Campus of the future
trends, cases and choices to make

Part I
1. Today’s campus
   strengths and weaknesses, opportunities and threats
2. Case “BK city”
   my own faculty of architecture building as a “living lab”
   to test campus solutions, after a fire destroyed the old building
Project team BK city (2008)
ASSIGNMENT: relocate > 3000 students and > 800 employees
DEADLINE: renovate 32,000 m² < 6 months
+ new construction 4,000 m² < next 6 months

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**Part II**
3. Campus trends
Innovations on campus
4. Strategic choices to make
summarizing campus decisions for the future

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**1. Today’s campus**
strengths and weaknesses, opportunities and threats

**FUNCTIONAL definition of “campus”**

- **ACADEMIC**
classrooms, library, offices, laboratories, lecture halls, ...
- **RESIDENTIAL**
student housing, hotels, ...
- **RELATED BUSINESS**
start-ups, incubators, industry, ...
- **RETAIL & LEISURE**
sports, restaurants, cafés, ...
- **INFRASTRUCTURE**

**PHYSICAL definition of “campus”**

the “campus” is defined as the (collection of) buildings and land, used for university or university-related functions

**Campus Weakness**
**Threat for the (financial) future**

More than half of the university buildings is from 1960s-1970s, in bad technical & functional state (and energy-inefficient).

→ in Europe 85 mln m² needs energy-efficient transformation
→ smart, sustainable strategies required
**Campus Weakness**

Low utilisation rates, high vacancy rates in academic offices, laboratories, classrooms. "Sometimes overcrowded, often empty."

- high costs for underutilized space
- smart planning tools required (= current research project, see trends)

**Campus threat**

Campus costs about 8% to 16% of university budget – and rapidly increasing – affecting their financial sustainability.

- Norway: 21% of university budget spent on campus (2017)
- depends on % old buildings, % laboratories and space use
- smart investment strategy required

** Costs versus value**

Students and staff often prefer old, unique buildings with "character and soul"... and feel anonymous in brand-new flexible buildings... They need an academic home.

"NOT Investing in the campus is NOT investing in education and research"

A campus in bad condition NEGATIVELY affects university goals, financial resources and user productivity and satisfaction

- Harms the university’s reputation, less attractive to talent
- Lower productivity of staff and students
- Higher maintenance costs, lower value
- Higher energy use, low quality buildings

Opportunity: using the city as campus

Study choice research shows: the quality of the city is equally important as the quality of the university!
Campuses, Cities & Innovation

- Where (technology) campuses are located, innovation takes place
- Positive effect of presence (top-ranked) university on economic growth, demographic profile and social-cultural facilities of cities and regions

“Investing in the campus is investing in education and research”

A campus in good condition POSITIVELY affects university goals, financial resources and productivity and satisfaction.

- Supports the university’s reputation and attractiveness
- Higher productivity of staff and students
- Higher value, lower energy costs
- High quality buildings, lower ecological footprint

2. Case BK city

Fire in 2008 destroyed the old building, new building as living lab

2008
- relocate >3000 students
- > 800 staff members
- in < 6 months
- use the opportunity of a crisis: implement radical changes
- irony: ultimate case study for research

Movie 1 – “The unforgettable fire”

Architects suggested: “make a new icon”
We said: “no, let us give new life to an old icon...”
Lessons

1. Design the building as a city – keep the best places public, intensify use: density of people

Important are:
- density of people
- acknowledge # visitors
- keep best places public
- orientation, logical floorplan
- sense of place: heritage
- branding: showroom, legacy

Lessons

2. Reduce m2 - trade quantity for quality of space
32,000 m² = -25%

Creating a place to meet was most important after the fire...

New building has more public space to share

**LESSONS**

#3

Invest in visible quality – "window dressing" / "distractions"

Reduction m², but improving...

Quality of place (interior design)

**LESSONS**

#4

Embrace academic history – use heritage for branding
International references:
- Heidelberg
- Uppsala
- Sorbonne/Paris
- Glasgow
- Gent

LESSONS
#5
Avoid individual territory ("no names on the door")

Old building: “Cellular office symbolic for cellular research”

“on a busy day: less than 20% of the desks is occupied”

source: various utilization studies

LESSONS
#6
Implement flexible concepts – mixed use – but avoid standardization and "open plan"

Stimulate social interaction & intellectual interaction

... at our Faculty of Architecture & the Built Environment ...

Campus of the future: - intensive and flexible use of high quality facilities
LESSONS

#7
Make it feel like home – “home away from home”

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LESSONS

#8
Allow students + staff to decorate their working environment
Personalizing their space helps to make (international) students feel at home in university buildings.

LESSONS

#9
Make it a showroom with the best products of students + staff

LESSONS

#10
Make sure people can see each other work
for security, community building, serendipity → innovation

Campus of the future:
- transparency of processes to inspire and learn from each other
Movie 2 – “The making of BK city”

online version see: http://managingtheuniversitycampus.nl/case-bk-city

DISCUSSION / BREAK

Campus of the future

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3. Campus trends
Innovations on campus
Why “campus favorite study place”?

“push factors”
- Distractions at home:
  - roommates
  - social life, hobbies
  - Netflix
- More pressure on students:
  - higher tuition fees
  - stricter deadlines, rules
  - risk of burn-out

“pull factors”
- Quality of campus:
  - better facilities, network, ICT applications
- Other students:
  - more group work
  - group pressure to study
  - friendship and love (!)

Students: “Protect us from working day & night”
“We need regular working hours and deadlines”

Campus NL – “many more users on same m2”

- More and more (20-25%) unregistered users and visitors
- Preferences international students: quality of life is important
- Research (funding) has become more unpredictable (>2 year contracts)
- More temporary staff
- Functional demands change rapidly (labs, ICT, legislation)

Campus models A-B-C as basis

A = traditional
- exclusive & territorial

B = network
- interactive & shared

C = virtual
- place independent & individual

Campus NL – more dynamic

De universiteit zit weer stampvol

“Student ondanks digitalisering steeds vaker op de campus”

Camo (2016–2017)

Student ontdekt campus als favourite place to study

Investeren in de toekomst

Campus NL

C Unive rsiteit

Ce nt

ruur rijen dik voor de
Utrecht staan ze om acht
vaker op de universiteit.

Campa
den

en beschikbaarheid van voorzienin
ten van de studie zetten de student
“overal werken, maar ze hebben be
ken, hebben niet geleid tot minder
die een virtuele campus mogelijk ma
en wil zijn dan tien jaar terug

De VU heeft ook

Strengere selectie, studievoort
Met hun laptop kunnen studenten
bouw; dat is het voordeel
ten en vaak lege werkkamers, is ach
galmende gangen, volle boekenkas
zijn benen zien lopen.

Ook zijn andere aanpassingen no

Een steeds groter deel komt uit het

veen op de campus is
staat stelt buiten de campus te stude
van de universiteitenkoepel VSNU en
maakt. Het is opgesteld in opdracht
TU Delft, dat maandag openbaar is ge
van het campus research team van de
men.

Wel met bijna een kwart is toegeno
gegroeid, terwijl het aantal studenten
beschikbare oppervlakte nauwelijks
sterkte restaurant dicht is. Farma
pizzakoeriers langs, omdat het uni
theek van 7 uur

Versiteitsrestaurant dicht is. Farma

De student juist vaker op de campus is
staat stelt buiten de campus te stude
van de universiteit, aldus koepel

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Worden we? Stu den t e re c o rd
2016/17

“Student rediscovers campus as favourite place to study”

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Worden we? Stu den t e re c o rd
2016/17

“Student rediscovers campus as favourite place to study”
**Campus NL – “solid, fluid, gas”**

- **A = traditional** - exclusive & territorial -
- **B = network** - interactive & shared -
- **C = virtual** - place independent & individual -

**Campus strategies in 10 themes**

1. **Revisiting the academic workplace**
2. **Investing in state-of-the-art laboratories**
3. **Enriching campus with non-academic functions**
4. **Extending opening hours: evenings, weekends, summer school**
5. **Implementing “smart tools” for campus navigation**
6. **Creating flexible learning environments with more study places**
7. **Replacing or renovating old faculty buildings as home base**
8. **Giving new life to old buildings, including heritage buildings**
9. **Use circulation space – inside and outside – more effectively**
10. **Stimulating sustainable behaviour and testing innovative technology.**

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**Campus NL – theme 1 “rethinking the academic workplace”**

Finding the right combination between:

- (A) Individual workplaces
- (B) Workplaces to share
- (C) Working from home or anywhere else

**Professor is interviewed by the BBC at his workplace at home – which has some “distractions”**

Movie 3 – link to BBC website


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**Campus NL – theme 2 “more flexible learning environment”**

From 15% m2 assigned for education to 33% m2 for educational activities - including study places in libraries, restaurants, coffee bars, meeting rooms, offices.

**Campus NL – theme 3 “new faculty buildings”**

- When universities become larger, the need for smaller communities increases
- Large faculty buildings can have low market values, because of their size, function mix and campus location

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**Presentation Alexandra den Heijer**

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**Campus NL – theme 3 “new faculty buildings”**

- When universities become larger, the need for smaller communities increases
- Large faculty buildings can have low market values, because of their size, function mix and campus location
Campus NL – theme 4 “finding partners to invest in labs”

Investing in innovative research – more often in partnerships and shared use

Campus NL – theme 5 “adding more non-academic functions”

Van sports facilities to incubators for start-ups, from student housing to foodtrucks

Campus NL – theme 6 “new life for old buildings”

More than half of the university buildings (in m2) dates from the 1950s, 60s, 70s with a substantial amount of heritage buildings

Campus NL – theme 7 “expanding opening hours”

For study (groups), not for contact hours with staff. Some libraries are open until 2am in exam periods

Campus NL – theme 8 “more functional circulation space”

Inside and outside – for activities, but also to showcase “the best of education and research”

Campus NL – theme 9 “smart tools”

Preventing “booked, unused space”
Measuring “real campus use” with sensors (Bluetooth, cameras, WiFi / Eduroam etc.)
Design navigation apps for the campus
Sustainable technology, but more importantly: sustainable behaviour (more awareness among students and staff)

4. Strategic choices to make
Summarizing campus decisions for the future

Campus NL – combination “solid, fluid, gas”

A = traditional - exclusive & territorial -
B = network - interactive & shared -
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Campus strategy responsibility entire university

Campus strategies in 10 themes

1. Rethinking the academic workplace
2. Creating flexible learning environments with more study places
3. Investing in state-of-the-art laboratories
4. Replace or renovate old faculty buildings
5. Enrich campus with non-academic functions
6. Give new life to old buildings, including heritage buildings
7. Extend opening hours: evenings, weekends, summer school
8. Use circulation space – inside and outside – more effectively
9. Implement “smart tools” for campus navigation
10. Stimulate sustainable behaviour and test innovative technology.

Campus strategy is about “balancing value and costs”

Every campus decision affects university goals, financial resources, and user productivity and satisfaction

2006: “good luck campus manager”

2016: collective responsibility
Managing the university campus (2011)
The European Campus (2014)
Smart campus tools (2016)
Campus NL (2016)
Campuses, cities and innovation (2017)

About the books, other publications and this lecture:
www.managingthecampus.nl

DISCUSSION