Managing the university campus
... and opportunities of a crisis

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http://www.managingtheuniversitycampus.nl
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.

CONTENT

THEORIES & FRAMEWORKS
1. Each university goal can be frustrated by the physical campus.

AFTER OUR FIRE: BK CITY
2. It takes a crisis – for example a fire – to change the academic workplace.

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

STRATEGIC CHOICES
4. The campus of the future is a city.
Each university goal can be frustrated by the physical campus

Elke universiteitsdoelstelling kan door de fysieke campus worden gefrustreerd.

“If you think education is expensive, try ignorance”

Derek Bok, former Harvard president

[I used this quote in the first sentence of my book]
performance criteria university

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

impact of campus on ‘financial sustainability’

Managing the university campus

strategic
policy makers

financial
controllers

users
functional

technical
managers
physical

focus on university
focus on real estate

strategic
operational
Every project or campus can be assessed from 4 perspectives

- Strategic: Policy makers
- Functional: Users
- Financial: Controllers
- Physical: m2

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performance criteria university

- Competitive advantage
  - Strategic goals to support quality ambitions
  - Financial costs, benefits, value
  - Productivity
  - Sustainable development

- Profitability
  - Campus management
    - Users, satisfaction, mix of functions / spaces functionel
    - Real estate projects (input)
      - # users involved
      - Types of m2
      - Budget in euros
      - Supporting culture
      - Improving quality of place
      - Increasing real estate value
      - Decreasing costs
      - Increasing user satisfaction
      - Increasing flexibility

- REAL ESTATE PROJECTS (INPUT)
  - Through strategic goals
  - Through functional goals
  - Through physical goals

- Performance (OUTPUT)
  - Competitive advantage
  - Profitability
  - Productivity
  - Sustainable development

Adding value

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CREM framework

Campus management is improved as real estate decisions are explained with more strategic, financial, functional and physical data to policymakers, controllers, users and technical managers, referring to their key performance indicators.
14 universities in the Netherlands:  
16 mln Dutch inhabitants  
220,000 students  
45,000 faculty/staff  
+ 46 institutions for higher professional education ("hogescholen")  
source data: 2008

Universities in the Netherlands

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Source: Managing the university campus (Den Heijer, 2011)
Problems internationally shared

Faculty of Architecture building destroyed by fire – May 13, 2008
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.
Emergency management

< 3 days after the fire
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
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

Phase 1 - EAST:
16,000 m² gfa
in use September 2008

Phase 2 - WEST:
16,000 m² gfa
in use November 2008

Phase 3 - GLASS HOUSES:
4,000 m² gfa new
in use May 2009

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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.
Cellular office space in old building – average occupancy rate 15%
11th floor – 13.5 m² usable floor area / fte

32.000 m²
Design the building as a city
– reduce footprint (-15%), more shared / public space
BK city won an EU price (Europa Nostra 2011) for conservation of cultural heritage
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
Campus of the future:
- sustainable solutions
- CO₂ neutral campus
- less m2, more quality

(photo: Wageningen)

Campus of the future: - lecture halls – only to share

(photo: VU Amsterdam)
Campus of the future:
- transparency, shared facilities
(photo: VU Amsterdam)

Campus of the future:
- creating the place to meet
(photo: Library TU Delft)
Campus of the future:
- more quality, less quantity
- new life for old buildings
- increase benefits / m2 to cover high maintenance cost / m2
- users accept more defects of meaningful, historic buildings

Reducing m2, but improving...
Quality of place (interior design)


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Reducing m2, but improving...

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

the academic workplace
place → building → city

one territorial office workplace → many non-territorial places
The campus of the future is a city

De campus van de toekomst is een stad
FUNCTION MIX – campus of the future

ACADEMIC: EDUCATION & RESEARCH
RESIDENTIAL
INFRASTRUCTURE
RELATED BUSINESS
RETAIL & LEISURE

2011: “To share or not to be…”

<table>
<thead>
<tr>
<th>ORGANISATIONAL LEVELS / potential partners for shared use, management and/or ownership</th>
<th>global</th>
<th>continental</th>
<th>national</th>
<th>regional</th>
<th>local</th>
<th>university</th>
<th>faculty</th>
<th>department</th>
<th>section</th>
<th>individual</th>
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<td>models for shared use, management and/or ownership</td>
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PHYSICAL SCALES / resources to accommodate the required campus functions

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1. Studio space
1. Studio space

- student back at the faculty
- 6 m² usable per workplace
- → became less after decision process
- tables are assigned to groups of students per semester (no permanent territory)
- smart use of space (by smart scheduling)
2. Office space
2. Office space

- no individual territory
- 12 m² usable per fte 
  → became more after design process
- activity related concept

students and academic staff sharing workspace → reducing the footprint, improving interaction
3. Lecture halls

- more shared use of large halls
- more small spaces locally
- flexible floor plan
- differentiation of quality: also used for seminars / conferences
4. Library
5. Educational facilities

6. Laboratories
7. Conference rooms

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8. Restaurants & bars

8. Restaurants & bars
9. Public functions
BK city got many nominations and won Architecture prices (2009-2011)

Public space, like in a city

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9. Public space

• usable space in corridors for informal meetings and work

10. Storage

→ including digital storage
Virtual tour – BK city

some academics – 30 of 450 – were still very dissatisfied...
- “we will work at home”
- “we can not concentrate in this colorful, crowded city”
- “we want to share an office with the same person every day”
- “we don’t have enough individual storage space” (just 1,20 m)
PRIMARY FACTS

ORGANISATION

- 1400 BSc students
- 1675 MSc students
- 450 FTE staff
- 800 employees
- 170 0,0 fte

BUILDING

- 700 BSC STUDIO DESKS
- 830 MSC STUDIO DESKS
- 470 DESKS
- 350 AVAILABLE EXTRA SEATS

AND MUCH MORE

- 270 PARKING PLACES

BUILDING-2011

- 2260
- 400
- 44 MEETING ROOMS
- 5 LECTURE HALLS
- 1 LIBRARY
- 1 RESTAURANT
- 3 BARS

Changing the academic workplace

strategic goals:
- increase competitive advantage (image)
- stimulate collaboration between different user groups
- change culture

financial goals:
- reduce risks
- reduce costs
- increase value

functional goals:
- higher productivity
- better match for user activities
- higher quality of the working environment

physical goals:
- reduce the footprint
- reduce COₒ emission

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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
- increasingly paperless (paper determines territory…)
- from one assigned workplace to many meaningful workplaces or to finding the most comfortable workplace in every season

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Strategic choices, linked to stakeholders

<table>
<thead>
<tr>
<th>accommodate “exclusive” and “closed”</th>
<th>accommodate “shared” and “open”</th>
</tr>
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<tbody>
<tr>
<td>low % of resources spent on the campus</td>
<td>high % of resources spent on the campus</td>
</tr>
<tr>
<td>only public funding</td>
<td>allow private funding</td>
</tr>
<tr>
<td>low space use per student or employee</td>
<td>high space use per student or employee</td>
</tr>
<tr>
<td>focus on individual needs</td>
<td>focus on collective needs</td>
</tr>
<tr>
<td>accept % buildings in bad condition</td>
<td>all buildings at least reasonable condition</td>
</tr>
<tr>
<td>small(er) ecological footprint</td>
<td>large(r) ecological footprint</td>
</tr>
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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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Follow me on Twitter: @alexandra_dh

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

The campus of the future is a city
The city of the future is a knowledge city

Designing the campus of the future:

1. new life for ‘intellectual heritage’ with emotional value
2. public space (inside and outside buildings)
3. concepts for intensive, flexible, sustainable use
4. transformation, renovation, re-use
5. residential, retail & leisure functions for international community

Changing the academic workplace

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functional goals:
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Managing the university campus

strategic goals:
• reduce risks
• reduce costs
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physical goals:
• reduce the footprint
• reduce CO$_2$ emission