

Implementing sustainable sourcing in construction: Results of a current analysis of the Austrian market

Johannes Wall^{1,2} Christian Hofstadler²

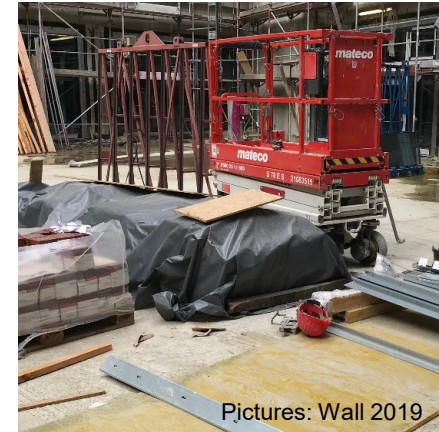
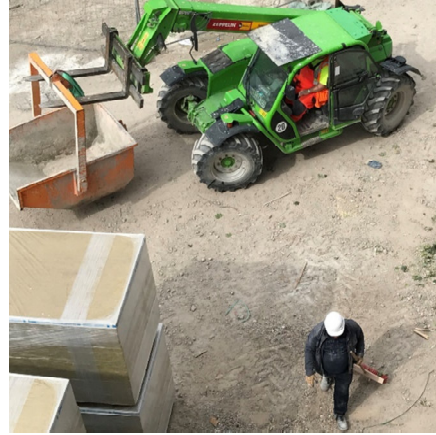
¹ Ed. Züblin AG | Direktion Mitte
Europa-Allee 50, 60327 Frankfurt am Main, Germany

² Graz University of Technology | Institute of Construction Management and
Economics
Lessingstraße 25, 8010 Graz , Austria

Session title: Education & Economy 3: Actors, Markets & Business

Date: 12.09.2019

2 Impressions



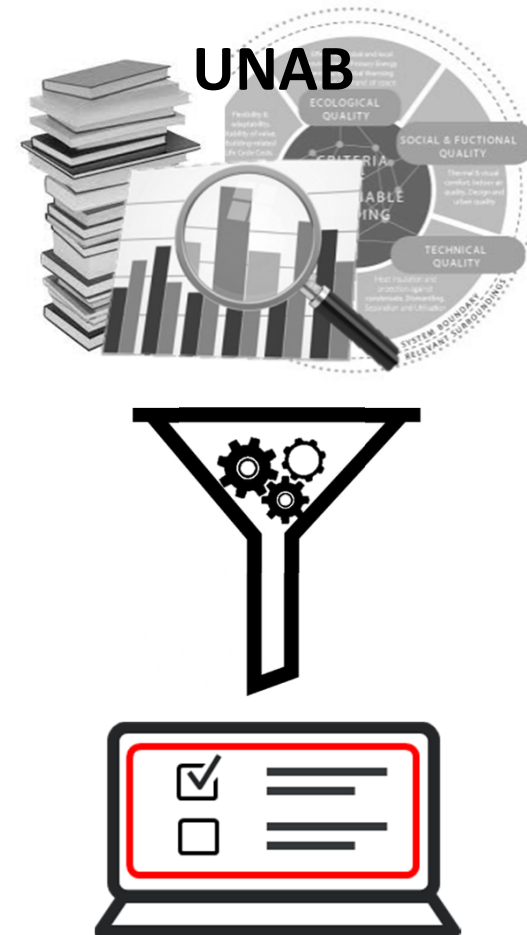
Pictures: Wall 2019

Research Questions



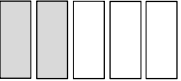







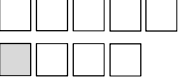






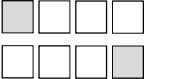
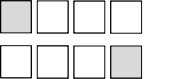
- What's the situation of sustainable procurement and sourcing of construction works in Austria?
- What are the main requirements, to facilitate sustainable sourcing in the construction and building sector?
- How can data-information management tools like building information modelling support sustainable sourcing in construction industry?

Methodology

- Literature review
Wall, J. Hofstadler, C. (2016)
- Explorative studies
Scherz, M. (2016), Koppelhuber, D. (2017)
- Major research project – UNAB
Sustainable Designprocess & Integrated Facades
- Online questionnaire
Wall (2017) Life-cycle-orientated modelling of planning, awarding and tendering processes of construction works

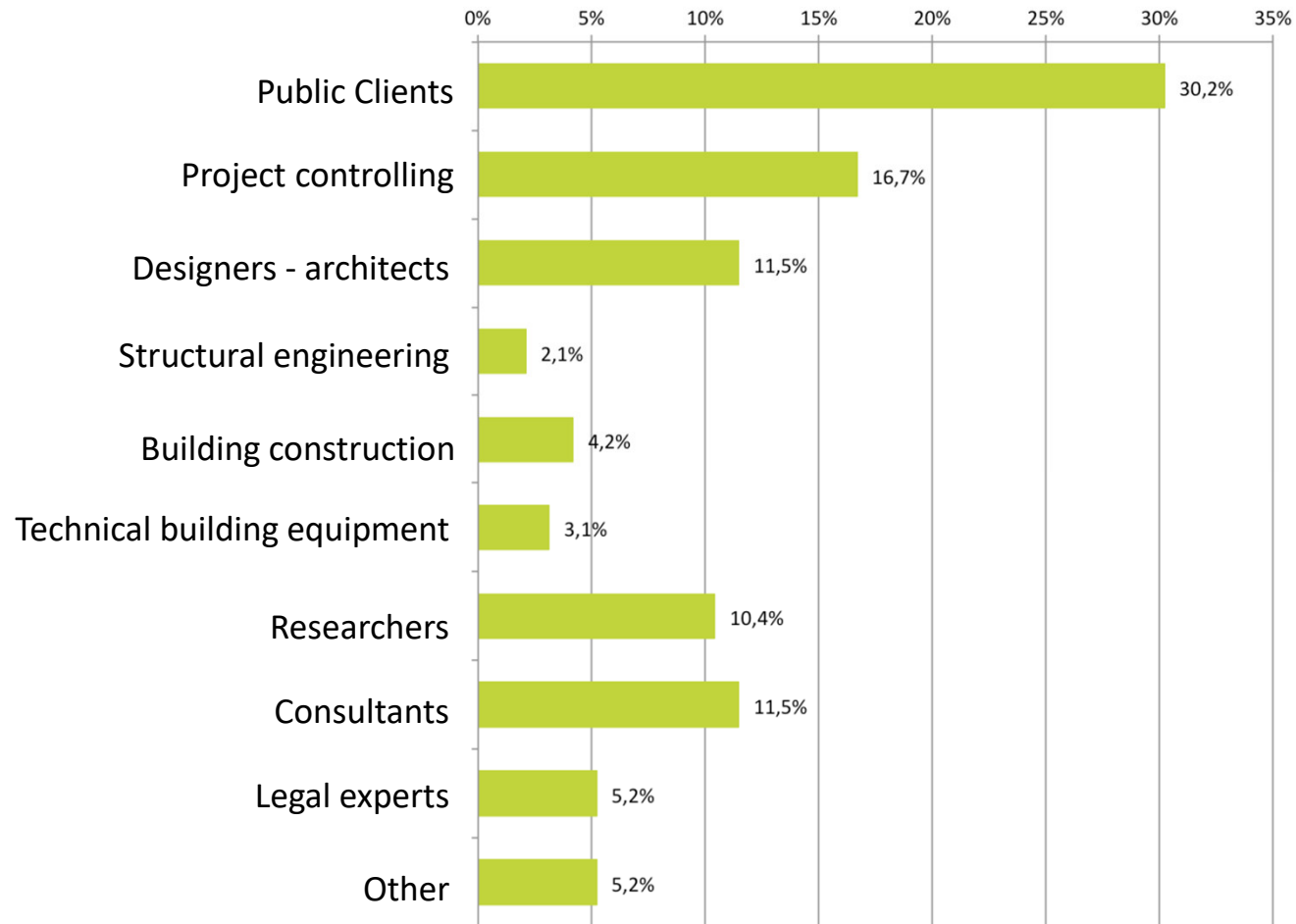


Structure of the survey

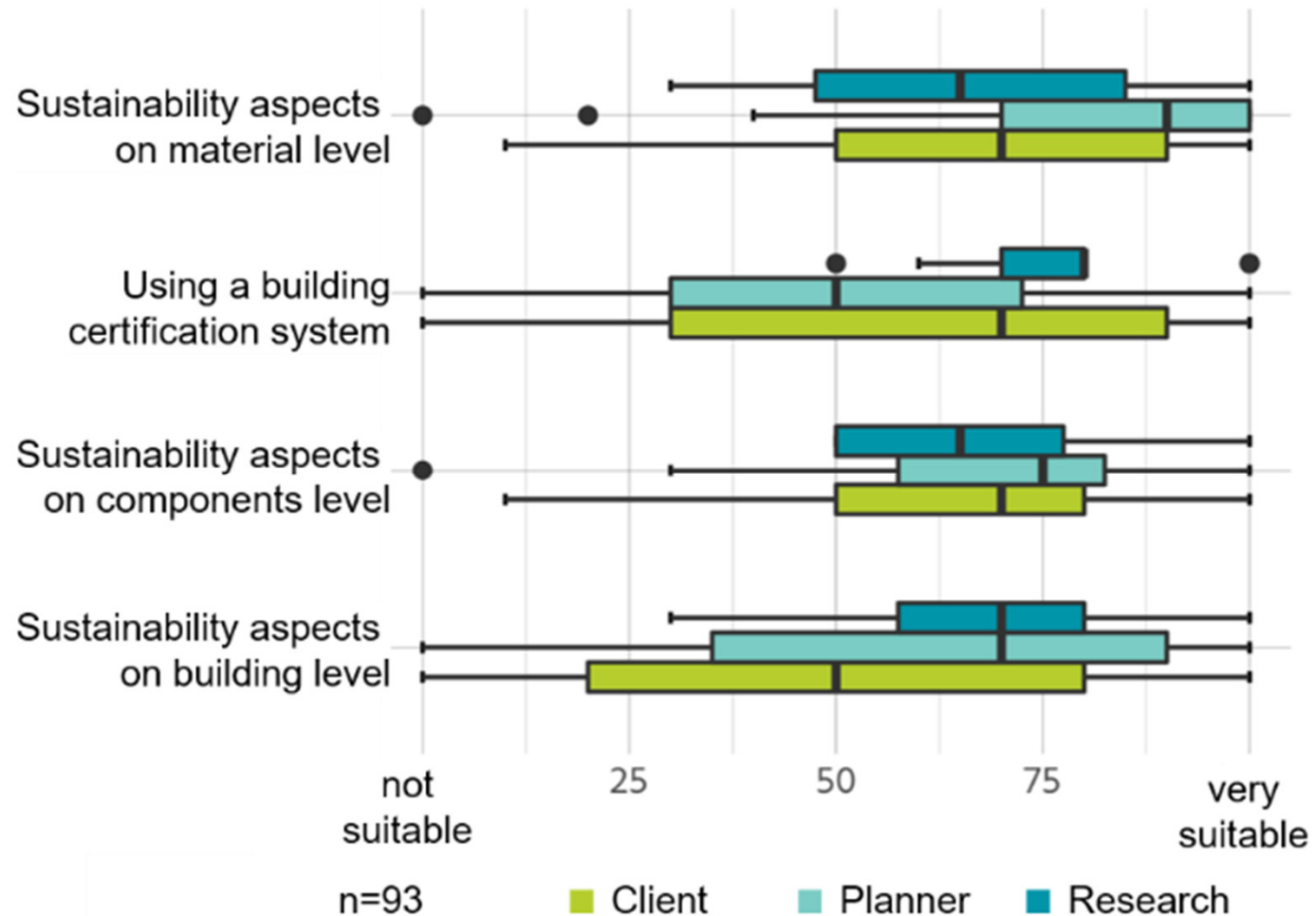
#	Structure of the survey	N° of questions	Clients and design experts	Research	Legal experts
1	General questions	5	 5/5	 2/5	 2/5
					
2	Notions and Concepts	3	 3/3	 3/3	 3/3
					
3	Design process	9	 9/9	 8/9	 1/9
					
4	Tendering and awarding	8	 8/8	 8/8	 8/8
					
5	Implementation (BIM)	8	 8/8	 2/8	 2/8
total			Σ 33	Σ 23	Σ 16

General information

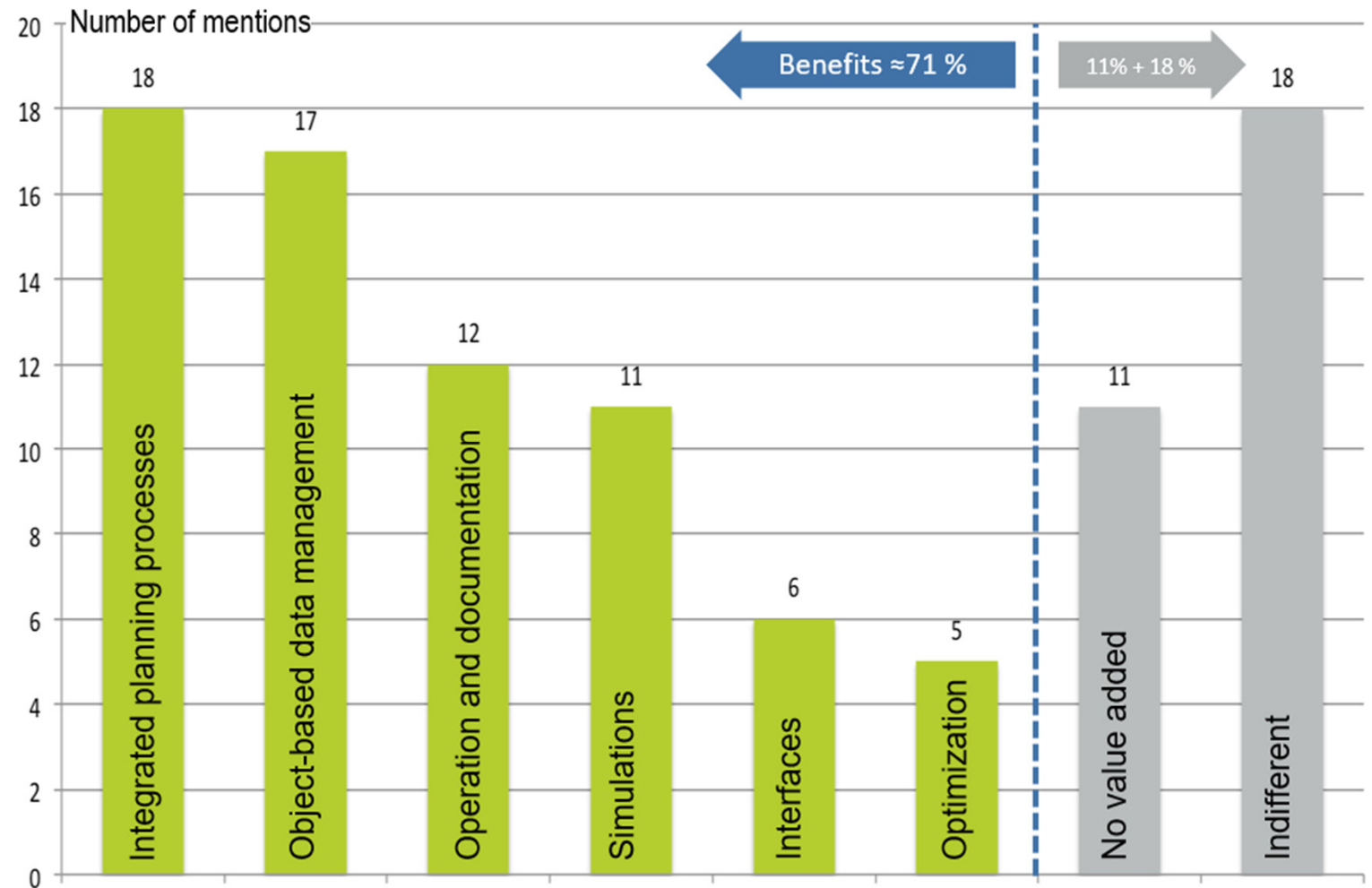
- Survey period:
April – May 2017
- 320 questionnaires sent
- 96 responded [n = 96]



7 Results (1)



8 Results (2)



Take away message (1)

Information flow (interaction of planning and sourcing)

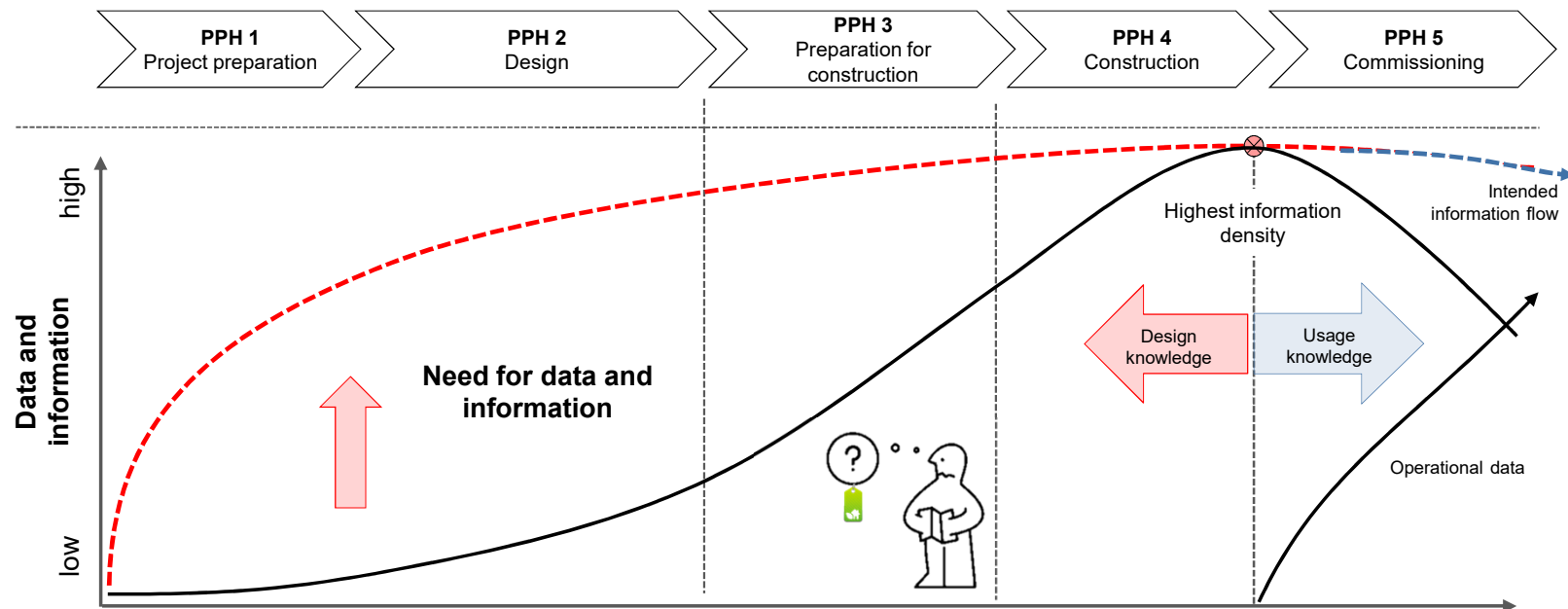


Illustration: Wall 2017

Take away message (2)

- Process-thinking and design
 - Information flows
 - Definition of interfaces
 - Process guidance and supervision

- Process support using data information management tools
 - Visualization
 - Clash detections
 - Work and design schedule
 - Supporting life cycle information management

Contact info



DDipl.-Ing. Dr.techn. BSc.

Johannes Wall

Europa-Allee 50

60327 Frankfurt am Main, Germany

☎ +49 69 60608 1157

☎ +49 151 1563 2268

✉ johannes.wall@zueblin.de

ZÜBLIN STRABAG
TEAMS WORK.



Assoc.Prof. Dipl.-Ing. Dr.techn.

Christian Hofstadler

Lessingstraße 25

8010 Graz, Austria

☎ +43 69 60608 1108

☎ +43 160 905 863 40

✉ hofstadler@tugraz.at

iBBW  **TU**
INSTITUT FÜR BAUBETRIEB UND BAUWIRTSCHAFT **Graz**

