



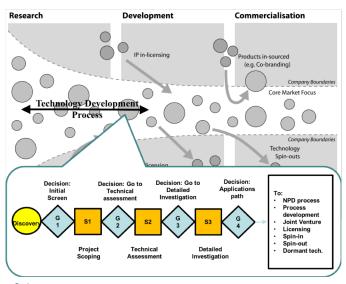
Strategic Technology and Innovation Management Programme 2018

Strategic Decision Making and Selection Criteria in Technology Development Processes

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Strategic decision making processes are complicated and there are many factors affecting decision making processes. In this research project, we seek to identify and understand which selection decision making criteria are used to evaluate technology projects, as well as the technology process models available.



Aims

To understand:

- The technology development process and how people make decisions along a technology stage gate process
- The selection decision making criteria, which are used to evaluate technology projects against

Progress

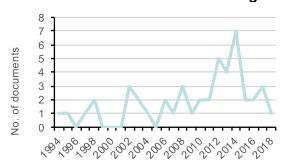
- Completed the reviews on technology development process models and selection criteria (summaries prepared)
- Analysis of the interviews and preparation of more interviews (<u>future industrial engagement opportunities</u>)
- Survey preparation for launching to find significant selection criteria (<u>future industrial</u> <u>engagement opportunity</u>)

Deliverables

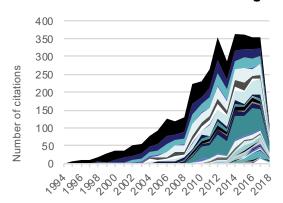
- Technology Project Selection Criteria summary
- Technology development process models summary

Results

No. of articles has been increasing



· No. of citations has been increasing



 9 categories of selection criteria and 562 selection criteria

Main Criteria	No.
Market (Probability of commercial success)	131
Technology (Probability of technical success)	84
Profit (Probability of reward)	72
Leverage (Probability of Competitive Advantage)	66
Strategy and Business	62
Other	58
Project Management	43
Resourcing	31
Legal/Regulatory	15
Total	562
*the number of selection criteria includes repeated criteria across multiple articles	