

Cambridge

# Centre for Technology Management



UNIVERSITY OF  
CAMBRIDGE

## *Integrating technology into business decisions*

### *A focus for...*

- *leading edge research*
- *state-of-the-art industrial practice*
- *innovative management processes*
- *education for technology leaders*
- *international networking*



Institute for  
Manufacturing

Photo: ABB

Cambridge

# Centre for Technology Management

*Building bridges between industry and research*

## What is CTM?

CTM brings together member companies and researchers from all over the world who have an interest in technology management issues. The Centre is part of the University of Cambridge Institute for Manufacturing, an acknowledged centre of excellence in research, education and industrial best practice.

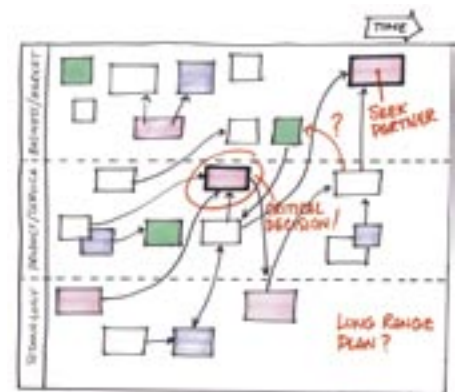
## What do we do?

Our research is undertaken in close partnership with industry and in response to industrial need.

We encourage exchange of good practice through courses, publications and an international symposium. Our researchers work with other centres of excellence world wide, offering members access to an international network of technology management professionals.

## Practical help for companies

We can help companies solve problems at all levels from strategy to operations. Drawing on a combination of research findings and practical experience, we are able to facilitate change in many areas of technology management. Make-or-buy decisions, technology



roadmapping, new product introduction and design, are examples of some of our areas of expertise.

## Courses and workshops

Management education and training can be delivered to suit your company's particular requirements - from tailored, in-house workshops to open events where problems and solutions can be shared. Our access to leading ideas and accumulated best practice in technology management enables us to offer the most appropriate course for your business.



*Technology management is about the effective identification, selection, acquisition, development, exploitation and protection of technologies. These activities are key to achieving and maintaining a company's desired market position and business performance.*

## Members' benefits

Member companies enjoy privileged access to all our research results and newly developed improvement techniques. They have opportunities for close involvement in research projects and to act as hosts for student projects.

They are entitled to reduced or free attendance at Centre events. They can also have the new approaches developed by the Centre facilitated in their company.

Centre members are given automatic membership of the Institute for Manufacturing, giving access to a range of further benefits.

## Member companies

Members come from a wide range of sectors including aerospace, automotive, pharmaceuticals and scientific instruments. Examples of members include ABB, Rolls-Royce, GSK, Domino Printing Sciences, The Post Office, Unilever, Bepak, Infracore Sub-Surface, Philips, Lucent Technologies, BAE SYSTEMS, BG Research, Federal Mogul and ComDev.

## Sharing best practice

Leading companies from a wide range of sectors come to our regular series of seminars, forums and the Cambridge Technology Management Symposium.

They find the presentation and discussion of new ideas and emerging practice of great value, promoting links between companies of all sizes and stages of development.



## Workbooks and facilitation

The Centre focuses its research on issues of practical importance to technology-based companies.

The results are published as workbooks, designed to enable managers to tackle these issues with new insight.

Facilitation is available to help companies apply these new methods in the context of real business projects.



## Members views

*"We have been actively involved in research projects with the Centre over the last seven years. This has made a major contribution to our understanding and practice in technology management - including the development and implementation of an award winning technology prioritisation process."*

John Wright - Air Systems R&T Business Manager, BAE SYSTEMS

*"Our CTM membership has been of great value. Technology roadmapping is now a regular part of our technology strategy. CTM's help was invaluable in getting us started and we've also benefited from several excellent student projects."*

Rick Mitchell - Group Technology Director, Domino Printing Sciences plc

*"We found the Centre's roadmapping technique very powerful in thinking through our technology strategy and prioritising opportunities. The mix of academic rigour and practical relevance is really useful."*

Dr Paul D Taylor, Chief Technology Officer, Bespak plc

*"Our involvement with the Centre provides a great exchange of ideas, access to the latest research projects and a window on future trends."*

Simon Minderhoud, Senior Consultant, Innovation and Industrial Support, Philips Centre for Industrial Technology

## Charting the road ahead at Bespak

Bespak plc is a leading supplier of drug delivery technologies and services to the pharmaceutical and biotechnology industries. As a member, the company was able to benefit from using the technology roadmapping approach developed at CTM. Together we explored the company's strategic opportunities arising from technology developments and market growth.

Research staff facilitated a series of workshops, bringing together participants from different parts of the business. A key benefit of this process was improved communication and alignment of strategic plans across the business.



*A roadmapping workshop underway with Bespak*

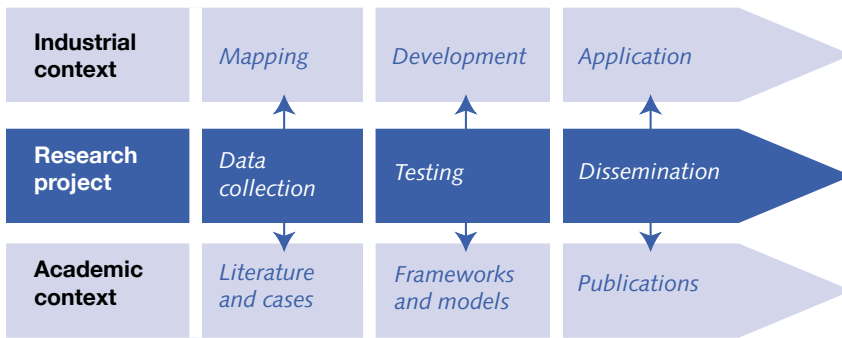
## Philips gains benefit across the board

By coordinating their CTM membership centrally, Philips makes sure that everyone in the business knows about projects and activities that might interest them.

The company has been involved in various research projects in the last few years, including new product design and introduction and software sourcing.

"Leading companies need the constant stimulation of new thinking to stay ahead," commented Simon Minderhoud of the company's Centre for Industrial Technology.

Philips participates actively in seminars and meetings and has hosted student projects in the UK and overseas. "Working together over time has meant that researchers and company staff have got to know each other well and issues that matter to Philips have been rapidly addressed," said CTM's head, David Probert.



## Research approach

Our research is undertaken in close collaboration with industry. We focus on the development of practical outputs to help solve real problems identified in partnership with our industrial collaborators.

# Leading edge research geared to industry's needs

## Project examples

### *Industrial make-or-buy*

Developing a methodology to help manufacturing managers make consistent and soundly based sourcing decisions.

### *Good design practice*

Supporting companies in the design of world class products, focusing on issues of usefulness, desirability and production. Undertaken in partnership with the University of Cambridge Engineering Design Centre and the Royal College of Art.

### *Software sourcing in manufacturing*

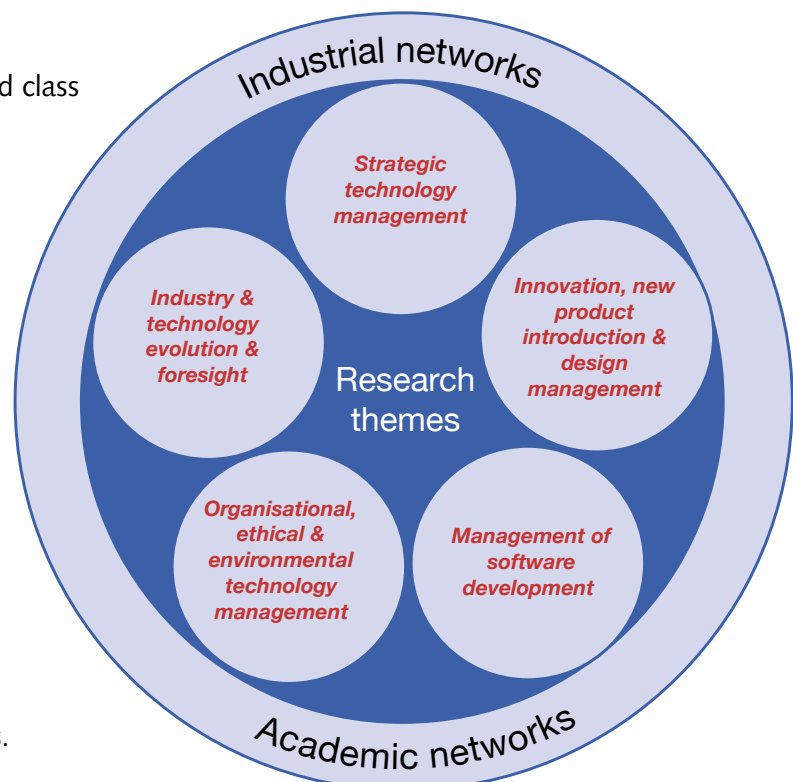
Providing guidance to manufacturers on make-or-buy decisions for embedded software.

### *Sustainability*

Developing approaches to help industry achieve sustainable development, without compromising social and economic progress.

### *Evolution of firms*

Supporting the growth of high-tech firms and the increasingly important role they play in the development of new technologies.





Institute for  
Manufacturing

## The Institute for Manufacturing



CTM is one of several research centres within the University of Cambridge's Institute for Manufacturing.

IfM promotes the development of manufacturing through pioneering research, innovative education programmes and direct support to companies.

All of IfM's research centres attract active involvement from a broad range of companies and benefit from working closely with industrial collaborators.

Most of IfM's research results in practical tools for use in industry. Joint projects between the Institute's different research groupings are actively encouraged.

The major research centres and groups are:

- Technology Management
- Strategy and Performance
- International Manufacturing
- Economic and Manufacturing Policy
- Manufacturing Automation and Control
- Production Processes



### Contact information

Centre for Technology Management  
Institute for Manufacturing  
University of Cambridge  
Mill Lane  
CAMBRIDGE  
CB2 1RX

Tel: +44 (0)1223 766141  
Fax: +44 (0)1223 766400  
email: [ctm-enquiries@eng.cam.ac.uk](mailto:ctm-enquiries@eng.cam.ac.uk)  
[www-mmd.eng.cam.ac.uk/ctm/](http://www-mmd.eng.cam.ac.uk/ctm/)