



Strategic Technology and Innovation Management Programme 2019

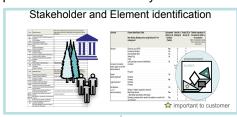
System Design Characterisation

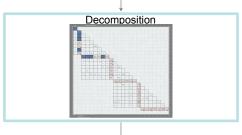
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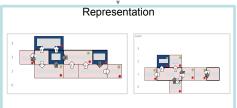
SDC is a workshop approach that supports the new product/service development process, resulting in clearer design specifications.

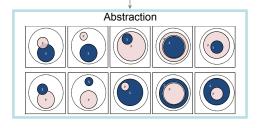
Aims

- Clarify the structure of a new system idea through decomposing the overall design into its elements by the nature of their relationships.
- Surface potential design complexities and suggests ways to simplify.
- Align the company's understanding of the potential value of the product and service portions within the new system.









Deliverables

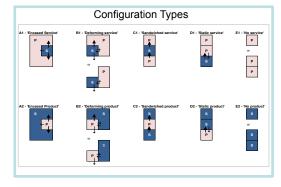
- Customised facilitated workshop(s)
- *Digital copies of workshop output:
 - Stakeholder identification table
 - Element identification & relative importance table
 - Decomposition diagram(s)
 - Mini representation diagram(s), with summary of how the design may be simplified
 - Abstraction diagram
- STIM companies may apply SDC to other new design concepts on their own

Progress

The SDC project has been successfully completed in 2019.

Further research

The mini representation diagrams could be aggregated at the system level, forming a representation that may resemble one of the configuration types:



- How do the configuration types relate to the human and non-human stakeholders, including technology, policy and environment, when the system is in-use? This may inform more effective stakeholder engagement during system design.
- A new project is proposed in 2020 to explore the interactions between stakeholder groups and portions of a commercialised system.