Managing Hidden Innovation
1st December 2015
Grand Parade Boardroom M2, University of Brighton

The workshop invites papers or posters to address the management of innovation that takes place ‘under the radar’ of official statistics and formal management practices, what has been coined as “hidden” (NESTA 2006, Harris and Halkett 2007) or “neglected” innovations (Arundel, Bordoy et al. 2007). The term includes new forms of innovation as well as innovation taking place in new ‘uncharted’ contexts or sectors. Typical examples of hidden innovation are non-technical innovations, innovations in low and medium technology sectors and in services, innovation in emerging economies and innovation with “frugal” resources. The term also includes innovations in a non-profit context such as social innovations, innovation in health systems, innovation in the provision of humanitarian aid etc. Current references to “hidden or neglected innovations” have so far been limited to defining the phenomenon, without providing sufficient insights into the challenges of managing these innovations.

This workshop aims to remedy this gap by inviting full papers, developmental papers (papers in the process of development) or posters to address this gap. Contributions are expected to rely on solid theoretical underpinnings within a specific domain. Six leading experts in the area of innovation (Professor Peter Augsdoerfer, Professor John Bessant, Professor Paul Nightingale, Professor Howard Rush, Professor Maria Savona, Professor Paul Trott) and the participants are expected to provide feedback to the presented work in order to make them fit for publication.

Abstracts of no more than 1,000 words (or suggested posters) can be sent by the 20th November 2015 to g.tsekouras@brighton.ac.uk cc nick.marshall@brighton.ac.uk. The workshop will discuss a strategy for a Special Issue on “Managing Hidden Innovation” in an academic journal in 2016. The Special Issue will be double-blind reviewed and participation to the workshop is not a guarantee for inclusion. The workshop is open to junior and senior academics, PhD and MSc students, policy-makers and practitioners - whether they want to present a paper or just attend the workshop.

The workshop is organised to mark the establishment of a new Special Interest Group (SIG) on Innovation with the British Academy of Management (BAM) and the continuing success of the Innovation Track in the BAM Conference. The Innovation SIG (www.bam.ac.uk/sigs-innovation) was launched in 2014 with the support of nearly 100 senior academics, including 60 Professors, doing research in the area of innovation.

Deadline for sending abstracts (or suggested posters): 20th of November
Booking deadline: 27th of November
Participation fees: £25 for academics and researchers, £10 for PhD/MSc students; Free for BAM members, staff and students in University of Brighton and SPRU and BMEc at University of Sussex
For travel and location: http://about.brighton.ac.uk/maps/grandparade/index.php?PageId=758
For guidance on accommodation, contact Chris Matthews (C.R.Matthews@brighton.ac.uk)

The Special Interest Group on Innovation of the British Academy of Management

Dr Neil Alderman, University of Newcastle
Dr Pelin Demirel, University of Southampton
Dr Nick Marshall, University of Brighton
Dr George Tsekouras, University of Brighton
Dr Paul Windrum, University of Nottingham
The rationale

Innovation is instrumental for economic wellbeing; 50-80% of economic growth is estimated to originate from innovation and new knowledge (Helpman 2009). The innovation process has been examined from a number of different perspectives such as the economics of science and technology, evolutionary economics, economic and business history, economic geography and the policy domain, including the fields of ‘science policy’, ‘research policy’, ‘technology policy’, and more recently ‘innovation policy’ (Martin 2012).

A distinct stream of literature addresses the challenges and the enablers of innovation management or in other words how to manage the innovation process despite the inheritably ‘unpredictable’ character of innovation (Tidd, Pavitt et al. 2001). Pioneering contributions first appeared in the early 1960s (Burns and Stalker 1961) with the innovation management discussion subsequently integrating elements of R&D management, new product development, technology management and parts of strategic management analysis (Teece, Pisano et al. 1997, Zollo and Winter 2002) and organisational learning literature (Brown and Duguid 1991, Argyris and Schön 1997).

Despite the significant contribution of this literature to the measurement, support and management of innovation, there is a pressing need to expand its boundaries and its focus to offer a more comprehensive understanding of the innovation process and to account for recent developments. An influential report opened this debate in a very convincing way (NESTA 2006):

innovation is frequently found in unlikely places. It is rarely based on traditional understandings of linear, ‘pipeline’ research and development that lead only to new products, drugs or technology ... We need a deeper understanding of innovation based on where it actually happens ... The current emphasis on traditional research and development is necessary, but not sufficient ... The result has been an over-emphasis on a very small sector of our economy and the exclusion of the vast majority.

The rise of new management practices has displayed the limitations of the current innovation management literature. For a start, the R&D activities include much more than the R&D indicated by the formally recorded activities and the official statistics of a firm (Augsdorfer 2005, Augsdorfer 2008, Augsdorfer 2012). Furthermore, the supposed supremacy of a strong R&D performance was challenged by the ‘inexpensive’ strategy of open innovation and the opportunity to use (potential) users of the firm’s products as innovation agents (Enkel, Gassmann et al. 2009, Bogers and West 2012, Robertson, Casali et al. 2012, West, Salter et al. 2014). To ‘complicate matters’ even further, the innovation capability of companies in developed economies was challenged by the ability of companies in emerging economies to innovate at an international level, notwithstanding the rather limited basic research infrastructure in their countries (Bruton, Ahlstrom et al. 2008, Senik, Scott-Ladd et al. 2011) or the “frugal resources” of the relevant companies (Zeschky, Widenmayer et al. 2011, Bhatti 2012, Bound and Thornton 2012, Radjou, Prabhu et al. 2012, Rao 2013).

Furthermore new economic and social challenges have emerged ‘inviting’ contributions beyond the current agenda. For instance, the burst of several tech bubbles the last 15 years despite the unremitting support of high-tech firms, has suggested that the research needs to look into the management of innovation in new sectors and in new contexts. The management of innovation in services is clearly such a case where the innovation is much less linear, more interactive and less amenable to long-term planning (Desyllas and Sako 2013, Salunke, Weerawardena et al. 2013, Chang, Miles et al. 2014). Similarly the management of innovation in low and medium
technology sectors has gained the attention of recent contributions (Von Tunzelmann and Acha 2005, Hirsch-Kreinsen and Jacobson 2008, Robertson, Smith et al. 2009). The notion of non-technical or management innovations has become increasingly the focus of recent contributions (Birkinshaw, Hamel et al. 2008, Mol and Birkinshaw 2009, Rammer, Czarnitzki et al. 2009). The social pressure to move towards the more responsible management of natural resources has created an additional set of requirements for managing innovation (del Brío and Junquera 2003, Schiederig, Tietze et al. 2012).

“Hidden innovation” in a non-profit context has also emerged as a clear trend the last few years. The increasing resources required for managing health systems has encouraged innovations in healthcare provision (Christensen, Grossman et al. 2009). The wider public sector and its services have also come under pressure to increase productivity mainly through innovation (Windrum and Koch 2008, Mazzucato 2011, Mazzucato 2013). The notion of “social innovation” e.g. the availability of microcredit and innovation in the provision of humanitarian aid has captured the attention of the academic debate (Mulgan, Tucker et al. 2007, Phillips, Deiglmeier et al. 2008).

These trends are mirrored by a dearth of studies on the management of ‘hidden’ innovations, with very few contributions specifically addressing the distinctive character of innovation processes in these contexts. As with much innovation rhetoric, these concepts can easily be overplayed, and there is a need to develop new literature that takes a critical look at these ideas and the context in which they are espoused and presented as the solution to pressing economic or social problems. Potential issues to be explored within this research agenda are:

- Sources of hidden innovation
- Measurement of hidden innovation (Adams, Bessant et al. 2006)
- Forms of hidden innovation product, process, organisational, market etc.
- Format of hidden innovation, whether technically-driven, organisationally-driven or a combination of both
- The role of non-R&D activities (design, creativity etc.)
- Alternative inputs to innovation (contract R&D, user-led innovation etc.)
- The economic and social environment of hidden innovation, e.g. whether in the context of profit-making or a not-for-profit commercial environment
- The role of absorptive capacity and technology transfer in hidden innovations
- The role of tacit knowledge in the hidden innovation
- The role of new business models (e.g. crowdfunding) in hidden innovations
**BAM INNOVATION SIG**

The Papers

*Hidden Innovation: The Initial Concept and Further Reflections by Professor Paul Nightingale*

*Abstract:* This talk will explore the roots of the concept of Hidden Innovation in the 2006 NESTA Innovation Gap report, and how it developed since its publication. It will highlight the ways in which innovation policy in the UK and internationally has adopted what BIS calls a 'Broader View' of innovation that goes beyond R&D and research. In doing so, the talk will highlight progress, but also the continuing influence of unhelpful models of innovation, and their negative influence on practice and policy.

Paul Nightingale is a Professor of Strategy at Sussex University and Deputy Director of SPRU, the Science Policy Research Unit, at Sussex. He is a visiting Professor in the Strategy Group at Cass Business School. He is editor of Research Policy and formerly editor of Industrial and Corporate Change. He is now a member of the ESRC Research Committee, and is the Principal Investigator on the University of Sussex IAA project. He was the Sussex Principal Investigator on the Brighton Fuse project. He was also the main author (with Virginia Acha) of the NESTA Innovation Gap report that argued that many traditional indicators of innovation fail to capture the complexity of technical change in the UK economy, highlighting the large amount of 'hidden innovation' ongoing in the economy. Paul works extensively with governments and industry on innovation policy and innovation management matters.

*Forbidden fruit: Bootlegging by Professor Peter Augsdörfer*

*Abstract:* It is a general observation that increasingly uncertain dynamics govern company’s technological environment. The creation of valuable innovative investment opportunities becomes more and more a necessity for the survival of industrial firms. In contrary to the development of new products or processes, the initial impulse relies very much on individual people with unusual ideas. In 1996, my book called “Forbidden Fruit”, looked in detail on the controversial research method ‘bootlegging’, also called covert research, which is carried out, in corporate R&D laboratories. It tells about researchers who experiment and develop their ideas under cover and hidden from management. The book was updated, together with Eicher and Mösllein, in 2015 including all publications, which have appeared in the meantime. The latest research confirms that covert research is an absolutely common phenomenon in corporate organisations and its positive effects should not be belittled. Essentially, bootlegging exercises researchers’ creative learning capabilities and thus stocks technological competence building. Overall, it can be considered as an organisational self-regulating element in the corporate search for organisational correctness and creative chaos.

Peter Augsdörfer is Professor for Technology and Innovation Management at the Technical University Ingolstadt, Germany. He holds a German Engineering degree, a French Management degree, and a PhD from SPRU at the University of Sussex in UK. His research interests include bootlegging in R&D, evolutionary aspects of early innovation processes, and discontinuous innovation.

*Hiding in unexpected places - mapping innovation in uncharted sectors by Professor John Bessant*

*Abstract:* 'Hiding in unexpected places - mapping innovation in uncharted sectors' would draw on the work in the humanitarian sector as a particular example which the author has been doing
for the last two years. This presentation would theorise and complement the practitioners’ perspective.

John Bessant, originally a chemical engineer, has been active in the field of research and consultancy in technology and innovation management for over 35 years. He is currently holds the Chair in Innovation and Entrepreneurship at the University of Exeter and has visiting appointments at the universities of Erlangen-Nuremburg, Queensland University of Technology and the National University of Ireland. In 2003 he was elected a Fellow of the British Academy of Management. He has acted as advisor to various national governments and international bodies including the United Nations, The World Bank and the OECD. He is the author of 30 books and many articles on the topic and has lectured and consulted widely around the world.

Service output, innovation and productivity: A time-based conceptual framework by Professor Maria Savona

Abstract: The paper adds to the literature on innovation and productivity in services in a three-fold way. First, it extends recent literature attempting to re-conceptualise service output in terms of Lancasterian characteristics. Our focus is the analysis of inputs involving the use of customer time in co-production and informational inputs, which may be produced by either the service provider or the client. In particular, we focus on those features that are associated with the use of ICT in service definition and delivery. Second, it models user choices in terms of the time-allocation between self-production, co-production and purchase as influenced by competences and time-saving preferences, and supplier choices as governed by opportunities to benefit from informational economies, cost saving arising from the stimulation of co-production and productivity increasing opportunities arising from the use of ICT. Third, it uses the conceptual framework to re-interpret the well-known theory of innovation in services, the Barras reverse product cycle model. Implications of the model for productivity are also considered. Finally, the model is used to interpret UK experience with e-government: NHS Direct and Direct-Gov. The paper concludes with proposing a research agenda.

Maria Savona is Professor of Innovation and Evolutionary Economics at SPRU, Science Policy Research Unit at the University of Sussex, UK. Her main research interests are structural change and development, particularly the recent international fragmentation of production involving services; the economics and policy of innovation in services; spatial distribution of innovation and production activities; theory and micro-econometrics of innovation, particularly the effect of barriers to innovation and growth. She has published widely in these areas on international peer-reviewed journals (Journal of Economic Geography, Research Policy, Cambridge Journal of Economics, Journal of Evolutionary Economics, Journal of Economic Surveys, Structural Change and Economic Dynamics among others) and handbooks. She is council member of RESER (European Association for Research on Services) and REDLAS (The Latin America and Caribbean Network on Service Research). She is a peer reviewer for over thirty academic journals and is in the Editorial Board of Research Policy, the Journal of Evolutionary Economics, the Eurasian Business Review and Economia Politica.

Product innovation in low- and medium-technology industries by Professor Paul Trott

Abstract: The food industry has traditionally experienced very low levels of investment in R&D yet has delivered both product and process innovation over a sustained period. In such environments innovation can be explained through learning by doing and the use of networks of interactions and extensive tacit knowledge. This study explores how the innovation process in the UK food industry uses a doing using and interacting (DUI) mode of innovation including
activities such extensive on the job problem solving and the use of external firm sources. This research provides evidence that innovation is indeed occurring but is not being captured in existing innovation metrics. Our findings support the view that LMT industries rely on non-formal R&D activities such as firm interaction and shared experiences.

**Paul Trott** is Professor of Innovation Management at the University of Portsmouth UK and for the past five years was also Professor of Innovation & Entrepreneurship at TU Delft, The Netherlands. He received his Ph.D from Cranfield University, UK. He has published over forty articles on innovation management. His book Innovation Management & New Product Development is now in its 6th edition. His new book, with colleagues from TU Delft, is titled Technological Entrepreneurship. He is currently exploring innovation in low technology sectors.

**The Facilitator**

**Professor Howard Rush, CENTRIM, University of Brighton, UK**

Howard Rush has engaged in research in the field of science and technology policy, and innovation studies, since 1974. He started his research career at the Science Policy Research Unit (SPRU) and, after a brief spell at the National Economic Development Agency (NEDO), joined the then Brighton Polytechnic (now University of Brighton) in 1983. He was a founder member of the Centre for Research in Innovation Management (CENTRIM) at the University of Brighton, where he was Head or Deputy Head for 26 years. He has also been co-director of the ESRC-funded centre on Complex Product Systems Innovation (CoPS). His research has been in the areas of socio-economic impacts of information technology, benchmarking of research and technology institutes, the diffusion of new technologies in developing countries, the evaluation of national and regional innovation policies, managing innovation in complex projects, illegal innovation in cybercrime and, most recently, innovation within humanitarian relief. Professor Rush has published over 125 academic papers and has been the Principal Investigator on over 25 major research projects and numerous consultancies funded by a range of national and international agencies including the UK Department of Trade and Industry, the Department for Internal Development, the World Bank, the European Commission, and United Nations agencies such as the ILO, UNDP, UNESCO and IFAD.
References


Mulgan, G., et al. (2007). "Social innovation: what it is, why it matters and how it can be accelerated."


BAM INNOVATION SIG


