

Strategic Technology and Innovation Management Programme 2018

Creating and capturing value from data

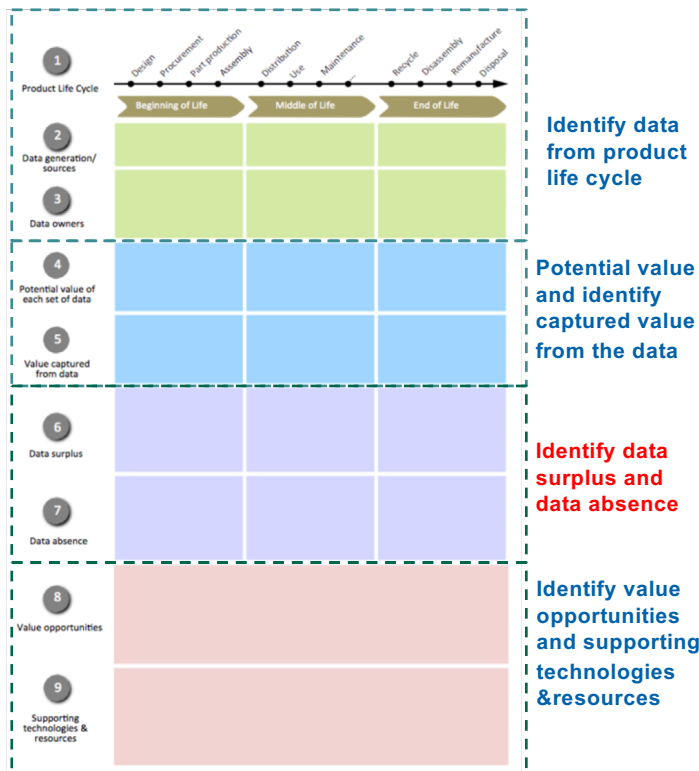
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In an increasingly digitized world, data is regarded as important resource. Many companies are facing the challenge of creating and capturing value from data. Decision makers often lack a comprehensive view of what value could be captured from existing data, which data is already available and which data needs to be added to make it valuable.

Aims

- to investigate how firms can create and capture value from data
- to help firms identify value opportunities from data

Progress



Approach

- Apply the concept 'value uncaptured' from previous research to the context of digitalization

Deliverables

- A tool for identifying opportunities of creating and capturing value from data
- Workshop slides

Engagement opportunities

- Identify barriers to implement data projects in your company and potential solutions
- Use the tool in a workshop

Barriers

- Barriers to implement big data projects in operations and supply chain management
- Cause and effect of the barriers

Organizational	Supply chain integration	Barriers
		B14: Competition and conflicts within supply chain network and departments
		B15: Time-consuming to gather experts across various organizations within supply chain
		B16: Insufficient resource; lack of big data resources and capabilities in other firms in a supply chain (could be external)
		B17: Data is owned by various stakeholders across supply chains
		B18: Lack of big data analytic talents in supply chain domain
	Leadership, talent and skills	B19: Employee's lack of trust and understanding in big data (lack of data-driven culture)
		B20: Lack of abilities to manage and organize existing data
		B21: Supply chain managers lack the understanding of the linkage between big data, supply chain capability and performance
	Organizational change	B22: It requires changes in technology infrastructure and business in the initial phase
		B23: Transforming towards data-driven culture is not easy
	Privacy and security concern	B24: High cost in implementing big data facilities
		B25: Lack of manufacturer in data ownership (i.e., data)
	S4: Value from Data	Technological
		S1: Data generation and collection
		B1: Paper and manual-based data still widely exists
		B2: Data scalability; large amount of invaluable data
		B3: Data transmission (accuracy, velocity and security)
		B4: Data availability; lack of data or inability to identify suitable data
		B5: Limitation of physical hardware to carry data
		B6: Lack of efficient way to hold huge volume data
		B7: Lack of a more general and complex markup language for data integration
		B8: Lack of data analysis techniques and procedures
		B9: Lack of computation resources
		B10: Processing large amount of data is time-consuming
		B11: Lack of data accuracy, timeliness, consistency, completeness, relevancy, value-added, quantity, believability, accessibility, and reputation of data
		S2: Data management (integration, cleaning and storage)
		S3: Data analysis
		S4: Data quality