a relatively small proportion of overall supply chain costs. Intel in microprocessors for example," he says.

"Industries that are highly regulated such as pharmaceuticals, medical devices, biotech and so on, and where there is a reluctance to move a significant amount of activity to locations where the regulatory environment may not be regulator-friendly, [are further exceptions]," he adds.

Sweeney also says sectors such as the food industry that are dependent on local raw materials and where shelf-life is short are also relatively immune from competition from locations so far away.

There is a flip-side. "China is both a threat and an opportunity," he says. "The opportunities are many and potentially lucrative. Access to low-cost manufacturing is the obvious advantage but establishing a foothold in the world's most populous nation is often a major source of new revenues."

SerCom Solutions, a leading Irish specialist in the provision of supply chain management (SCM) services, established an office in China four years ago to effectively source and evaluate local suppliers and trading partners on behalf of its customers. The SerCom office is located in Shenzhen in the Guangdong province. Shenzhen was China's first Special Economic Zone and has many investment and tax benefits, similar to the Shannon Free Zone.

Kevin Vaughan of SerCom

The Shenzen office evaluates suppliers and products to ensure the right product gets to the customer on time. This can involve hundreds of hours searching for suppliers, visiting selected suppliers and finally auditing factories before sample product is ordered for testing and proof of compliance to the customer specification.

"Experience shows that a number of Chinese companies may have a very impressive website and rapid response to queries," says Sercom group head of business development Kevin Vaughan. "However, when one visits the factory you might find a basic assembly house where the parts are bought in on an order-by-order basis. The company would have no leverage with the component supplier and this will lead to intermittent supply. Also, some factories will not comply with an ethics policy which would govern age of employees, working conditions and so on."

Painstaking efforts and thorough assessments of selection criteria should be applied in order to find the correct supplier who can comply with the quality needs of customers based outside China, says Vaughan.

"Quality will be very much evident in the better companies when visiting and auditing the factory," he says. "Compliance to ISO standards, defined inspection criteria, inspection results available for review and a sense of awareness that quality is enshrined as part of the company culture will be evident."

Vaughan also advises Irish companies to see for themselves the product being manufactured. "When starting to work with new suppliers in China, you should always insist on being in the factory when product is being manufactured for the end customer," he says. "Depending on the product, further inspection should be completed when the product is delivered in Europe. Ongoing inspection must be maintained on a regular basis to ensure consistency and reliability of the product being delivered."

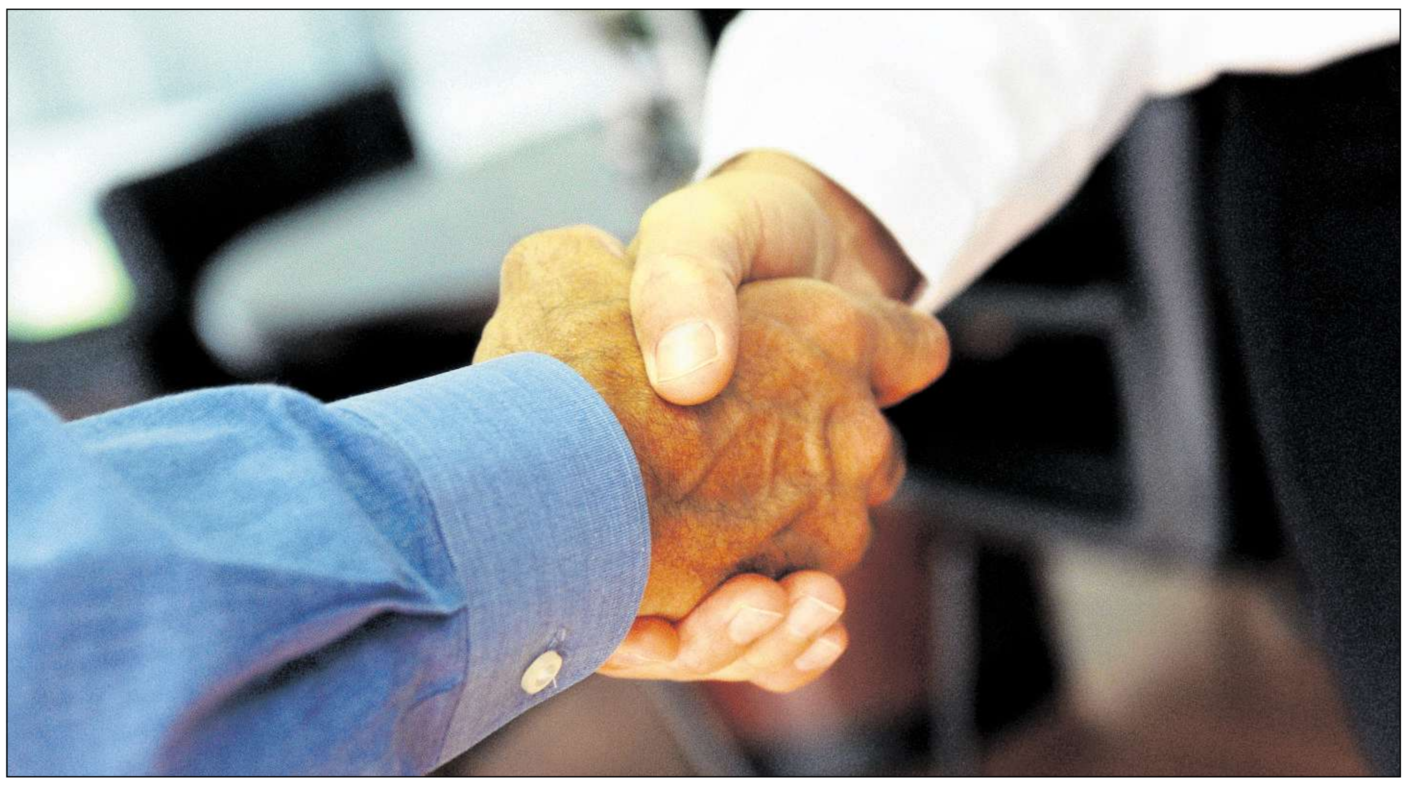
He remains positive about China and what it can offer Irish companies. "I would encourage Irish-based manufacturers to see China not as a threat but as an opportunity. This, no doubt, will take a change of mindset and may involve significant changes for existing operations.

"But our developing links with China can only bode well and it is by finding out what is going on there and opening our minds to the potential opportunities to trade and collaboration that we can transform doom into boom."

Given Sercom's success there, it is clear China represents a real opportunity for Irish companies to enhance their competitiveness by using it as a base for manufacturing operations or as a source of products and components for subsequent use and assembly here in Ireland.

Trust is the key to successful SCM relationships

In today's economic climate, trust between companies and their outsource partners is more important than ever, writes **Peter Cluskey**



THERE'S AN old saying in business: if either side has to refer to the contract, the deal is already dead in the water. It's as true of supply chain management (SCM) as it is of any other complex business-to-business relationship.

Because what makes SCM work is that key word: "relationship". The commitment from each side that it will treat the other as an equal, and trust in its professionalism, in the corporate drive to improve efficiency and generate savings.

And yet increasingly – particularly since the near-collapse of the global financial system in 2008 – the hard economics of survival are making themselves felt in this symbiotic relationship as well.

"Given what's happened to the global economy, a lot of companies have been under enormous margin pressure," says Rose McCarthy, supply chain director with SerCom Solutions – a wholly-owned subsidiary of DCC – which acts as a global outsourcing partner to many of the world's biggest information and communications technology (ICT) companies.

"For companies in that position, managing volatility across a whole range of components and commodities can be very resource draining – not least because the systems their suppliers operate are sometimes not the most up-to-date or dynamic.

"So by using a company like ours, they can concentrate their resources on the high-dollar items, the ones that need a lot of micromanagement perhaps, and leave the rest to us. We may end up managing far more parts than they do internally, but what we manage may only amount to, say, 5 per cent of their spend.

"So essentially outsourcing to us allows a company to direct its resources to where the money is. That's where the opportunity lies. And they trust us with that."

Research by the National Institute for Transport & Logistics (NITL) at DIT shows that in terms of SCM excellence, four fundamental elements are regarded as critical by most companies when it comes to trusting their outsource partners:

"Identification and measurement of customer service because customer service essentially sets the spec for supply chain design.

"Integration of supply chain activities and information because many supply chain NVAs [non value-adding activities] are caused by fragmented supply chain configurations.

"Treatment of supply chain management and logistics as a senior management function because SCM is a strategic activity.

"Establishment and measurement of supply chain key performance indicators (KPIs) because what gets measured gets done.

"Certainly, if you don't have senior executive understanding and buy-in, you're always going to have difficulties," agrees Armin Samali, senior executive leading the Supply Chain Practice at Accenture Ireland.

"There also has to be a common expectation between the company and the supplier of the supply chain management services, a clear understanding of what is going to be outsourced and how it's going to be run – something that's particularly important if it's the company's first, culture-changing, experience of outsourcing."

Integration, too, is challenging. "When you have part of your supply chain outsourced, it becomes hugely important that the two organisations are well integrated in terms of technology, data, information and transparency – and sometimes if the technology doesn't work, it's going to cause friction, and perhaps the inability of the supplier to provide the service to the customer."

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But it's the quality of the relationship between the two sides which determines, in the end, how well they deal with adversity. "There's a whole spectrum of relationships, from very transactional ones to real partnerships, where the sides sit down, discuss any challenges and work together to overcome them. The real partnerships typically last – while the others can easily turn sour."

For Sean Darcy, managing director of global transport and logistics company DSV, the key to a successful relationship is the ability of the provider to guarantee quality of service – which is achieved through "the quality of your people, the training that you give them, and the effectiveness of your IT swill probably become more and more important for the next year or so."

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Kevin Vaughan, business development director at SerCom Solutions, agrees that a high-quality and comprehensive service is all-important.

"That's always our aim," he says. "Starting with sourcing the product, placing purchase orders, analysing forecast information, doing audits at the factory and checking the product right at the factory's back door. Using our SAP operating system, we manage the logistics right to the customer's warehouse – indeed, onto the shelves."

Doing that successfully means a relationship of trust develops naturally. "We have to show we have the procurement skills to manage all of that. But we've also been innovative in that we now fund all of that activity along the chain as well.

"Previously, companies buying products in Asia, for example, would typically pay 30 per cent upfront and the final 70 per cent when the product left the factory. At SerCom Solutions, we now fund all of that activity – so our customer only pays when the product reaches the warehouse.

"It is a balance sheet opportunity," adds Vaughan, "and in the current climate there aren't many companies with the financial strength to offer that kind of service. For us, it's a key differentiator – and certainly a key element in developing successful long-term partnerships with our clients."

Case study Mazda and DSV

WHEN HENRY Ford started his motor company at the turn of the 20th century, it was the very model of what would today be described as a vertically integrated business – all the elements in its supply chain united through their common owner.

The Ford philosophy at the time was simple: you have to own it to control it. As a result, the company mined its own iron ore to build the chassis and, believe it or not, ran its own sheep farms to produce the wool for the upholstery.

No longer. To use the jargon of supply chain management (SCM), "vertical disintegration" has become the order of the day, with companies increasingly outsourcing non-core functions in order to share risk and become more responsive to market volatility.

Take, for instance, Mazda, the Japanese car manufacturer with whom Ford has had a strategic relationship since 1979 – and which has been doing business in Ireland even longer, since 1974.

Mazda imports its car parts to Ireland through global transport and logistics company DSV, which has its corporate head office in Copenhagen, has 21,300 employees in more than 60 countries and provides services in 50 more – with worldwide revenue of €4.8 billion in 2009.

Multinational companies tend to be notoriously shy about letting outsiders peek under the bonnet, so to speak, at the workings of their supply chains. But Mazda's relationship with DSV gives a fascinating insight into how smoothly an outsourced chain can run when the relationship between client and provider works exactly as it should.

For the past three years, Mazda has been sourcing parts for Ireland from its own high-tech central warehouse in Belgium – located there because of its proximity to the ports of Antwerp, and particularly Rotterdam, the major international crossroads through which parts pass.

"The decision to source from Belgium was in keeping with trends in the automotive industry," says Sean Darcy, managing director of DSV Ireland, which has its headquarters in Naas, Co Kildare.

"Fundamentally, the Irish car market is still small by European standards and a lot of the major manufacturers have UK or continental European warehouses and see a value in consolidating all their volumes into one point, mainly in the Benelux countries."

Every day, the Mazda supply chain works like this: the network of dealers across the 26 counties place their orders for parts – everything from engines and gearboxes to bumpers and headlamps – directly with the Mazda warehouse in Belgium.

And every day, a truck run by DSV Ireland collects around 1,000 parts – roughly half a 13.6-metre trailer-full – directly from that Belgian warehouse and transports them to the DSV warehouse in Naas.

"If you take the Monday cycle," says Darcy, "the shipment arrives in Naas the following Wednesday morning. We've been pre-advised of its contents by our Belgian office, so we know exactly what's on board for Mazda.

"We then separate out the Mazda parts, which have been pre-labelled for individual dealers across the 26 counties. The parts, destined for Mazda dealers in Dublin, are delivered by DSV vans by lunchtime on Wednesday.

"The parts destined for dealers in the other 25 counties are delivered during the rest of Wednesday and through the night – to secure lock-ups to which we have the access codes – until nine o'clock on Thursday morning, so the parts are there when the dealerships open."

This is a supply chain which DSV operates for Mazda on a daily basis, and so problems are rare. "The single biggest difficulty we've encountered in the past few years was the bad weather at the start of January, when snow meant we had to reduce deliveries, which was unfortunate.

"But this system works very well. It's backboned by people who are very experienced at what they do, and it's a model that's motivated by the expectations of Mazda dealers and their customers. There's no room for error; it has got to work each and every day.

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"And don't forget how well-practiced we are at this. Including Mazda and all the other car manufacturers we work with, we control around 52 per cent of all the parts delivered to Irish car dealerships."

Despite the sheer volume, that business accounts for only between 3 and 4 per cent of DSV's turnover. "We try desperately hard not to have too large a financial exposure to any one industry sector. That's a constant priority for us."

In general, says Edward Sweeney of the National Institute for Transport & Logistics at DIT, the motor industry has been good at building relationships between manufacturers and outsource suppliers. "The key thing is that they've been doing it for a long time, longer than most other sectors. They know what works and what doesn't, and they learn from each other. On the other hand - as we've seen with Toyota - if you stop learning, you can still have big problems."

Peter Cluskey