



The Open2-Innova8ion Tool—A software tool for rating organisational innovation performance



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ABSTRACT

The Open2-Innova8ion Tool is an interactive, multi-media, web-based software tool for rating organisational innovation performance. This tool was designed for organisations to use as an adaptation of the European Commission's work on developing empirical measures of national innovation performance with the Summary Innovation Index (SII). It is designed for users with experience of employment in an organisation, from senior managers to all types of employees, with an interest in rating the innovation performance of their organisation. The Tool is quick and intuitive to use, and provides textual feedback, together with graphic ratings using Google meters. Feedback is based on user perceptions of organisational indicators of Innovation Enablers, Activities, and Outputs to provide an overall rating of innovation performance; this can be compared with a self-rating of innovativeness to allow some interpretation of the congruence between the user and their organisation. This prototype Tool was trialled and evaluated during a workshop on low carbon vehicle innovation, with participants (innovators) representing organisations from the surface transport industry as part of the U-STIR programme with EU Framework 7 funding. This publically available web-tool has applications to education, training, and research <http://design.open.ac.uk/itool/>.

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1. Description of the Open2-Innova8ion Tool

The Open2-Innova8ion Tool is an interactive web-based software tool for examining and rating organisational innovation performance. It has been designed for users with experience of employment, from senior managers to all types of employees with an interest in rating the innovation performance of their organisation.

Over the last 40 years, the innovation literature has sought different factors to explain what enables successful innovation and how this can be fostered by organisations. In the 1980s, there was an emphasis on enterprise, small firm start-ups and organisational spin-offs, with increased understanding of the innovative role of entrepreneurs, intrapreneurs and social entrepreneurs. In the 1990s, there was a focus on multidisciplinary approaches, multi-functional teams and collaborative networks as a source of innovation. In the 2000s, the role of users and industry supply-chain intermediaries attracted particular attention. More recently the Internet and the availability of Information and Communication Technology (ICTs) infrastructure, devices and technologies have led to new trends in innovation, including the growth of online users and virtual communities that are capable of

innovating independently of organisations, in pursuit of personal or collective goals. New organisational practices capitalise on these opportunities for innovation with for example, crowdsourcing or outsourcing a task to an open community; and open-sharing or free-revealing information on product components & architecture, and toolkits to online user communities.

The Open2-Innova8ion Tool draws on these ideas, together with recent research on the indicators of innovation performance, to offer a tool for rating organisational innovation performance. In particular, it builds on the European Commission's work on developing measurable indicators of national innovation performance based on recent statistics from Eurostat and other internationally recognised sources of innovation data (European Commission, 2008). This resulted in the development and application of The Summary Innovation Index (SII) to provide a comparative rating and trend analyses of national innovation performance on the European Innovation Scoreboard (EIS) based on the average for EU Member States. The Open2-Innova8ion Tool was developed as an adaptation of the SSI measures of national innovation performance to provide extrapolated ratings for indicators of organisational innovation performance. It also includes measures of user innovation, originally omitted from the SSI, even though research surveys showed that half of EU companies currently active in process/product modifications actually engage users in the innovation process (Flowers et al., 2009).

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This interactive, self-assessment tool is freely available (<http://design.open.ac.uk/itool/>). The user is invited to respond to 28 statements by selecting a response option to show if they tend to agree or disagree with a statement. This takes about 5 min to complete. Questions are classified in terms of the key indicators of innovation performance, namely: enablers, organisational activities, and performance outputs,

- **Innovation enablers** refer to the human resources, finance and organisational resources for innovation;
- **Organisational innovation activities** include organisational investments in innovation-related expenditures to support innovation activities; connections established between

organisations, disciplines, and users; and intellectual property (IP) generation;

- **Innovation outputs** include innovation introductions, resource efficiency innovation, valuable IP, and economic effects;
- **A self-rating of personal innovativeness** is also included to explore the congruence between the user and their organisation.

This is summarised in [Table 1](#).

When the responses are complete the user selects 'My Score'. Scoring based on mostly high (i.e., > 50%) or mostly low scores provides the results for each of the rating measures. Based on their responses, the user receives feedback and interpretation about their

Table 1

Adapted table of innovation success indicators (for the Open2-Innova8ion Tool).

Enablers	
<i>Human resources</i>	
Are you?	Educated to graduate level
Are your colleagues or employees?	In science and engineering (S&E)
	In social sciences & humanities (SSH)
	Educated to post-graduate or doctoral level
	In science and engineering (S&E)
	In social sciences & humanities (SSH)
	Participating in tertiary or further education
	Supporting life-long learning
	Participating in education & training linked to innovative projects
<i>Finance and support</i>	
Is your organisation benefiting from?	Public R&D expenditures
	Venture capital
	Private credit
	Advice & support for innovation
	Broadband access
Organisational activities	
<i>Organisational investments</i>	
Does your organisation provide?	Business R&D expenditures, for research and development, major modifications, incremental changes, new designs, mock-ups, mash ups, new combinations of existing products, and technology adoption
	ICT expenditures
	Non-R&D innovation expenditures
<i>Linkages & entrepreneurship</i>	
Does your organisation support?	Inter-company collaborations with innovative organizations
	Spin-off innovative organizations
	Innovative-projects in-house
	Multi-departmental, multi-functional & multi-disciplinary collaborations
	Linkages with customer/user groups/user communities
	Public-private research co-publications
<i>Throughputs</i>	
What is the evidence of innovative operations in your organisation?	Community trademarks
	Design & copyright publications
	Technology transfer
	Patents (e.g., European Patent Office, US Patent & Trademark Office etc.)
	Open Source or Copyleft mechanisms e.g., licensing schemes permitting other organisations to reproduce, further develop & distribute intellectual property
Outputs	
<i>Innovation</i>	
Have you or your organisation been involved with the introduction of product, process system or marketing, organisational innovations?	Radical technological innovation to achieve an exponential improvement in performance, or a significant reduction in cost
	Incremental innovation with minor or major modifications to existing products/systems/services/organisational practices, or re-engineering to improve performance, efficiency, standards, value & other success outcomes
	Disruptive innovation with a major impact on the market. i.e., destroying & replacing the value of an existing technological base, range of products/systems or services, or organisational competencies
<i>Economic effects</i>	
What are your innovation outputs?	Innovation introductions of product, process, service
	Resource efficiencies, e.g., reducing labour, materials, energy costs
	Valuable intellectual property rights, e.g., patents etc
	New-to-market & new-to-firm sales
	Exports.
	Employment opportunities (especially technological, manufacturing & in knowledge-intensive services)

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