MEASURING PROJECT’S TEAM CULTURE IN PROJECTS USING THE LAST PLANNER SYSTEM
“Culture”

„the collective programming of the mind which distinguishes the members of one group or society from those of others”

(Hofstede, 1984)
The Construction Industry

- Tough competition leads to unprofitable contracts → focus on claims instead of partner-like conditions (Racky, 2008)
- Escalating (Racky, 2008), adversarial and distrustful relationships (Beach et al., 2005)
- Antagonistic behaviours (Johnston and Lawrence, 1988, Beach et al., 2005)

- Low productivity
- Insufficient quality
- Time over-runs
- Poor safety
  (Senaratne and Wijesiri, 2008)
The Last Planner System

Continuous planning process to improve projects through the management of “relationships, conversations and commitments” (Mossmann, 2015)
The Last Planner System

Benefits through the Last-Planner-System:
1. Smooth work flow
2. Predictable work plans
3. Reduced cost
4. Reduced time in project delivery
5. Improved productivity
6. Greater collaboration with field personnel and subcontractors
   (Fernandez-Solis et al, 2013)
7. Transparency
8. Mutual Understanding
   (VDI, 2017)

Impact on Project Culture?
How to measure culture?
121 instruments for measuring culture

(Taras et. al, 2009)
Competing Values Framework

Conducted through a survey with 24 standardized questions
Clan
- Sense for the group as a family
- Focus on the individuals
- Focus on teamwork (Paro & Gerolamo, 2017)
Market
- Focus on competition and competitive advantage
- Focus on external influences from
  - Competitors
  - Suppliers
  - Customer
(Paro & Gerolamo, 2017)

(Cameron & Quinn, 2011)
Adhocracy
- Focus on flexibility
- Dynamic and ad hoc decisions
- Focus on creativity (Paro & Gerolamo, 2017)
Hierarchy
- Clear work standards and rules
- High focus on control of the internal operations (Paro & Gerolamo, 2017)

(Cameron & Quinn, 2011)
Culture in the construction industry (Cameron & Quinn, 2011)
Culture in the construction industry (Cameron & Quinn, 2011)

Ideal Lean Culture (Paro & Gerolamo, 2017)
Culture in the construction industry (Cameron & Quinn, 2011)

Ideal Lean Culture (Paro & Gerolamo, 2017)

Project Team Culture Case 1
Percent Plan Completed
PPC = 83%

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Case 2
Culture in the construction industry (Cameron & Quinn, 2011)

Ideal Lean Culture (Paro & Gerolamo, 2017)

Project Team Case 2
Percent Plan Completed
PPC = 51%
Case 3
Culture in the construction industry (Cameron & Quinn, 2011)

Ideal Lean Culture (Paro & Gerolamo, 2017)

Project Team Case 3
Percent Plan Completed
PPC = 71%
Conclusions
- The Competing Values Framework is a suitable tool to measure and interpret the project culture
- There is a measurable relation between the project culture and the Last-Planner-System performance (the shapes of the projects with high PPC scores are similar)
Recommendations
- The correlation of the PPC and the culture should be investigated
- How does the ideal culture for construction projects looks like?
- How to improve the culture in this direction?
Thank you for your attention