

Strategic Technology and Innovation Management Programme 2020

6. Making Innovation Management Tasks self-sustaining?

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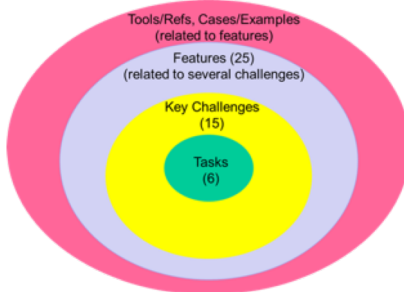
Effective innovation management relies on good data. This includes updating project information for portfolio management activities, longer term record keeping and tracking information gained during networking. This research seeks to investigate some of the barriers and enablers involved, in order to propose practical ways to improve processes and to demonstrate benefits more clearly.

Aims

- To effectively engage teams carrying out innovation management tasks such as project and portfolio management data collection and reporting
- To reduce the effort needed to ensure compliance by increasing support and organizational motivation

Approach

- Review innovation literature and STIM companies for good practice examples
- Review behavioural sciences, human performance and process improvement fields for tested concepts and impact such as safety and quality
- Trial use of techniques including templates, implicit/digital prompts and reframing



Activities in 2020

Matrix framework (see below) developed and discussed in interactions with STIM companies:

- In person workshop with STIM companies to discuss possible areas of focus (March)
- Webinar for STIM company (May)
- Online workshop in a STIM company using MIRO (July)
- Online STIM seminar with polling followed by online workshop (July)
- Online discussion with a STIM company about potential application of a Directional Survey from research by Cihat Cengiz (September)

Deliverables

- Matrix framework developed and discussed (see below)
- An overview of relevant areas to take forward in more detail

Future research in 2021

- Case studies from literature and STIM members' in-company experience
- Trial use of techniques/ideas
- Checklists to support technology managers based on findings for different organisational and sectoral scenarios

Innovation Task	Challenges within each Task	Features of key Challenges	Tools/ Refs	Cases/ Examples
All Tasks T1-T6	C1 Understanding the value C2. Reduce effort/increase efficiency	F1. Visibility of research; F2. Process rigor; F3. Making sure projects happen; F4. Capturing ideas; F5. Prioritising long term work; F6. Sharing ideas across the business F7. Light touch process. F8. Intuitive machine/human interfaces on systems	Safety climate Performance Other STIM Value projects? Other CTM / ECS projects? External funding processes? Behavioural benefits / costs	
T1 Updating data on projects	C3. Easy to use, self-facilitating format C4. Quality of data C5. Easy access to data	F9. Onboarding to process; F10. Templates; F11. Making it a formal process; F8. Intuitive interfaces on systems F12. Auto prompts/self-correct for data entry; F13. Good data sources	Visualisation Process mapping Systems spec	Adaptation? RIP performance? Experience of users carrying through?
T2 Providing feedback to project stakeholders	C6. Timely and relevant, tailored to audience C7. Saving time in new projects	F9. Intuitive interfaces; F14. Connectivity; F11 Make it a formal process	Stakeholder analysis Collaborative improvement processes	Training standards?
T3. Record keeping on projects	C8. Making links between groups	F1. Visibility of research; F11 Making it a formal process; F16. Inclusive eg attending events to see who/what is needed	Reviews	Government HSE safety Digital process HSE safety Cheams
T4. Reporting for development paths	C9. Recognising developments C10. Communicating learning and delays C11. Coordinating activities and next steps C12. How to share complex new tech	F11 Making it a formal process to report progress F17. Understanding human behavior and human performance F18. Working with local cultures F19. First role models; F20. Training; F21. Look for early adopters.	Social-Cognitive Culture Web Diffusion theory	
T5. Networking across the company	C13. People interested in just doing research	F18. Working with local cultures; F22. Link to organisational KPIs to make it win-win? F23. Need to work to change culture	Culture and knowledge boundaries	
T6. Optimising system interfaces for data entry and access	C14. Focus C15. Ensuring timely and accurate inputs	F24. Support pathways to change; F25. Build smaller interest groups; F9. Onboarding to idea on joining company, joining network, becoming a senior scientist etc. F8. Intuitive machine/human interfaces on systems.	Knowledge mgmt Boundary mgmt Digital	