

Innovation Solution Protocol

How to Solve an Innovation Challenge

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Innovation^{sp}



- A universal procedure to meet an innovation challenge
- Applicable to well-organized R&D campaigns.
- Useful for Single Researchers, R&D teams, and Global R&D Collaboration.
- Developed, Practiced and Taught by Gideon Samid

The Top Sequence



2020

- 1. Well define an Innovation Challenge (IC) of Interest.
- 2. Put the IC of interest in focus (ICiF)
- 3. Prepare an Innovation Action Plan for the ICiF.
- 4. Secure a 'Go Ahead' order and the required resources from the community of stakeholders, according to the Action Plan. Re-Plan if fails.
- 5. Setup Re-Validation Milestones for the Action Plan.
- 6. Carry out the Action Plan
- 7. Adjust then Re-Validate the Action Plan at each milestone; terminate if validation fails.
- 8. Terminate when the Action Plan is fully executed. If the ICiF is solved, the procedure ends. Otherwise either abandon the IC or restart the Innovation^{sp} procedure.

Defining an Innovation Challenge



- Specify an end-state, different from the present-state.
- Insure that there is no algorithmic procedure to proceed from present state to end state. If there is, no IC exists, however big the gap between the present and desired state.
- Identify clear metrics to ascertain whether the desired state has been achieved.
- Insure availability of reasonable amount of resources to solve the IC, to warrant the planning effort.

Put the IC in Focus



- Normally Innovation Challenges compete for attention.
- It is important to select a single challenge to warrant the considerable effort required to meet it – to put the challenge in focus.
- This in-Focus selection should involve engagement of all the stakeholders.
 Maximum transparency.

Prepare an Innovation Action Plan for the ICiF



- Chart an Innovation Map
- Prepare the Resource Allocation State Function

Establish a course of action

Secure 'Go Ahead'



- Present the proposed course of action to the relevant stake holders.
- If the stake holders approve the plan and allocate the required resources – go ahead.
- Otherwise either Re-Plan an action plan, or abandon the IC.

Setup Re-Validation Milestones



- Innovation undertaking is subject to strategic surprises, which require re-validation milestones.
- Innovation undertaking is subject to 'blind inertia' and the trapping of 'false imminence' – alleviated by re-validation milestones.
- Too few milestones may lead to unnecessary loss of time, resources and general loss.
- Too many milestones will deny the benefit of innovation momentum and undermine innovation efficiency.
- Milestones may be (i) calendar driven, (ii) resource expenditure driven, or (iii) event driven.

Carry Out the Plan



 Proceed with the actions which per a given measure of resources would result in the greatest increase of the credibility of the estimate of cost to complete, and time to finish the innovation project

Adjust then Re-Validate Action Plan at each milestone



- The actions taken in the series of milestones determine the fate of the innovation project.
- Adjust the course of action
- Adjust the resource requirement
- Adjust the appraisal of the innovation load.
- Re-validate the project based on available resources, urgency and significance.

Adjustments Concerns



At every milestone allow the added insight since last milestone to impact the plan ahead – prudently. Tendency to under-impact and over-impact. Mind:

- Enthusiasm Pro and Con
- Progress forward pace, negative pace
- Resurrection Environment
- Revised Milestone

Enthusiasm Awareness



- Enthusiasm may create 'blind inertia' and 'false sense of imminence' where one charges ahead in a given course with a sense that success is imminent, despite so believing for a long time with persistent disappointment. A well managed innovation milestone breaks this spell.
- Creative People harbor the most lethal enemy for innovation projects: shifted enthusiasm.

Adversarial Creativity



- Creativity is the engine of innovation. When it dies innovation chokes; when it shifts – innovation withers.
- Poorly creative people don't sustain creativity to complete a prolonged innovation project
- Overly creative people tend to flare with their next idea, losing interest in the ideas that underlie the innovation project.
- Both tendencies are reflected in the dynamics of the innovation load – remains flat.

Innovation Progress



- Measured in the rate of decline of the innovation load (increased estimate credibility).
- Healthy pace of load decline indicates good innovation management strategy
- Flat innovation load calls for investigation of likely reasons
- Increased innovation load suggests serious errors in project premises. May require involvement of all major stake holders.

Resurrection Environment



- The prospect of resurrecting a terminated project proves itself useful. Often circumstances change and a 'dead project' deserves resuscitation.
- This option alleviates the pain of defunding.
- Projects enthusiasts keep pushing it 'under the table'
- Resurrection prospects calls for detailed, comprehensive documentation of the 'state of innovation – at termination'

Revised Milestones



- At each milestones, the milestones ahead need to be re-examined.
- If progress is not at high pace, more milestones are called for.
- Milestones may be revised as to the level of evaluation: working team, supervisors, executive level, all major stakeholders.

Bifurcation



- A powerful means to shake up listless Innovation.
- Identify two sufficiently non-overlapping most promising innovation management strategies.
- Divide resources between the identified strategies, and dynamically re-allocate resources according to relative innovation progress between the two strategies.
- In some case may be practiced with more than two strategies.

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