a Routine Design Strategy

to change organisational processes in the front end of radical innovation

The research subject

For technology firms like Barco, radical innovation a way to escape intense competition and also crucial for long-term survival (Sandberg & Aarikk-Stenroos, 2014). However, mature organisational radical innovation capability in the front end was lacking (O'Connor & DeMartino, 2006). Therefore, they have to change their internal processes and organisational routines to develop this capability (Junginger, 2008). Routines are regarded as the building blocks of capabilities (Salvato & Rerup, 2011). However, an understanding how routines are designed is still a key question in the field of organisation design (Wegener et al., 2019). This leads to the following research question:

How to design an organisational routine that develops a radical innovation capability within a technology firm?

The challenge

In the front end of the radical innovation process within Barco, both technology managers and business managers are needed in the processs to create new radical innovation opportunities. However, both managers have different interests with regards to innovation and have their specific specialization of technology or business.

The approach

To answer the research question I developed a routine design strategy based on existing routine design literature (Pentland & Feldman, 2008) and the double diamond approach (Design Council, 2005). I executed this strategy within a case study at Barco to create new and empirical insights for organisation designers and researchers.

The solution

The study shows that using a routine design strategy consisting of three interdependent phases are critical to routine design. First, emphasize with routine actors, conduct activities to discover and define the challenges and needs the actors face in their patterns of action. Second, lock in desired performance, prototype in collaboration with the routine actors the desired performances and lock them in a physical artefact. Third, build the ostensive, perform the designed performances in design experiments within a reflective and experimental space to practice the routine in safe but realistic boundaries.

Emphasize with routine actors

Lock in desired performance

Build the ostensive

Discover pains, needs and wants of routine actors. Figure out their political interests and alternatives.

Define the desired performance aspects of the routine and lock them in a physical artefact.

Practice the designed performances of the physical artefact to build the ostensive aspect of the routine

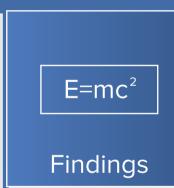


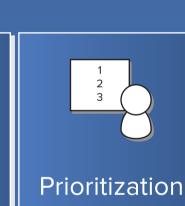
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Finding

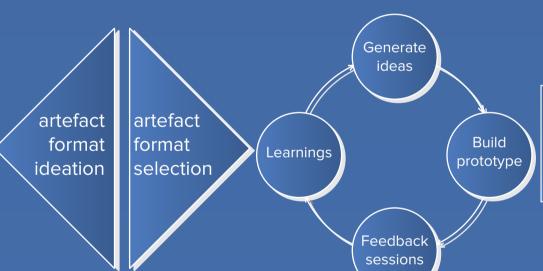
Goal











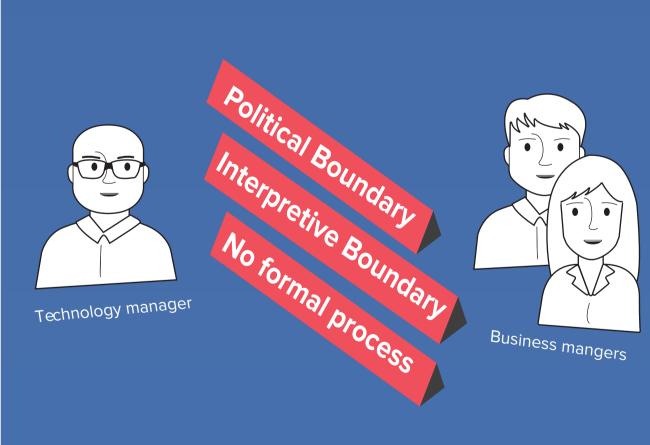
Physical artefact



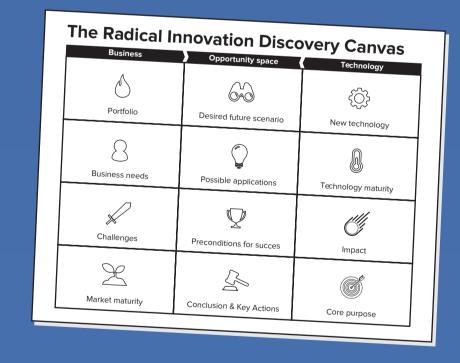


Design experiment 1

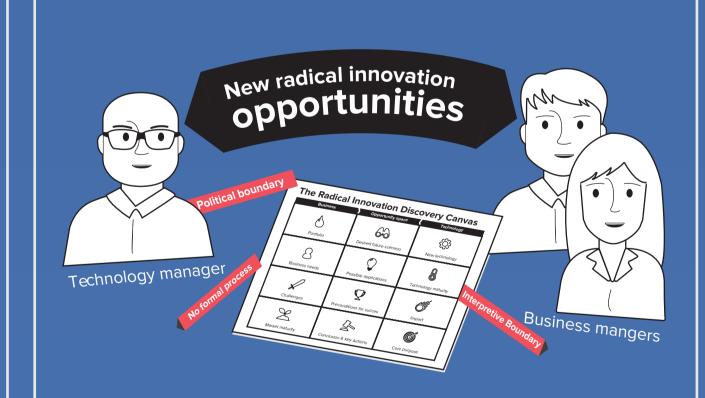
Design experiment 2



The findings of the first phase show that within Barco there is no formal process in place to support technology and business managers in their exploration meetings to create new radical opportunities. Furthermore, a conflict in interests created a political boundary and their two specialisations created a knowledge boundary, which challenges them to collaborate in the front end.



In collaboration with both technology and business managers the "radical innovation discovery canvas" is created to support their exploration meetings. During multiple feedback sessions with both managers the desired performances are subtracted and were captured in the canvas.



The findings of the third phase show that during one experiment the routine actors managed to translate knowledge across their interpretive boundary to create a new shared meaning of two new technologies. In the other experiment the routine actors managed to transform knowledge across their political boundary to create a new radical innovation opportunity. Which in both cases could not be achieved in earlier exploration meetings.

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MSc. Strategic Product Design

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