Innovation and entrepreneurship management in the era of digitalization

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Innovation, entrepreneurship and the entrance of new business models.

How to manage innovation in a digital era?

Agenda:

Short introduction to digitalization, innovation, business model and entrepreneurship

Presentation of findings from a R&D project of a Kongsberg group company
Digitalization

Andersen og Sannes (2017) argues that digitalization needs to be something more than just a buzz word of applying digital technology to improve existing business model.

- It is about **fundamental transformation that’s impact all aspects of a company business model**. Which means digitalization goes from supporting technology towards becoming the company DNA.

*Hagberg et. al (2016) - “Digitalization: Integration of digital technologies into everyday life by the digitization of everything that can be digitized”*
Business model innovation in light of digitalization

- A business model describe the rationale of how an organization creates, delivers, and capture values (Osterwalder and Pigneur 2010)

- In essence, a business model [is] a conceptual, rather than financial model of a business (Teece 2010)
Innovation

«An innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practice, workplace organisation or external relations” (Oslo Manual)
Innovation management and strategies

**Innovation Management:**
1. Managing (existing) innovation resources → recombine and expand the company resources base?
2. Managing (existing) innovation processes → search, selection, implementation and capturing values?
3. Managing (existing) innovation system → integration of systems?
4. Managing (existing) innovation effects → types of measurements, incentives and performance indicators?

**Innovation strategies** (often combined):
- Linear innovation (research based)
- Stage gates innovation model
- User driven innovation
- Employee driven innovation
- Open innovation
Entrepreneurship and innovation

• Drucker (1985) the entrepreneurs see changes as the norm, and as healthy. “The entrepreneurs always search for changes, respond to it, and exploits it as an opportunity”

• Schumpeter (1934) sees entrepreneurship as the processes of recombining resources to create something which is (disruptive and radical) different from existing solutions, “creative destruction”

• Eric Rise (2011) “entrepreneurship is management, finding resources, explore possibilities, take risks and develop new solutions under the condition of extreme uncertainties” A startup is a human institution designed to create a new product or service under condition of extreme uncertainty

Entrepreneurship management is a discipline that can be thought, learned and managed.
Managing Innovation for Value Creation
A 2 years collaborative R&D project with a R&D company within the Kongsberg Group Corporation

Statement:
R&D intensive firms are product centric companies. However, entrance of new disruptive business models, co-creation of values and new service exchange are changing the game.
This new game, challenges the way R&D intensive firms collaborate, produce and capture values.

Approach:
• Action research design/approach
• 40 employees trained in use of service innovation and entrepreneurship tools (workshops)
• 250 employees engaged in defining the company innovation culture and climate for innovation (measurement tools)
• 3 senior management workshops and strategy seminars focusing on BM development and climate for innovation
Findings:

H1: The company competitive advantages is determined by the company ability to facilitate and encourage individual creativity, supported by a systematic way to test and measure innovation performance
- The company organizational structure hamper knowledge flow, internal collaboration effort and creativity (structure beats culture)
- Lack of decision making under condition of uncertainties, lack of feedback mechanism
- Lack of management role models
- Lack of innovation measurement (different from bottom line accounting)

H2: Employees capacities to generate new ideas are determined by the company innovation culture, the management practice and access to appropriate tools and collaborative work forms
- Employee perceive themselves as creative and relatively more than firm facilitate for creativity
- Employees report lack of arenas for knowledge sharing and idea testing (early phase of the idea)
- Employees report lack of basic skills and practice in ideation and team based collaboration across departmental structures
Based on findings we asked:

In which extent can the company develop new corporate entrepreneurial practice by use of entrepreneurial team and lean start-up/service design methods?

- A three days workshops, organized as a entrepreneurial team, with a board, a steering group and a resource group of three researchers
- The entrepreneurial team were staffed by employees from different departments which was assumed to have critical user information and the right entrepreneurial attitude
- Customer involvement/insights
- The team members was decoupled from all other tasks or mission during the three day workshop

Findings:
- Increased innovation performance (from idea to solutions, not include implementation)
- Greater exploiting of resources (knowledge) across departments
- Cultur/clima improvement
- Importance of management support and follow-up
- New innovation tools and methods boost the innovation performance
- However, the company resources, processes and systems at work did not support this type of experimental entrepreneurial work form
Summary of findings

• Innovation management
  – Workers are highly motivated, companies existing resources, processes and systems are not fit to these type of work forms → innovation management need to be embedded in the company DNA

• Entrepreneurship management
  – Is to pursuit of opportunities beyond the resources you currently control, which we managed by applying appropriate tools. However, entrepreneurship is quite different than running a operational business

• Challenges:
  – The company existing ways of capture values (business model) and management practice are hampering implementation of new BM or work practice from an entrepreneurial perspective (opportunity exploration)
  – Organizational structure/routines beats innovation culture
  – Innovation management, strategy and BM are resources which can be recombined to search for new business opportunities. However, it takes times to makes changes in these resources!
Thank you for your attention!