# OPOLICY LINKS

## BESPOKE TRAINING FOR GOVERNMENT OFFICIALS IN SINGAPORE

A bespoke training course on IfM approaches to innovation policy, technology management and intellectual property.

#### THE CLIENT >>

The Intellectual Property Office of Singapore (IPOS) is an innovation agency that uses its IP expertise and networks to drive Singapore's economic growth. Its team of IP consultants works both with other government departments and agencies and local businesses to help firms grow through the development of IP and innovation strategies that will turn new ideas into successful enterprises.

#### THE CHALLENGE:

Building IPOS's capabilities in technology and innovation management

To build its capabilities in this area, IPOS wants its consultants to be able to carry out industry trends analysis and strategic roadmapping workshops for its clients, based on the latest research from the University of Cambridge's Institute for Manufacturing (IfM). IPOS asked the IfM to create a training programme for its consultants which would introduce them to new thinking about IP and innovation while giving them first-hand experience of using the IfM's roadmapping methods to develop effective IP strategies. IPOS also requested assistance communicating the benefits of these approaches to other government departments seeking to build IP and innovation strategies for their own sectors.

### THE IFM APPROACH AND EXPERTISE

The IfM has substantial expertise in the field of technology and innovation management, primarily through its Centre for Technology Management (CTM). CTM researches how organisations can develop effective strategies and systems for turning R&D into successful products, processes and services. Innovation and IP management is a core part of this research programme and CTM is also one of the world's leading centres for the study and application of roadmapping. Through its Centre for Science, Technology & Innovation Policy (CSTI), the IfM carries out applied research into translating publicly-funded R&D (in particular science and engineering research) into new technologies, industries and economic wealth.

The Policy Links team, based within the IfM's dissemination arm, IfM Education and Consultancy Services, worked with IPOS to develop a coherent training programme with three main aims:

- > Provide an overview of key IP, technology and innovation concepts, frameworks and tools, that would support the work of intellectual property offices (IPOs)
- > Offer participants first-hand experience in the use of roadmapping methodologies for building effective IP strategies
- Reflect on practical challenges for effective technology, IP and innovation management and discuss ways of overcoming them.



A one and half-day training course was organised at IPOS's offices in Singapore. As well as the IP consultancy teams for government and enterprise, the 17 attendees included the Director of IPOS's Legal Department, the Head of IP Management (Government) and members of the team that provides patent analytic services to industry.



#### DELIVERING THE TRAINING

The training course consisted of six modules, combining insights into new research with practical activities and discussion:

**ALIGNING TECHNOLOGY, IP AND INNOVATION STRATEGIES:** this session looked at national innovation systems, how different countries are shaping them for competitive advantage, and how some are developing national IP strategies to support their innovation systems.

**LANDSCAPING ACTIVITY:** in this session, delegates were introduced to the IfM's roadmapping techniques and put them into practice to develop a landscape for 'mobility futures'.

**INTRODUCTION TO SELECTED IP FRAMEWORKS AND CONCEPTS:** delegates learned about new research in innovation management, the different IP strategies that are available to firms and in what circumstances to use them.

**TOPIC ROADMAPPING:** in this practical exercise delegates learned how to develop a topic roadmap using IfM templates and techniques.

**BUILDING AN IP STRATEGY:** this session brought together IfM's approaches to developing IP strategies with its roadmapping techniques. Delegates used what they had learnt in the previous sessions to develop a strategic IP sector roadmap, using a roadmapping template customised for IP strategy development.

**TECHNOLOGY AND INNOVATION MANAGEMENT FRAMEWORKS AND TOOLS:** in this final session delegates looked at the non-linear pathways to technology commercialisation and some of the practical tools available to managers to help them bring new technologies successfully to market.

"I was really impressed with the professionalism displayed by the team from scoping to delivery. They were flexible and willing to customise the content of the course to meet our needs, even accommodating the rather last-minute request to add a seminar at the end of the workshop for other colleagues. I received excellent feedback from colleagues who attended the workshop".

Dr Amy Fong, Intellectual Property Management Consultant, IPOS ValueLab



#### THE IFM TEAM LEADERS

**Dr Carlos López-Gómez** is Head of Policy Links, a not-for-profit innovation consultancy unit which helps governments develop effective industrial innovation policies. Carlos works closely with UK government agencies, with national and regional governments and with international organisations such as UNIDO, OECD and WEF. Policy Links is part of the IfM's knowledge transfer arm, IfM Education and Consultancy Services.

**Dr Rob Phaal,** Principal Research Associate in the IfM's Centre for Technology Management, is one of the world's leading authorities on strategic roadmapping and author of Roadmapping for strategy and innovation: aligning technology and markets in a dynamic world and Technology roadmapping: plan your route to success.

**Dr Frank Tietze** leads the Innovation and Intellectual Property Management research group at the IfM's Centre for Technology Management. He is also departmental editor of IEEE Transactions on Engineering Management and serves on the editorial board of World Patent Information, the leading journal in its field.

#### **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.

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