

## **OPEN BUSINESS MODELS AND CO-CREATION IN REAL ESTATE AND CONSTRUCTION SECTOR**

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### **ABSTRACT**

One reason for low levels of innovativeness and productivity in the Real Estate and Construction sector is its fragmented value chains. We argue that REC companies could gain from theories of open innovation and open business models. In the context of innovation and business models, the aim of the study is to examine how intermediation activities can support innovation process in the REC sector through three cases. During the intermediation process links between the co-development objectives and the business strategy of companies strengthened in all cases.

### **INTRODUCTION**

The real estate and construction (REC) sector has a significant environmental and economic impact on the society. At the same time the sector is associated with low levels of innovativeness and productivity.

One reason for this is the fragmented value chains in the industry (Miozzo and Dewick, 2004). The fragmentation is visible both horizontally and vertically at a project level, multiplied along the temporal axis and posing several challenges from the life-cycle perspective. Due to this fragmentation, almost all innovations in REC sector have to be negotiated with one or more actors within the project coalition (Winch, 1998).

Thus we argue, as they work in highly networked business environment, that REC companies could potentially gain from theories of open innovation and open business models. In the context of innovation and business strategies in the REC sector, particularly the analysis of co-development relationships is interesting. (Chesbrough and Schwartz, 2007)

In the rise of open innovation, open business model and co-development paradigm, the role of intermediates, third party organizations acting as an agent or broker in any aspect of the innovation process, has grown more prominent (Chesbrough 2006, Howells 2006). The different roles that these actors play within the innovation process are various, e.g. third parties, intermediary firms (Stankiewicz, 1995), bridgers (Bessant and Rush, 1995), brokers (Hargadon and Sutton, 1997), and superstructure organizations (Lynn et al., 1996).

The aim of the study is to examine the process, potential and strategies of five REC companies to establish end-user driven and open co-development partnerships. In particular,

this paper analyses the effect of third party intermediation focusing on the following questions:

- How the objectives, actions and priorities changed during the intermediation process?
- What was the role of intermediates in the innovation process?

## RESEARCH APPROACH AND METHODOLOGY

The study is conducted using an action research approach. It shares similarities with participant observation in the sense that the researcher takes part in the activities of the studied organization. However, the action in action research comes from the strong problem-solving focus and the researcher’s central role in the problem-solving process (Susman and Evered, 1978).

Our empirical data consists of three cases. The cases are joint innovation projects with two to three companies, referred as “groups of innovating organizations” (GIOs). All of them partake in the Real Estate and Construction Innovation (RECI) research program, planned to run from 2013–2017. The data was collected in 2012 and 2013 in researcher-led workshops that were held for the GIOs in the planning phase of the research program. For each GIO 3-6 workshops were held in which the agenda was to write a GIO-specific research plan for the program. The GIOs are described in more detail in table 1 below.

Table 1. Description of cases (GIOs)

<i>Participants</i>	<i>Previous co-development between companies</i>	<i>Initial motivations for the innovation project<sup>1</sup></i>
<b>GIO 1</b>		
<p><i>Company A.</i> Large globally operating corporation, with of office, R&amp;D and production facility portfolio.</p> <p><i>Company B.</i> Global facility and construction management services provider</p> <p>The companies had a long co-operation history. The competitive advantage of B was declining, since its proactive innovation capacity was seen lesser than its competitors. Company B wanted to enhance its innovation capacity. Company A aims at developing its sourcing practices so, that it would get innovations and proactive inputs for facilities management development from its suppliers.</p>		
<b>GIO 2</b>		
<p><i>Company C.</i> Medium-sized consulting and engineering company, strong focus on proprietary IT-tools and energy reporting systems development</p> <p><i>Company D.</i> Medium-sized IT solutions provider, specialized in space optimizing and corporate real estate management software</p> <p><i>Company E.</i> Large globally operating corporation with office and production facility portfolio</p> <p>Companies C and D had an existing client relationship with company E’s real estate department. Company C wanted to integrate software with D’s offering, which they see complementary. In addition, they wanted to develop a deeper client relationship with its client (E). Company E wanted to enhance their energy, supplier and space management efficiency and reporting practices</p>		
<b>GIO 3</b>		
<p><i>Company C.</i> Same company as in GIO 2 but only little overlap in individual project participants, focus more on consultancy</p> <p><i>Company F.</i> Small company focusing on public sector consultancy and resource planning services</p>		

<sup>1</sup> As expressed by the company representatives in the beginning of the co-development process

Over one year of co-development of real estate portfolio optimization tools, with company C focusing more on development and F on data collection. Both companies wanted to further develop their service offering to public sector customers.

## **RESULTS**

The main result is that during the intermediation process links between the co-development objectives and the business strategy of participating companies strengthened in all cases. The transparency of partners' business models and strategic targets made the discussion over targets, actions and required investments more to-the-point. It helped positioning each company's efforts in projects to the actions that will bring most value to them, contributing to the overall common objectives of the co-development project target.

The increased understanding and transparency of companies' joint, as well as company-specific objectives contributed to trust-building among partners and balanced the observed asymmetry of negotiation power between some co-development partners. In some cases new customer-supplier settings were identified. Co-development started to be seen as a strategy to leverage the competitive positioning by improved customer relationship to expand the services to new markets.

## **DISCUSSION AND CONCLUSIONS**

The paper examines the potential and strategies of four real estate and construction sector companies to establish end-user driven and open business models through formal and informal partnerships. We wanted to analyze, how the objectives, actions and priorities changed during the intermediation process, how the business model was taken into consideration and what roles did the intermediates get in the innovation process.

The most visible roles of intermediates were: linking of innovations to the business strategies of participant companies, making them visible to all parties and balancing the positioning of asymmetric parties. This was seen to improve the motivation of companies, indicated by increased contribution to the process. The results of the study confirmed the assumption found in existing literature that co-development partnerships are an increasingly effective means of innovating the business model to improve innovation effectiveness, and that participants should however carefully assess others' business models and needs. (Chesbrough and Schwartz 2007)

The outspoken role of university intermediates in the meetings was facilitator and coder of the discussion (Blayse et al 2006, Winch, 1998). In addition to these roles, it was identified that intermediates also helped to bring dynamism to the meetings and the sequence of workshops. During the process they contributed to identifying common targets and to construct the "big picture" of business strategy and long term targets (Winch 1998, Chesbrough and Schwartz 2007). The common long term business goals then acted as a compass and a time-scale for shorter scale operational activities. Intermediates had the possibility to increase the transparency of co-development motivations as by having the freedom to ask "dumb questions" which otherwise would not have been raised. They also ensured that all parties of co-development projects were heard and their business strategy and development potential were taken into consideration, despite of initial disproportion of the participants.



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The quality and focus of innovation projects were significantly improved through the introduction of a neutral party. This appears to be analogical to the REC sector challenge of life-cycle management, where this has been approached utilizing independent life-cycle consultants to watch over the long term targets and optimal solutions over drivers for short term optimization of investment costs.

It seems that the same short term-long term optimization dilemma is identifiable also in REC sector related co-development projects. Especially in project based, client driven projects these implications were observed. It is also clear that the linkage between project goals and business process should be enforced more clearly from the beginning of a co-development project.

This study is an introduction for a four-year research project on REC sector innovations (RECI). It will continue to explore how the innovation capacity of REC sector can be enhanced to unlock the sectors potential.

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