

# Facilitating interdisciplinary learning communities

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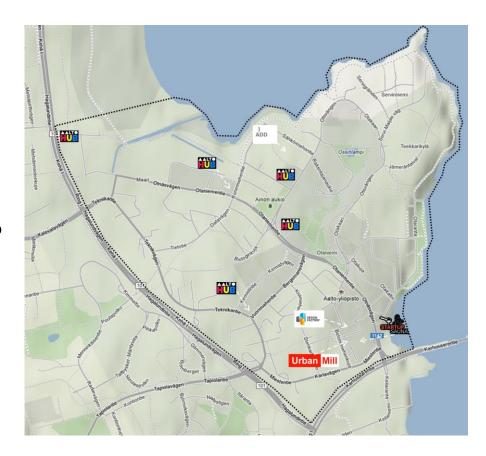
#### Agenda

- 1. Purpose: Shed light on an interesting case
- 2. Research question: The characterics of the cases?
- 3. Method and sample: 17 interviews, 5 cases, analyses
- 4. Results: Similarities and differencies
- 5. Conclusions and practical implications:
  - **Hindrances and enablers**

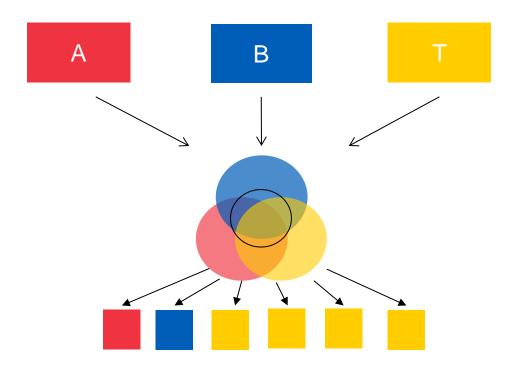
#### **Purpose**

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.

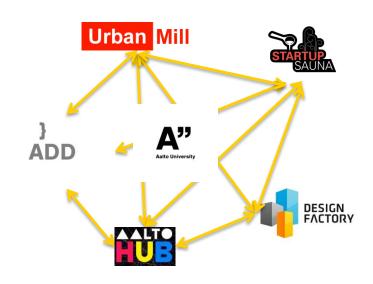


An umbrella concept that *unites a network of independent experimental learning spaces* within Aalto University campus. Each space is a prototype.

#### Research question(s)

1. Similarities and differences?

- 2. Added values for the university?
- 3. How to support?



### Methods and sample

17 semi-structured interviews5 casesCross-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"

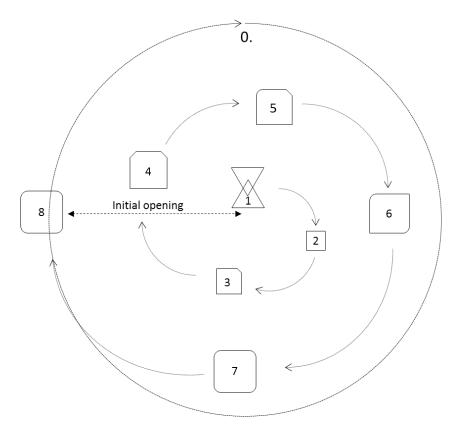
- Project staff member

"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.
- 4. Development phase. User observation and constant testing. Value creation begins.
- 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

Factors leading to:	DESIGN	STARTUP SAUNA	HUB	} ADD	Urban Mill
Initiative phase	Organizational change on top.  Research project on bottom.	Growing student-led entrepreneurship society.	Organizational change on top.  Research project on bottom.	Organizational change on top.  Evolving technology.	Organizational change on top.  Research project on bottom.
Pre-development phase	Tenant move from building	Overlooked space used for storing hand sanitizer.	Overlooked spatial resources around the campus.	Overlooked space used for storing furniture.	Tenant move from building.
Development phase	Product-development, prototyping.	Student-run development and facilitation	Collaborative community inclusion.	Consultancy. Firm collaboration.	Effectuation (Sarasvathy 2001) and Lean (i.e. Jylhä 2013) principles.
Evolution phase	Project-like nature, international collaboration.	Community demands.	Accumulative prototypes.	Showrooming, discourse, café facilitation.	Prototype, community to set up the space.
Value creation	Student-industry collaboration through courses.  Test bed for research.  Global interest.	Promoting and enforcing entrepreneurship Connecting external actors to university. Global interest.	Increasing interdisciplinary communications. Increasing library utilization rates. Local interest.	Research-industry collaboration.  Possibilities for innovations in 3D printing.  Global interest.	Research-industry collaboration.  Re-thinking the revenue logic of University facilitation.  Global interest.



#### Added values to university

External focus









Internal focus



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)



- "...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

# Conclusions & practical implications

#### Phase Hindrances(-) Enablers(+)

Initiative	-Leaning to traditional ways of operating.	+ Risk taking capabilities and hands-on attitude.	
Pre-development	- Restrictions based on standards and specialization principles.	+ Focus on user needs, user involvement and overlooked spaces.	
Development	- Prohibiting space use for informal events.	+ Efficient communications and event facilitation.	
Evolution	- Command, control, hierarchies, bureaucracy.	+ Facilitation, empowerment, support, negotiations.	
Value creation	- Traditional measures and standards.	+ Evaluation of efficiency and effectiveness. Costs vs values vs impacts.	

#### 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.





### Top←→down ←→ middle → local → bottoms←→up →global?

Massive hierarchical bureaucracy with a twist of Dynamic ad hoc experiments.





"The value is wholly created by the community."

-Project staff member



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