Preface

Innovation is a non-linear process where development paths emerge from the process of ‘imagining’ and ‘doing’, iterating around in evolutionary cycles until a satisfactory innovation emerges.
Agenda

1 Models of the innovation process
2 Creative Innovation Development (CID)
3 Case study: LivingPattern Technology Inc.
4 Future directions

Businesses are all about stories.
Ways of creating future stories: fiction and ideation

Science Fiction Prototyping (SFP)

Diegetic Innovation Templating (DiT)

Future Technology Workshop (FTW)

Innovation Lab

OurHEX - An online ideation and prototyping environment

Productive brainstorming depends on having a diversity of people, good social interaction and an environment that promotes a sense of creativity.
Managing Innovation

Innovation is a learning process, not a single event and needs to be managed with building and developing routines across the core process.

Innovation process diagram

Tidd and Bessant (2013)

Product development process flows

From Product Design and Development by Karl Ulrich and Steven Eppinger (McGraw-Hill/Irwin)
**Cyclic-SFP Process**

This model consists of a series of processes containing feedback loops and forms an evolutionary process that leads to delivering a scenario and associated product specifications or business models. "Imagination Workshop" functions by mediating the steps in the process of scenario creation and thereby reinforces the generation of new SFPs.

**Agile Development Process**

Agile Development provides flexibility as its core principle allowing requirements and solutions to evolve through self-organizing collaboration between cross-functional teams. In this way it achieves enormous flexibility and promotes adaptive planning that enables continuous improvement or response to change.
it can be seen that ‘agile development’ forms a bridge between the technical and conceptual development teams since both work in a cyclic and reflective way where the work of one influences the work of the other. The model is independent of the environment but it may be seen as being compatible with the innovation-lab concept since it can be set inside either a physical i-Lab environment (as described earlier in the paper) or a virtual one (eg someone’s office).
Example of practice:

- Pre-conditions were defined as setting the scope to Smart Home Technology that was implementable in the next 6-12 months.
- A brainstorming session identified a vision (concept) where ‘the smart home is a container of memories’. In this, living patterns (behaviours) become analogous to picture images creating a framework where the two can be intertwined to create new, attractive and useful service.
- To provide an insight to what is involved, before adopting CID, the ideation and feature listing process consumed (intermittently) a period of some 4 weeks and the team found it difficult to narrow down the scope.
- However, with CID, the team took only 2 hours to run the Imagination Workshop from ideation to the discussion of scenario building, and eventually successfully prioritised the top 6 features to be developed from a list of 23 features.
- The practice has helped the team shorten the time from ideation to development.
Future directions

- Conduction online trials in China, Mexico, the USA and UK for introducing students to creative thinking, product innovation and language learning.
- Deploying it with in Taiwan with a start up, Living Patterns for service innovation
- Refining the concept and implementation through a masters and PhD project