

The gap between theory and practice in innovation management

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About me

- Master of Science in Mechanical Engineering
- Master in Business Administration
- PhD. Innovation Management

- Industry (textile, paper, tools): quality management and continuous improvements
- Researcher: selection of ideas and projects, portfolio management
- Management consulting: innovation education programs
- National strategic innovation program: program office
- Innovation office at Uppsala University: collaboration academy-industry
- Swedish National Space Agency: innovation system and societal benefit

The question

- Why are some fundamental aspects of innovation management still difficult to manage, despite being extensively studied and discussed in theory?

Unresolved issues

- The tensions between exploitation and exploration
- The management of disruptive innovations
- The challenge of fostering collaboration in an innovation system
- The consequences of uncertainty, ambiguity and non-linearity
- The resource allocation chaos in multi-project settings

The tensions between exploitation and exploration

- High-technological components for the electronic industry: conflicts between two business units competing for the same resources
- University: criticism regarding partnerships with big companies
- Innovation program: higher valuation of radical innovations at the expense of incremental improvements, while procedures and tools systematically favor exploitation
- Criticism to specific approaches: risk of reductionism

The management of disruptive innovations

- National innovation programs: lack of an hypothesis about what is required for the creation of disruptive innovations
- Telecom firm: the innovation process begins with a defined idea, accompanied by the necessary information for evaluation, enabling a decision on its selection
- Disruptive ideas often receive attention for their eventual positive outcomes rather than for their defining characteristics and the implications these hold for evaluation and development

The challenge of fostering collaboration in an innovation system

- University innovation office: understanding collaboration as unrelated to innovation, a prerequisite for innovation, or an innovation in itself
- National innovation agency: lack of hypothesis regarding how to support collaboration (challenge, key aspects and competence)
- Home appliances: difficulties in driving cross-units projects
- National innovation program: knowledge transfer as a collaborative project

The consequences of uncertainty, ambiguity and non-linearity

- Recognizing situations
- National agency: difficult to accept agile and non-linearity

Resource allocation chaos

- Multi-project settings: alignment, value, balance
- Telecom/Medtech: informal activities alter resource planning
- Aeronautics: creating a separate organization / competence becomes the scarce resource
- The cognitive problem: sensemaking in the definition of portfolio dimensions

Some speculative considerations

- Lack of an innovation portfolio approach
- To achieve multiple and sometimes conflicting strategic goals, various types of innovations are necessary.
- Managing these different types of innovations requires distinct logics, approaches, and tools.
- The criticism focuses on reductionism, not on each approach itself

Some speculative considerations

*“To label something that is novel or undesirable as a **problem** is to imply that is something to be solved... then one could also say things like, that is an **issue**, manage it; that is a **dilemma**, reframe it; that is a **paradox**, accept it; that is a **conflict**, synthesize it; that is an **opportunity**, take it... once something is labeled as a **problem**, that is when the problem starts.”*

Karl E. Weick

Some speculative considerations

- Characterization of situations
- Accepting paradoxes: the paradox remains
- Frustration, anguish and sense of failure: What does it mean to manage innovation?

Thank you!

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