



Strategic Technology and Innovation Management Programme 2020

17. Strategic Roadmapping Implementation and Embedding Process

Lead Researcher: Yuta Hirose (IfM) Developing a maturity model for organisation-wide roadmapping implementation and embedding

Supporting IfM members:

Robert Phaal (IfM)

Clare Farrukh (IfM)

IHI Corporation

Subsea 7

External collaborators:

Nathasit Gerdsri (Mahidol)

Sungjoo Lee (Ajou)

Aim

To characterise the process in which organisations implement and embed organisation-wide roadmapping in business cycles and organisational systems

Deliverable

 Characterising maturity levels for organisation-wide roadmapping implementation (IEEE Engineering Management Review)

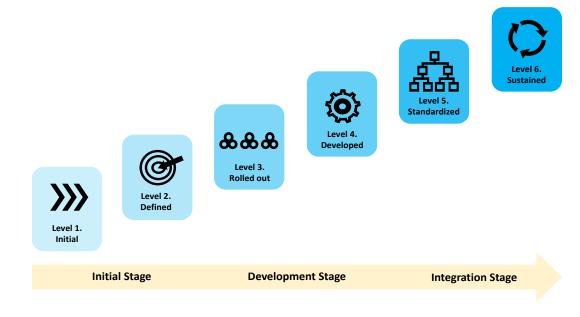
Assessment Indicators

- Awareness and understanding
- Leadership and management support
- Team development and engagement
- Process design and customisation
- Information and data accessibility
- Strategic alignment

Future research

We will translate our work over the years into a practical method for roadmapping maturity assessment

Organisation-wide Roadmapping Maturity Model







Strategic Technology and Innovation Management Programme 2021

17b. Roadmapping Maturity Assessment

Lead Researcher: Yuta Hirose (IfM) Developing a practical method for roadmapping maturity assessment

Supporting STIM members:

IHI Corporation

Subsea 7

Robert Phaal (IfM)

Clare Farrukh (IfM)

Aim

To develop a practical method for roadmapping maturity assessment through

pilot tests and evaluation

External collaborators:

Nathasit Gerdsri (Mahidol)

Sungjoo Lee (Ajou)

Deliverable

 A prototype method and associated guidance for roadmapping maturity assessment

Assessment Indicators

- Awareness and understanding
- Leadership and management support
- Team development and engagement
- Process design and customisation
- Information and data accessibility
- Strategic alignment

Engagement

We would like to invite STIM member companies to participate in this project to assess roadmapping implementation to review the past, understand the current and plan for the future

Roadmapping Maturity Levels

Stage of Roadmapping Implementation	Maturity Level	Description	Leading Players	Key Indicators to Move onto the Next Maturity Level
Initiation The aim of this stage is to define the alignment between corporate strategic plan and roadmap as well as to get an organization ready prior to implementing roadmapping	Level 1.	An organization has started exploring the possibility to apply roadmapping for technology and strategic planning. The organization does not have a clear strategy yet how roadmapping could be used and who would involve in the roadmap development. The engagement for initiating roadmapping is still within a limited group.	Idea Champion	An initiative led by idea champion with supporting colleagues to plan for roadmapping implementation
	Level 2. Defined	The organization has decided to use roadmapping. The management agrees with the scope and aim of roadmapping implementation and allocate resources supporting roadmapping implementation. Key people potentially involving in the roadmap development have agreed to support and participate. The process of roadmapping has been discussed for customization.	Idea Champion and Operation Team	An operation team and support team founded to prepare for roadmapping customization and rolling out
Development The aim of this stage to develop desired roadmaps and engage right people, gathering people, gathering aim of the desired roadmat and conduct a step-by-step analysis.	Level 3. Rolled out	The operation team has been trained to understand the analysis steps and required tools used for developing a roadmap. Roadmapping workshops are conducted across the organization with a roll-out plan reviewed in details and approved by the management.	Champion Team, Operation Team and Support Team	A group of leaders as champion team formed with collective internal support gained across the organization
	Level 4. Developed	Roadmaps have been developed and used in the organization but they are still within certain units or departments. It is not a part of corporate requirement to have a roadmap. The roadmap has bought up to strategy and implementation discussion from time-to-time but no specific schedule.	Champion Team, Operation Team and Support Team	Completion of customization with appropriate resources and capabilities gained across the organization
Integration The aim of this stage is to integrate roadmapping into an ongoing business planning process so that roadmaps can be constantly reviewed and updated in a temely manner.	Level 5. Standardised	Roadmapping activities have been fully integrated throughout the organization. Roadmapping has become a common language across the organization. Roadmapping has been embedded in the existing management processes. A specific unit is assigned for maintaining roadmapping as a standardized activity.	Champion Team and Support Team	Roadmapping is a common language and standardized activity across the organization for technology and strategic planning
	Level 6. Sustained	The organization has decided to take an active approach to sustain modampping implementation. Risks and uncertainties are brought into consideration. The support team closely monitor the status of roadmaps produced and call for review if necessary when severe changes considered to affect the organization take place in the internal and/or external environment.	Champion Team and Support Team	An active approach pursued by the organization to sustain roadmapping with support of digitalization and other relevant tools and techniques.