

## Thought Piece:

by Dr David M Atkinson

**Notwithstanding the present economic challenge, UK productivity continues to under-perform, relative to other developed nations. It is suggested that “differences-in-knowledge” form a key driver of productivity difference, and that this places a critical importance on innovation and knowledge creation.**<sup>1</sup> In Europe as a whole, poor productivity, relative to US and Japanese competition, is linked to inadequate levels of knowledge creation, in which, *inter alia*, structural factors such as unfavourable conditions for fast-growth SMEs, are cited.<sup>2</sup> In seeking to create “cultures of innovation”, and stimulating demand for innovation, structural funds have fed the potential of SMEs in some of the more disadvantaged regions of Europe, including parts of the UK.<sup>3</sup>

In my local region, Yorkshire and Humberside, it is said that we need more businesses to compete in the global market. *‘Enterprise is a key driver of productivity and we need more start ups by a diverse range of people, higher survival rates, better business support and more investment in the region.’*<sup>4</sup>



Set within the wider, strategic context of enhancing the potential of the people, and achieving a healthy and inclusive region, **Yorkshire Forward**, the region’s Development Agency, aims to grow both existing and new businesses to achieve sustainable economic growth and jobs. But, given this aim and the crucial relationship between innovation and productivity, there are some serious challenges.

Some examples of Yorkshire Forwards’ successes will serve as a useful background to the point I would like to make in this piece:

Firstly, there is the roll-out the £11 million programme of **Centres of Industrial Collaboration**, designed to help businesses innovate and access the region’s science base. Secondly, the **York Science City** has led to the creation of over 2,500 jobs and some 60 new businesses. And thirdly, there is the development of the **Waverley Advanced Manufacturing Park**.

And, the point? There is a common theme here – a policy-driven focus on science and technological innovation. However, despite the undoubted importance of science and technology, does such a focus risk the exclusion of all that innovation and creativity that has no such basis in science? Is this an inclusive strategy in the context of developing *cultures of innovation*? I think not; yet making this point invites an analysis of what might constitute an inclusive approach to strategy.

A traditional analysis would lead me down a path of trying to identify the challenges across the gamut of political, economic, societal and technological factors that surround us. But, let me STEP forward – and there is a pun intended here, in rearranging the traditional acronym for the PEST analysis.

### A Paradox of Capitalism

Firstly, however, there is a paradox to consider. Let me make the broad assumption that, in a commercial sense, Innovation starts with creativity, which, generally, is within the capacity of the individual – *aka* the worker.

<sup>1</sup> For example see AIM (2007), AIM (2009)

<sup>2</sup> Vigier (2007)

<sup>3</sup> Edwards and others (2007)

<sup>4</sup> The Regional Economic Strategy for Yorkshire & Humber 2006-2015 Progress update

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If we need more start ups, by a diverse range of people, then, implicitly, we would want to support the development of an innovative culture within the SME environment where, numerically at least, a great many workers are located. We would want to tap into and develop the individual's creative potential to contribute to both Regional and National productivity and economic success.

Robert Tressell described the "Great Money Trick" of capitalism, in his book "The Ragged Trousered Philanthropists, first published in 1914. This was admirably summarised by Gary Day, in his 1997 introduction to the book<sup>5</sup> – and I paraphrase slightly:

*"There are those who own the means of production, and there are those who own nothing except their labour power, which they sell in order to survive. What the workers earn is always less than the value of what they produce. Hence the owners, by selling back to the workers what they produce, continue to increase their wealth while the condition of the workers progressively deteriorates."*

[we] need... to adopt a more innovative nature, taking into account ... social cooperation, moral inter-dependence and reciprocity

To these words, I would add a caveat: the condition of the workers progressively deteriorates *relative* to the condition of the owners; that is to say, although – in our contemporary society – capitalism has undoubtedly raised standards and conditions for the worker, the gap between the owners and workers seemingly persists. I might suggest that we should seek to reverse this phenomenon, and encourage a culture of innovative practice through an exchange of knowledge for fair value.

## The Perspective of Culture

What should we take to mean by the word *culture*? This, I believe is the anthropological view of culture. For example, Geert Hofstede wrote in 1994 that culture represents the patterns of thinking, feeling, and acting that influence a given universe's population. In this case, the patterns of thinking, feeling, and acting that influence our individual workers within the SME population. To paraphrase Peter Anthony, also writing in 1994, contextually then, the SME culture is something the typical SME organisation is: it is a representation, a pattern of economic and **social cooperation** reinforced by custom, language, tradition, history, and networks of **moral interdependence** and **reciprocity**.

The challenge to be faced in developing an innovative SME culture might therefore be described as the need to influence the whole of our SME population to adopt a more innovative nature, taking into account such key cultural concepts as social cooperation, moral interdependence and reciprocity. But, we also need to be very clear about what we take to mean as innovation in this context.

## What Innovation?

There are a number of contemporary flavours of Innovation. We have **Steady state innovation** (*aka, low-order innovation*), which involves incremental innovations in products or processes. Here, as a point of interest, I might add that most patents applied for are incremental developments on some preceding design or other – a better this or a better that.

Then we have **discontinuous innovation**, and **management innovation**, together also known as **high-order innovation**. These innovations involve

<sup>5</sup> Edition Harper Perennial, 2005

fundamental changes in processes, technology or management and, potentially, provide a source of lasting competitive advantage. These contemporary categories give rise to talk of **the ambidextrous organisation** – one that simultaneously copes with both steady state and discontinuous innovation.

However, despite this innovation vocabulary, if we are principally concerned with engendering an innovative culture, I believe we are best to talk about innovation, simply as **“the successful introduction of new services, products, processes, business models and ways of working.”** This is the broad conception of innovation used in a recent joint call for further innovation research by the Economic and Social Research Council (ESRC), the Department for Innovation, Universities and Skills (DIUS), the National Endowment for Science, Technology and the Arts (NESTA), and the Technology Strategy Board (TSB).

While there is clearly much to be learnt about innovation, in all its guises, we need to retain a broad conception of innovation if we are to avoid the premature reification of any specific innovation mode, as some form of panacea to productivity and economic development. I believe that this is particularly so in the sub-universe of SMEs. I therefore ask a further question: where is the current focus of innovation?

#### Innovation: A Cultural Focus?

THE UK INNOVATION CHALLENGE report<sup>6</sup>, produced by the Advanced Institute of Management Research, lies centrally, amid a plethora of Innovation writing aimed at influencing policies that will improve the Nation’s productivity.

Every year, the UK spends some £21 billion on creating new knowledge via the science system in universities, research institutes, and companies. This forms part of an estimated £600 billion spent by OECD countries around the world. The evidence suggests that the UK is good at producing scientific knowledge. Yet, despite impressive performance in this area, we lag other developed nations in converting new ideas into commercial applications.

However, insofar that my concern in this piece lies with SMEs, and their potential to make a significant contribution to National Productivity, am I surprised at this focus on Scientific Knowledge?

The AIM Research report only mentions one instance of the term SME: in relation to stimulating the formation of innovation networks. The report’s recommendations include actively “promoting local SME networking”. This, I argue, does nothing, policy-wise, to encourage an innovative SME culture. Indeed, the words “small” and “medium” only occur once, each, within the body of the report. Can we really say that such research – given its potential to appeal to, and influence, policy makers – has a role in growing an SME culture of Innovation, inclusively encouraging more new start-up businesses? To address our National Innovation malaise, AIM recommends:

- **Opening up innovation as a** collaboration across organisations and national borders;
- **Mastering higher-order innovation**, to raise the National innovation game;
- **Developing innovation networks** to capitalise on our strong science base; and we can see the RDA strategy successes reflected here; and
- **Making the most of international firms in the UK, drawing on the fact that** foreign multinationals own large parts of our economy.

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<sup>6</sup> See AIM (2007)

I just want to take one of these recommendations to its extreme, as an illustration of the potential for a disconnect between policy and practice that can occur through a polarisation of strategy. The subject of opening up Innovation – a key current flavour in innovation research – draws upon the concept of **Open Innovation**. This is the idea that the innovation process has shifted from a closed process within firms to an open process drawing on many sources of knowledge. In a key Open Innovation study, Harvard's Henry Chesbrough<sup>7</sup> noted that firms could access vital knowledge from outside sources including, for example, customers, suppliers, universities, consultants and start-up firms.

Increasingly then, a common open innovation strategy involves companies seeing users, not merely as passive consumers of innovations, but rather as contributors to the innovation process also. Their ideas and insights can provide the starting point for new directions, creating new markets, products and services. For example, Lego, the Danish toy manufacturer set up the Lego Factory website. Users can now design their own model online, and have the ready-to-assemble model sent to them. The site has given Lego an effective way to capture ideas from its customer base, which are then be built into mainstream products, and (re)sold in quantity. In the extreme, is this a sustainable strategy?

I think, without a doubt, there is a place for this type of thinking and strategy, but as a basis for policy making to generally improve inclusive economic development, we could draw an interesting insight from *Robert Tressell's "The Ragged Trousered Philanthropists*. And I will paraphrase again:

Taken to the extreme: "Lego owns the means of production... then there are others who own nothing except their knowledge power, which, under open innovation, they no longer sell in order to survive – they give away in a globally networked, knowledge exchange process. What the knowledge workers now earn is far, far less than the value of their ideas. Hence Lego, by selling back to the knowledge workers innovations based on their own ideas, continue to increase Lego's wealth while, relatively, the condition of the knowledge workers progressively deteriorates."

## Challenges to an Innovative SME Culture

Culture is about the people; and it is at the level of the people that creativity takes place. In the SME community, the focus should be about people, not so much about process. There is a place for process of course, but in fostering innovation, and its root of creativity, knowledge workers should be engaged and encouraged to participate in a general, innovative culture. This will require principles better aligned to fair trade ideals, than some ideological notion of a global network for the free exchange of ideas.

The challenge facing us is not simply to create more knowledge, but to capture it in ways that have a positive economic and social impact. It is a question of how best to support the transition of worker to owner-worker through support for innovation (and in doing so, affording the opportunity to recognise and capitalise on high growth potential wherever possible).

Researchers at AIM Research do have it right. They see the challenge as converting our knowledge base into economic value. This requires an innovation infrastructure to become more effective at identifying and capturing know-how, rather than letting it slip through our hands. Open Innovation and Innovation networks may well be, academically, highly interesting and sound concepts, but, in extremis, they might be counter-productive.

<sup>7</sup> See Chesbrough, 2003

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I hope that, in this piece, I have raised more questions than I have answered. However, given the challenges of trying to influence any culture, I offer a new direction from which to approach the challenges.

## SKiP – A New Acronym for Relating to Innovation in Knowledge

Following Jean-François Lyotard, scientific knowledge does not represent the totality of knowledge; it exists in addition to narrative knowledge. Narrative – and its close cousin, storytelling – represents a creative description of the world in which hidden patterns and previously unexplored meanings unfold. In this respect, narratives need only be provisional as a basis for action. They can spell out an innovative path to move from a current state of where we are now, to a state of where we want to be. The challenges of supporting the development of an innovative culture in SMEs, is therefore reflected in the totality of knowledge. I believe we have to throw out PEST or its sometimes variation, STEP, and adopt a new approach to understanding knowledge creation as a negotiated, multi-level process. The challenges I identify are, I suggest, reflected in a new acronym as we **SKiP** towards a futurist economic response to our current state:



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- **S**: provides the **Societal** aspect; here the challenge may be seen as responding to a state of distress – a requirement to move from “State A”, to a desired “State B”.
- **K**: is the **Knowledge** aspect; it is the challenge of breaking down barriers created by a polarisation on instrumentalised, scientific knowledge – we need more stories!
- **I**: is the **(i)Conomy** - as opposed to *Economy*; it is the challenge of understanding and facilitating the exchange of value in knowledge ownership – understanding the distribution of risk and reward through the value chain of a socially negotiated, networked, innovation practice
- **P**: provides the **Political** aspect, which follows as the challenge of developing a socially inclusive policy focus that appeals to a broader base of the population and facilitates the achievement of State B.

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