

TECHNOLOGY

BEST BUSINESS: MANUFACTURING

Setting the educational bar high

By Leslie Faughnan

The new diploma course in supply chain management at the University of Limerick (UL) is a project with eight students. One student is Irish, while four are from Germany and the others come from Austria, China and Singapore.

This unique project is a joint initiative between UL and Infineon Technologies, one of the world's leading chip makers. Discussions about the feasibility and content of such a course only began as recently as June 2009, and enrolment and teaching began last April.

The diploma is a distance learning programme, with a range of tutor-led and self-paced e-learning, online collaboration involving video and teleconferencing, and two separate residential modules on the UL campus. This current program, from which participants will graduate in January, includes Infineon employees only, but the intention is to have a student body next year. It is recognised as a Fetac Level 8 qualification.

"We have a strong relationship with industry, forged over the years, and a commitment to cultivating excellence relevant to industry in our programmes," said Michael Hennessy, education programmes manager in UL's enterprise research centre. "When Infineon approached us we were delighted, and becoming a leader in the effort in designing a course of an academically high standard, and with the very encouraging current diploma, we are seriously considering an MSc level programme in supply chain," said Hennessy.

The course content is not



Dr Peter Williams, lecturer in operations management at the Department of Manufacturing and Operations Engineering, UL, Hans Elm, principal, Supply Chain Europe, and Tony Smyth, managing director, Infineon

company-specific, although Infineon facilitates the practical exercises of the participants as most employers would. It is firmly based on the internationally-recognised supply chain operations reference (SCOR) framework model of the Supply Chain Council, as well as standards such as Six Sigma and lean manufacturing. The SCOR model provides a framework that links business processes, metrics, best practices and technology features into a unified body of knowledge to improve the professional effectiveness of SCM.

"Recognising the importance of SCM in manufacturing industry today, and with the very encouraging current diploma, we are seriously considering an MSc level programme in supply chain," said Hennessy.

From the point of view of Infineon Technologies, the joint initiative with UL had worked out very well, said Hans Elm, principal of SCM who is based at the company's European headquarters in Germany. The choice of academic partner came about partly because of Infineon's 40-strong Irish operation, reinforced by UL's track record in working with industry partners.

"They were the main factors, plus the fact that English is the international language of supply chain – and many of us find Irish English easier to understand than British English," said Elm.

SCM is a key strength in Infineon, which complements its own manufacturing operations with outsourcing from trusted partners. Elm said it sourced from locations that offered the



Michael Hennessy, education programmes manager in UL's enterprise research centre

superior cost or supply position, while the company used best of breed software solutions to control and optimise its supply chain.

The Infineon Technologies office in Dublin is a customer-facing support operation, handling the company's CRM for Europe and elsewhere. Its personnel currently offer customer support in 13 languages.

Thriving on a global reach

By Leslie Faughnan

Globalised manufacture and product distribution has brought about a total transformation of how goods are produced and brought to the market. What we now call supply chain management (SCM) has become an overall business function that effectively includes the actual manufacture as one element, together with logistics and physical distribution, demand planning and other disciplines.

"Back in the days of Henry Ford, the manufacturer and brand owner controlled all aspects of the supply to market," said Edward Sweeney, director of education in the National Institute of Transport and Logistics (NITL). "Today, outsourcing is the norm in all but the core competencies of a business, which might well mean just a brand and marketing. The strategic control is through partnerships."

Based in the Dublin Institute of Technology, NITL was established in 1999 as Ireland's centre of excellence in the field following a Forfás report, 'World Class to Serve the World'. It aims to heighten awareness of SCM, increase the pool of professionals in the area and provide a strategic source of expertise and knowledge.

"One result of the changing nature of global manufacturing is that SCM at the top level has become a brand, as opposed to a leading bay, function," Sweeney said. "It is now a business, as opposed to a disciplinary role in any manufacturing enterprise,



Edward Sweeney, director of education in the National Institute of Transport and Logistics (NITL)

as well as in the new breed of contract manufacturing, and logistics and fulfilment services."

SCM could be a differentiating factor in competitive markets, said Sweeney. "An enterprise can meet or exceed its customer requirements and still optimise its own costs of operation through smart systems," he said. "Here, as in almost every other aspect of business, the power of ICT has transformed the way things work. The sheer flexibility, for instance, would have been impossible in previous decades."

The electronics sector was a particularly good example, Sweeney said.

"Most commodity components come from Asia, the most demanding consumer markets are in America and Europe, and the big brands are global – sourcing what they need from wherever ticks all of their quality and supply boxes. What matters to them strategically is that they control the IP [intellectual property], marketing and the supply chain, and the profits. In essence, they outsource the

middle bits, the non-core elements."

There were major opportunities for Ireland in this new landscape, Sweeney said. "We are already seeing indigenous contract and virtual manufacturing companies achieve significant success, based in large measure on their SCM expertise and investment in smart systems," he said.

But this new global manufacturing world is still like any business, in the sense that clever systems are not everything.

"They form what one might call the hard wiring, but relationships and trust still matter hugely," said Sweeney. "When the enterprise and its supply chain stretch across cultures and geographies and time zones, the soft wiring piece is Irish the weakest link. "That is something we Irish are very good at, and we have proven it in very far-flung places. Add high level SCM skills, and there is a new horizon of opportunity for businesses and for individuals."

Commercial profile: Access Ireland

software key to manufacturing success

The latest economic figures may have sent mixed signals to the manufacturing industry, but there's a great deal that the sector can do to position itself for a brighter future. Craig Such, supply chain managing director of Access, the business-led consultancy and software developer, explains how technology holds the key

While manufacturing in Ireland saw a slight pullback in growth during August, over the past six months the sector has strengthened, making operating conditions much more favourable – something that is also reflected in the US and Britain.

This should make firms more optimistic, but the increase in input prices and the uncertainty about order levels are just a couple of reasons why firms are holding back and not filling positions, preferring to keep operational costs as low as possible.

Minimising risk

Firms rightly remain cautious and want to manage their risk. Who can blame them when there's still a question mark over the health of the economy?

The fact is that businesses can't predict and control external economic forces, but they can control the way the company reacts and operates. Some of the issues that we see all too often are companies struggling to get a current picture of stock and work-in-progress, due to time-consuming manual processes. We also see a huge amount of time being spent on tedious admin tasks such as processing and approval of purchase invoices that the ERP software should be performing.

This all adds unnecessary complexity within the manufacturing operation, causing undue stress both on the staff who have often taken on additional responsibilities due to the reduction in employee levels – as well as affecting available stock levels and working capital.

It's impossible for the directors of the business to see the



Craig Such, supply chain MD of Access, the business-led consultancy and software developer

full picture and to take decisive action to manage costs and increase customer service because they rarely have

accurate, up-to-date information at hand which can help them deal with the issues their business faces.

A helping hand

The good news is that technology can help to join up the different manufacturing and distribution processes. Complex manufacturing environments in particular need software to track multiple supply chains at every stage in order to minimise waste and maximise profitability. Manufacturers face signifi-

cant external challenges whether they are demands from customers, changes to legislation or cost of raw materials – and technology can mitigate the impact of these factors.

"We've experienced firsthand how customers can leverage their systems during the downturn with remarkable success. These businesses have been utilising their software to link up every part of the orga-

nisation so that everyone has visibility of what's going on.

Most companies have fewer staff than before the recession, but now things are picking up, they're realising they can rely on their technology rather than increasing headcount. It's totally scalable.

The Access solution

We spend a great deal of time in development to ensure our software matches the needs of our clients. Everything we've been doing for nearly 20 years. Our consultants are also highly experienced in working with manufacturing and distribution companies to help them see their business right now or see trends that are emerging.

We're providing the tools to show the bigger picture so situations can be confidently addressed there and then, not after the horse has bolted. This all comes down to knowing you can rely on the key data, that it's accurate and up-to-date.

One element that is so vital to this is integration. We're con-

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Craig Such, supply chain MD of Access

stantly extending our software portfolio and services with this in mind. In addition to manufacturing, distribution and finance software, we offer web-enabled management, time and expenses management, procurement, workflow management, CRM, and dashboard reporting.

Our focus is on meeting the needs of the whole manufacturing operation, helping to reduce complexity and increase efficiencies throughout the business. That's our passion. And while the Access net-

work continues to expand, our personal commitment to Ireland is as strong as ever.

Where we excel is through our ability to pull the company together at the same time maintain a personal service to our customers in Ireland. That's so important to us and to our customers too.

To find out more about Access's consulting, software and solutions, tel: 01-8855577, e-mail: info@theaccessgroup.ie or visit www.theaccessgroup.ie

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To download a free white paper visit: www.theaccessgroup.ie/erpguide or telephone: 01 885 5577

