NECESSITY SHOULD BE THE MOTHER OF INNOVATION

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University of Nottingham Institute for Enterprise and Innovation (UNIEI) Nottingham University Business School The imperative of thinking differently, identifying and exploring opportunities for innovation, may never be greater for many organisations than in a period of economic recession, yet the likelihood of it occurring in practice given the frequent need for short-term 'fire-fighting' may never be lower. At an economy-wide level, the same impasse and disjoint between what is required and what is likely to happen in practice jeopardises the process of renewal and recovery. There may not be an obvious solution to this conundrum but there are some straightforward possibilities that might be considered by

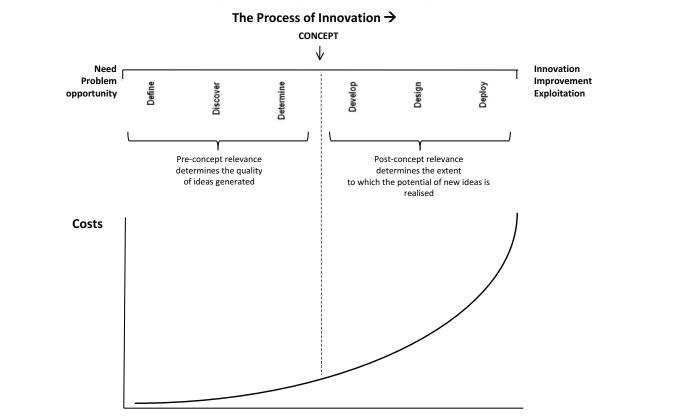
organisations small, medium and large, private or public.

It has long been recognised that entrepreneurship and innovation underpin economic development and progress. Back in the early 20th century Joseph Schumpeter, the famous Austrian economist, emphasised the crucial distinction between incremental and discontinuous innovation. The first builds on gradual improvements to the accepted and established methods of operation whilst the second causes radical change. The first improves, the second transforms. Whilst Joseph Schumpeter was observing these characteristics in the generic context of economic

development precisely the same principles apply to individuals and also businesses and organisations of all kinds.

Incremental innovation may be important in maintaining or increasing market share often in response to market research and customer feedback. The inspiration for radical innovation that involves considering key aspects of a business from nonobvious, different and novel perspectives may reveal opportunities previously unrecognised. These innovations are not just restricted to products, services and processes but also refer to organisational behaviour, structure and culture. Whilst it may be important for

Successful innovation depends upon the quality of the concept. The Ingenuity Guide for Clear Thinking optimises the prospects of success by applying creative thinking at the heart of and throughout the innovation process.



organisations to refresh their 'offer' in order to remain competitive within existing markets and technologies it is also crucial that they undertake a more wide-ranging and freethinking review of all areas of their operations to ensure that opportunities previously unrecognised are not missed. To achieve this requires rigorous 'pre-concept' preparations prior to 'post-concept' implementation strategies. Consider the continuum of innovation that stretches from problem or opportunity identification all the way through to a new innovation.

Given a problem, opportunity or perceived need then in a perfect rational world those considering implementing an effective response would follow a simple but rigorous procedure.

In the definition phase they would strip the problem down to its root causes and prioritise these so that they could be dealt with one at a time.

In the discovery phase the root cause concerned would be comprehensively explored with as rich a set of solutions as could be produced using divergent thinking and solution storming.

In the determine phase the wealth of spontaneous ideas and solutions would be sorted and sifted and reduced to a number of viable practical alternatives. Proven techniques would then be used to ascertain the best possible solution.

The new product, process, mode of organisation or structure that emerges from this pre-concept focus would then be subject to more familiar considerations in terms of development, design and eventual deployment.

In practice, as individuals or organisations, we tend to neglect this crucial 'pre-concept' focus and default immediately or very quickly to the nearest solution

emerging from previous experience or that deployed by others. When confronting a problem there is pressure to seek a solution as quickly as possible. This means that the rigours of definition, solution generation and solution selection are neglected and the flow of new ideas and concepts into organisations and economic progress more generally may be suboptimal. Pre-concept innovation analysis may also help to filter out unworkable concepts at an early stage when the sunk cost involved is guite low. Insufficient focus on problem definition, idea generation and concept selection often allows significant costs to be incurred before fundamental weaknesses that could have been detected much earlier are fully recognised.

In order to determine the levels of innovation in a business it is important to consider the extent to which opportunity identification activities are present and pre-concept analyses are undertaken. The extent to which new products processes and organisational changes are introduced should also be considered. As indicated above time pressure may appear to preclude these considerations in practice particularly when 'firefighting' in a recession but finding some space to reflect on these issues in the context of prevailing business practice could make a significant positive difference.

Rapid decision making under pressure without allowing recourse to advice or reflection is sometimes mistaken for strong and effective leadership. Whilst those responsible for leadership may regard this approach as unavoidable in the circumstances it means that there is virtually no 'pre-concept' focus and the existing reservoir of experience and understanding latent in the rest of the organisation is ignored. ... Incremental innovation may be important in maintaining or increasing market share often in response to market research and customer feedback...

Creativity and the generation of innovative ideas are not the jurisdiction of a select few; they are open to everyone. We often tend to be self-limiting in the extent to which we share ideas for fear of humiliation, criticism or simply due to a lack of trust in how these may be used or recognised. Open innovation and the sharing of ideas requires structure and trust and may best be established through collaborative pre-concept working across the organisation. Approaches and systems that are created by those expected to apply them may be less susceptible to rejection and therefore more long lasting. Given the prevailing trading conditions in many markets, now may not seem to be the best time to stop, think and reflect but it may be just what is needed.

The 'Ingenuity Approach' developed over the past two years at the University of Nottingham Institute for Enterprise and Innovation (UNIEI) at Nottingham University Business School (NUBS) has been designed with the specific aim of 'demystifying' pre-concept innovation activities. It enables and encourages individuals and

teams to think differently, more creatively and more effectively. It leads to the generation of non obvious and often superior solutions. This approach has been applied successfully in practice with a wide variety of groups including high growth SMEs, large public and private organisations, academics, post graduate students and now, most recently, the mass application of the principles with over 800 first semester undergraduates. Future developments include an exploration of the ways to harness the creativity of hundreds of teams of bright young minds by encouraging them to apply the Ingenuity approach to pressing live problems affecting people, communities and businesses. The outcomes are impossible to predict but their impact could be enormous.

The Ingenuity approach is now available more widely from Amazon through the publication 'Ingenuity in Practice – A Guide for Clear Thinking' written by Paul Kirkham, Simon Mosey and Martin Binks.

