#### The role of space in the 21st Century University - Learning from the Design Factory at the Aalto University

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## Content

- Intorduction
- Role of space for learning
- Aalto University
- Design Factory
- Conclusions





#### Who is here today ?

- Doctoral Thesis 2005 TKK
  - The nature of the workplace for knowledge creation
- Research Manager TKK, 2005 Workplace Management

ProWork - Workplace Management REBUS – Nordic Usability of Workplaces project ASI –Innovative and Customer orientated Real estatate and User services

PREFERENCES – User preferences with TKK/REG SELMA – Senior housing with TTY SIN – Where innovations take place? In collaboration with TAIK Company projects toti – Productive office environment INDUSPACE– Usability in production premises

- Associate Professor of real estate management in Tampere university of Technology TTY, 2008
- EuroFM network
- Nordic FM network, chairman 2009-2011
- New Ways of Work –network
- CIB W111 Usability of workplaces
- FSR consulting: Co-ordinator of Built Environment Program in the Finnish Funding Agency for Technology and Innovation



Population of 5,282,583 People spread over 338,145 square kilometres (130,559 square miles). The most sparsely populated country in the European Union. Finland is a democratic republic. Finland has four seasons and thousand lakes.

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#### ProWork project Goals and partners

#### Goal 1

To understand :

- The crucial elements of productive knowledge work
- The requirements they set to physical, social and virtual work environment

#### Goal 2

to develop an evaluation- and foreseeing tool for creating physical, social and virtual workplace resources that support both individual and collaborative knowledge work.

#### Goal3

to develop concepts and agendas for workplace resource management to create productive knowledge work environments.

Duration: 2006-2010



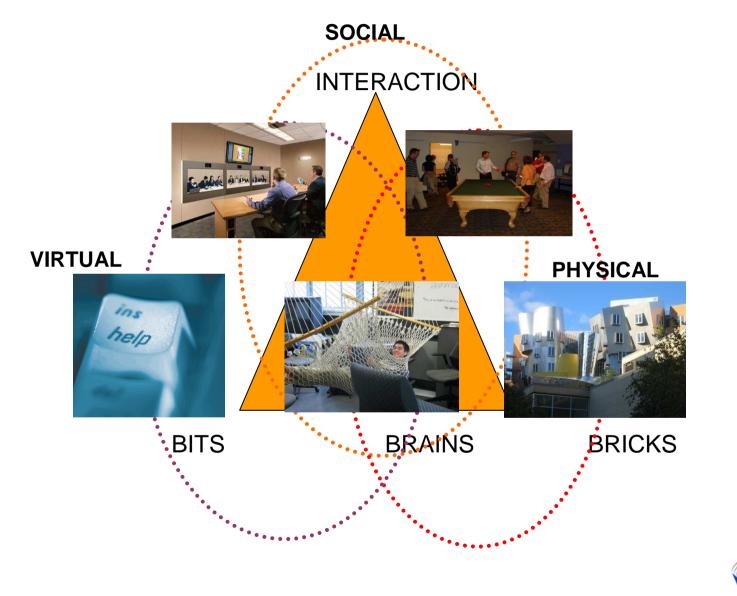
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## Knowledge is profoundly social

- > Our organisations are not made for knowledge
  - They are based on angloamerican individualism
  - Angloamerican individualism is sickness for knowledge work
  - Command, control and fear eliminates knowledge and innovation



#### Physical, social and virtual space/place



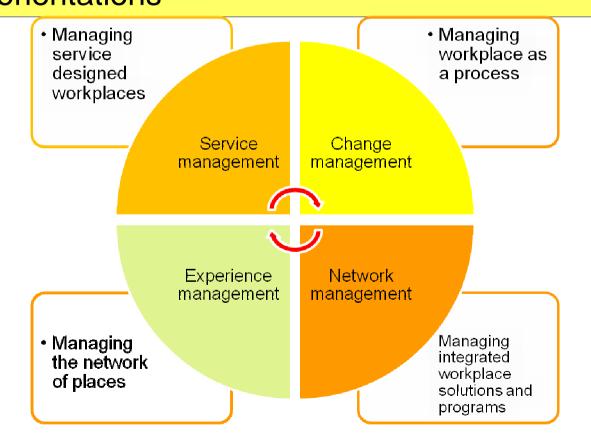


#### Results in brief



- Proximity & People "Great People."
- IT Infrastructure
- Embeddedness

Four Workplace Resource Management orientations





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# **Aalto University**

- Aalto University is created through a merger between
  - the Helsinki School of Economics,
  - the University of Art and Design Helsinki and
  - the Helsinki University of Technology





# Aalto University established three projects

- **Design Factory**, **Media Factory** and **Service Factory** are the first joint projects of the Aalto University, the so called New Expertise Workshops.
- The workshops provide learning, teaching, research, and co-operation environments in which the academic teams and projects as well as companies or communities work together.
- The workshops support international principles, open innovation, and new ways of learning and teaching as well as an interdisciplinary attitude.
- The objective is that the research information will be seamlessly transferred into teaching.

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## **Background for Design Factory**

- Three years ago no one had any clue what Aalto
   University would look or feel like
- There was a real activity : International Design Business Management (IDBM) + Product Developmer Project (PDP) = Aalto University activity (interdisciplinary)



 -->Future Lab of Product Design (FLPD) research project was started 2007
– financed by 8 companies + Finnish Funding Agency for Technology and Innovation

## The begin of the Design Factory

- How to best support the diverse activities and needs in the early phase of product development ?
- How to enable cooperation between students, research and corporate world?
- Serendipity and easily approachable spaces





# A passion-based co-creation platform

- An interdisciplinary product design and learning hub uniting students, teachers, researchers and industry
- Design Factory is an experimental platform of Aalto University, started in Autumn 2008.
- The Factory is a constantly developing physical, social and mental environment, aiming to support interdisciplinary and international co-operation between parties interested in design and development.







# Design Factory is a project, which provied different type of spaces for

#### Courses

- To attract teachers -> students -> better learning outcomes
- Interdisciplinary / focused courses
- Uniting & mixing students from different universities
- Researchers
  - Interdisciplinary
  - Interesting people, change of thoughts
  - Bringing research visible
- Companies
- Start-ups
- International supporting partners
  - Open innovation



## **Design Factory Principles**

- User centered design
  - Transformable by everyone Design your space principle
  - It will never be ready and completed
- Spaces enable spontaneous interactions



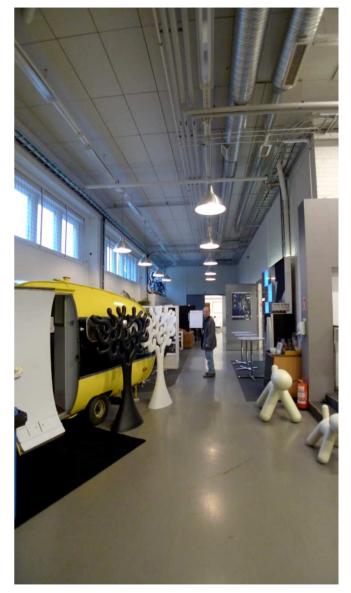
- NON STERILE environment encouraging people to try, share, talk ...
- One can prototype, learn and have fun
- Designed to be used by everyone: uniting & inspiring students, research, start-ups, companies, organizations, teachers, KIDS, dogs,...

#### Design Factory is located in Otaniemi Campus

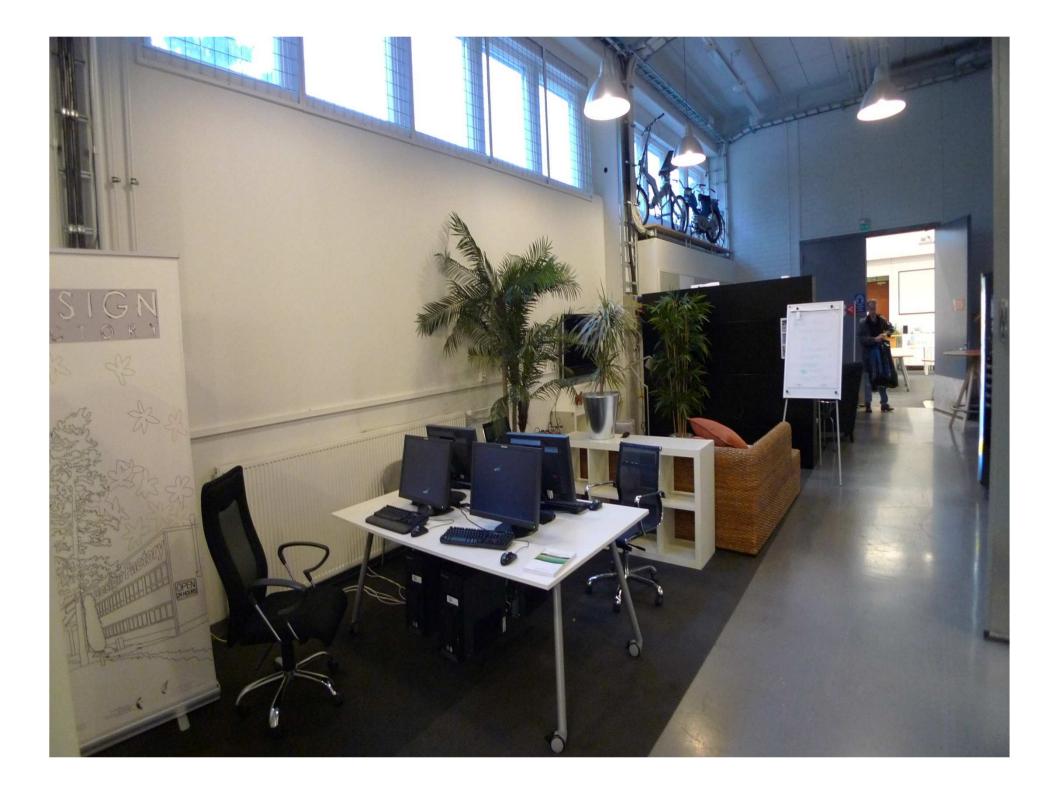


Photos from Esa Santamäki and http://www.flickr.com/photos/39975941@N03/3675064644/in/photostream/















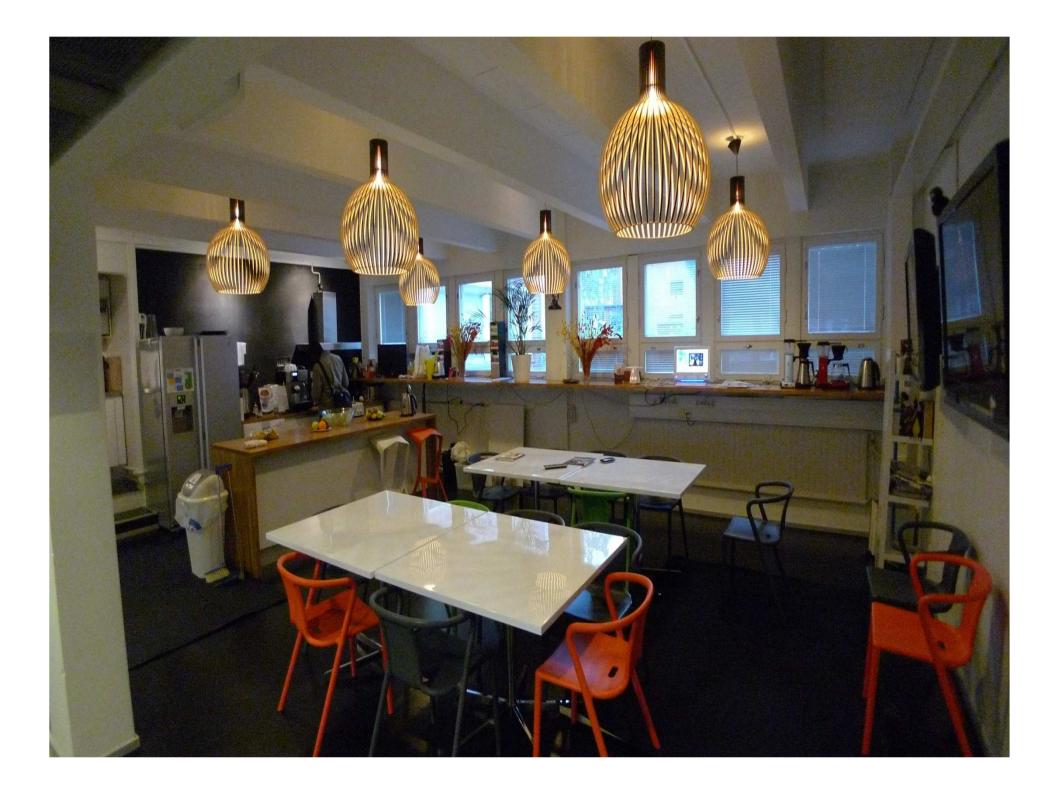














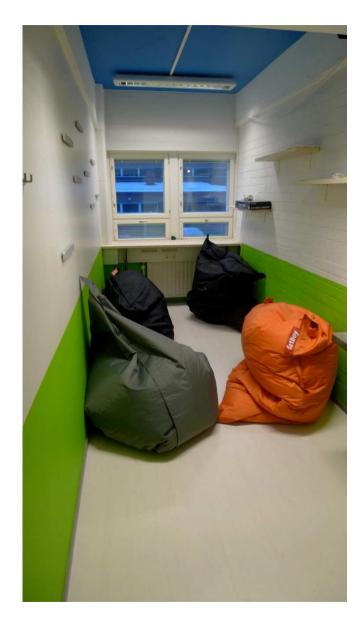


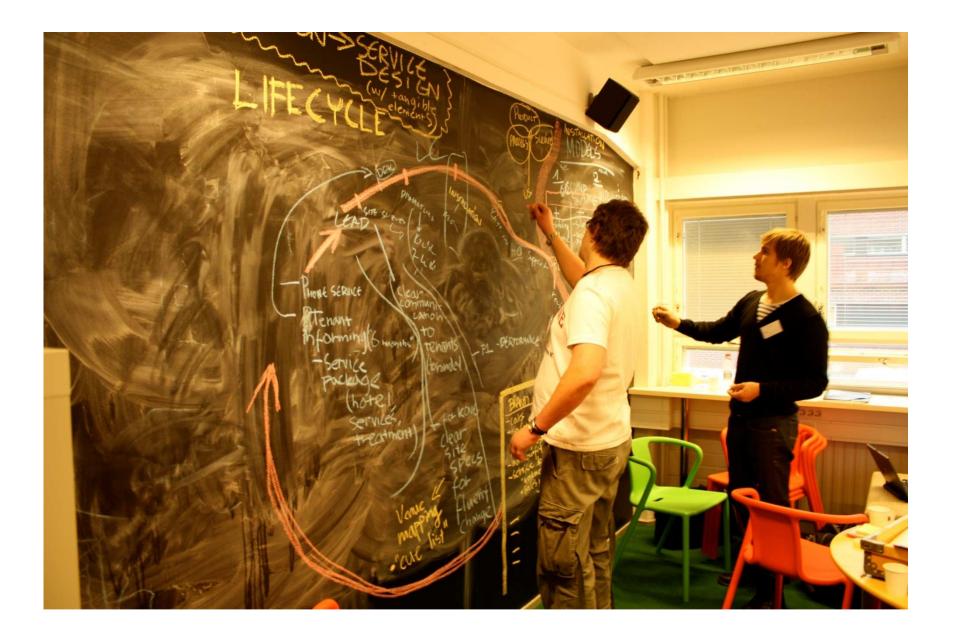




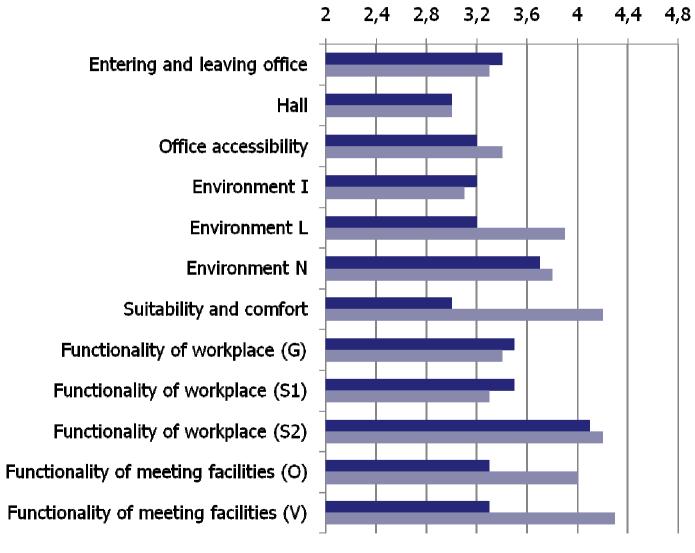








User Feedback; Comparison between R-department and Design factory



R-department Design Factory

## Future plans

- More space for start-ups
- New building wing ready in a year
- Design Factory ideologies
  - & environments spread all

around Finland & world

Design Factory Venture Park





#### Conclusions

Connectivity to social and digital networks

- Uniting students, researchers, universities, companies, start-ups, people, kids.
- Creativity and product development is SHARING ideas

Embededdness

- Focus is on the early phases of Product Development
- More doing than planning
- Entrepreneurship: support and help should be easy to get
- Shared spaces open innovation
- Prototype the activities build on each other's ideas

Experience management

- One has to have fun while working
- One has to learn new things everydayand then work like crazy
- Failures are OK!
- Spaces can be rented on daily bases



### Conclusions

Design Factory is a constantly developing

- physical,
- social and
- mental environment

aiming to support interdisciplinary and international co-operation between parties interested in design and development.



#### Welcome to visit!

#### http://aaltodesignfactory.fi



#### Thank You – questions?

