Irish Independent
THE FUTURE OF MANUFACTURING
NATIONAL CENTRE FOR PARTNERSHIP AND PERFORMANCE
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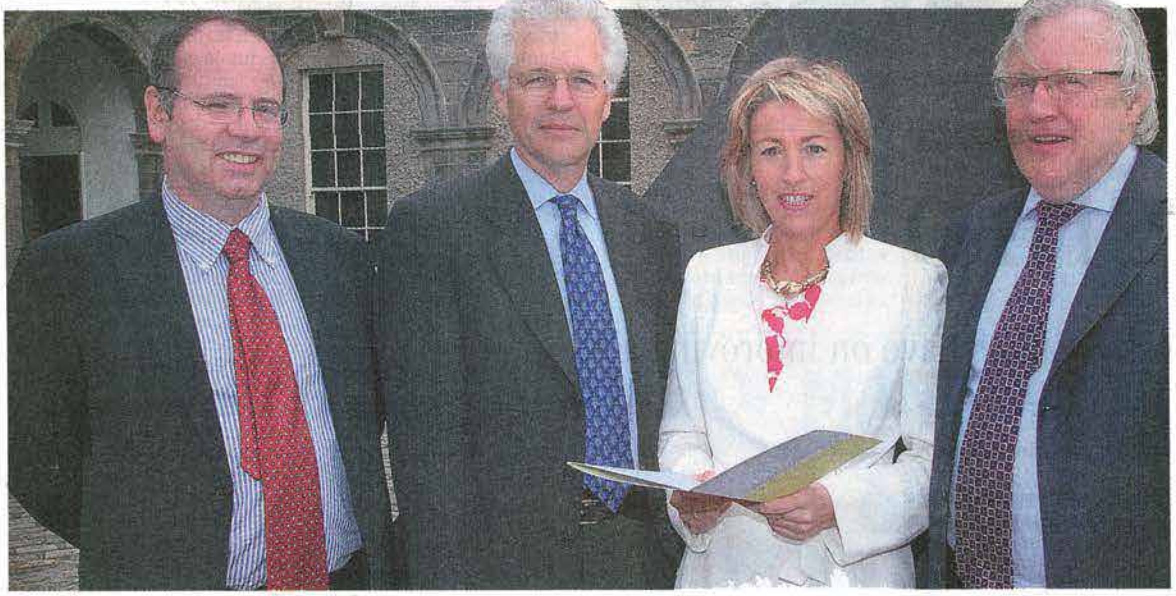

Speakers at the recent Future of Manufacturing in Ireland conference in Dublin were (from left): Patrick Flood, professor of organisational behaviour at Dublin City University Business School; Dr Richard Lester, director of the Industrial Performance Centre at Massachusetts Institute of Technology; Lucy Fallon-Byrne, director, National Centre for Partnership and Performance (organisers of the conference); and Stephen Wood, research chair, Institute of Work Psychology and professor of employment relations, University of Sheffield Management School

Welcoming change

Manufacturing firms that embrace innovation will not only survive, but will also far exceed their competitors

DR Richard Lester, director of the Industrial Performance Centre at Massachusetts Institute of Technology, strongly disputes the argument that the West should give up on manufacturing, simply because other countries can supply lower labour costs.

Speaking at the National Centre for Partnership and Performance conference in June, he said: "Western consumers have not lost interest in manufactured goods and there are plenty of successful, profitable manufacturing firms to dispel the notion that American and European manufacturers can no longer compete in global markets."

He believes trying to compete with low-cost manufacturing economies (such as Asia) is pointless; instead the West should focus its efforts on bringing about improvements in the way traditional work practices are carried out – in other words – innovate.

"The firms that continually develop innovative products, find new markets for them and improve on their production and delivery processes will not only survive, but prosper," he says. This applies to traditional sectors as much as high-tech industries.

Lester put forward an interesting debate on the blurring of the lines between manufacturing and services. "It is no longer clear whether we are talking about a service-enhanced product or a product-enhanced service."

He cited the Apple iPod success story to further illustrate this point – highlighting the fact that by outsourcing practically all of the manufacturing to an army of suppliers, Apple could get on with what it does best – adding value to the product and, better still, bringing it to market faster.

"With the iTunes music downloading service, Apple found a creative and profitable way to combine its product with a value-added service," he said.

The Irish experience

Closer to home, Lester believes Ireland Inc is on the right track with its innovation strategy. Our low resistance to the adoption of new technologies is one of our strengths as much as our "own inventive prowess", he says.

"Critical to the entire process is the ability to attract financial capital with an appropriate appetite for risk and a workforce at all levels that is open to innovation," he added.

Crucially, on the subject of cost, Lester says innovation does not require a large financial outlay – an important point in the Irish economy where 97pc of businesses are small to medium-sized enterprises (SMEs).

Similar to many myths in the marketplace surrounding manufacturing, there is the incorrect perception that innovation costs money. "Some kinds of innovative activity require upfront investment of a substantial nature, but others don't. Somebody spotting the opportunity to improve an efficiency can cost very little or nothing at all," he said.

Lester believes technology is a key facilitator of innovation, however he is quick to point out it is far from the only factor. "Often, on the process side, it's more about changes in the way work is organised. I do see technology as a facilitator, but almost always it requires complementary changes to the way organisations work and the way people behave. Truly radical technological innovations require system-level and behavioural changes," he said.

Having knowledge about the entire value chain is another critical factor, according to Lester. Part of this involves helping employees to have a complete understanding of how what they do affects the overall process. People can only start to innovate if they understand this.

"These value chains manufacturers are participating in are complicated and almost always extend beyond the plant itself. We need to devote more time to understanding how each part works together," he said.

Collaboration is another essential factor: "Innovation is not the product of one person's actions, particularly in complex manufacturing industries where it happens as a result of many people collaborating together. You can prepare people to lead that process," he explained.

Lester believes there are two different processes within the innovative function: problem-solving (the one people are most familiar with); and before that the open-ended process of identifying what the problem is even before you know you have to solve it. Both of these allow companies to identify new niches in the market and new ways of working smarter.

"In an innovation-based economy, there is a need for continued investment in the upskilling and re-skilling of the workforce. This will increasingly be a competitive requirement for all parts of the manufacturing sector, from traditional activities such as paper pulp production to leading-edge software development," he said.

Facilitating open-ended collaboration is a skill set more companies need to recognise and encourage, according to Lester.

"Often the most creative ideas or insights come out of an open-ended conversation between people – they are interacting with each other. Companies that want to be innovative have to make room for this and reward people who are good at it. They are essential skills."