The generation of opportunity beliefs and promoters in the ecosystem emergence

DESIGN DRIVEN VALUE CHAINS IN THE WORLD OF CELLULOSE DWoC Henri Hakala University of Vaasa, & Lappeenranta University of Technology

Background: Business Opportunities

- Most studies take the perspective that opportunities are either discovered or created.
- Opportunity **discovery** is often described as "eureka" or a "light bulb" moment by an <u>innovative individual</u>.
- In contrast, opportunity creation is described as a series of creative and innovative decisions by the <u>entrepreneur</u> (Vaghely & Julien 2010).
- Our model is based on Davidsson (2015) opportunity unfolding from a 'seed venture' idea which can change considerably during its development course = an interaction based perspective that suggests that both discovery and creation intertwine

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Background:

- **Business ecosystem** = a collection/network of actors that evolve around a core innovation (business opportunity) to fulfill their goals.
- Different types of organizations may be involved and ecosystems may be born in different ways: Hub-firm based vs. bottom-up community based.
- **Community of inquiry**: group of individuals involved in a process of empirical or conceptual inquiry into problematic situations
- How the idea of an business opportunity evolves over time? (in bottom up, community based ecosystems)
- These conclusions are based on the qualitative research using multiple methods.
 - Theory, prior research
 - Documents, presentations and observations within and outside DWoC
 - Interviews of cellulose actors (50+)



EMERGENCE OF THE FINNISH CELLULOSE ENTREPRENEURIAL ECOSYSTEM THROUGH

- PHASE TRANSITIONS
- CRITICAL ROLES
- KEY PROCESSES



Promotor Roles in Ecosystem Development

- Prior research suggests that a key element in the emergence of an ecosystem is the *interaction between the relevant actors* that builds a holistic system to facilitate business venturing (Isenberg, 2010; Stam, 2015).
- who facilitates these interaction activities
 ?
 - the role of key actors in the emergence of an entrepreneurial ecosystem.



Key roles identified : Dream phase

Phase	Key Roles	Description
Dream	Visionary	A driving and future-oriented role, imagines and clarifies new entrepreneurial opportunities and large-scale institutional change to address future opportunities
Dream	Resource Explorer	Collects and organises existing resources and networks, and influences external actors, helps in the process of recombining existing practices, technologies, and institutions as a resource.
Dream	Diplomat	Shows political awareness in understanding the interests of the other actors in the expanding community, helps frame the dream agenda to appeal to the interests and identities of actors outside of the initial community and liaises closely with the funding body and local and national government
Dream	Missionary	Helps create and then convey meaning and meaningful stories on the importance of the entrepreneurial ecosystem vision, on the need to make institutional changes and actions that actors and others can take to help promote such a change



Key roles identified: inquiry phase

Phase	Key Roles	Description
Inquiry	Conductor	Nurtures membership by building on everyday conversations, creates agreement on how to ensure transparency in decision-making processes, helps the structuring needed for effective self-organising.
Inquiry	Interpreter	Keeps the diverse and multidisciplined group together, mediates the dialogue between the domains of expertise, facilitates the open communication process.
Inquiry	Sensehelper	Creates and presents frameworks to help with the mutual and individual sensemaking processes that are needed to give individuals within the community some clarity of direction in the medium to longer term.
Inquiry	Boundary Crosser	Takes the mundane from one discipline, across a boundary into their own discipline, recognises, gathers, interprets, and disseminates relevant information across boundaries to create new opportunity ideas



VIT

VALUE CHAINS IN THE WORLD OF CELLULOSE WOC

Phase	Key Roles	Description
Commerce	Co-Creator	Facilitates, helps articulate and support emerging understandings and opportunity ideas of the partners and of the group level collaboration needed as a basis for joint action, facilitates an open and equal innovation approach
Commerce	Architect	Leads the construction process of an industrial infrastructure for commercialisation, implements through negotiation and persuasion, and helps design critical institutional arrangements such as clarity on property rights, materials standards and certification, supply chain construction and future financing arrangements.
Commerce	Bridger	Has joint venture and partnering expertise to lead collaboration with larger partners, SMEs or possible in-house start-ups or spin-offs that evolve from pilots; creates and supports activities that enhance the entrepreneurial environment, for example, lobbying government and establishing organisations that support entrepreneurial activity.
Commerce	Mentor	Contributes director-level experience through positions on start-up or spin-off boards of directors. Acts as a teacher and judge for new student start-up competitions.





VIT

Findings & Implications

- Policy makers have primarily supported the creation of knowledge ecosystems assuming that these ecosystems will automatically trigger the development of business ecosystems
- Yet the value creation processes in the bottomup, emergent, knowledge driven ecosystem and those in the traditional hub-based business ecosystem are fundamentally different
- the process is about understanding connectivity, interdependence, emergence, and self organisation.



Findings & Implications

- Ecosystem 'projects' have to allow for the "chance" emergence of breakthrough ideas in the areas of products, services, and business models.
- Through the identification of key promotor roles, the policy maker (leader, funding body) may be better informed to design (build, create) ecosystems / recruit people for specific roles.
- People working within can better identify what their role for the emergence is.





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Sustainability as a criterion for resource substitution in the **Finnish manufacturing** industry







Motivation

- One of the important advantages of bio-based materials is their environmental friendliness (or 'sustainability')
- But why do some firms make the switch to sustainable materials – while others do not?
- We asked: Under what conditions Finnish manufacturing firms are willing to substitute their familiar input material to a more sustainable one?





Data

- We identified ca 1600 firms (SMEs)
- We contacted all of them by phone and got 568 to promise to participate
- 282 firms actually did participate
- After cleaning up the data we could use
 273 firms in the analysis



Method

- Conjoint analysis
 - Four parameters with 3-4 answer options each
 - Sustainability
 - Stakeholder pressure
 - Switching costs
 - Financial cost considerations
 - 108 distinct hypothetical decision scenarios
 - Block design: each respondent rated 6 randomly assigned scenarios
 - Control variables from the survey and the Orbis database



Scenario Example

- A new input has become available with the following characteristics:
 - The input is half as damaging to the environment as the current input your company is using.
 - The input is already used by a key competitor.
 - Employees will have to invest time into learning how to work with the new input.
 - Using the input will require a one-time investment in machinery of about 10% of your annual turnover.

How likely would you be to purchase this new input at the same price as your current input?



Findings

- Sustainability is a significant and robust predictor of the willingness to switch input materials
 - Even if we control for many different strategic parameters
- This bodes well for bio-based materials!
- We are adding data and exploring conditions to the main effect



Towards a new cellulose community

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VISUALIZATION BY ANASTASIA IVANOVA, AALTO UNIVERSITY

DESIGN DRIVEN VALUE CHAINS IN THE WORLD OF CELLULOSE DWOC



VISION

Catalyse the creation of an Entrepreneurial Ecosystem



Understand process and roles

Understand how opportunities are generated Understand why new materials are adopted

DWOC Business Research Team





Seedfunding – more and bigger fish



The developing bottom up ecosystem



If you have any thoughts, questions, ideas – please contact me at gregory.oshea@aalto.fi