

new directions:

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new directions: is edited by
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Welcome to new directions:

Welcome to our latest edition of **new directions**: our journal for leaders, innovators and change agents within European businesses. Our focus is on the business activity that is key for today's businesses: **innovation**. In this edition we look at how organisations can use an **innovation audit** to catalyse and focus their innovation improvement activities; we profile **Renishaw's** success at innovation; we examine the challenges for **law firms** in becoming more effective innovators and we get an academic view on innovation **culture**.

Inside this issue

>Where to start?

- In improving innovation

>Probing Renishaw

- Innovation case study

>Law Firms

- Making innovation work

>Personal view

- It's that Culture word

>Competition

- Big Business Innovation?

Accelerating innovation - where to start?

Many management teams recognise that their organisation's innovation performance is not what they would wish. Look around your own organisation. The symptoms may vary: Perhaps there aren't enough new ideas around and not the 'buzz' in the business that you would like to see; or it takes a long time to make change in the ways of working; or simply that really innovative products/services are rarely produced. All these symptoms point to the fact that the business needs to become more innovative - or risk falling behind its competitors. But where should you start in improving innovativeness? What are the areas you should prioritise? Who should you involve? These are important questions and need to be answered well, after good consideration. Unfortunately executives can be as guilty of 'knee-jerk' decision-making as the man in the street and grasp for anything that promises a quick fix. A new piece of IT to automate the NPI process; or perhaps a good dose of creativity training; or what about establishing an 'innovation room' complete with whacky furniture, table football and big whiteboards... We've all seen this and many of us have been guilty of believing (hoping?) that things were that simple....

Unfortunately innovation is complex and can't be fixed with a simple turn of the 'magic screwdriver'. Research and experience has shown time and time again that effective and sustainable innovation requires an holistic and systematic approach that weaves together the threads of a number of key practices to create a strong and rich fabric of innovation capabilities. Exploiting these capabilities leads to long term superior performance. The key innovation practice areas comprise the following (see Figure 1):

- Leadership – *Active support and encouragement from the top is key to innovation*
- Climate – *The culture and values within an organisation can either energize or emasculate innovation*
- Process – *A structured process and controls to utilise, select and implement new ideas is a key backbone*
- Strategy – *A clear business strategy is required to provide context and priorities for innovation*
- Resources – *People time, methods and supporting resources are needed*
- Learning – *Capturing and sharing learning across the organisation is key to effective innovation*
- External Linkages – *No organisation is an island – ideas and resources from outside are key ingredients*

These key practice areas are made up of a number of supporting or 'foundation' practices. To help organisations assess their current innovation practice and performance we developed the 'Foundations for Innovation' (or F4i) assessment, working with Professor John Bessant, Head of Innovation Management at Tanaka Business School, Imperial College London. We identified 57 supporting practice & performance metrics. Together these enable an organisation's 'innovation health' to be assessed and key improvements identified.

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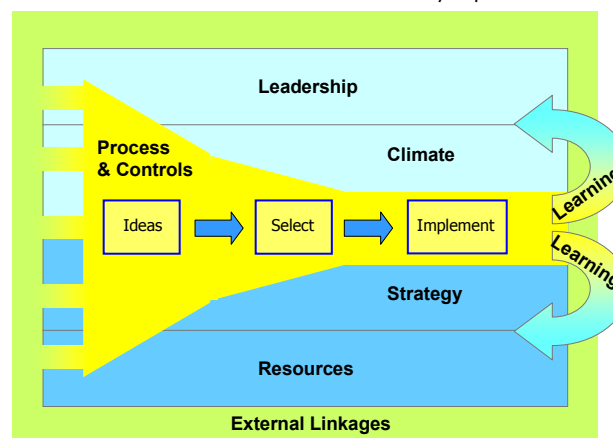
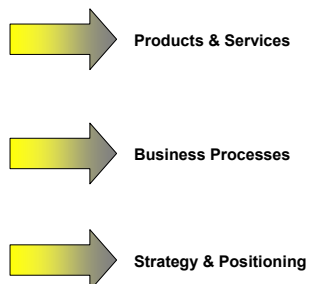


Figure 1: Innovation System model



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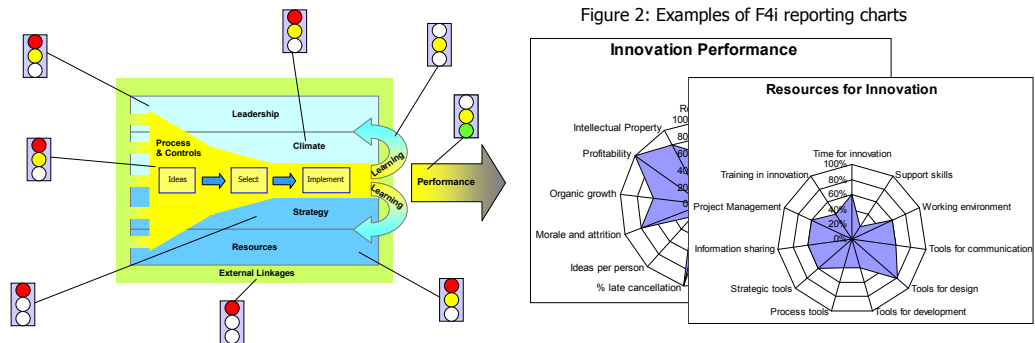


"Innovation is key for us. As a manufacturer in the West, you have to innovate or you'll be dead in 30 years."

Each practice/performance metric is assessed against a 5-level descriptive scale covering low to high levels of achievement. An organisation's innovation is assessed against the F4i template through interviews and workshops with a representative set of personnel. The organisation's innovation practices and performance are then scored using a variety of tools as shown in Figure 2; key areas of weakness can then be identified to enable focused improvement.

One early pilot of F4i was with Stannah Stairlifts, the world leader in the stairlift market. Stannah is recognised as utilising best practices in a number of its business areas, winning the award for 'Best Factory' in the Institute of Mechanical Engineers' MX awards in 2004. Following the innovation assessment, David Walton, Managing Director said: *"Innovation is key for us. As a manufacturer in the West, you have to innovate or you'll be dead in 30 years. The Codexx 'Foundations for Innovation' assessment is a very good methodology for pulling out the key issues on innovation. It makes a lot of sense."* We have developed F4i as a practical, fast and cost-effective way for any organisation to determine the health of their innovation system and identify the key priorities for improvement.

An f4i assessment typically requires 2-3 days of interviews and workshops with a sample of management and employees across the organisation, followed by reporting and feedback. If you are interested in hearing more about how F4i could help your innovation, go to <http://www.codexx.com/knowledge.htm> for a brochure or contact us.



"UK manufacturing has been in the wars of late, under attack from low cost offshore rivals, from high relative UK operating costs and from regulation."

Innovation in Renishaw – a question of probing

UK manufacturing has been in the wars for the last decade, under attack from low cost offshore rivals, from high relative UK operating costs and from regulation. Factories have closed, margins and growth have been hit. One manufacturer that has successfully bucked this trend has been Renishaw. Renishaw plc is based in Wotton-under-Edge, Gloucestershire and currently employs 1,750 people. Sales for the 2006 financial were the highest ever at £175 million and growth over the last 2 years has averaged 17%. Renishaw supplies solutions for co-ordinate measuring machines (CMMs), CNC machine tools and manufacturing automation systems in the electronics and semiconductor industries, it also provides measurement systems for the dental sector. Its products include an extensive range of probing, calibration, encoder, scanning and spectroscopy systems. Renishaw was started by David McMurtry in 1973 to develop and manufacture a touch trigger probe for use by Rolls Royce and CMM manufacturers. The company was founded on innovation and has been true to this pioneering spirit ever since. It designs and manufactures its products in the UK and exports them world-wide. Renishaw has been honoured with eleven Queen's Awards to date, for innovation and export success. We interviewed Renishaw's Chairman and CEO, Sir David McMurtry, in 2005 to hear how important innovation has been in this success.

"Since its early days, Renishaw has focused its product innovations on areas that are patentable."

Q. Renishaw is a recognized world leader in its business, indeed it is the market leader in a number of its sectors - how has it done this when so many UK manufacturers have not?

A. Since its early days, Renishaw has focused its product innovations on areas that are patentable. If we don't believe that we can effectively patent a new product or technology, then we won't develop it. This philosophy enables us to invest high amounts of money and resource in R&D as we know that we will have a long period of time in which we can cover that investment, before we have to deal with product copies. This approach also brings us another benefit: With many of our probes being original equipment in new machine tools, by the time our product comes out of patent, the market will primarily be for replacement probes, where we have the advantage that companies typically wish to replace parts with those originally specified – we have the benefit of loyalty. So patenting is key to our success and we employ four patent attorneys at Renishaw - a significant number for a company our size.

Our philosophy enables Renishaw to focus on high value-add products, which are ideal when we are based in a relatively high cost country like the UK. We have also sought to leverage our competencies into other sectors, as our



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core metrology sector is not large, hence we have recently moved into the health sector with our Dental measurement systems. Whilst we are technology focused, we are not technology led. We balance the technology promise with the market potential.

We are also firm believers in performing our R&D in-house, rather than using third parties like Universities. We believe that this approach allows us to better control costs and minimizes the likelihood of Intellectual Capital 'leakage' – which would obviously threaten patentability. To support our focus on innovation, we operate a culture that is open to the challenging of norms and our managers keep close to the 'pulse of the business' by walking around and talking with people. We also endeavour to avoid listening to customers as other companies try to do! Yes that's right. By this I mean that we wish to understand the customer problems, understand their real needs. But we don't want to hear their requirements for a solution – as we would thus not be able to patent that solution! If we can't patent it, we won't make it.

We aim to retain our core production in the UK as this enables us to introduce and protect new process innovations and also maintain the close link between development and production that is key to effectively introducing new products to market. However we aim to reduce our labour costs through increased automation, and to this end we have developed innovative manufacturing techniques, such as our RAMTIC machine loading approach.

Q. What do you believe to be the main steps that UK manufacturers must take to remain globally competitive?

A. Over time, the manufacturing companies that will remain in the UK are those making high value products and those whose local presence is based on the benefits of logistics and customization. Inevitably the other manufacturing operations will be outsourced to lower cost countries.

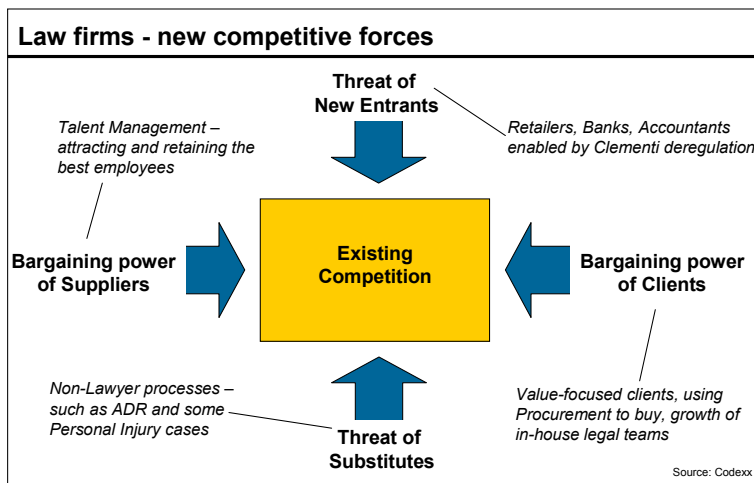
"Breakthrough solutions are at the heart of our business strategy, which is captured by the phrase 'apply innovation'."

In the words of its CEO, Sir David McMurtry: *"Breakthrough solutions are at the heart of our business strategy, which is captured by the phrase 'apply innovation'."* Clearly Renishaw has an effective innovation system in place, with clear leadership from the top, a defined strategy, good resourcing (enabled by focused patent-based investment) and a supportive culture. It shows the way for UK manufacturers on how to differentiate through innovation.

Law Firm innovation challenges

"Innovation is increasingly an important topic in progressive law firms."

Many outsiders will consider the legal sector as epitomising a business sector that has changed little in decades. Compared to what has been happening in the manufacturing sector over the last two decades, this is perhaps true. However, the forces of change are growing in strength – increasing client focus on value, move to a 'procurement relationship', use of IT and the internet and the increasing power of non-lawyers in the value space for legal services are all examples of this (see Figure 3). A major imminent force for change in the UK market is that of deregulation. The legal market is set to be deregulated from 2008 due to the Clementi reforms. This will enable new businesses to enter the legal sector. This is likely to result in simpler repetitive services such as basic wills, probate, conveyancing and personal injury services to be offered by new competitors such as Tesco and other providers that have the brand allied with the purchasing power to potentially provide standard legal services. Will they and can they do this? Only time will tell. But meanwhile law firms need to consider how best to react to the potential threat and other emerging challenges such as the web and low cost offshore competition. They will have to improve their ability to innovate: to develop new strategies for differentiation, re-engineer their ways of working to improve value/cost and launch new products.



Innovation is increasingly an important topic in progressive law firms. Indeed this is shown by their participation in the current Codexx - Imperial College study on 'Innovation in the top 75 UK law firms', where we are examining the level of innovation practice and the key improvement activities underway in major law firms.

Figure 3: Competitive forces on law Firms



Our experience in helping law firms improve their innovation capabilities has shown the following common challenges:

- Little focus on business processes and their improvement - this is beginning to change with the need to compete more strongly in lower cost 'commodity' businesses which requires the engineering of cost-effective processes
- Challenge in committing sufficient partner resources for developing 'tomorrow's business' as against the immediate pressures of today's business - in a work culture where billable hours rule
- Limited client closeness and empathy which means that many law firms do not well understand their client's businesses – this severely limits their ability to effectively innovate
- Weak definition of strategic goals at practice & sector level – without a clear vision and strategy that defines key improvement activities over a 3-5 year timescale, there is an inadequate context for effective innovation
- A supportive culture for innovation activities is generally not present

Law firms face significant challenges in seeking to embed a robust system of innovation given their internal environment. So where to start? An initial innovation assessment is a good place to begin – this will help the partners understand the breadth of challenges to be addressed. As a next step, we have found that putting in place a structured 'end-to-end' process for innovation, covering idea generation, selection, implementation through to launch, is a good way to embed a 'system' for innovation. This provides a process 'backbone' around which other key innovation elements can be developed. Work on strategy development and cultural issues can then follow. Given the competitive forces at play in their markets, law firms need to take action now to put in place the required capabilities to ensure a successful future.

"Law firms face significant challenges in seeking to embed a robust system of innovation given their internal environment."

Personal View – the right culture for innovation is key

Dr Dave Francis – Deputy Head of the Centre for Research in Innovation Management, University of Brighton

We are all familiar with the stereotypical view of an innovative organisation as one that is 'whacky', crazy and completely unstructured where new innovative products somehow 'emerge' from the innovative chaos of the firm..... But is this really the case? We talked with one of our academic partners, Dr David Francis, who is Deputy Head of the Centre for Research in Innovation Management (CENTRIM) at the University of Brighton. Dave has spent decades looking at organisational change and innovation - initially as a sociologist, then as a consultant and for the past decade as an academic.

Q. What do you see to be the major culture requirements for effective innovation in a company?

A. According to our research there are five major cultural components. These are (1) Empowering able and willing people to promote new ideas and get things done; (2) A shared attitude of 'constructive discontent' - meaning that people are proud of what has been achieved but know that things can always be better. (3) High energy - confidence, commitment and can-do spirit. (4) Support for those who strive to innovate - whether they succeed or not. (5) A commitment to execute: "creativity into action"

Q. In your experience what are the common cultural weaknesses in firms when it comes to innovation?

A. I see a number of typical challenges: (1) Being too busy with the present. (2) Not believing in progress. (3) Not following through. (4) Excessive use of centralised power. (5) Satisfaction with excuses as to "why we can't change."

Dave Francis is Deputy Director of the Centre for Research in Innovation Management (CENTRIM) at the University of Brighton. He is a sociologist specialising in firm-level innovation and organisation development. He has acted as a consultant to many organisations and has authored 29 books.

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Biggest business innovation in the next five years?

You could argue that the biggest business innovation in the last 100 years was the telephone, in the last 50 years the shipping container and in the last five years the application of the internet. Now let's look ahead: What will be the biggest business innovation in the next 5 years and why? Go to <http://www.codexx.com/contactus.htm> and register your reply or email us at innovation@codexx.com by 22nd December 2006 - the best argument gets published in New Directions and the winner receives a £30 Amazon voucher (editor's view is final!)



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