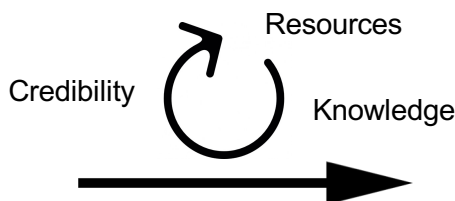


Strategic Technology and Innovation Management Programme 2020

Roadmapping hardware venture pathways from prototype to manufacturing

Erica Melo de Carvalho
erica.melo-de-
carvalho@strath.ac.uk

A “second valley of death” occurs when innovators move from prototype stage. This project aims to develop a framework for mapping new hardware venture pathways from prototype to full manufacturing to bolster understanding of potential obstructions to this journey and of alternative paths to support strategy development and investment readiness.



Engagement opportunities

Companies are invited to participate in the project to share best-practice experience when moving from proof of concept to full manufacturing and benefit from a framework to evaluate risks when deciding to collaborate with a new venture in their supply chain. Hardware venture start-ups are invited to share case experience and benefit from a systematic approach to strategy development and investment readiness.

Approach

- Interviews with different stakeholders (innovators, contract manufacturers, investors etc.) to identify alternative pathways and readiness criteria
- Use of roadmapping concepts
- Case studies

Deliverables

- A framework for mapping hardware venture pathways from prototype to manufacturing using roadmapping concepts to support strategy development and estimation of future time and investment required to get a hardware product to market.
- Includes a set of recommended activities, milestones, decision gates, key performance indicators, SWOT evaluation and implications for new ventures based on their characteristics and the institutional landscape.