Managing the university campus: strategic choices and future models

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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.

“If you think education is expensive, try ignorance”

Derek Bok, former Harvard president

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

my analogy: “If you think the campus is expensive, try neglecting it”

http://www.managingtheuniversitycampus.nl
1. Invest in campus → high capital costs → at cost of resources education & research
2. Neglect back-up maintenance → productivity loss → lower profitability → lower rank

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

Managing the university campus

Every project or campus can be assessed from 4 perspectives

Performance criteria university
Appendix I
Dutch university campuses

Universities in the Netherlands

University campus in 2011

Problems internationally shared

Managing the European campus
country profiles

Example: France

http://www.managingtheuniversitycampus.nl
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

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.

Movie “The unforgettable fire”

Emergency management
< 3 days after the fire
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
3. The innovative and flexible knowledge economy can bring new life to obsolete industrial heritage buildings.

De innovatieve en flexibele kennisconomie kan nieuw leven geven aan industrieel erfgoed.

42,000 m²

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

11th floor – 13.5 m² usable floor area / fte

32,000 m²

http://www.managingtheuniversitycampus.nl
Design the building as a city
– reduce footprint (-15%), more shared / public space

Private → Public space
Contextual Concept: Connectivity and variety

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

BK city won an EU prize (Europa Nostra 2011) for conservation of cultural heritage
Campus of the future:
- sustainable solutions
- CO₂ neutral campus
- less m², more quality

(photo: Wageningen)

Transforms BK City to an energy / CO₂ neutral building
Reduce footprint: more-users / m²

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

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

http://www.managingtheuniversitycampus.nl
Reducing m2, but improving... Quality of life (campus & city)

the academic workplace place → building → city

one territorial office workplace → many non-territorial places

4. The campus of the future is a city

De campus van de toekomst is een stad

FUNCTION MIX – campus of the future

http://www.managingtheuniversitycampus.nl
“To share or not to be…”

Academic: education & research

<table>
<thead>
<tr>
<th>functions</th>
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<tbody>
<tr>
<td>Academic</td>
</tr>
<tr>
<td>class rooms and studio spaces (small group)</td>
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<td>lecture halls (large group)</td>
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<tr>
<td>office space (faculty)</td>
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<td>laboratories</td>
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<td>office space support staff</td>
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<tr>
<td>study places for individual use (small groups)</td>
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<tr>
<td>board</td>
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<tr>
<td>special places for ceremonies (graduation)</td>
</tr>
<tr>
<td>special conference facilities</td>
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<tr>
<td>general educational facilities (science, media, arts)</td>
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<tr>
<td>academic hospital</td>
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<tr>
<td>medical school</td>
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PHYSICAL SCALES / resources to accommodate the required campus functions

<table>
<thead>
<tr>
<th>ACADEMIC FUNCTIONS</th>
<th>EDUCATION &amp; RESEARCH</th>
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<tbody>
<tr>
<td>RESIDENTIAL FUNCTIONS</td>
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<td>RETAIL &amp; LEISURE FUNCTIONS</td>
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<td>RELATED BUSINESS FUNCTIONS</td>
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<td>INFRASTRUCTURE FUNCTIONS</td>
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models for shared use/management/ownership with internal partners on campus

models for shared use/management/ownership with external partners on campus

TO SHARED OR NOT TO BE SHARED…”

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)

CREATE “HOME AWAY FROM HOME”

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

workplace for students:
• brief: 5.6 m²
• realized: 4.0 m²

• 2011: 4.3 m²
• 283 tables, 1530 → 2260 chairs
• 0.75 workplace / enrolled student
• occupancy rate > 40%

m² is usable floor area (m² ufa)


Lecture halls

- more shared use of large halls
- more small spaces locally

- flexible floor plan
- differentiation of quality: also used for seminars / conferences

source: photo: TU Delft / Alexandra den Heijer

http://www.managingtheuniversitycampus.nl
Campus of the future: 
- transparency of processes; 
to support image of faculties 
and university

Library: quiet place to study

Educational facilities

Changing the academic office

http://www.managingtheuniversitycampus.nl
Office space

- 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

New concepts for the academic office

<table>
<thead>
<tr>
<th>Workplace for employees: brief</th>
<th>realized</th>
<th>usage</th>
<th>2011</th>
<th>470</th>
<th>396 desks</th>
<th>0.86 workplace / fte</th>
<th>occupancy rate 22% → 27%</th>
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<td>brief: 12 m²</td>
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<td>realized: 14 m²</td>
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<td>2011: 11.2 m²</td>
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m² is usable floor area (m² ufa)

Dutch references – new academic workplace

Storage

⇒ including 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
ORGANISATIONAL LEVELS / potential partners for shared use, management and/or ownership
- global
- continental
- national
- regional
- local
- university
- faculty
- department
- section
- individual

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

ACADEMIC FUNCTIONS • EDUCATION & RESEARCH
- Campus of the future:
  - sharing laboratories and other expensive facilities

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

RETAIL & LEISURE
- sport facilities
- book stores
- coffee bars
- student associations and societies / fraternities
- restaurants, lunch / dinner
- bars
- theaters
- jazz / clubs
- cultural centre
- dry cleaning, day care centre, supermarkets
Campus of the future: student & faculty housing

Campus of the future: - creating the place to meet (photo: Delft)

Restaurants & bars
Public space, like in a city

Public space

- usable space in corridors for informal meetings and work

Business & Science campuses

 RELATED BUSINESS
- knowledge (academic spin-off)
- R&D departments (academic spin-off)
- related business/service spin-off
- business who combine learning/working
- combinations: leisure/leisure places (artists)

 INFRASTRUCTURE
- parking space
- transport on campus (trams)
- accessibility (by car)
- accessibility (by public transport)

Campus of the future: "university" (photo Groningen)
Campus of the future:

**model A – traditional university**
- exclusiveness, elite & large
- can we still afford this?

**model B – network university**
- "campus is marketplace of knowledge"
- sharing the campus
- "univer-city"

**model C – virtual university**
- work where you want

**model D – University College**
- small, broad, Bachelor in English, selected talent

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<thead>
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<th>Model A: Traditional university (° reference)</th>
<th>Model B: Network university</th>
<th>Model C: Virtual university</th>
<th>Model D: University College</th>
</tr>
</thead>
<tbody>
<tr>
<td>m²</td>
<td>same m²</td>
<td>much less m²</td>
<td>less m²</td>
</tr>
<tr>
<td>users</td>
<td>more users</td>
<td>more users</td>
<td>less users</td>
</tr>
<tr>
<td>euros available (from more users)</td>
<td>more euros available</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 quality</td>
<td>higher quality</td>
<td>higher quality</td>
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http://www.managingtheuniversitycampus.nl
combining future campus models, adding to the university’s performance

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

Strategic choices, linked to stakeholders

<table>
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<th>Accommodate</th>
<th>accommodate</th>
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<tbody>
<tr>
<td>“exclusive” and “closed”</td>
<td>“shared” and “open”</td>
</tr>
<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(er) ecological footprint</td>
</tr>
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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
- from one assigned workplace to many meaningful workplaces or to finding the most comfortable workplace in every season
- increasingly paperless (paper determines territory…)

Follow me on Twitter: @alexandra_dh

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

Movie “The making of BK city”