Speed Presentations
on Framework & Support Actors

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by SHIFT team
WP 1: Framework and central concepts

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by Professor Olof Hjelm
Environmental Technology and Management
Linköping University, Sweden
Actors and approaches of the support system for entrepreneurship in eco-innovation

Public and private support system

<table>
<thead>
<tr>
<th>Actors</th>
<th>Universities</th>
<th>Incubators</th>
<th>Business development organizations</th>
<th>Design service providers</th>
<th>Financial institutions</th>
<th>Other actors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approaches</td>
<td>Business platform</td>
<td>Business plan competitions</td>
<td>Cluster initiatives</td>
<td>Design for sustainability</td>
<td>Public funding</td>
<td></td>
</tr>
</tbody>
</table>

Boosting the development and implementation of eco-innovation

Key actors: Entrepreneurs, start-ups & micro-SMEs

Stage 1 | Stage 2 | Stage 3 | Stage 4 | Stage 5 | Stage 6 | Stage 7
Opportunity identification | Opportunity evaluation | Commitment of resources | Market entry | Full launch & growth | Maturity & expansion | Liquidity event

Sector context: emerging, growing, mature industries

Environmentally beneficial
Economically feasible
No conflict with social sustainability
SHIFT: Support Systems & Gaps

Supply
- Support system
  - Universities
  - Incubators
  - Business development organizations
  - Design service providers
  - Financial institutions
  - Other actors

GAP
- Real gaps
- Perceived gaps

Demand
- Key actors
  - Entrepreneurs
  - Start-ups
  - MSMEs

Supply side barriers

Demand side barriers

Stimulating, initiating and implementing eco-innovation and the transformation towards a Green Economy
Multi-level perspective

MACRO
- The Enterprise Europe Network
- DGs
- EC
- EU

MESO
- NATIONAL DESIGN CENTRES
- NATIONAL PROFESSIONAL DESIGN ORGANISATIONS
- OTHER NATIONAL SUPPORT ACTORS
- OTHER ACTORS

MICRO
- Eco-SMEs & startups
- DSPS – Designers & design agencies
- DSPS – Specialist research centres
- DSPS – LOCAL & REGIONAL CO-ORDINATORS
- DSPS – others

OTHER ACTORs
- OTHER ACTORS
- NATIONAL DESIGN CENTRES
- NATIONAL PROFESSIONAL DESIGN ORGANISATIONS

OTHER ACTORs
- OTHER ACTORS
- NATIONAL DESIGN CENTRES
- NATIONAL PROFESSIONAL DESIGN ORGANISATIONS
The Role of Universities in supporting sustainable entrepreneurship and eco-innovation

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by Linda Bergset and Klaus Fichter
Borderstep Institute, Berlin
Research gap and missing concepts

Based on Xavier et al. (2012) and Rothaermel et al. (2007)
Disconnection of concepts

Environmental context
- National university policy
- Regional development strategies
- Triple helix approach
- Innovation system

Institutional framing
- Strategy, Structure, Culture

Entrepreneurship

Sustainability

Research
- Entrepreneurship
- Sustainability

Education
- Entrepreneurship
- Sustainability

Cooperation
- Entrepreneurship
- Sustainability

Support
- Entrepreneurship
- Sustainability

Effects
- Output
- Outcome

Need for integration! Options for intervention!
Good practice exists, but still „niche phenomenon“

- We investigated 5 countries
  - Finland
  - Germany
  - Sweden
  - UK
  - USA

- We identified and documented 42 good practice examples (cf. Geier and Fichter 2015)

- Good practice collection (booklet and single 4-pager of nine examples)

- Overall: Less than 10% of all universities in the respective countries offer specific support for sustainable entrepreneurship and eco-innovation
The Role of Incubators in Supporting Sustainable Entrepreneurship

SHIFT Final Workshop
Magnus Klofsten, Dzamila Bienkowska & Natasha Bank
Linköping University, Sweden
The incubator study

Aim:
To investigate deficits and potential of the existing incubator support systems for sustainable entrepreneurship. Identify and learn from good practices

- Extensive literature review on incubators
- Three case studies on incubators
- Survey of incubators in Finland (11), Germany (64) and Sweden (20)
- A case study on an entrepreneurship programmes aimed to support green business start-ups
Results

- Incubators are showing great interest in promoting sustainable business.

- Incubators with a strategy of recruiting only sustainability-oriented tenants could face difficulties in finding enough firms in their surroundings to carry their operations.

- There exists complementing activities to incubators e.g. entrepreneurship training programmes.
Business Development Organizations (BDOs)

SHIFT Final Workshop
13\textsuperscript{th} January 2016, Brussels
Presentation by Professor Olof Hjelm and Wisdom Kanda
Linköping University, Sweden
WP4: Focus

- **Scope:**
  - Regional focus (Region Scania, Sweden and North Rhine Westphalia, Germany)
    - To reflect how firms access support.
    - To capture potential “good” support practices.

- **Actor:**
  - Business development organizations
    as organizations or entities that assist firms in the eco-innovation and entrepreneurship process often by acting as an intermediary between two or more parties.
    - Actor type often offers a broad portfolio of support to firms.
    - Intermediates between other support actors such as financers, universities and incubators.
WP4: Approach

1. Defining the study focus
2. Mapping BDOs
3. Mapping support functions of BDOs
4. Assessing support functions
5. Recommendations for BDOs and key stakeholders

WP4: Main conclusions

• For policy makers, focusing on the functions of BDOs could be more relevant than focusing on the types of actors.

• Interactive learning is needed between established and new entrant BDOs.

• A proactive approach to support is needed to trigger radical eco-innovations.

• Dynamic tailoring between general innovation support and eco-innovation specific support is needed.
WP5 The Role of Design Service Providers (DSPs)

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by Prof. Alastair Fuad-Luke
Research by A. Fuad-Luke, Malin Backmän & Anja-Lisa Hirscher,
NODUS, Sustainable design research group, Aalto ARTS (School of
Arts, Design & Architecture), Aalto University, Helsinki, Finland
Early orientation…

The aim of our key research questions:
- Understanding, from a Multi-level perspective, how the EU policy fields of design, innovation and environment related to the practices around the provision of design services as part of eco-innovation support systems at the meso and micro-levels and if/how eco-SMEs or start-ups were utilising these services

Context:
- Designers, design agencies & specialist research units were our key ‘Design service providers’ (DSPs). These DSPs are also (M)SMEs or equivalent-sized organisations. The ‘small:small’ problem.
- There are diverse ‘design services applied at different parts of the innovation cycle
- Recent studies under the European Design Innovation Initiative (EDII) helped differentiate between national design policy/support/promotion and design centres
Policy fragmentation

<table>
<thead>
<tr>
<th>EC Directives</th>
<th>Regulations</th>
<th>Action Plans</th>
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<tr>
<td>Landfill EC/31</td>
<td>1998</td>
<td>SCP/SIP-AP</td>
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<td>ELV EC/53</td>
<td>1999</td>
<td></td>
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<tr>
<td>WEEE EC/96</td>
<td>2000</td>
<td>Eco-AP</td>
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<td>Energy use</td>
<td>2001</td>
<td>Design-Driven Innovation-AP</td>
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<tr>
<td>Products EC/32</td>
<td>2002</td>
<td></td>
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<td>Energy Star</td>
<td>2003</td>
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<td>2014</td>
<td></td>
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<tr>
<td>Ecodesign EC/125</td>
<td>2008</td>
<td>Green AP for SMEs</td>
</tr>
</tbody>
</table>

The first AP to bring together 'ecodesign' and 'eco-innovation'

APs do not co-ordinate around the 'green economy' and 'design' or 'ecodesign'

BEDA commences lobbying EU to develop a design policy

EDII publishes *Design for Growth & Prosperity* – the EU's first key design policy document

Source: SHIFT report - NODUS, Aalto ARTS, 2015, WPS The Role of Design Service Providers, p14, Figure 2.

Green economy diagram by European Environmental Agency, 2014.
Further Key Findings

Interviews with experts, UK.
• Lack of infrastructure at the regional level to address the design & entrepreneurship needs of SMEs.
• Fragmentation of policy.

Surveys of existing design support systems in the EU.
Less than 0.02% of Europe’s 23m SMEs have accessed these systems and vast majority of enterprises supported (76%) did not have a green or eco-focus.

Demand-side survey with Suomen Yrittäjät.
MSMEs apply concept design/ideation; graphic design; new product development in pre-seed/seed/start-up stages of innovation life-cycle.

Demand & supply side surveys in Finland, Germany & Sweden with eco-SME, DSPs and experts.
• The way in which MSMEs and DSPs think about how design can benefit the business of MSMEs are similar, but there is confusion about how design adds value and when to apply it.
• MSMEs and DSPs both struggle to get financial support.
• MSMEs have difficulty finding the right DSP.
• Few DSPs with eco-design/sustainable design competences & SME support experience.
• SMEs and DSPs believe the market for eco-/greening enterprises is expanding but the support system is not.
• Need for more match-making events and regional support.
Design Acupuncture Game

- Workshop facilitated at the Helsinki Design Week: 8.Sept. 2015
- Includes: A booklet with explanations of the different design services, a ‘needs-wheel’ and ‘design service cards’
- The game is based on the key findings from survey work:
  - creating a mutual understanding between designers and entrepreneurs
  - addressing the real needs of the MSMEs with potential design services
SHIFT: Overview

- Funded within ECO-INNOVERA
- Call topic: Paradigm Change
- Project period: 2012 - 2016
- Partners & project managers:
  
  Klaus Fichter
  Coordinator

  Magnus Klofsten
  Olof Hjelm

  Alastair Fuad-Luke
The Role of Finance and Funding in supporting sustainable entrepreneurship & eco-innovation

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by Linda Bergset
Borderstep Institute, Berlin
Focus:
- Primarily demand side
- Start-ups

Methods:
- Exploratory interviews
- Survey

Central Findings:
- No notable difference between green start-ups and non-green start-ups
- However: Particular challenges for specific types of green start-ups!
Gaps & Particular Challenges

- Particular struggles for green start-ups that
  - are innovative
  - have a high level of R&D
  - have a team with no business background
  - particularly in the expansion phase

- What about the non-green start-ups?
  - Similar findings in the non-green control group
  - But note: 1) Strength statistical differences and 2) Characteristics of start-ups

- Findings from interviews
  - Lack of benchmarks
  - Difficult relationship between investors and sustainable entrepreneurs
Possible Solutions

- Private sector:
  - One solution: Intermediaries and networks
  - Example: Investors’ Circle (the US)

- Public sector:
  - One solution: Support of such actors
  - Examples: INNEON (EU) & Green Start-up Investment Alliance (Germany)
WP7 The Roles of Interagents and Unusual Collaboration in supporting sustainable start-ups and eco-SMEs

SHIFT Final Workshop
13th January 2016, Brussels
Presentation by Prof. Alastair Fuad-Luke
Research work by Mika Kuisma and A. Fuad-Luke
NODUS, Sustainable design research group, Aalto ARTS (School of Arts, Design & Architecture), Aalto University, Helsinki, Finland
Early orientation…

- Key research question:
  - What emergent and innovative types of bringing people and other resources together to support eco-oriented innovation and start-ups exist in the current support system (in addition to those of actors in focus in WPs 2-6)?

- Context:
  - Early engagement with eco-(M)SMEs and start-ups revealed the importance of informal, soft, or other forms of collaboration & support not delivered by the official innovation support systems.
Rethinking the actors

Focus & approach:
- We focused on ‘interagents’ and unusual collaboration in the exchange of expertise/knowledge, resources, structures/processes & dynamics/relationships through an extensive literature review and 3 case studies from Finland.
- We created an outline classification of potential interagents & collaborator actors according to their organisational background.

<table>
<thead>
<tr>
<th>Background</th>
<th>Individuals</th>
<th>Organisations</th>
<th>Individuals or organizations</th>
<th>(More complex) Multi-actor structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term mentioned in the literature on collaboration and innovation support</td>
<td>Business contact CSR champion Entrepreneur Expert Founder / CEO Friend</td>
<td>Boundary organization Business Development Organization Incumbent (‘Goliath’) Innovation consultancy Intermediary firm Knowledge intermediary Not-for-profit organization Private organization Public organization Regional institution Superstructure organization</td>
<td>Bonding interagent Bricoleur Bridging interagent Broker Consultant ‘David’ (small firm) Ecopreneur (Innovation) intermediary Intermediary (agency) Intermediary level body Knowledge broker Network facilitator Regulatory interagent Researcher Resource interagent Systemic intermediary Technology broker Venture capitalist</td>
<td>Family Industrial cluster Innovation community Network Peer group Social innovation network Systemic intermediary Third parties</td>
</tr>
</tbody>
</table>
### Perceived gap in the support system on which the interagent is focusing

<table>
<thead>
<tr>
<th></th>
<th>CASE Local Energy / FinSolar</th>
<th>CASE TELAKKA®</th>
<th>CASE Peloton Club</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector focus</td>
<td>Renewables / Solar Energy</td>
<td>Fashion and textile (design)</td>
<td>Consumer clean tech</td>
</tr>
<tr>
<td>Market orientation</td>
<td>Finland + exports</td>
<td>Finland + exports</td>
<td>Nordic ‘born globals’</td>
</tr>
<tr>
<td>Typical businesses involved</td>
<td>Technology driven SMEs (including startups)</td>
<td>Design driven SMEs (including startups)</td>
<td>Innovation driven teams on seed stage (and startups too)</td>
</tr>
<tr>
<td>Micro level challenges of business development</td>
<td>Weak financial condition of the SMEs, fierce competition between actors</td>
<td>Weak financial condition, lack of time &amp; other resources</td>
<td>Business model generation; lack of finance, know-how, personnel</td>
</tr>
<tr>
<td>Macro level constraints of growth</td>
<td>National legislation, unfavorable conditions in the home market</td>
<td>Lack of trust in the business sector in general (Finland)</td>
<td>The behavioral changes necessary in the market (sharing economy etc.)</td>
</tr>
<tr>
<td>Drivers of collaboration</td>
<td>Building up an ecosystem to promote more favorable conditions and create better opportunities in domestic market</td>
<td>Building up an ecosystem to create better opportunities for all in sustainable fashion</td>
<td>Building niche markets / accelerating social change towards resource smart economy and opportunities for smartups in clean tech</td>
</tr>
</tbody>
</table>
Challenging the support regime

The value adding contributions of interagents and unusual collaboration in filling the gap between start-up support supply and support needs.
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