



PRIORITY AREA N

**INNOVATION IN SERVICES AND BUSINESS PROCESSES ACTION PLAN
JULY 2013**

Innovation in Services and Business Processes (Priority Area N)

Context

Services are an important part of the economy and account for around 70% of GDP in OECD countries. In today's economic climate, many OECD governments are looking for new sources of economic growth. Boosting productivity in services through innovation is one way to restart growth. It is important to highlight that innovation in services extends beyond the service sector per se since service innovation can be implemented by firms in both manufacturing and service sectors.

Irrespective of sector and size, companies engage with customers and other businesses in a range of ways and at different stages of the value chain. In order to do this, companies must innovate their service offering and delivery and also ensure that their business processes are efficient, effective and lean. Conceiving and developing new globally successful operating models, products and business processes requires companies to respond to global megatrends such as the cloud; web based delivery; big data; mobile commerce, sensing and monitoring; and globalisation / localisation. As a result of this, companies must continually innovate the service component of product concept design and delivery, and also their business processes in order to both define and meet the needs of their customers.

The Opportunity

Advances in technology have presented new opportunities for companies to innovate their service delivery and business processes such as; new monetising models; new channels for service delivery; and improved customer experience. That said, in order to utilise these technological advances in order to both define and meet the needs of their customers, companies must apply an approach to innovation that is customer focused and that combines non-technological and technological know-how. Such action will assist companies in conceiving and developing new globally successful operating models, products and business processes. Inherent to this is; understanding consumer behaviour in order to extract real time information for the production and design of products and services; understanding human interaction with IT for concept development and design; monetising mechanisms for new service opportunities; the utilisation of technology for management of business processes; and understanding legal affairs such as regulatory and competition analysis.

The Challenges

In order to capture customer centric innovation that combines non-technological and technological know-how, there are key challenges that must be addressed. Challenges include: the applied nature of the research; the speed this area of research moves at; and the multidisciplinary approach to research that must combine STEM research areas with business schools, social science, arts and humanities. Success will be defined in the space where these research disciplines combine and will require having the right commercialisation supports in place.

Publicly Funded Research Landscape

Ireland has a number of research centres working in areas aligned to this priority area such as; Innovation Value Institute, Learnovate and the Centre for Cloud Computing and Commerce. Research related to this area is primarily driven by ICT and is also being undertaken across the higher education sector at a small scale within business schools and the social science and humanities schools. There is a noted absence of deep multidisciplinary research involving collaboration between the aforementioned groups.

Important Note: Actions from the two research priority areas “Data Analytics, Management, Security & Privacy” and “Digital Platforms, Content & Applications” provide the vital ICT platform that is required for innovation in services and business processes.

Innovation in Services and Business Processes

Vision/opportunity: To capture customer centric innovation that combines non-technological and technological know-how in order to conceive and develop new globally successful operating models, products and business processes. Inherent to this is:

- Understanding consumer behaviour in order to extract real time information for the production and design of products and services;
- Understanding human interaction with IT for concept development and design;
- Monetising mechanisms for new service opportunities;
- Utilisation of technology for management of business processes; and
- Legal affairs such as regulatory and competition analysis.

Objective 1

To fund research to meet the strategic needs of firms in relation to innovation in services and business processes.

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| Objective 2 | Provide integrated multi-disciplinary education (to include science, IT, business, social science, arts and languages) to ensure the availability of researchers with the appropriate skills to meet the needs of industry and to ensure that a critical mass of researchers is in place to deliver on the vision. |
| Objective 3 | To ensure the appropriate supports / infrastructure are in place to facilitate commercialisation. |
| Objective 4 | Support objective 5 from the “Data Analytics, Management, Security & Privacy” action plan on Ireland’s role contributing to the development of international standards and regulation re data management, security and privacy. |

| No | Action | Deliverable | Benefit | Lead | Support | Timeline |
|--------------------|--|---|--|------------------------------------|-------------------|----------|
| Objective 1 | To fund research to meet the strategic needs of firms in relation to innovation in services and business processes. | | | | | |
| N1.1 | Adopt a coordinated approach to funding and measuring success for research in this area across all relevant agencies | A coordinated approach to funding and measuring success across all relevant funding agencies. | Co-ordination across the relevant funding agencies | SFI EI Teagasc IRC HEA | DJEI (through TI) | Q3, 2013 |
| N1.2a | Update and maintain intelligence on the research | Strengthening of the dialogue between companies and the | Better understanding of the research needs | IDA EI | SFI HEA | Q1, 2014 |

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| | needs of industry. This should build on information generated during the National Research Prioritisation Exercise (NRPE). | higher education sector in this space. This will act as a source of information for the funding agencies. | of companies in this space. Better able to position the public research system as a partner to industry. | Teagasc | | |
| N1.2b | Update and maintain intelligence on research activity and strengths relevant to this area in the higher education sector. This should build on information generated during the NRPE and other relevant available sources of information. | Intelligence on the research landscape relevant to this area across agencies. | Better able to position the public research system as a partner to industry. | SFI IRC Teagasc | EI HEA | Q1, 2014 |
| N1.2c | Based in 1.2a and 1.2b, identify research gap and address via funding instruments (existing and/or new). | Addressing gaps required for delivering on the research needs of industry. Will identify if new | Better able to position the public research system as a partner to industry. | SFI IRC Teagasc | EI HEA | Q1, 2014 |

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| | | funding instruments are required. | | | | |
| N1.3 | Promote the submission of research proposals from multidisciplinary teams (e.g. science, IT, business, social science and languages schools). | Bringing together of multidisciplinary teams who generally do not collaborate in this space. | Better able to position the public research system as a partner to industry. | SFI IRC | Teagasc | Q1, 2014 |
| N1.4 | Funding agencies to implement as a matter of principle the leveraging of European and other international funding / leaderships / participation into their funding instruments where appropriate. | Leveraging of national public funding. | Increased value for money from publicly funded research. | SFI IRC Teagasc | EI | Q3, 2013 |
| N1.5 | Continue to fund research in underpinning platform research disciplines of relevance to this area through bottom-up calls. | Mechanism for allocating research funds for underpinning research disciplines. | The underpinning research requirements of this area are addressed. | SFI IRC Teagasc | | Q1, 2013 |

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|--------------------|--|--|--|--------|---------|----------|
| Objective 2 | | Provide integrated multi-disciplinary education (to include science, IT, business, social science and languages) to ensure the availability of researchers with the appropriate skills to meet the needs of industry and to ensure that a critical mass of researchers is in place to deliver on the vision. | | | | |
| N2.1 | Roll out the employment based postgraduate research programme. | Critical mass of graduates with skills required by industry. | Skills to drive innovation in areas relevant to this area. | IRC | | Q3, 2013 |
| Objective 3 | | To ensure the appropriate supports / infrastructure are in place to facilitate commercialisation. | | | | |
| N3.1 | Undertake an international review to establish what R&D structures are in place to support this area. Key issues in this regard are establishing how the structures accommodate the fast moving and applied nature of R&D in this area, and also defining the required skillset of graduate and postgraduate students. | Understanding the ecosystem to support this area. | This will input into establishing “fit for purpose” supports in this area. | Forfás | | Q4, 2013 |

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| Objective 4 | Support objective 5 from the “Data Analytics, Management, Security & Privacy action plan on Ireland’s role contributing to the development of international standards and regulation re data management, security and privacy. | | | | | |
| N4.1 | To establish a position of leadership and credibility for Ireland in the Data Analytics, Management, Security and Privacy area such that Ireland is able to influence and contribute to the development of international standards and regulations for the area for example in the development of an agile and adaptive governance framework to offer guidance in instances of shifting points of authority and ownership in relation to data. | Refer to the “Data Analytics, Management, Security & Privacy” action plan. | Refer to the “Data Analytics, Management, Security & Privacy” action plan. | Refer to the “Data Analytics, Management, Security & Privacy” action plan. | Refer to the “Data Analytics, Management, Security & Privacy” action plan. | Q4, 2014 |

Forfás



An Roinn Post, Fiontar agus Nuálaíochta
Department of Jobs, Enterprise and Innovation