Dominik Steuer

THE GENERAL CONTRACTOR RESPONSE TO PLATFORM ECOSYSTEMS
"Firms that fail to create platforms and don't learn the new rules of strategy will be unable to compete for long" 

van Alstyne et al. (2016)
Why should we care about platform ecosystems?

Individual Transportation vs. Hotel industry

Uber vs. Airbnb vs. Hilton vs. Mercure vs. Ibis
Method

- Interviews with 7 industry experts from Germany
- Explorative and speculative interviews
- Collaborative business model creation
- Role construction manager to CEO
- Average work experience over 15 years
Results

SECTION A: Understanding of Business Models in Construction
SECTION B: The Business Model of the General Contractor
SECTION C: Potential of Digital Platforms in Construction
The role of GCs in the construction industry

Value Proposition
- Reduce complexity
- Risk management for cost, time and quality
- Optimise solutions

Alhava, Otto; Laine, E.; Kiviniemi, Arto (2017). „Construction Industry needs an Airbnb of its own!”
Business model Canvas following Osterwalder, Alexander; Pigneur, Yves (2011)
<table>
<thead>
<tr>
<th>Customer Segments</th>
<th>Value Proposition</th>
<th>Channels</th>
<th>Status Quo - GC</th>
<th>Potential for digital platforms in the construction industry</th>
<th>Challenges for digital platforms in the construction industry</th>
<th>Recommended action for GC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Professional client who wants to realize complex projects order / project specific categorization: Public / private Project content / industry project scope Farther: Basic philosophy / relationships</td>
<td>Tender, award, contract</td>
<td>Provision of a production system</td>
<td>Consciously perceive that both the client and the key partners from the status quo represent customers. Definition of the sides of the platform (including preview of potential sides).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Reduction of complexity. Taking risks for deadlines, costs and qualities. Value engineering. Value offer is perceived very homogeneously by the customers, therefore the significance of the price is high.</td>
<td>Enable direct interaction</td>
<td>Simplify direct interactions</td>
<td>Focus on enabling direct interaction between users. Start with the tendering, assignment and order processes creating the basis for further interactions. Value offerings from the status quo of the GC are taken over, but must be reinterpreted (elimination of friction by providing a production system).</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Public client: Public tenders, submission of tenders, placing of orders (open and transparent competition according to VOB). Private client: Classic sales work building</td>
<td>Order brokerage via platform</td>
<td>Integral handling on platform: Platform as digital project space is central processing point ➔ Short information paths. Throughout the lifecycle there is the possibility to access all data of the building in terms of cost</td>
<td>Disruptions are unplanned and cannot be predicted. Legal Challenges in the award of public services.</td>
</tr>
</tbody>
</table>

Open channels and drop gatekeeper function. Define role as mediator. Enable the collection of data (⇒ key resources) Initially exclude public clients.
DISCUSSION

- It was found that there is potential for a digital platform in the construction industry,
  - Tendering
  - awarding of contracts
  - provision of a production system

- The added value is realized through direct and simplified interactions

- First step towards a value proposition with the logic of the networked business models

- Key activity of networked business models to reduce resistance

- The challenge lie above all is the characteristics of the construction industry
LIMITATIONS

- First look into the GCs awareness of a transforming business model
- Limits in amount of participants and market size
WHAT IS NEXT?

SDaC
Enabling Smart Design and Construction

Ein Projekt des Innovationswettbewerbes „Künstliche Intelligenz (KI) als Treiber für volkswirtschaftlich relevante Ökosysteme“
Looking forward to transforming discussions.

Leapfrogging construction – together!

Dominik Steuer
Research Associate @Karlsruhe Institute of Technology
Manager @Steuer Tiefbau GmbH

+49 176 1000 4124
dominik.steuer@kit.edu
www.linkedin.com/in/dominik-steuer