COST AND TIME OVERRUNS:
BUSINESS AS USUAL

from failure to success projects by steering
and intervening in building processes

Prof.dr.ir. J.W.F. Wamelink & Mr. F.A.M. Hobma | TU Delft
Dr. ir. A. Straub | TU Delft
Ing. F. Michielen & Ir. L.J.A.M. van Griensven | AT Osborne

Delft University of Technology | Real Estate & Housing | Design & Construction Management
COST AND TIME OVERRUNS
CAUSES
a. Cost and time overruns are common, but not acceptable

b. Research has been done, but overruns still take place

c. The focus on success projects should provide new perspectives

d. This research focussed on management tools to steer and/or intervene in the process to prevent or decrease overruns
RESEARCH QUESTION

What tools of project management methods can prevent or decrease cost and time overruns by steering and intervening in the process to result in successful building projects?
CONTENT

* Research design
* Theoretical framework
* Results & findings: case study & survey
* Discussion
* Conclusions & recommendations
* Questions
RESEARCH DESIGN
Research design

- Success (& failure) cases
- Cases of which at least some with a design and build and some with a traditional contract form
- New build or full renovation projects
- Completed projects
- Medium-scale development projects (project value 5-70 million euro)
- Utility development projects
- Located within the Netherlands
THEORETICAL FRAMEWORK

Cost and time overruns
Success projects
Management methods
Cost and time overruns

* In general, the theory on root causes is shared

Cost overruns:  
* Exceeding the budget in case of higher expenditures in relation to the credit decision (building budget), excluding scope changes and deliberately having a budget which is too short (Hobma et al., 2013)

Time overruns:  
* Extension of the allotted time to complete the project. It is a situation when the actual progress of a construction project is slower then the planned schedule (Hobma et al., 2013)
Success projects

* No overruns
* Project success or successful management
* Control of cost, time and quality leads to successful management

Management methods

* Project management is laid in management methods
* Influence of the process by certain means: management tools
* Tailoring to industry

Steering: Proactive balancing of project constraints to prevent deviation to the set result, takes place throughout the project

Intervening: Conduct a corrective action to keep the process on track to reach the set result, it is reactive
RESULTS AND FINDINGS

Introduction
Management tools
Success factors
Introduction

Case study
* Individual and cross case analysis
* Overview building management tools
* Overall success factors

Survey
* Descriptive and statistical analysis
* Validation corresponds mainly with the case study results
* Relations with ‘overruns’ and ‘success’ are defined
Case study
* Tailoring of management tools
* Overview of building management tools

Survey
* Relation between management tools and overruns
* Six management tools
* Consequent implementation leads to less overruns

Management tools
- Project charter
- Project plan
- Phase reports
- Decision document
- Stakeholder analysis
- Master planning
Case study
* Fundamental project management by building management tools
* Actual success is influenced by several factors
* Eight overarching factors

Survey
* Relation between success factors and management tools
* Two success factors with seven management tools
* Use of these tools will lead to more success

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<th>Success factor</th>
<th>Management tool</th>
<th>Theme</th>
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<td>Comprehensive budget</td>
<td>Lessons learned</td>
<td>Integration</td>
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<td>Additions and omissions (Board) credit</td>
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<td>Strong risk management</td>
<td>Decision document</td>
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DISCUSSION

Availability theories
Reliability case study results
Reliability survey results
Discussion

* Availability theories

* Reliability case study results

* Reliability survey results
CONCLUSIONS & RECOMMENDATIONS

Conclusions
Recommendation in the field
Recommendation for further research
Conclusions

* Ongoing occurrence of cost and time overruns
* Large shortfalls and reputational damage
* Research has been done, no solution yet
* Research based on Van Notten (2013): new insights
* React on these detections by steering and/or intervening
* Six management tools are directly related to overruns
* Two success factors are directly related to seven management tools
* The main research finding: an overview of building management tools to influence the process and success factors to deliver projects without overruns
Recommendations for the field

* Consequent implementation
* Conscious and wide approach

How to manage a project successfully?

Step 1: Consequent implementation
Step 2: Control of success factors
Step 3: Detection of indicators
Step 4: The less adjustments the better
Recommendations for further research

* Validation
* Use of management tools
* What is a success project?
* Control aspects
QUESTIONS?