The generation of opportunity beliefs and promoters in the ecosystem emergence

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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 innovative individual.
- In contrast, opportunity creation is described as a series of creative and innovative decisions by the entrepreneur (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.
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

COMMUNITY OF COMMERCE

COMMUNITY OF INQUIRY

COMMUNITY OF DREAMS

GEMEINSCHAFT
COLLECTIVISE
DREAM
ENVISION
BUZZ

FIND MEANING
COALITION
RESOURCES
FUNDS

CRITICAL ROLES:
VISIONARY
RESOURCE EXPLORER
DIPLOMAT
MISSIONARY

CRITICAL ROLES:
CONDUCTOR
INTERPRETER
SENSEHELPER
BOUNDARY CROSSER
HELICOPTER PILOT

CRITICAL ROLES:
CO-CREATOR
ARCHITECT
BRIDGER
MENTOR
INTRAPRENEUR

STRUCTURE
FORMALISE
PURPOSE
IDENTITY

GOVERNANCE
NORMS
ROADMAPS
LANGUAGE

MARKET
KNOWLEDGE
BUSINESS
MODEL
PARTNER
START-UP
SPIN-OFF

JOINT VENTURE
LOBBY

ENTREPRENEURISATION

CONVERGENCE
CONCEPTING
OPPORTUNITIES

GESELLSCHAFT
INFRASTRUCTURE

FORMALISE
ENTREPRENEURIAL
SUPPORT

SELF-ORGANISE
SENSEMAKE
COLLABORATE
DIVERGE

INQUIRE
LEARN
SHARE

MOTIVATE
INSPIRE
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

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Roles</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dream</td>
<td>Visionary</td>
<td>A driving and future-oriented role, imagines and clarifies new entrepreneurial opportunities and large-scale institutional change to address future opportunities</td>
</tr>
<tr>
<td>Dream</td>
<td>Resource Explorer</td>
<td>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.</td>
</tr>
<tr>
<td>Dream</td>
<td>Diplomat</td>
<td>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</td>
</tr>
<tr>
<td>Dream</td>
<td>Missionary</td>
<td>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</td>
</tr>
</tbody>
</table>
### Key roles identified: inquiry phase

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<th>Phase</th>
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<tr>
<td>Inquiry</td>
<td>Conductor</td>
<td>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.</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Interpreter</td>
<td>Keeps the diverse and multidisciplined group together, mediates the dialogue between the domains of expertise, facilitates the open communication process.</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Sensehelper</td>
<td>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.</td>
</tr>
<tr>
<td>Inquiry</td>
<td>Boundary Crosser</td>
<td>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</td>
</tr>
</tbody>
</table>
### Key roles identified: Commercial phase

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<tr>
<th>Phase</th>
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<th>Description</th>
</tr>
</thead>
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<tr>
<td>Commerce</td>
<td>Co-Creator</td>
<td>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.</td>
</tr>
<tr>
<td>Commerce</td>
<td>Architect</td>
<td>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.</td>
</tr>
<tr>
<td>Commerce</td>
<td>Bridger</td>
<td>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.</td>
</tr>
<tr>
<td>Commerce</td>
<td>Mentor</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 bottom-up, 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.
Sustainability as a criterion for resource substitution in the Finnish manufacturing industry

Teemu Kautonen
Aalto University
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

Greg O’Shea
Aalto University

VISUALIZATION BY ANASTASIA IVANOVA, AALTO UNIVERSITY
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

- Vision
- Theory
- Practical Work
- Recommendation
- Articles
- Frameworks

- Technology Transfer
- Spin Off Business Modelling
- Identify and Bridge Gaps
- Joint Ventures and Partnering

Cellulose Business Development
Ongoing work

**STAGE 1**  
**ECOSYSTEM CREATION**
- Virtual community
- Physical community
- Create MEANING

**STAGE 2**  
**ECOSYSTEM GROWTH**
- Branding, Market
- Certification, Pilots
- Supply chain
- Value network
- Entrepreneurs
- Funding

**CELLULOSE ECOSYSTEM DEVELOPMENT**

**COMMUNITY OF COMMITMENT**
- Training
- Knowledge
- Interaction
- Meaningful stories
- Chief Missionaries

**TRANSITION**
- Materials certification
- TR-CR review + focus towards 2-3 pilots
- Co-Creation for B2B, B2C
- Business Modelling
- Funding

**COMMUNITY OF BUSINESS**

**DREAM**

**INQUIRY**

**COMMERCE**
The developing bottom up ecosystem

At 2018

More and bigger fish

PRODUCTS & SERVICES

EMPTY Part of the POND
Needs GOLDEN fish

Big company

Small companies

Small companies using cellulose
Small design companies

Startup grants, Startup Sauna, Accelerators

Design driven possibilities
and business coaching

DWoC - knowledge

Forestry companies - material providers

TEKES funding

At 2018
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THANK YOU

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