

## Innovation and Entrepreneurship Theory and Practice Mini-Track

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### Abstract

*This mini-track examines both the theory and practice of knowledge management in organizations where innovation and an entrepreneurial structure require its successful application. Entrepreneurs often create knowledge but fail to capture it for future use. Organizations that have the ability to innovate in their early stages of existence and capture the knowledge they create are far better positioned to survive in the long run.*

### 1. Introduction

The uncertainty surrounding new ventures obligates the entrepreneur to take careful note of the factors leading to initial successes and failures. In addition, the maturation of the venture depends on entrepreneur's ability to codify the tacit knowledge from these painfully learned lessons and from the venture's ecosystem into company resources and procedures. Entrepreneurs without the skills or time to capture and institutionalize knowledge fail to manage uncertainty, and instead take on unnecessary risk. These crucial aspects of entrepreneurship fall under the broader scope of knowledge management and are the focus of this mini-track of the 52<sup>nd</sup> HICSS.

The research presented in this mini-track reviews the relationship between knowledge management and entrepreneurial activities and identifies interesting trends in this domain with a focus on emerging technology, digital entrepreneurship, the tech entrepreneurs' relationship with her/his ecosystem, and knowledge collection, creation, and exploitation.

Five of the eleven mini-track papers address knowledge creation and management among digital start-ups, the category of new ventures that leverage digital technologies for disruptive business model innovation. Erkkö Autio and Zhe Cao in "*Fostering Digital Start-ups: Entrepreneurial Ecosystem*

*Structural Model*" distinguish digital startups from traditional new ventures and argue that entrepreneurial ecosystems can foster digital startups under the right conditions. They present a structural model of entrepreneurial ecosystems consisting of four dimensions: community structure, resource flows, knowledge spillover, and general framework conditions. The authors conclude that these four dimensions, when managed concertedly, yield a supportive entrepreneurial ecosystem for digital startups.

Arto Ojala and Gabriella Laatikainen in "*Pricing of Digital Innovations as an Entrepreneurial Process*" present a dynamic resource-based view model of an entrepreneur's activities when pricing digital innovations and distinguish these from traditional pricing strategies. The authors build this model from interviews with entrepreneurs and qualitative multi-case study methods and conclude that the pricing of digital innovations is based on the resources at hand and adjusted through negotiations with customers in an iterative process that is unique to digital innovations.

Sara Fraccastoro, Arto Ojala and Mika Gabrielsson in "*Entrepreneurial Decision-Making Logic Related to Software Development in Different Growth Phases of INVs*" investigate how software standardization, customization and localization evolve as international new ventures (INVs) grow in foreign markets. They find that effectuation and causation trigger changes to these software characteristics, and that this strategic response evolves as the venture overcomes growth and survival challenges during its development in foreign markets. This study brings new insights to digital entrepreneurship and digital INV by applying existing theories from entrepreneurship and international business to the context of information systems.

Ryan Carroll and Mitch Casselman in "*The Lean Discovery Process in Digital Business Startups: The Case of raiserve*" discuss lean-based methods by which startups manage the uncertainty they face. They

define the concept of the minimum viable customer and present a Lean Discovery Process (LDP) that addresses uncertainty in all stages of a startup, from the formation of the business concept through product development. The paper considers the potential of early testing with concepts from market research and collective intelligence to reduce overall risk beyond that achieved with traditional A/B testing. The authors conclude with practical implications of the LDP, including hypothesis testing early in the life of a digital startup with inexpensive experiments conducted within a small window of time.

Maryam Roshan, Virpi Kristiina Tuunainen and Riitta Hekkala in “*How Mobile Game Startups Excel in the Market*” present a model of how successful early-stage mobile game startups excel in the market after releasing their apps. The interpretive grounded theory model, based on 20 mobile game startups, shows that the startups follow an experimentation approach that allows for discovery of areas of improvement as well as new potential markets. As entrepreneurs monitor the performance of their games, it is easier for them to improve, excel and expand in new markets while overcoming the software functionality and analytics gathering constraints of the platform on which they build the games.

In the pedagogical paper “*Breaking up I/E: Consciously Uncoupling Innovation and Entrepreneurship to Improve Undergraduate Learning*,” Nick Swayne, Benjamin Selznick, Seán McCarthy and Kimberly Fisher argue that the terms “innovation” and “entrepreneurship,” often used interchangeably, are in fact different concepts involving different practices in higher education settings. The authors present pedagogical conditions in higher education that may have led to the conflation of the terms ‘innovation and entrepreneurship’ (I/E) and analyze multidisciplinary I&E programs that distinguish these disciplines. The authors conclude that innovation precedes entrepreneurship, and that uncoupling these terms can promote better-developing innovators, successful ventures, and improved higher education.

Continuing on the theme of ecosystems, Othmar Lehner and Theresia Harrer in “*Crowdfunding Platforms as Focal Actors in an Entrepreneurial Ecosystem: An Interdisciplinary Value Perspective*” identify the specific activities provided by crowdfunding platforms (CFPs) and critically assess the role of CFPs as focal actors in forming, enabling and restricting crowdfunding from an institutionalist standpoint. The five major propositions proposed by the authors suggest manifold implications of the activities of CFPs as central actors for all other actors in the field. The authors use qualitative methods and

inductive reasoning to build an ecosystem model of crowdfunding platforms.

Four mini-track papers focus on innovation, one also considering gender differences. In “*IT Impact on Innovation at the Individual and Group Level – A Literature Review*,” Stanislav Mamonov and Richard Peterson examine the literature on the effects of IT and the use of information systems on innovation over the past ten years, distinguishing between innovation outcomes at the individual and group levels. The paper also discusses theoretical frameworks and innovation-related constructs of knowledge creation and dissemination.

In “*Toward a Framework for Cooperation Behavior of Start-ups: Developing a Multi-Item Scale from an Empirical Perspective*,” Konstantin Garidis and Alexander Rossmann investigate the cooperation between startups and incumbent ventures. Such cooperation has become a more frequently used approach to mitigate innovation risk, but it often ends in failure and there is little empirical research on the underlying reasons. Contributing to a theory for the analysis of such cooperation, the authors identify three behavior dimensions and a performance dimension: intention to cooperate, cooperation intensity, cooperation quality, and start-up performance. They then present a multi-item measurement scale for each dimension and test the scale empirically.

Cesar Bandera and Ellen Thomas in “*To Pivot or Not to Pivot: On the Relationship between Pivots and Revenue among Startups*” investigate the value of the pivot, promoted as a method with which new ventures can reduce the uncertainty and risk associated with innovation. They argue that while pivots can lead to de-risking and ultimately to improved revenue, too much pivoting postpones new venture maturity and introduces new sources of risk. They empirically confirm this argument, observing that technology-based startups are more susceptible to the risks of over-pivoting than traditional new ventures.

Daniel Chandran and Asma Aleidi in their paper “*Exploring Antecedents of Female IT Entrepreneurial Intentions in the Saudi Context*” argue that women in IT entrepreneurship are heavily underrepresented. Their literature review shows that innovation, technology and female entrepreneurs are rarely studied and ignored in Information Systems (IS) and female entrepreneurship disciplines. The authors propose a conceptual model that will affect women’s IT entrepreneurial intention and decision-making processes. They develop and test hypotheses, based on the data collected from different Saudi female public universities as well as technology incubator, and entrepreneurship programs.