



Strategic Technology and Innovation Management Programme

Customisable scoring systems for project selection

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Nicky Athanassopoulou, naa14@cam.ac.uk Scoring systems are widely used for early-stage project selection when only incomplete information is available. However, there is little guidance in the literature on how to chose the factors and how best to structure the scoring process.

Aims

The aim of this project is to develop a logically consistent approach that can apply to different kinds of project and can evolve if necessary as projects mature.



Project selection in the context of project management processes

Progress

Through literature review, consultation and case studies a coherent approach to the design and application of multi-factor scoring systems has been developed and tested. This has the following features:

•Separate evaluation of Opportunity ('the size of the prize') and Feasibility ('can we get the prize?'), supported by suggested dimensions and factors.

•Approach for aligning scaling statements for Opportunity & Feasibility scoring, supported by illustrative scaling statements. This avoids the need for factor weightings or non-linear scaling.

•Recommendations for treatment of uncertainty and risk, based on plausible upper and lower bound estimates, together with risk register.





Feasibility

Project selection display, based on upper and lower bound estimates of Opportunity and Feasibility

To select a conservative portfolio of projects, rank them according to (lower score x 3 + upper score) / 4; for a more aggressive portfolio (lower score + 3 x upper score) / 4.

Deliverables

Guidance note for the design of multi-factor scoring systems for early stage project selection, focusing on product innovation. Example selection factors, dimensions and scaling factors are provided.

Future research

This project has focused on the core 'selection' problem. Further work is needed to establish clearer guidance on how to adapt the approach for different project types and maturity, especially very early stage projects; and to deal with issues such as portfolio balance.



Process for design of customised multi-factor scoring system for project selection

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