

LIPS2015 Barcelona

Lean in Public Sector Construction Conference

Session 1*

Case study of a University Building Project

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#LIPS2015
@itec_es

THE UNIVERSITY OF HELSINKI

1640

ESTABLISHED IN

700

BUDGET MEUR

8,300

STAFF

35,000

STUDENTS

300

SUBJECTS

6,000

DEGREES/
YEAR

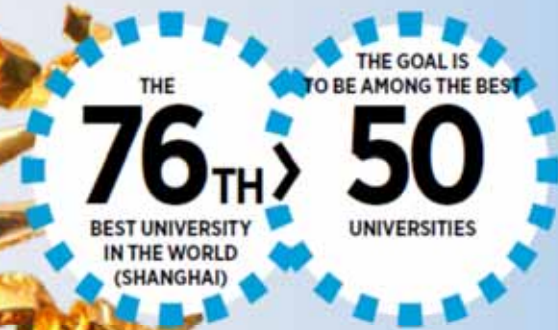
180 000

ALUMNI

HELSINKI.FI/UNIVERSITY/
FACEBOOK.COM/HELSINGINYLIOPISTO
YOUTUBE.COM/UNIVERSITYOFHELSINKI
TWITTER.COM/HELSINKIUNI



POWER
OF THOUGHT



STRENGTHS

ATMOSPHERE AND SMALL
PARTICLES

CANCER AND GENETICS

METAPOPULATION BIOLOGY

TEACHER TRAINING

GLOBAL JUSTICE
AND DEMOCRACY

4 CAMPUSES 11 FACULTIES



VIIKKI CAMPUS

TOP RESEARCH IN LIFE SCIENCES

6,400 STUDENTS

STRENGTHS:

BIO- AND NANOTECHNOLOGY,
METAPOPOPULATION BIOLOGY, ECOLOGY
AND SUSTAINABILITY OF NATURAL
RESOURCES, VETERINARY BIOSCIENCES
AND CLINICAL VETERINARY MEDICINE



KUMPULA CAMPUS

LARGEST CENTRE OF NATURAL
SCIENCES IN THE NORDIC COUNTRIES

5,800 STUDENTS

STRENGTHS:

ATMOSPHERIC SCIENCE,
NANO RESEARCH, SPACE RESEARCH

MEILAHTI CAMPUS

TOP LEVEL RESEARCH IN MEDICINE

3,400 STUDENTS

STRENGTHS:

CANCER, CEREBRAL DISEASES,
CARDIOVASCULAR DISEASES,
METABOLISM



CITY CENTRE CAMPUS

FOCUS ON HUMANITIES AND SOCIAL
SCIENCES

20,000 STUDENTS

STRENGTHS:

TEACHER EDUCATION, LEARNING
ENVIRONMENTS, DEMOCRACY AND CITIZEN
PARTICIPATION RESEARCH,
NORDIC WELFARE



WHY TO A PROJECT ALLIANCE ?

- good experiences of the integrated project deliveries (CM, DB)
- experience of risk sharing
- early integration and better co-operation between designers, contractors and client
- possibilities
 - better quality
 - control of the schedule
 - cost savings
 - customer satisfaction
- new ways of leading project
- suitability for a small renovation project



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VUOLUKIVENTIEN 1 RENOVATION AND A NEW BUILDING

- Renovation gross area 14 770 m²,
- 256 apartments
- garage, 59 parking place.
- Original construction year 1968
- Listed building
- New building about 1000 m²



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GOALS

- target price 18 million euro
- space and energy efficiency
- 5 years period of guarantee
- most of the flats are in use during repair works

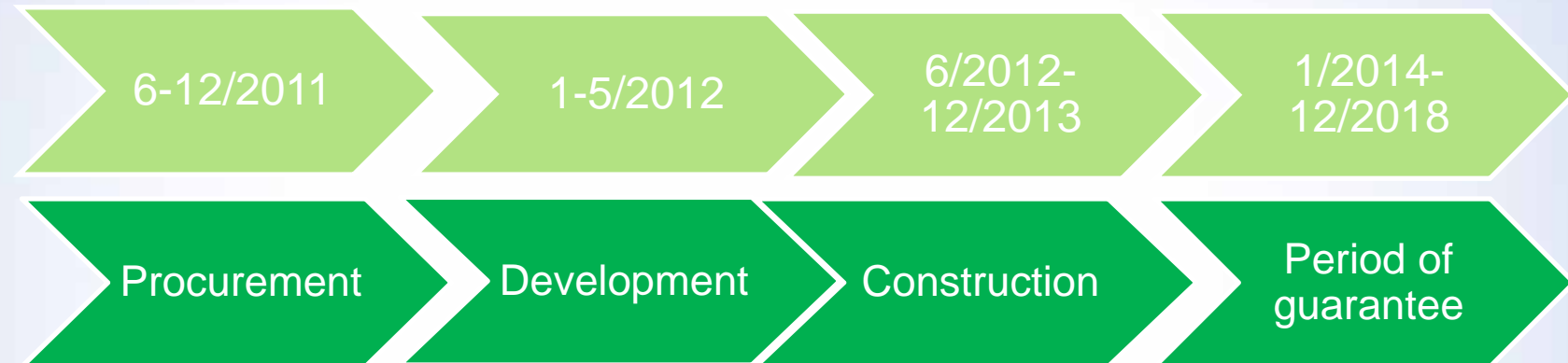
A GOAL
WITHOUT A PLAN
— IS JUST —
A WISH

antoine de saint-exupery



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PROJECT IN BRIEF



Co-operative and professional partners
Best project plan and timetable
Best renovation plan
Energy and space use efficiency
Target price 18milj €, pay fee

Planning and development in a team (big room)
Alliance agreement
Key performance indicators
Learning new roles
Innovations/Target value design

Planning permission and construction
Moving services
Procurements in a team
No faults
Operation model of the period of guarantee
Last planner

Energy consumptions
Facility services
Tenant satisfaction inquiry
Bonus payment +/-

KEY PERFORMANCE INDICATORS

Phase of Development and Construction 69/100

- Target value issues 21
- Flats 256 → 333 (50 + 27 new flats)
- Safety 92,3/100 and 1 injury
- Recycling of construction waste 89 %
- Zero fault delivery 332 (flats)
- Project satisfaction 4/5
- Apartments away from the use because of repairs (4 days)

Period of warranty

- Tenant satisfaction 4,2 / 5
- Energy efficiency (heat, water, electricity) 86 / 100



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WHAT HAVE WE LEARNED?

- Project alliance is a suitable delivery method for a renovation and complex projects
- Project alliance is a good tool for the improvement of effectiveness and quality
- Project alliance makes quick progress possible
- KPI works and keeps the focus on goals
- The success inquires
 - Good leadership
 - Professional skills and experience
 - Motivation
 - Co-operation
- Commitment of subcontractors needs "tools"



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THANK YOU!



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