

Strategic Technology and Innovation Management Programme 2017

Improving Innovation Project Portfolio Management in Technology-Intensive Firms

Nitish Gupta
ng372@cam.ac.uk

In both theory and practice, portfolio management capability has been positively linked with business performance of a firm. However, managers often face challenges in making portfolio management more effective.

An integrated diagnostic portfolio management framework is developed, and a self-assessment tool underpinning the framework is piloted.

This project is aligned with ongoing PhD research study.

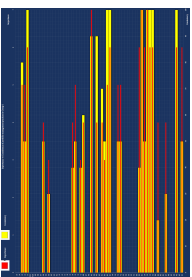
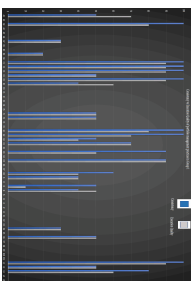
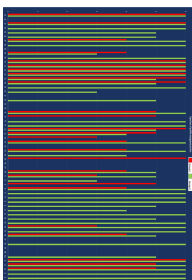
Aims

- Review state of portfolio management practice and challenges
- Develop an integrated framework that can be used to identify strengths and weaknesses of portfolio management processes (and associated practices)

Progress

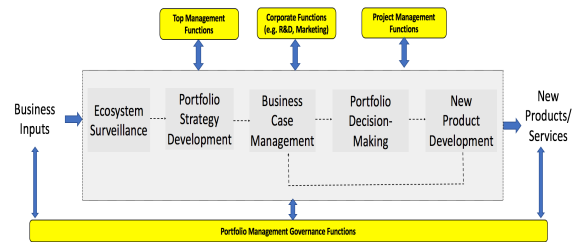
- A total of 9 case studies and 2 focus groups on portfolio management in technology-intensive firms are conducted.
- The framework is currently being tested by using it as a diagnostic aid for portfolio management processes
- The tool for self-assessment of portfolio management practices is also being piloted.
- Next step – develop an integrated toolkit for portfolio management (based on the framework)

Sample visualizations of results of using self-assessment tool



Deliverables

- An integrated diagnostic portfolio management framework



“This framework gives opportunities to us to think about how to make links between business and R&D activities”

“Your template fully include important factors in appropriate depth to be considered in R&D activities”

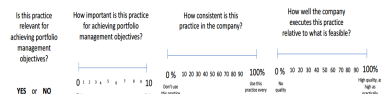
- General Manager of R&D, a global high-tech firm, Asia (feedback given after using the tool)

- A template-based tool for self-assessment of portfolio management practices (a part of the template is given below)



Nitish Gupta
PhD Candidate
ng372@cam.ac.uk

Assessing Innovation Portfolio Management Practices



A. Ecosystem Awareness		0%	20%	40%	60%	80%	100%
Invest resources for market and customer investigations (e.g. funds, personnel)							
Identify market and social trends across different geographical regions							
Investigate new technologies and review Intellectual Property (internally and externally)							
Scan for opportunities for Merger & Acquisition (e.g. set-up incubators)							
Gather competition insights from commercial ends (e.g. from sales, suppliers, distributors)							
Monitor existing products in market and identify life cycle management needs							
Analyze & prioritize micro/macro trends to identify business requirements							

Do a quick health check of portfolio management capability of your firm!