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## **R&D and Knowledge Management: unnecessary costs or sensible forward planning?**

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With low-cost global players emerging in countries such as Russia and China, and the high energy prices we are experiencing in the Western world, many companies are being forced to take cost out of their business in order to remain competitive. Unless it affects us personally, we hardly notice when downstream operations here in the UK reduce their workforce or shut-up shop completely. It's a similar story in Western Europe, where cost competition is driving the divestment of assets. Whilst these measures are effective in satisfying shareholders' short-term needs, will these companies survive in the long-term, and is there a way to minimise the risk?

What are the risks facing these companies? Firstly, cost cutting inevitably results in a loss of experienced people. They often possess the in-depth product and process knowledge which will be critical to future innovation. A similar risk exists with spin-outs from larger parent companies. These can be successful in freeing an operation of costly corporate overheads, but they seldom result in a manufacturing company with the same wealth of technical knowledge. Secondly, many products are considered 'mature' and treated as 'cash cows' which receive little investment in R&D programmes. The closure of high-cost central R&D laboratories (and dispersal of people into manufacturing operations) is a valid business model, but despite the best endeavours will inevitably lead to the loss of key people and their know-how. This is fine until the competition takes a leap forward in technology. Where will the in-depth product and process knowledge required for technical innovation come from? It's impossible to compete long-term on manufacturing cost alone, but companies can differentiate themselves by producing complex products with high added value and by innovative product development. However, companies need to have the right resource in place, and that means a dynamic R&D programme, together with a highly trained and experienced workforce capable of producing high-tech products efficiently. Also, it would be dangerous to assume that the developing countries are incapable of world-beating product innovation: it's only a matter of time.

So does this mean that short-term cost-cutting spells disaster in the long-term? Not if the right measures are put in place ahead of time. Most knowledge resides in people, not in documents or presentations. So it's important that a system is put in place to capture and manage know-how before it is lost forever. Through structured workshops, Innoval Technology has developed an efficient, non-threatening process that creates an environment for open sharing and capture of knowledge. This helps the company to know what they know and, importantly, to know what they don't know! An R&D programme then be defined that puts valuable (and scarce) resources where they are most able to respond to future market needs. And if a business doesn't possess extensive in-house R&D resources, there are specialist out-sourced R&D companies, such as Innoval Technology, who have the extensive industry expertise and skills needed.

In order to have a viable business it may not be possible to avoid workforce downsizing or R&D cut-backs. However, there are ways to do so while protecting a company's long-term technology position. *Put sensible risk management into your planning process now, before it becomes too late.*