

Background to the theme

The reality of R&D and its impact on innovation

Objectives

The conference will illuminate the reality of R&D: the variety of situations and conditions in which R&D is being organised; how adequate are the conditions; the factors which are influential and how the reality is managed.

The theme can be interpreted as a focus on: the reality of R&D; the impact of R&D on innovation; how the reality of R&D impacts innovation.

The conference aims to advance research about the management of R&D. It recognises a need for interactions between the social and management sciences which analyse R&D management methods and the science, technology and industry domains where R&D projects take place and investments are made. Contributions are welcomed from R&D and innovation management researchers and from those directly involved in the R&D business - knowledge workers, R&D managers, consultants, and technology entrepreneurs, business strategy and investment managers, and policy advisors.

Contributions might describe and comment on the reality of R&D in specific cases: e.g. in particular knowledge domains such as nano, neuro or bio or at a project, company, industry or regional level. They might provide comparative evidence about the performance of R&D in different locations, or present problems and solutions, or conceptual frameworks. The overall aim should be to stimulate via discussions a deeper understanding of the reality of R&D and how it is perceived in different industries or by different groups of stakeholders.

Discussions will be structured to identify how and where improvements need to be introduced and the implications for R&D management and R&D management research.

Background

The reality of R&D poses a complex multi-dimensional challenge to management. The conference will examine and discuss how the reality is perceived, how it is experienced and how it affects all those involved in 'doing' R&D. It will consider how the reality of R&D might constrain, encourage or induce worthwhile projects and appropriate levels of investment. It will also consider the difficulties being encountered. Instead of just focusing on new management practices and concepts as solutions to be promoted and diffused, it will recognise these practices and concepts might in reality be the source of new problems.

The reality of R&D is influenced by knowledge frontiers, project and business objectives, innovation opportunities, facilities, resource constraints, finance, business models, location, workplace environment, teams, networks, access to information and expertise, perceptions of success and failure, creativity, productivity, motivation and leadership, sense of achievement and other factors. When conditions are adequate and the working environment is conducive, the returns from R&D can be very high-impact.

Much R&D expenditure is either to support or to respond and adapt to incremental innovation. The cumulative effects can be dramatic. However, Europe and perhaps all advanced economies want 'transformative innovation' to generate new markets and industries. Papers are encouraged which describe how R&D is being organised for such breakthrough innovation. Discussions will complement the theme of the ISPIM Conference: 'the future of innovation'.

Perspectives about the reality of R&D in different contexts can inspire and inform management research and suggest how better business and financial practices and organisational and innovation effectiveness can be achieved.

The R&D Management Conference 2009 and the **ISPIM Conference 2009** will be organised concurrently and synergistically in WKO, Vienna. The theme of the ISPIM conference is 'the future of innovation'. The theme of **The R&D Management Conference** is 'the reality of R&D and its impact on innovation'.

Focus and scope

New methods and concepts of management have been introduced over the years to manage complexity, reduce uncertainty, address emerging trends and economic pressures, and respond to new opportunities. They have differentiated different aspects of R&D such as 'new product development', 'process improvement', 'project management', 'breakthrough innovation', 'exploratory or blue skies research', 'large systems' and 'services R&D'. Methods have focused on a wide range of approaches from worker motivation and career development to quality and performance measurement, from functional interfaces to technology and business strategy, from effectiveness and efficiency to creativity, intellectual capital and network capabilities. Management has responded to changes in the supply chain and structure of industry, to the internationalisation of R&D and the globalisation of business, and is now increasingly recognising the importance of environmental issues. R&D (or 'R' or 'D' separately) has even been reconceptualised or reengineered through outsourcing, cost-centres and profit-centres, 'virtual laboratories', knowledge management, information systems, options thinking, university-industry collaboration, user-driven innovation, design-driven R&D and 'living labs'. How effective is R&D and how does it lead to innovation has for a long time been a major concern.

Some methods and concepts have emerged from successful practice, from management or research insight, or from careful observation, and some have recognised the reality of R&D and its inherent difficulties (e.g., innovation champions, technology gatekeepers, skunkworks, and the need for venture capital to finance R&D). Often the inspiration to introduce such methods comes from other fields or from business or general management pressures (as was the case with total quality management, business process engineering, core competences, performance measurement, and concurrent engineering). Inspiration and improvement opportunity also comes from ICT applications (process simulation, social network analysis, internationally distributed teams, Web2.0 social groups, electronic laboratory notebooks, data mining, competitive intelligence).

The terms 'industry' and 'business' are defined widely to include: R&D activities in company environments, research institutes, government labs, universities, science parks, and incubators; technology commercialisation; health and medical services; R&D for charitable, social and other objectives; R&D in the creative and sports industries etc.

Reality check

The overall emphasis of the conference theme is on 'doing R&D', 'using R&D' and 'investing wisely' in R&D. What is the reality of R&D as it is currently being experienced?

The reality is varied and changing dynamically and non-uniformly across all industry sectors, across applications or technologies and regions as well as internationally. The reality now, perhaps, might be to expect shocks, surprises and discontinuities more frequently and with greater consequences. The reality now may be an enhanced awareness of social and environmental factors or new business models to operate R&D. Individuals wanting to work in R&D face very different career prospects, modes of engagement and specialisations.

The 'reality of R&D' is what is actually experienced by those who are actively involved and what constrains or empowers those people. Management concepts and research help us to observe, interpret and understand the reality and to interface with its complexity. But management concepts and trends in research may not be so helpful to those who are actually doing R&D. This conference provides an opportunity for a 'reality check'.

Format and structure of the conference

The format will build upon the long history of The *R&D* Management Conferences and encourage the presentation and discussion of (full) research papers. It will integrate research presentations with practitioner perspectives and organise interactive sessions. These will focus on the range of subjects represented in selected papers, and participants' suggestions for workshop and discussion topics.

Discussions will aim to explore, question and learn more about the reality and how it varies from context to context. What are the trends, consequences, implications and requirements?

All participants are invited to network, to become involved in understanding more clearly the problems that are experienced in R&D and to suggest and develop ways of improving R&D and innovation management.

Participants will represent a wide range of backgrounds including: academic, government and industrial R&D (scientific, technological, and other knowledge domains); management, economic and social science research (focused around R&D and innovation management); business, government, research institute, SME and other management positions; strategic management and technology consultancy; finance, investment and entrepreneurship; policy advice and implementation; innovation intermediaries and user innovators. In particular the conference encourages papers based on action-research and R&D 'user', 'client' or 'worker' perspectives.

Schedule:

31 January	Submission of proposed contribution
27 February	Notification of acceptance
30 April	Upload full papers and presentation files
21 May	Close of registration
21-24 June	The <i>R&D</i> Management Conference 2009

ORGANISED BY MIOIR IN COLLABORATION WITH *R&D* MANAGEMENT AND ISPIIM

Papers, presentations and discussion topics will be selected for **The R&D Management Conference** on the basis of their quality and relevance to address the conference theme.

Abstracts and discussion proposals should be between 500-1500 words and clearly indicate the focus and potential impact of the contribution. There are 4 types of proposal categories offered within the conference submissions system.

There will be opportunities for groups of authors to network and to develop new papers based around discussion topics.

Full papers will be considered for publication in the *R&D Management* journal.



The *R&D Management* journal is edited by Jeff Butler: RnDManagement@mbs.ac.uk

He and the Book Review Editor (Khaleel Malik) are based in the Manchester Institute of Innovation Research (MIOIR), Manchester Business School, University of Manchester.

Conference venue:
WKO, Vienna, Austria

Hotels in Vienna and travel: see **Conference information**

Registration

All participants are required to pay the registration fee which will allow delegates to participate in both The *R&D Management Conference 2009* and the *ISPIM Conference 2009*

Each Conference will have its own CD proceedings and ISBN reference.

Conference information:

Files can be downloaded from www.RnDManagement.info and www.conferencesubmissions.com

Conference enquiries - email:

theorganisers@TheRnDManagementConference.org

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