Facilitating interdisciplinary learning communities

Eelis Rytkönen, Suvi Nenonen, Erica Österlund
@ CIB conference in DTU, Copenhagen 22nd May 2014
1. Purpose: Shed light on an interesting case
2. Research question: The characteristics of the cases?
3. Method and sample: 17 interviews, 5 cases, analyses
4. Results: Similarities and differences
5. Conclusions and practical implications: Hindrances and enablers
Purpose

To analyze five intrinsic spatial development project processes in one campus – why do they arise interests?

The theory of spatial transformation? (Castells)
The organizational reform
Case description

The source of alternative spaces of Aalto University. An interdisciplinary collaboration platform to support state-of-the-art product development.

A meeting place and mentoring program for aspiring entrepreneurs in Northern Europe.

A collaboration platform for research and industry concentrated in urban innovation.

ADDlab is designed as a place to foster an exchange of creativity between the different cultures of business, art, design, science and technology through the theme of digital manufacturing.

An umbrella concept that unites a network of independent experimental learning spaces within Aalto University campus. Each space is a prototype.
Research question(s)

1. Similarities and differences?

2. Added values for the university?

3. How to support?
Methods and sample

17 semi-structured interviews
5 cases
Cross-case analysis

project initiators or project staff members (11), volunteer students (3), facilities and campus services unit employees (2), real estate owner (1)
Results

“...the process is to recycle the spaces that are not used currently and converting them into something more interesting, something more useful for the people of the University”
- Project staff member

“Do we only provide (the raw) premises and say ‘do what you want but these are the terms of condition?’”
- University administration
Common iterative process

0. On-going Organisational Change

1. Initiative phase. Strategic top and functional bottom demands meet.

2. Pre-development phase. A tenant move or overlooked facility / space. The concept begins to evolve.

3. Initiators develop a space based on a conceptual idea.


5. Development based on observations.

6. Feedback from development, alterations accordingly.

7. A developed concept to be cloned / exported.

8. Potential export, cloning or collaboration, continuing the organisational change and feeding back to original concept.
## Differences in phases

<table>
<thead>
<tr>
<th>Factors leading to:</th>
<th>Initiative phase</th>
<th>Pre-development phase</th>
<th>Development phase</th>
<th>Evolution phase</th>
<th>Value creation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organizational change on top. Research project on bottom.</td>
<td>Tenant move from building</td>
<td>Product-development, prototyping.</td>
<td>Project-like nature, international collaboration.</td>
<td>Student-industry collaboration through courses. Test bed for research. Global interest.</td>
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<td>Growing student-led entrepreneurship society.</td>
<td>Overlooked space used for storing hand sanitizer.</td>
<td>Student-run development and facilitation</td>
<td>Community demands.</td>
<td>Promoting and enforcing entrepreneurship Connecting external actors to university. Global interest.</td>
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<td></td>
<td>Organizational change on top. Research project on bottom.</td>
<td>Overlooked spatial resources around the campus.</td>
<td>Collaborative community inclusion.</td>
<td>Accumulative prototypes.</td>
<td>Increasing interdisciplinary communications.</td>
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<td>Evolving technology.</td>
<td>Tenant move from building.</td>
<td>Effectuation (Sarasvathy 2001) and Lean (i.e. Jylhä 2013) principles.</td>
<td>Prototype, community to set up the space.</td>
<td>Research-industry collaboration.</td>
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Added values to university

- Learning through education with focus on students (Learning)
- Inventions through thematic research with focus on researchers (Research)
- Innovation for practice with focus on entrepreneurs (Societal impact)

Internal focus

External focus
“…we hope that (...) we could get rid of useless spaces and no money would be allocated in vain but direct the money to the main purposes of the university – education and research.”
- University administration
<table>
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<th>Phase</th>
<th>Hindrances(-)</th>
<th>Enablers(+)</th>
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<tr>
<td>Initiative</td>
<td>- Leaning to traditional ways of operating.</td>
<td>+ Risk taking capabilities and hands-on attitude.</td>
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<tr>
<td>Pre-development</td>
<td>- Restrictions based on standards and specialization principles.</td>
<td>+ Focus on user needs, user involvement and overlooked spaces.</td>
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<tr>
<td>Development</td>
<td>- Prohibiting space use for informal events.</td>
<td>+ Efficient communications and event facilitation.</td>
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<tr>
<td>Evolution</td>
<td>- Command, control, hierarchies, bureaucracy.</td>
<td>+ Facilitation, empowerment, support, negotiations.</td>
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<td>Value creation</td>
<td>- Traditional measures and standards.</td>
<td>+ Evaluation of efficiency and effectiveness. Costs vs values vs impacts.</td>
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Conclusions

• Larger change nurtures smaller change and vice versa
• Iterative processes enable quick modifications
• Quick reactions require project-like processes
• Engaged communities make things happen
• Different core functions require different metrics

→ How to balance between the traditional top-down and the alternative bottom-up project processes?
Implications to...

Understanding of usability:

Usability of campuses is enhanced by cross-organizational pop-in places where knowledge is thematically shared through facilitation operators.

Impact on learning environments:

Valid measures, costs, values and impacts differ from those of the traditional learning environments.

Means for FM:

Various operational models are needed to create an interdisciplinary community – an agile follow-up project model seems to function for these.
Massive hierarchical bureaucracy with a twist of Dynamic ad hoc experiments.
“The value is wholly created by the community.”

-Project staff member