CONTENT / Propositions

1. Each university goal can be frustrated by the physical campus.
2. It takes a crisis – for example a fire – to change the academic workplace.
3. The innovative and flexible knowledge economy can bring new life to obsolete industrial heritage buildings.
4. The campus of the future is a city.

1. Elke universiteitsdoelstelling kan door de fysieke campus worden gefrustreerd.
performance criteria university

- competitive advantage
- profitability
- productivity
- sustainable development

"2 worst case scenarios":
1. invest in campus → high costs → at cost of resources education & research
2. neglect backlog maintenance → productivity loss → lower profitability → lower rank

goal: find estate strategy that optimally contributes to all performance criteria

Managing the university campus

- strategic policy makers
- financial controllers
- users
- functional
- technical managers
- physical

Every project or campus can be assessed from 4 perspectives

- strategic
- financial
- users
- functional
- physical

key performance indicators (for measuring added value)

- competitiveness
- profitability
- productivity
- sustainable development

source: Den Heijer 2011 – investment costs from 350 to 4400 euro / m2 gross floor area

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Appendix I
Dutch university campuses

Erasmus University Rotterdam
Leiden University
Open Universiteit
Radboud University Nijmegen
University of Groningen
Delft University of Technology
Eindhoven University of Technology
Maastricht University
University of Twente
Utrecht University
University of Amsterdam
Tilburg University
Vrije Universiteit Amsterdam
Wageningen University
EUR
LEI
OU
RU
RUG
TUD
TUE
UM
UT
UU
UvA
UvT
VU
WU

Universities in the Netherlands
14 universities in the Netherlands
17 mln Dutch inhabitants
240,000 students
24,000 academic staff
21,000 support staff
+ 40 institutions for higher professional education ("hoogscholen")
source data: 2011

University campus in 2011

Decreasing public funding
Aging campus (technically and functionally)
More than 50 % of floor area is from 1960s and 1970s
Low occupancy and frequency rates
Sustainable campus → "greening the campus"
Increasing costs of campus
Expanding campus → city

Managing the university campus → Managing the European campus

• putting campus (management) on the strategic agenda
• gathering data in European network
• use ‘crowd sourcing’ and ‘crowd funding’ (EU universities)
• to generate collective management information
• compare campus management models (campus ownership)
• result: publications / benchmarks / tools
• supporting campus decisions of EUA members

Problems internationally shared

2. It takes a crisis – for instance a fire – to change the academic workplace

Er is een crisis voor nodig – bijvoorbeeld een brand – om de academische werkplek te veranderen.

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Aankondiging in Aula

Found a ‘new’ building within 10 days

sustainable = re-use

ASSIGNMENT: relocate 3300 students and > 800 employees
DEADLINE: renovate 320,000 sqft < 6 months
+ new construction 40,000 sqft < next 6 months

Foto’s bezoek Julianalaan

What we started with in June 2008...
Facts
150 participating companies
25 consultancy / architecture firms
350 construction workers on site
800 orders
15 km sprinkler / 5500 sprinklers
30,000 litres paint
220 km data cables
5200 wall outlets

Undergraduates < 4 months after fire
Project ready < 1 year

3. The innovative and flexible knowledge economy can bring new life to obsolete industrial heritage buildings.

De innovatieve en flexibele kenniseconomie kan nieuw leven geven aan industrieel erfgoed.
Challenge the future
Delft University of Technology
42,000 m²

Cellular office space in old building – average occupancy rate 15%

11th floor – 13.5 m2 usable floor area / fte

Design the building as a city – reduce footprint (-15%), more shared / public space

32,000 m²

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GOALS ORGANISATION
1. Community building
2. More effective support of education, research & management
3. Creating the place to meet
4. Stimulate social interaction & intellectual interaction
5. Flexible use of facilities
6. Sustainable

Private → Public space
Contextual Concept: Connectivity and variety

Campus of the future:
- sustainable solutions
- CO$_2$ neutral campus
- less m$^2$, more quality

BK City Slim
Transform BK City to an energy / CO$_2$ neutral building
Reduce footprint: more users / m$^2$
Reducing m2, but improving...
Quality of place (interior design)

Reducing m2, but improving...
Quality of place (cultural heritage)

Reducing m2, but improving...
Quality of life (campus & city)

4. The campus of the future is a city

De campus van de toekomst is een stad

the academic workplace
place → building → city

one territorial office workplace → many non-territorial places


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FUNCTION MIX – campus of the future

Academic: education & research

Studio space

To share or not to be…

Academic: education & research

Studio space

http://www.managingtheuniversitycampus.nl
New concepts for the place to study

<table>
<thead>
<tr>
<th>Workplace</th>
<th>Floor area (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brief</td>
<td>5.6 m²</td>
</tr>
<tr>
<td>Realized</td>
<td>4.0 m²</td>
</tr>
<tr>
<td>2011</td>
<td>4.3 m²</td>
</tr>
</tbody>
</table>

- 283 tables, 1530 chairs
- 0.75 workplace / enrolled student
- Occupancy rate > 40%

m² is usable floor area (m² ufa)

New concepts for the academic office

- no individual territory
- 12 m² usable per fte ➔ became more after design process
- activity related concept
  a. SILENT ROOMS
  b. LIVING ROOMS
  c. MEETING ROOMS
  - formal / informal
  d. TEAM OFFICES

workplace for employees:
- brief: 12 m²
- realized: 14 m²
- 2011: 11.2 m²
- 470 ➔ 396 desks
- 0.86 workplace / fte
- occupancy rate 22% ➔ 27%

m² is usable floor area (m² ufa)


Dutch references — new academic workplace

http://www.managingtheuniversitycampus.nl
ORGANISATIONAL LEVELS / potential partners for shared use, management and/or ownership

- global
- continental
- national
- regional
- local

university
faculty
department
section
individual

world
Europe
Netherlands
region
city
campus
building
zone
subzone
place

PHYSICAL SCALES / resources to accommodate the required campus functions

- lecture halls
- class rooms
- academic office space
- representative meeting rooms
- informal office space
- support staff
- laboratories
- university library
- personal studios / study places
- ceremonial places
- conference facilities
- special educational facilities
- general hospital
- academic nursing school
- medical school

footprint
use autonomy

resources / m² available - + - + - +

ACADEMIC FUNCTIONS • EDUCATION & RESEARCH

Campus of the future:
- sharing laboratories and other expensive facilities

Storage

includes digital storage

PROBLEMS
- accessibility individual archives for groups – sharing of books / material
- same books / magazines / reports on every shelf: waste of resources?
- expensive m² in use for storage
- lack of “storage management” – how often do we clean up
- culture change of “paperless office” (or “less paper office”)
- supply generates demand

SOLUTION
- “to share or not to be”
- books are UNIVERSITY property
- share digital resources

http://www.managingtheuniversitycampus.nl
Campus of the future: student & faculty housing

RESIDENTIAL
- student housing /national
- student housing /international - short stay
- alumni housing /young potentials, creative class
- faculty housing
- housing for support staff
- hotel facilities
- short stay apartments for visiting professors

RETAIL & LEISURE
- music/fitness
- book stores
- coffee bars
- student associations and societies /institutes
- restaurants (lunch)
- restaurants (dinner)
- bars
- cinemas
- jazz clubs
- cultural centre
- dry cleaners, dry care centre, supermarkets

Campus of the future: creating the place to meet

http://www.managingtheuniversitycampus.nl
Public space, like in a city

• usable space in corridors for informal meetings and work

Business & Science campuses

Campus of the future: “university”
(photography Groningen)
Campus of the future: univer-city
- building a knowledge city
- competitive advantage of city for university / university for city
- knowledge workers: economic growth

Region: Den Haag
Delft
Rotterdam
network of campus functions

European 'Univer-cities' in the top 150 world-wide

Campus of the future: model A – traditional university
- exclusiveness, elite & large
- can we still afford this?

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Campus of the future:
model B – network university
- "campus is market place of knowledge"
- sharing the campus
- "univer-city"

Campus of the future:
model D – University College
small, broad, Bachelor in English, selected talent

<table>
<thead>
<tr>
<th>Model A</th>
<th>Model B</th>
<th>Model C</th>
<th>Model D</th>
</tr>
</thead>
<tbody>
<tr>
<td>m²</td>
<td>same</td>
<td>much less</td>
<td>less</td>
</tr>
<tr>
<td>users</td>
<td>more</td>
<td>more</td>
<td>less</td>
</tr>
<tr>
<td>euros</td>
<td>more euros available (from more users)</td>
<td>more euros available (for less m²)</td>
<td>more euros available (higher added value)</td>
</tr>
<tr>
<td>quality per m²</td>
<td>higher</td>
<td>higher</td>
<td>higher</td>
</tr>
</tbody>
</table>

Strategic choices, linked to stakeholders

- accommodate "exclusive" and "closed" versus accommodate "shared" and "open"
- low % of resources spent on the campus versus high % of resources spent on the campus
- only public funding versus allow private funding
- low space use per student or employee versus high space use per student or employee
- focus on individual needs versus focus on collective needs
- accept % buildings in bad condition versus all buildings at least reasonable condition
- smaller ecological footprint versus largely ecological footprint

http://www.managingtheuniversitycampus.nl
Changing the academic workplace

• from private to more public space
• from office space to a multifunctional working environment
• from individual to shared - “to share or not to be…”
• is expanding from a workplace to the campus and the city
• trading quantity (per user) for quality of the working environment
• from one assigned workplace to many meaningful workplaces or to finding the most comfortable workplace in every season
• increasingly paperless (paper determines territory…)

THEORIES & FRAMEWORKS
1. Convince policy makers of role campus in financial sustainability.

AFTER OUR FIRE: BK CITY
2. Never waste a good crisis.

NEW CONCEPTS TESTED
3. Use European heritage buildings as a competitive advantage.

STRATEGIC CHOICES
4. Use European historical inner cities and collective qualities as a competitive advantage – to share or not to be

SHARING KNOWLEDGE IN EUROPEAN NETWORKS

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@alexandra_dh

More about case BK city & book "Managing the university campus”:
http://managingtheuniversitycampus.nl

http://www.managingtheuniversitycampus.nl