



# Striving for sustainability, integration and elite level — Strategic campus development at DTU



$$f(x+\Delta x) = \sum_{i=0}^{\infty} \frac{(\Delta x)^i}{i!} f^{(i)}(x)$$

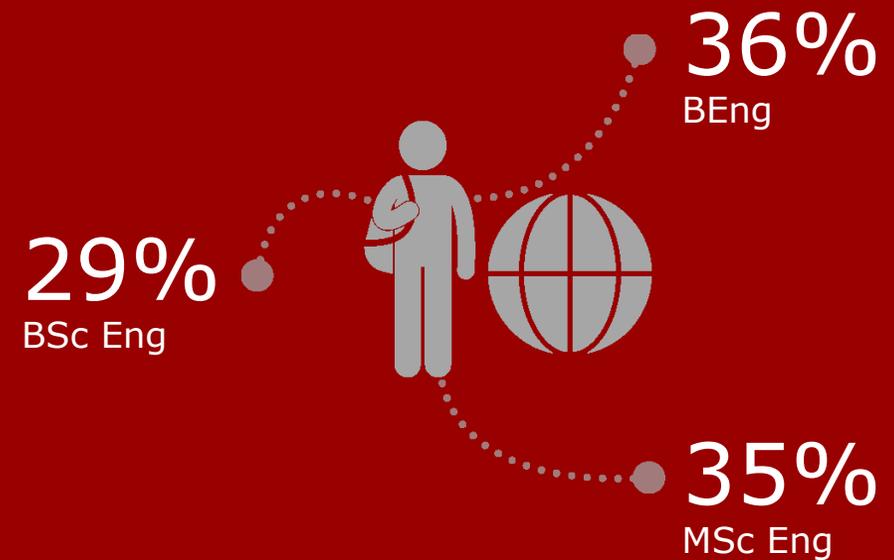
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# Staff and students

Human resources (FTEs)  
**6,053**



Full-time students  
**11,538**



\* Employees only

# Transforming DTU

DTU is investing more than €680 million in world-class research and teaching facilities (2010-2020)

- 4 campuses
- 600.000 m<sup>2</sup>
- Growth in terms of users, space, activities

A photograph of a modern university campus at dusk. The central focus is a large, multi-story glass building with a dark frame. The words "DTU TECH LAB" are written vertically in red on the left side of the building. The interior lights are on, and the building's reflection is visible in the glass. In the foreground, a paved plaza with a pattern of light and dark tiles is populated with people. Some are sitting on long, dark grey concrete benches, while others are walking or standing. A large, illuminated sculpture of white, glowing spheres is on the left. The sky is a deep blue, and the overall atmosphere is one of a vibrant, modern academic environment.

*STRATEGISK*

# *CAMPUS- PLAN*

*DTU Lyngby Campus*

*TRANSFORMING DTU*



# Vision

*DTU's campusser bidrager til DTU's værdiskabelse ved at være bæredygtige, integrerende og på eliteniveau*

En **bæredygtig** campus er ressourcebevidst, sund og god for mennesker og miljø og sikrer langsigtet handlefrihed for DTU med verdensmålene for bæredygtighed for øje.

En **integrerende** campus forbinder fagligheder, mennesker, universitet og det omkringliggende samfund - internationalt, nationalt og lokalt.

En campus på **eliteniveau** tiltrækker og inspirerer de dygtigste og skaber de bedste resultater for samfundet ved at udbygge unikke forsknings- og læringsfaciliteter.

Campusudviklingen tager afsæt  
i fire strategiske og fire fysiske temaer.

### Strategiske temaer



#### Værdiskabelse

Campusudvikling, der skaber værdi for samfundet



#### Excellent universitetsmiljø

Excellent forsknings-, uddannelses-, rådgivnings-og innovationsmiljø



#### Identitet

DTU's identitet gennemsyrrer alt



#### Campusmiljø

Liv i og mellem bygningerne

### Fysiske temaer



#### Mobilitet

Effektiv og bæredygtig mobilitet



#### Landskab

Landskabet som markant og sanselig ramme



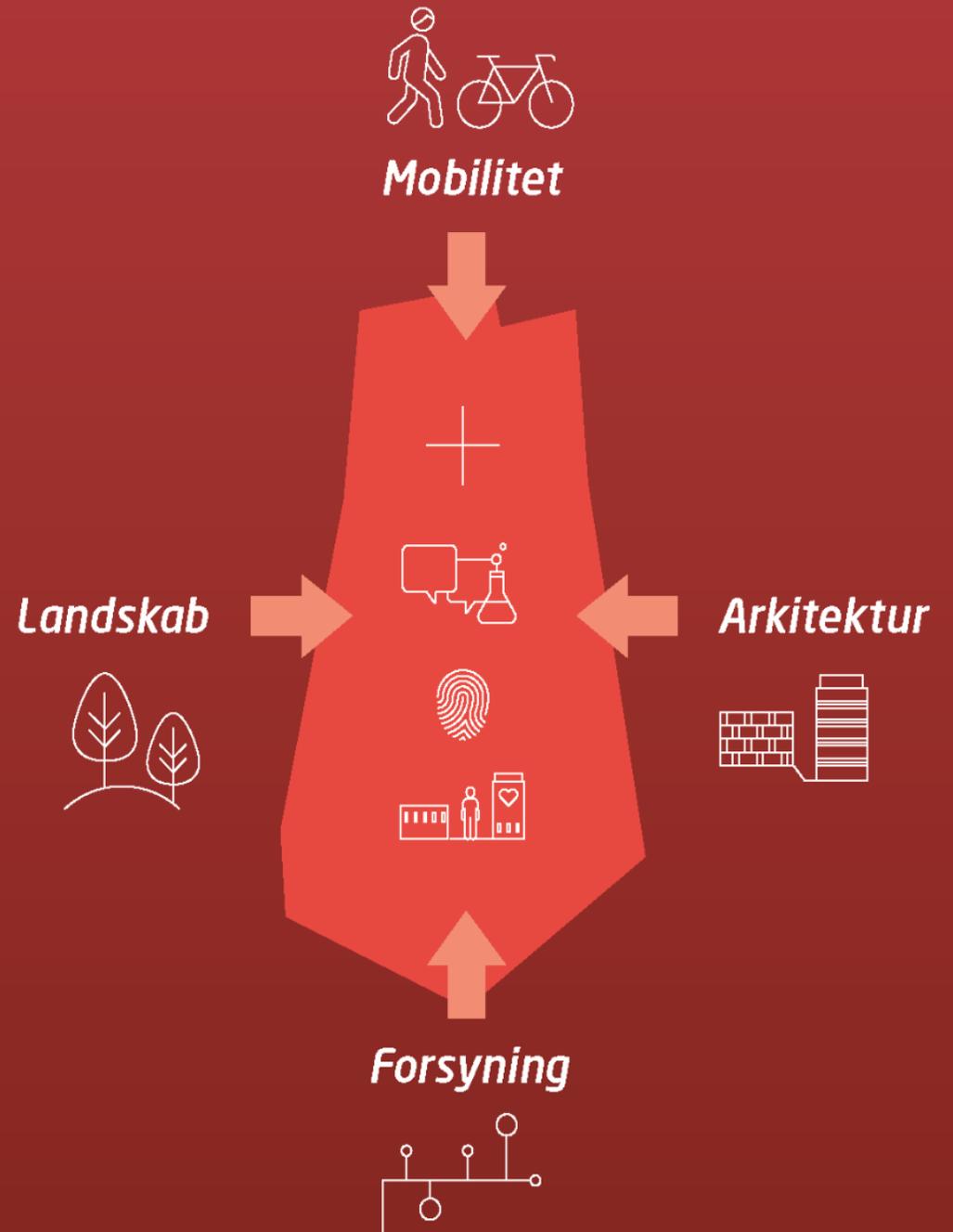
#### Arkitektur

Arkitektur i menneskelig skala og af høj kvalitet



#### Forsyning

Fleksibel, robust og fremtidssikret forsyningsinfrastruktur





Bygning 324  
DTU Compute

4.600 m<sup>2</sup> nybyg  
2013

TRANSFORMING **DTU**

# Bygning 303A

3.300 m<sup>2</sup>

Auditorierenovering  
2016

TRANSFORMING DTU

# DTU Skylab

1.500 m<sup>2</sup> ombygning af  
forskningshal til innovations  
hub  
2014

**value creation in practice**

**- How do we know if the efforts has the desired impact?**





## A two step process at DTU

### Step 1: The survey

Students satisfaction on a 1-6 scale.

Target: positive evaluations (4-6)

### Step 2: What matters the most in terms of general satisfaction?

General satisfaction importance analysis  
(Partial Least Squares Regression (PLS))

## Survey results – FM specific statements

The 5 best evaluations	Average	Share of positive score (4-6)
DTU's outdoor areas generally appear neat and well-kept	5,5	98%
DTU's facilities generally appear neat and well-kept	5,1	95%
There are good bicycle parking conditions at DTU	5,1	77%
I am satisfied with the leisure activities offered at DTU	5,0	81%
DTU's outdoor areas invite both contemplation and active use	4,9	89%

## Survey results – FM specific statements

<b>The 5 lowest evaluations</b>	<b>Average</b>	<b>Positive scores (4-6)</b>
There is generally a good indoor climate in the classrooms	4,0	68%
There are enough workspaces for students at DTU, where I can work myself an undisturbed	4,3	61%
There are enough workspaces for students at DTU, where I can work with my group	4,3	72%
There is sufficient access to power outlets at campus	4,3	74%
I am not bothered by noise	4,4	76%

# The general satisfaction factor

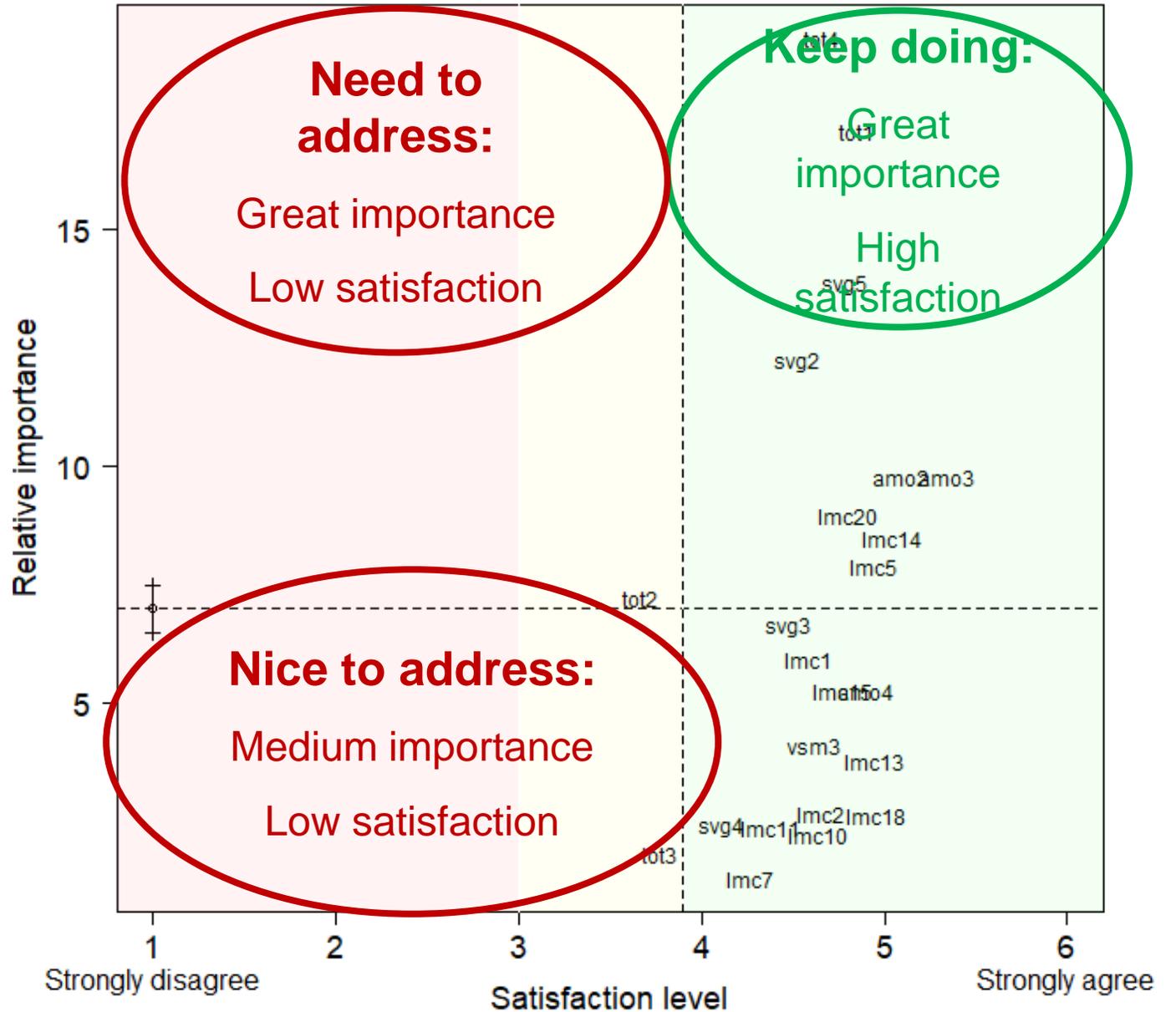
The average of:

1. I consider myself to be generally well informed regarding my studies
2. I generally feel at ease and comfortable at DTU
3. I am overall satisfied with the physical surroundings at DTU
4. The atmosphere at DTU is generally good



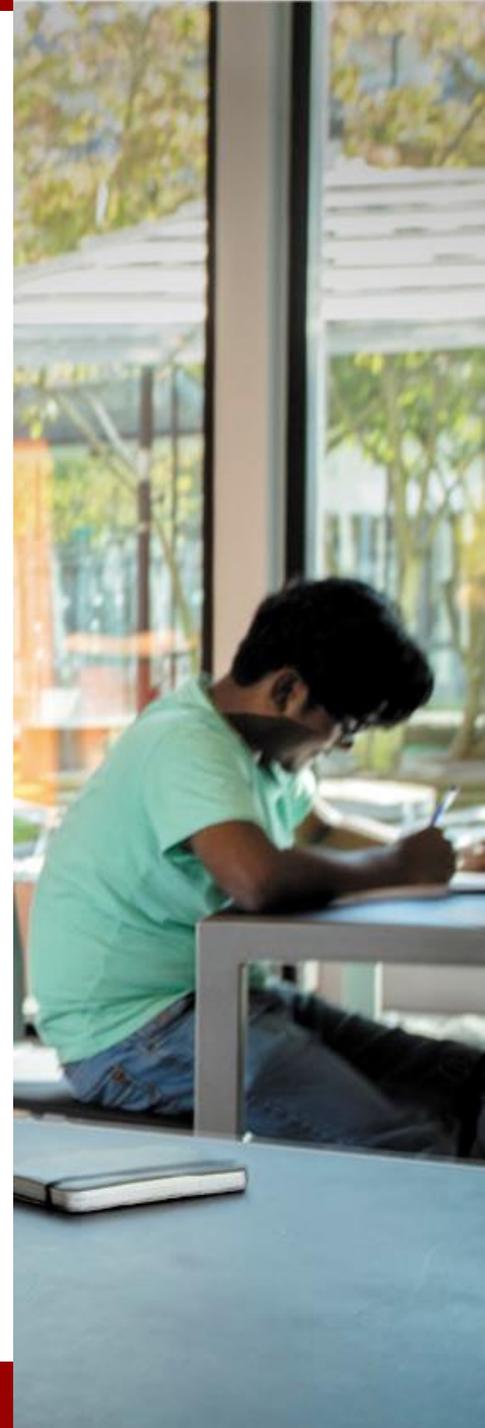
# Step 2: Important analysis

- Partial Last Squares Regression
- Relative importance to the general satisfaction factor
- 47 elected statements



## Top 10 – important questions

1. Absence of loneliness,
2. Good contact with fellow students,
3. Availability of lecturers also outside of normal teaching time,
4. Easy access to information about one's study lines and the courses followed,
5. Tidy and well-kept outdoor areas,
6. Tidy and well-kept premises,
7. Easy way finding,
8. Selection of social events,
9. Well-functioning informal learning environments
10. Absence of stress symptoms in everyday life.



# New result goals for Campus Service re. learning environment and campus life

1. DTU meets the need for study places for concentrated work alone or in groups.
2. There is a good indoor climate in DTU's teaching rooms
3. Noise reduction (during construction and renovation activities)
4. Sufficient power outlet supply on the Ballerup Campus
5. S-Huset, cafés and Friday bars appear as DTU's students want it
6. The facilities for sports and leisure activities at Ballerup Campus have a satisfactory level
7. Covered and locked bicycle parking is available for DTU students
8. It is easy to orientate and find your way around DTU
9. DTU's outdoor space supports an attractive learning environment and is comfortable to stay in

# In conclusion: Value adding in practice

## The DTU approach:

- Documentation of the high and still increasing student satisfaction
- Importance analysis gave new insights
- New study environment action plan 2019-2021

## Links (copy link to browser):

Adding Value in practice: methodology and research paper:

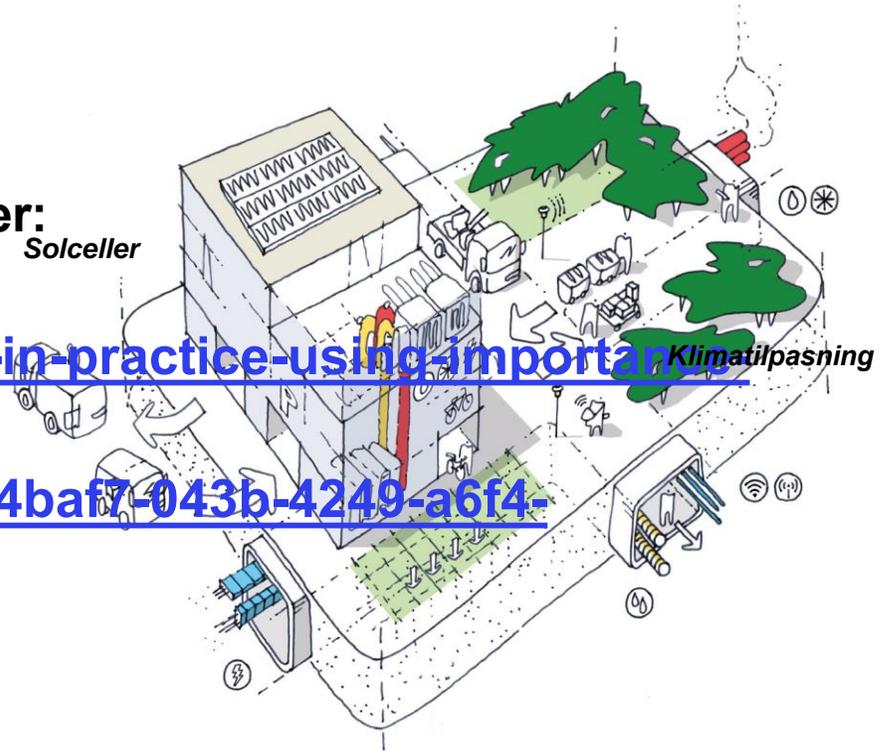
[https://orbit.dtu.dk/en/publications/value-adding-fm-in-practice-using-importance-analysis-at-the-technical-university-of-Denmark\(5634baf7-043b-4249-a6f4-18a172f80ad4\).html](https://orbit.dtu.dk/en/publications/value-adding-fm-in-practice-using-importance-analysis-at-the-technical-university-of-Denmark(5634baf7-043b-4249-a6f4-18a172f80ad4).html)

Campus plan : <https://www.dtu.dk/Om-DTU/Profil/Campusudvikling>

Light rail: <https://www.dtu.dk/om-dtu/profil/campusudvikling/letbane>

Transforming DTU 2016: <https://www.youtube.com/watch?v=M06Z8eVtucc>

Campus Plan 2010: <https://www.youtube.com/watch?v=NmErjUf-pNU>





Thank you!

Questions & comments?