
Editorial

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1 Introduction

The challenge of innovation has never been more keenly felt. With the constraints imposed by a deep financial crisis coming soon after major concerns about energy and resource availability there is a strong imperative for continuous improvement (CI) – doing what we do more efficiently and sustainably. But, at the same time, we face dramatic new problems requiring radical solutions – we need urgent and different responses to deal with climate change, with feeding an increasingly hungry population, with providing clean water and access to basic facilities and delivering healthcare.

The innovation imperative is not really in doubt – the real question is not whether to innovate but *how*? And here we focus on an important theme – whilst the underlying problem of managing innovation remains the same, the context in which we have to do so is changing dramatically. It has always been a question of converting new ideas – whether they come from R&D, from market demand or customer insight – into effectively applied solutions. The difference today is that the environment for doing so is significantly different. Take, for example, the knowledge question. Of course creating new knowledge via public and private sector R&D is an important way of triggering the innovation process – but in a world where close to \$1 trillion is being spent every year around the world on creating new knowledge the question is raised about whether we know about or can access such knowledge. Emphasis in managing innovation shifts to thinking about knowledge *flows* as well as knowledge creation – and the topic of ‘open innovation’ recognises how important the external networking amongst even large firms has become as they realise that ‘not all the smart guys work for us’.

On the demand side, the pattern is equally difficult, with markets globalised, fragmented and increasingly virtual and with users playing a growing role in defining and co-creating innovation.

The result is that we need to look again at our prescriptions for managing innovation and constantly revise and reconfigure them. Innovation management is very much a 'dynamic capability' rather than a static one, learned once and then established forever. And this inevitably shifts our attention to how we might best learn about developments in managing innovation. A clear message here is that no single organisation has the 'right' answer. Learning to manage innovation is about research and experimentation, reflection and experience sharing, theory building and testing. And this argues for building bridges to cross between the worlds of research and practice, between academics and application. Building such a 'forum' for exchange and development of innovation management theory and practice has been the work of the Continuous Innovation Network (CINet) since its inception over a decade ago.

2 Continuous Innovation Network

CINet is a global research network set up to bring together academics and industrialists working in the field of innovation management. It started as a Eureka project (EU 1222) in 1994 (Caffyn, 1998) and amongst its many network activities it has held a regular international conference. The core focus has shifted from early concerns with CI/kaizen and what might be termed 'high involvement innovation' to a wider view, embracing both incremental and radical innovation and the management challenges they pose (Boer and Gertsen, 2003; Corso, 2002; Cole, 2001; etc.). This involves a new way of thinking about the integrated management and organisation of day-to-day operations, improvement and learning and innovation and change. The core idea is that organisations in the future will rely more and more on individuals and their commitment to learning and diffused innovation at all levels and in all parts of the organisation, as the basis for economically and socially sustainable development (Boer and Visser-Groeneveld, 2007a, 2007b).

The research vision sees continuous innovation as the ongoing process aimed at generating product (and/or service) – process – organisation – market combinations (PPOM) that are new to an individual, a group of people, an organisation, a market sector or even society as a whole (see <http://www.continuous-innovation.net>).

Recent CINet conferences have discussed various themes including Continuous Innovation and Sustainability: Designing the Road Ahead (2006, Italy) or Continuous Innovation – Opportunities and Challenges (2007, Sweden). Both conferences presented a number of their selected papers in the pages of the *International Journal of Technology Management*.

3 The 9th Conference

This special issue presents a selection of the papers presented at the 9th International CINet Conference, which was held in the Universidad Politecnica de Valencia, Spain. The conference was open to industry practitioners since discussion of innovation

management must be carried out by academia and industry if we want it to be effective and knowledge in the field to be shared.

There were several keynote sessions exploring innovation management not only from an academic but also from a practitioner's point of view. John Bessant's presentation 'Putting people back into innovation' looked at the continuing importance of people as the engine for innovation within the enterprise and this was complemented by a presentation of a radical innovative management experience, within IRIZAR, the automotive multinational cooperative (Casadesus and Mitchell, 2006). On the second day, another prestigious academic, Ben Martin, who had led SPRU from 1997 to 2004, gave an insightful personal view on 'Innovation studies: what have we learned in 50 years?'. He shared the session with two industry cases: that of the Valencia port illustrating the challenges that innovation poses to logistic services and a case of a university research group which has developed a new cooking technology collaborating with world renowned chefs.

The conference included 95 papers including industry presentations covering various continuous innovation fields. This special issue presents ten papers reflecting most of the tracks within the conference.

The first three articles reflect the transition between CI and continuous innovation. In the first, 'Effectiveness of different development paths in continuous improvement: empirical results from a (new) methodological approach' by Davide Aloini, Antonella Martini and Luisa Pellegrini. The challenge is explored through the metaphor of driving the innovation process and the authors ask who makes the better driver – the one who learned to drive with a driving-instructor or a self-taught driver? This article won the best paper award prize and utilises an approach based on structural equations. The second article, 'Can we still talk about continuous improvement? Rethinking enablers and inhibitors for successful implementation' by Julio J. Garcia-Sabater and Juan A. Marin-Garcia focuses on CI as a management tool drawing on field work in the automotive industry. The third contribution, 'Dispersion of continuous improvement and its impact on continuous improvement' by Keith Sloan and Terry Sloan deals with a relevant proposition backed up by an empirical study, that dispersed CI enhances the business performance benefits of CI and that the experience of CI was more positive in firms where CI was dispersed, with fewer implementation problems and higher levels of support and measurement tools supporting again the idea of CI as a strategic management tool.

In the next section, we have four papers presenting management tools and skills linked to continuous innovation. In their paper 'The complementary effect of internal learning capacity and absorptive capacity on performance: the mediating role of innovation capacity', Beatriz Forés and César Camisón analyse the links between the firm's internal learning capacity and their absorptive capacity and examines the effect of knowledge generation on development of innovation capacity. The second paper of this group, 'Global value chain reconfiguration through external linkages and the development of newcomers: a global story of clusters and innovation' by Jose-Luis Hervás-Oliver, Jose Albors-Garrigos and Antonio Hidalgo, analyses firm's relational capabilities and how globalisation has impacted on clusters by examining intercluster linkages through multinational enterprise affiliates in the case of the tile ceramic global value chain.

In the third contribution, ‘The influence of knowledge management on continuous innovation’, Aino Kianto demonstrates how certain elements of knowledge management (KM) such as knowledge assets, strategic management of knowledge, knowledge codification, knowledge sharing and knowledge acquisition contribute as enablers of continuous innovation contributing to a loose empirical link between both disciplines: KM and CI. Finally, the fourth paper, ‘The role of cross-functional teams on the alignment between technology innovation effectiveness and operational effectiveness’ by Ricardo Santa, Phil Bretherton, Mario Ferrer, Claudine Soosay and Paul Hyland addresses a dear subject of innovation management theorists, that of cross-functional teams and how these have an indirect influence on CI of operational performance through the alignment between technology innovation effectiveness and operational effectiveness by utilising advanced statistical constructs.

The last group of papers address new fields in continuous innovation. In first place, the article ‘Outsourced innovation in SMES: a field study of R&D units in Spain’ by Jose Albors-Garrigós, Noemi Zabaleta Etxebarria, Jose Luis Hervas-Oliver and Jaione Ganzarain Epelde, a contribution that won the Industry Award at the conference focuses in open innovation and how SMEs can benefit of it by the support of well-driven public policies with the case of a field study in the north of Spain. The second contribution of this group ‘Selection strategies for discontinuous innovation’ by John Bessant, Bettina von Stamm and Kathrin M. Moeslein, explores the challenges posed by ‘discontinuous innovation’. Drawing on experiences within the multinational innovation lab, the authors argue that firms have to face the challenge of extending and replacing routines and develop dynamic capabilities in order to confront the challenges of discontinuity. Finally, the last paper addresses a crucial subject in developed countries, that of service innovation and customer involvement. In ‘Customer interaction in service innovation: seldom intensive but often decisive. Case studies in three business service sectors’ by Arja Kuusisto and Mikko Riepula, the authors analyse customer interaction in service innovation and propose three key roles of customer roles for innovation: catalysts of service development processes, providers of feedback and internal marketers of the new service idea.

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References

- Boer, H. and Gertsen, F. (2003) 'From continuous improvement to continuous innovation: a (retro)(per)spective', *International Journal of Technology Management*, Vol. 26, No. 8, pp.805–827.
- Boer, H. and Visser-Groeneveld, J. (2007a) 'Cinet – lessons from and for a community of practice', *88th International CINet Conference 'Continuous Innovation – Opportunities and Challenges'*, 7–11 September, Gothenburg, Sweden.
- Boer, H. and Visser-Groeneveld, J. (2007b) 'CINET – lessons from and for a community of practice', *7th International CINet Conference*, Gothenburg.
- Caffyn, S. (1997) 'EuroCINet – the first three years: a report of the activities and achievements of the European network for continuous improvement 1994–1997', Eureka Project EU1222.
- Casadesus, R. and Mitchell, J. (2006) 'Irizar in 2005', Case Study No. 706424-PDF, Harvard Business School, Cambridge, MA.
- Cole, R.E. (2001) 'From continuous improvement to continuous innovation', *Quality Management Journal*, Vol. 8, No. 4, pp.7–21.
- Corso, M. (2002) 'From product development to continuous product innovation: mapping the routes of corporate knowledge', *International Journal of Technology Management*, Vol. 23, No. 4, pp.322–340.