

REAL ESTATE DEVELOPMENT BY ARCHITECTURAL FIRMS: IS THE BUSINESS MODEL FUTURE-PROOF?

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Architectural firms need business models that are able to deal with the diversity and uncertainty of their work to run a successful business over time. Little is known about the business models that are used in architectural service delivery and how they enable or constrain firms to create and capture value in their projects. In this research, a theoretical framework is used to systematically analyse the business models for the delivery of real estate development services by architectural firms. The findings are based on interview data collected at 22 Dutch architectural firms and show that the resources which are necessary for value creation may either enhance or constrain the firm's value capture. This research contributes to construction management literature by providing a profound insight into the pitfalls and opportunities of real estate development by architectural firms. It helps architects to improve their business models in order to enable organizational sustainability.

Keywords: business model, value capture, value creation, value proposition

INTRODUCTION

Architectural firms increasingly take on new or altered roles to respond to ongoing societal and industry-level changes (Duffy and Rabeneck 2013). Their new ways of service delivery have to be accompanied by business models that are designed to serve and satisfy customers and to run a successful business at the same time. So far, little is known about the different business models that architectural firms employ and how these work out under certain market conditions or for certain types of firms. To successfully compete in a highly dynamic business environment, firms need to know how they can sustain or renew their competitive advantage (Teece 2010). Hence, a better understanding of the strengths and weaknesses of their business models is crucial.

Business model theory distinguishes between the value proposition, value creation and value capture of firms (Clauss 2016). The three interrelated constructs provide a powerful analytic outline to study how the business model of architectural firms is configured and how it is influenced by the challenges that firms face (Maister 2012, Winch and Schneider 1993). Business models for architectural service delivery need to incorporate the duality of practice and business (Coxe *et al.*, 2005).

In this research, we aim to develop knowledge of the business model for real estate development by architectural firms. We used a theoretical framework, based on business model theory from the field of management and literature on creative

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professional service firms, to analyse interview data gathered from representatives of 22 Dutch architectural firms. We discuss how resources enable or constrain the value creation and value capture of architectural firms from the offer of a real estate development value proposition. We contribute to literature by providing insight into the specific constraints and possibilities of real estate development business models for architectural firms. This insight may help architects to develop business models that are future-proof from both a professional and a business perspective.

THEORETICAL BACKGROUND

Business models

Over the last decennia, business models have become an important area of interest in different research fields and the potential of the business model concept for both the academic world and industry has been widely acknowledged (Clauss 2016).

Although scholars define the business model differently, they seem to agree that value is at its core. Shafer *et al.*, (2005, 202), for example, define a business model as “a representation of a firm’s underlying core logic and strategic choices for creating and capturing value within a value network”. Zott and Amit (2010, 216) conceptualize the business model as “a system of interdependent activities that transcends the focal firm and spans its boundaries”. They too refer to value, as “the activity system enables the firm, in concert with its partners, to create value and also to appropriate a share of that value” (*ibid.*). Osterwalder and Pigneur (2010: 14) helpfully include the pivotal role of value in their definition: “A business model describes the rationale of how an organization creates, delivers, and captures value”.

Many scholars conceptualize the business model as a configuration of different subconstructs (Clauss 2016), which are, for example, referred to as building blocks (Osterwalder and Pigneur 2010), components (Shafer *et al.*, 2005), elements (Teece 2010) or dimensions (Baden-Fuller and Mangematin 2013). From his literature review, Clauss (2016) recognizes three main dimensions that explain a firm’s business model, namely value proposition, value creation and value capture. The value proposition is aimed at solving customer problems and satisfying customer needs (Osterwalder and Pigneur 2010). It contains the solutions for customers and how they are offered (Clauss 2016). Value creation refers to how and by what means firms create value along the value chain (*ibid.*). It includes any activity that provides benefits that the customer is willing to pay for (Lepak *et al.*, 2007). Finally, value capture explains how value propositions are converted into revenues (Clauss 2016). It revolves around the firm’s revenue model and cost structure. A revenue model that is able to outweigh the firm’s costs is key to organizational sustainability (Bowman and Ambrosini 2000).

Building on the three main dimensions of the business model as identified by Clauss (2016) and expanding on the definition given by Osterwalder and Pigneur (2010), we define the business model as the rationale of how an organization proposes, creates, and captures value.

Out of the array of aspects that play a role in a firm’s business model (see for example the overview of literature by Zott *et al.*, (2011) and Clauss (2016)), firm resources seem particularly important. According to the ‘resource-based view’, resources represent a firm’s primary source of competitive advantage and thus define its ability to create and capture value. Resources are the tangible or intangible assets that are tied semi-permanently to a firm, such as physical, human or organizational capital (Barney

1991). Capabilities are firm-specific, organizationally embedded resources, or ‘intermediate goods’ that are built by a firm to handle its combined resources in order to achieve a desired goal (Makadok 2001). Scholars who follow the ‘dynamic capabilities view’ consider this specific type of resource crucial to successful value creation and value capture over time as capabilities enable the firm to adapt to its environment (Achtenhagen *et al.*, 2013).

Business models for architectural firms

Architectural firms are professional service firms (PSFs), a specific category of knowledge-intensive firms that are hired by their clients for their expertise and skills to work on unique problems (Von Nordenflycht 2010). As PSFs face both commercial and professional goals (Maister 2012), their value proposition, value creation and value capture extends beyond the traditional business interaction of perceived customer value and fee (Bowman and Ambrosini 2000). It also involves professional value, such as reputation, development or work pleasure (Bos-de Vos *et al.*, 2016).

PSFs often work in project-based constellations to perform their complex, customized work (Jones *et al.* 1998). The interaction with other stakeholders helps firms to deal with the heterogeneity and uncertainty that is involved in their work (Boyd and Danks 2000). Business model research of project businesses has only recently started to develop (Wikström *et al.*, 2010). Kujala *et al.*, (2010) support the view that a firm can have multiple business models and argue that the business model analysis in project-based firms needs to take place at the project-level rather than at the firm-level.

Figure 1 presents a business model framework for architectural service delivery based on our review of the literature. The framework is related to a project instead of to an entire firm and is useful to study the firm’s value proposition, value creation and value capture in the respective project. The value proposition refers to what the firm offers the customer in anticipation of the customer’s needs or desires. We distinguish between process services and product services.

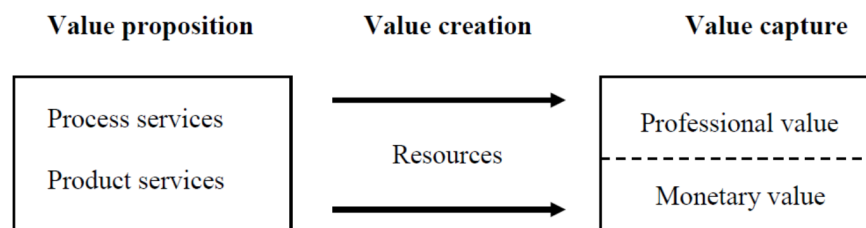


Figure 1: Business model framework for project of architectural firm

Value creation refers to how the firm creates value for the customer (and possibly also other stakeholders) based on the services that are proposed. We include the firm’s resources as an important mean for value creation. Resources also influence the amount of value that the firm is actually able to capture. They are key determinants of firm performance (Makadok 2001). Our framework expands on the classic definition of value capture, which we refer to as monetary value capture (i.e. firm revenues and profits) and includes professional value as a second dimension of value that can be appropriated by architectural firms. Professional value includes all the non-monetary elements that are important for the firm’s existence and survival (e.g. reputation, development, work pleasure) (Bos-de Vos *et al.*, 2016).

RESEARCH APPROACH AND METHODS

We used a qualitative research approach to expand on the information available in literature and to develop a profound understanding of business models for architectural service delivery (Miles and Huberman 1994). From January 2014 until January 2015, we conducted 28 face-to-face interviews with representatives of 22 Dutch architectural firms. We chose to use a semi-structured interview protocol. In this way, we were able to address different topics from literature while leaving room for the respondents to come up with additional themes. The interviews lasted between one and two hours. They were all audiotaped and transcribed verbatim. This resulted in 821 pages of interview data. The transcripts were checked by the respondents and their comments were implemented. We gathered additional firm-related and project-related material from the respondents, the firms' webpages and the business press to reinforce or question the interview findings.

The aim for the interview sample was to cover the wide range of architectural services that are provided by Dutch architectural firms. We searched for firms with different age, size and technology policies (Mintzberg 1979). The 22 firms that we selected were, at the time of the interview, between 1 and 87 years old, consisted of between 3 and 120 people (Vogels 2015), and used either 2D drawing or 3D modelling technologies. The firms had a design-oriented or service-oriented strategy (Coxe *et al.*, 2005) and were located in different geographic areas of the Netherlands.

The semi-structured interview protocol included questions to address the theoretical constructs 'value proposition', 'value creation' and 'value capture'. Regarding value proposition, respondents were questioned about what services and products they offered, why specifically these services or products were chosen and if they expected their value propositions to change in the near future. The questions about value creation and value capture were related to specific projects. Regarding value creation, we asked the interviewees which competences, resources or partnerships the firm used to create value for the client and user, how these influenced the value that was created in the project and what was missing to create value. Regarding value capture, respondents answered questions about the outcome of their service delivery in terms of monetary and professional value.

We systematically analysed the interview data with the help of our framework, which we further developed while going back and forth between literature and empirical data. Software program MAXQDA was used as a supporting tool for the data analysis. Our data analysis procedure consisted of four steps. First, we derived value propositions from the data, which we divided into overarching categories. Second, we looked into the value creation of the different projects that were mentioned and searched for the resources that particularly enabled or constrained the architectural firm's value creation in the project. Third, we focused on the firm's value capture and analysed how resources influenced the appropriation of professional and monetary value in the project. Finally, we searched for similarities and differences across the projects to build theory. In this fourth step, we identified common opportunities and pitfalls for different scenarios of service delivery, which we supported with examples from multiple cases. In this paper, we discuss the business model for the delivery of real estate development services. Other business models will be included in a next paper.

FINDINGS

The value proposition: Offering real estate development services

Architectural firms that wish to deliver real estate development services appear to choose either a ‘product development’ or a ‘business case development’ value proposition. The ‘product development’ value proposition refers to the product-oriented services that are offered to come up with a design and the more process-oriented services that are needed to actually realize the designed product. According to the data, the main goal for architects is to ensure a substantial role for the architectural firm within the project. Firms, for example, proposed new apartment buildings to potential buyers. Respondents believed that selling the design of buildings directly to the end-users would naturally exclude the interference of other actors and lead to a bigger role for the architectural firm. One of the firm owners described his firm’s value proposition as the design of “affordable but special dwellings” in which the buyer, who is also the end-user, becomes directly involved in the design process and is able to influence the design of his own house, something that is only possible to a very limited extent in regular housing projects in the Netherlands. Another example of the ‘product development’ value proposition is the offer to design and realize the transformation of existing buildings.

The ‘business case development’ proposition consists of the services that are necessary to design and realize a marketable product, which has its own revenue stream. Architects used this kind of value proposition to demonstrate that they are able to add value to society by upgrading parts of the city in unexpected ways. An exemplary project that was based on this kind of value proposition consisted of the profitable and attractive transformation of an existing office-building that was on the list to be demolished. By setting up a profitable business plan for this project, the architectural firm wanted to show both the potential of the property and the added value of an architectural approach. Based on this and other examples, we found that a ‘business case development’ proposition helped architects not only to generate societal value, but also monetary value for the property owners.

The value creation: Delivering real estate development services

As our data shows, architectural firms are particularly depended on financial knowledge to create value with a ‘product development’ or ‘business case development’ type of proposition. It seems that financial knowledge is crucial to study the feasibility of a certain location and product idea, which are both key elements in real estate development. One of the firm owners emphasized the importance of knowledge about property calculations and investment calculations. He either asked employees who were specialized in calculating to expand on their regular work by including earlier stage calculations or attracted partner firms when it got really specific. Financial knowledge also seems crucial to develop a well-thought-through business case that allows a project to generate its own revenues. This was illustrated, for example, by the transformation project. In this project, the architectural firm gained the necessary financial knowledge by collaborating with a young real estate developer. Together they came up with a business case with a return of investment after five years by means of rental incomes.

Architectural firms typically do not own land, properties or substantial financial resources. We found that this lack of physical resources motivates architects to look for capital-intensive partners in their development projects, such as financiers,

developing contractors or developers. One of the firms that wanted to realize a new apartment building, for example, used its connections with the local municipality to find vacant and suitable plots for a project. Another firm initiated partnerships with a developer and a developing contractor as these actors had both access to financial resources and ownership of land. We found that architectural firms also collaborate with other architects to share their knowledge. As indicated by one of the respondents, a partnership between multiple architectural firms may even present an opportunity to avoid the involvement of a capital-intensive partner.

The real estate development activities by architectural firms are initiated ‘bottom-up’ and do not fit into the standard regulatory frameworks. Therefore, the support of influential actors appears to be necessary to create value. Dutch architectural firms seem particularly looking for the facilitation by municipalities. Many of our respondents mentioned that municipalities had to become more ‘guiding’ to facilitate the real estate development initiatives of smaller organizations such as architectural firms. They criticized municipalities for being mainly interested in deals with bigger organizations. We found that the involvement of influential actors such as municipalities helps to create a large support base for a project. One firm, for example, was better able to get its projects realized once they had managed to become a strategic partner of the municipality.

The value capture: Outcomes of real estate development services

Data show that financial knowledge helps architectural firms to generate monetary value from their service delivery. Examples of both a ‘product development’ and ‘business case development’ type of value proposition indicate that financial knowledge is employed by architectural firms to determine viable or profitable fees. In a ‘business case development’ proposition, financial knowledge also enables firms to generate income or save costs from the revenue stream that is created in the project. The firm of the transformation case, for example, cleverly saved on its monthly costs by renting the property that they developed for only a reimbursement of expenses.

Our data point out that successful professional value capture from the delivery of real estate development services is only possible when architects enjoy the large amount of managerial and financial activities that are needed. Architects who do not have any affinity with these kinds of activities risk losing their work pleasure, an important part of professional value capture. One of the architects, for example, stated that she absolutely did not want to do a similar project a second time. During the project, she had to be everything at the same time: the developer, the facility manager and the architect. It generated huge amounts of stress and in the end she wondered for who she had been doing it. In the future, she and her partner just wanted to focus on the core of their business: “the design thinking”. This shows that a professional drive to be involved in managerial and finance-oriented activities is key to the real estate development business model and absolutely necessary for firms who offer ‘product development’ or ‘business case development’ propositions.

The interviews show that the monetary value capture of architectural firms is severely hindered by the involvement of capital-intensive partners. For instance, the developer that provided access to land and capital in the case of an apartment building was unwilling to pay for the lead architect’s hourly rate of 150 euros. According to the architect, the developer considered him ‘an artist’ and the hourly rate inappropriate.

Although the architect stated that the rate was both reasonable and necessary because he had created an entire business plan for the project, he was struggling to convince

the developer of this added value. The example of the transformation project shows that although projects are indeed able to generate money, it is incredibly difficult for architectural firms to appropriate a share of that money. A different investor took over the project as he recognized the money stream that was involved. The architects, who were planning on generating revenues with their business case after five years, were suddenly no longer a party of interest in the project. They even did not receive any monetary compensation for their idea and extensive service delivery.

Based on the interviews, we suspect that the difficulty of monetary value capture is complicated even further by the importance of professional value capture. We found evidence that although architects acknowledge the importance of generating revenues with their projects, they considered making a statement as an architect and a societal impact more important than making money. One architect, for example, said: “We primarily wanted to prove that this can grow, so we actually proved what we wanted to prove”. It seems likely that this strong professional drive prevents firms from making clear business agreements in their partnerships, which can take its toll when an unexpected actor enters the arena.

A relationship with the buyer appears to help architectural firms to capture both monetary and professional value. Regarding monetary value capture, a personal relationship with the buyer or with an influential person in the 'buying' organization is beneficial to the fee negotiation of architectural firms as it helps firms to explain their added value to the client. In one of the cases, for example, the architect was able to negotiate a fee that would ensure a reasonable income and profit margin because he was in direct contact with the director of a small family-run contracting company.

Another case shows how an architect-buyer relationship provides architectural firms bargaining power for the fee negotiation when a capital provider is involved. “Meanwhile I [the architect] just think: ‘you need me’. I have a database of twelve hundred people of which two hundred [...] literally want one of our homes, thirty or forty of them would like to sign tomorrow”. This architect's personal relationship with many potential buyers gave him an opportunity to negotiate a higher fee from his capital investor. Regarding professional value capture, a relationship with the buyer seems an important condition for the work pleasure of architects. One of the architects, for example, said that for him it was more about the buyers than about the money: “New people every week, who are all in love with your project. What more do you want? That’s just incredibly cool, isn’t it?”

CONCLUDING DISCUSSION

This paper contributes to the theory development of business models for architectural service delivery. It specifically adds to construction management literature by highlighting the pitfalls and opportunities of business models for architectural firms that are offering and delivering real estate development services. We show how resources that are crucial for value creation can also complicate the monetary or professional value capture of architectural firms.

Our business model analysis, which is based on a framework that distinguishes between the value proposition, value creation, and value capture (professional value and monetary value) of architectural firms within a project, demonstrates the importance of four resources in the real estate development by architectural firms, namely financial knowledge, capital-intensive partners, support of influential actors and a relationship with the buyer.

First, we show how financial knowledge helps architectural firms to turn to negotiate profitable fees and to come up with profitable business cases for projects. The interviews provide evidence that the deployment of this knowledge really needs to fit the firm. To ensure work pleasure and thus professional value capture, architects need to feel happy with a more financially-oriented way of working.

Second, we point out that capital-intensive partners are crucial to create value as they provide access to land/property and capital. However, the involvement of such partners also seriously hampers the monetary value capture of architectural firms. This suggests that architectural firms need both a strong financial drive and a high level of persuasiveness to ensure that partnerships with these kinds of actors are profitable to the firm. We suspect that firms will especially benefit from capital-intensive partners that are willing to support the architect's goals. Some actors outside the construction industry may fit this requirement surprisingly well.

Third, the support of influential actors, such as municipalities, is necessary to facilitate the real estate development by architectural firms. Strategic partnerships with these kinds of actors may be extremely helpful. We expect that the inclusion of added value for influential actors in the value propositions of architectural firms may lead to mutually productive partnerships and ease real estate development by architectural firms.

Finally, we found that a relationship with the buyer - which is not really necessary to create value - is very important for the architectural firms' value capture. It increases the firm's bargaining power to negotiate a fee and ensures work pleasure and thus professional value capture. These insights suggest that firms should be extra cautious to engage in service delivery without the involvement of a buyer, as it is not likely to result in any benefits for the firm. Moreover, a project in which the buyer is a large organization seems to involve a higher level of risk regarding the firm's value capture. Firms need to assess these risks and take appropriate measures.

Although our data show that business models for real estate development services by architectural firms are not yet profitable or completely satisfactory, we found some major strengths and weaknesses of these particular business models. Building on our findings, this study offers architectural firms knowledge to implement or improve business models for real estate development services and to consequently enhance future financial and professional performance.

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