

TRAINING FOR RESEARCH AND TECHNOLOGY ORGANISATIONS (RTOs)

Bespoke training on technology and innovation management, strategy and policy

THE CLIENT >>>

The international RTO Performance Benchmarking Working Group is a forum at which Research and Technology Organisation (RTO) professionals from around the world gather to share insights and experiences.

In 2017 the Working Group was hosted by the Council for Scientific and Industrial Research (CSIR). Participants included 55 RTO professionals and policy practitioners from the Australia's Commonwealth Scientific and Industrial Research Organisation (CSIRO), Canada's National Research Council (NRC), the Danish Technological Institute (DTI), and Germany's Fraunhofer Society. They were joined by participants from local South African institutions such as the South African Agricultural Research Council, the South African Medical Research Council, the South African Technology Innovation Agency.

WHAT ARE RTOs?

Research and Technology Organisations (RTOs) provide R&D, technology and innovation services to other organisations. By bridging the spectrum of activities between research and technology commercialisation they help firms solve problems they would be unable to tackle on their own and cross the so-called 'valley of death' to bring new products and services to market.

While RTOs might have similar goals, they may be very different from one another in their focus and approach. These differences reflect particular national and regional priorities, the different challenges faced by key sectors or technologies and specific socio-economic conditions such as skills shortages.

THE CHALLENGE >>>

New technologies have the potential to transform whole value chains and the sources of competitive advantage. In this changing context, there is growing interest in the role of RTOs, how they can best foster innovation, and whether they need to develop new innovation functions and technical competencies to do so.

THE IfM APPROACH AND EXPERTISE

The IfM has significant research expertise in these areas combined with a successful track record in delivering training and facilitation through its dissemination arm, IfM Education and Consultancy Services (IfM ECS), and its Policy Links unit. The IfM's Centre for Science, Technology & Innovation Policy (CSTI) carries out applied research into translating publicly-funded R&D (in particular science and engineering research) into new technologies, industries and economic wealth. In addition, the Centre for Technology Management (CTM) researches how organisations can develop effective strategies and systems for turning R&D into successful products, processes and services. It is also one of the world's leading centres for the study and application of roadmapping and other tools and techniques for technology and innovation management.



DELIVERING THE TRAINING >>

Policy Links, based within IfM ECS, worked with participant organisations to develop a three-day programme which brought together IfM expertise to:

- Provide an overview of key concepts, frameworks and tools in technology and innovation management that can help support the work of RTOs
- Introduce the latest international trends and policy developments in science, technology & innovation policy, with an emphasis on the role and functions of RTOs
- Reflect on practical challenges for effective technology and innovation management and discuss best practices for overcoming them.

The programme consisted of presentations from the Cambridge team, practical exercises and facilitated sharing of experience and perspectives among the participants. It covered:

THE ROLE AND FUNCTION OF RTOS

In the context of global trends and recent developments in science, technology and innovation policy, the programme explored the role and activities of RTOs.

Topics included:

- What is driving change in today's innovation systems and how is that affecting the work of RTOs?
- How do RTOs differ from one another in their missions and how is that reflected in the way they measure their success?
- How do RTOs identify all possible sources of value capture (not just new product development) and where they can provide support?
- What are the different types of technology focus RTOs can adopt and what innovation function and services can they provide – with some examples from around the world.

TECHNOLOGY AND INNOVATION MANAGEMENT TOOLS AND TECHNIQUES

Participants were also given an overview of the key concepts, frameworks and tools in technology and innovation management that can help support the work of RTOs.

These included roadmapping; scenarios, technology evaluation and portfolio methods. As a group, they shared their experience of using different tools and methods, the challenges they face and best practices for overcoming them.



Comments from senior staff that attended the three day training workshop were extremely positive and a number described the documentation and examples used and shared as pivotal for their strategic planning going forward in the organisation as well as their careers.



Elma Scheepers, Institutional Planning Monitoring & Evaluation, CSIR Pretoria

ABOUT POLICY LINKS

Policy Links is a not-for-profit innovation policy consultancy unit whose aim is to help governments develop more effective industrial innovation policies. It is the knowledge transfer unit of the Centre for Science, Technology & Innovation Policy (CSTI), University of Cambridge. Our team is equipped with expertise and resources to provide professional advice, education services and policy solutions based on:

- World-class research in the fields of science, technology and innovation (STI) policy
- Specialist understanding of established and emerging technologies and industries
- Extensive knowledge and practical understanding of international policy approaches and best practice.

FIND OUT MORE: www.ifm.eng.ac.uk/policy-links | ifm-policy-links@eng.cam.ac.uk | +44(0)1223 766141