BUSINESS ECOSYSTEMS IN WMC
A CASE OF A RESIDENTIAL WOOD BUILDING PROJECT
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AGENDA

Business ecosystem concept

The case

Results

Conclusions
"In a business ecosystem, companies **coevolve** capabilities around a new **innovation**: they work **cooperatively** and competitively to support new products, satisfy **customer needs**, and eventually incorporate the next round of innovations.” (J. Moore 1993)

See Figure 1 from Letaifa (2014)
BUSINESS ECOSYSTEM IN CONSTRUCTION

• Pulkka et al. (2016)
  • The BE concept is applicable in the construction industry context
  • Following the principles of the BE concept leads to value creation
BUSINESS ECOSYSTEM IN WOOD CONSTRUCTION?

- How does the concept fit into wood construction?
  - Complexity of construction - **Ideal environment** for BE thinking?
  - Ecosystem thinking could **reduce the one-off nature** of the construction projects?
THE CASE

- Two-storey wood element loft in eastern Finland
- Finished in summer 2017
- 13 interviews from 9 companies and 1 municipality
Business ecosystems in the wooden multi-storey construction / Juho Pöyhönen
RESULTS (1/5)

• The operations of the project had features similar to a BE

  • The main contractor acts as a keystone, multiple years of co-operation with the core companies
  • Familiarity and high level of trust makes work faster and more efficient
  • Specialized and complementary actors created the whole
  • Co-evolution: e.g. project enhancements to make future projects more efficient
RESULTS (2/5)

• The novelty of WMC could require new roles and business models…
  
  • “We don’t normally… Or our business doesn’t include (...) acting as a main contractor, but then again, we have strong R&D. (...) We build a few buildings per year ourselves and test the new products, and get the feedback about them this way fastest.” - Director of planning, R&D and IT, Company A
RESULTS (3/5)

• ... more interaction and communication compared to established working methods...

• “Well, we created a new solution to the ventilation of the base floor structure, so that we drew completely detailed drawings. And the same thing with the plumbing of the intermediate floor, we made it with the structural designer, so that those were developed during this project.” - HPAC engineer, Company C
RESULTS (4/5)

• … and result in new skills that can be used in future projects.

• ”The use of [a certain new] element and its connections to the structures, the details, this was a new thing that was developed during the project. It can be used in other similar projects so that it acts as a reference to us.” – Structural engineer 2, Company B
• End-user involvement was traditional
  
  • “Well, in this particular project the future residents indeed were not yet known, so in a way, personal preferences and such couldn’t be considered. Here it has been tried to find good basic solutions, which would be versatile and would work for most (residents).” - Architect, company C

  • “…Which colors, door models, surfaces, and all the household appliances. To have stainless steel or white, traditional kitchen stove or one of those integrated ones. Yes, there is quite a lot to choose.” - Site supervisor, company A.
CONCLUSIONS

• There exists a diverse network of actors around the main contractor with varying level of interaction and involvement
  • At least most of the core companies were certain that cooperation would continue in the future
  • Some wished for deeper communication and involvement (e.g. more feedback, kick-off meeting)
• Features of BE concept could be observed, yet there is a need for further research to give more evidence on the realities in the wooden construction sector
THANK YOU!

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LITERATURE


