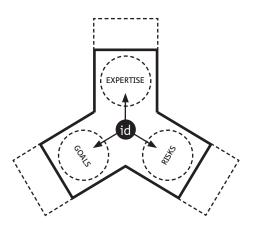
6 A toolkit for developing projectspecific value capture strategies



The value capture toolkit in this chapter was developed in close collaboration with the futurA research team and consortium partners. It is also included in the practice-oriented book Future roles for architects: an academic design guide, which was published as a limited edition in Dutch and is freely available online in both Dutch (https://books.bk.tudelft.nl/index.php/press/catalog/book/627) and English (https://books.bk.tudelft.nl/index.php/press/catalog/book/628). Preliminary versions of the toolkit were presented and discussed at:

- The Professional Practices in the Built Environment Conference, organized within the Value of Architects project, 27-28 April 2017, Reading, the UK.
- A discussion group of a network of managers of architectural firms, organized by the Royal Institute of Dutch Architects (BNA), 20 November 2016, Rotterdam, the Netherlands.
- A discussion group of the Policy Advisory Committee Entrepreneurship, organized by the BNA, 9 February 2017, Delft, the Netherlands.
- FuturA Living Lab #8, 22 September 2016, Amsterdam, the Netherlands.
- FuturA Living Lab #9, 25 April 2017, Utrecht, the Netherlands.
- The Delft University of Technology Research Exhibition, 6-8 June 2017, Delft, the Netherlands.
- FuturA Symposium 'Design your Business, Design your Futurel', 29 March 2018, Delft, the Netherlands.

This chapter presents the design-oriented part of my research, introducing a toolkit that can be used for the capture of value in projects. Although the toolkit was specifically designed for architectural firms involved in construction projects, it can also be used by other organizations and in other project contexts.

The chapter is organized into four main sections. It begins by briefly setting out the relevance of the toolkit, with insights from the literature and the previous empirical chapters used to provide a background to explain why architectural firms may benefit from a value capture toolkit. It then presents the development process, describing the methodology used, the steps that were followed to arrive at the final design of the toolkit and the key resources that served as input. Following this, the different components of the toolkit are presented. These include four generic professional role identities taken on by architectural firms, a board game with cards for value capture, an overview of specific value capture challenges and recommendations in relation to each of the four role identities, as well as nine example projects. The chapter concludes with some notes on the toolkit's usage, including the proposed settings in which it may be useful and suggestions for successful application.

§ 6.1 Why architectural firms may benefit from a value capture toolkit

Architectural firms are driven by the pursuit of originality and novelty in the delivery of unique, customized services addressing the complex problems of clients (Jones et al., 2016). They collaborate with other actors in temporary, inter-organizational projects where different domains of expertise are integrated. Although the role of architectural firms in construction projects has historically been well defined (Burr and Jones, 2010), their role has recently become more diverse, blurred and contested (Duffy and Rabeneck, 2013). Contextual developments, such as the emergence of new building professions (Burr and Jones, 2010) and new technologies (Whyte, 2011), the increase in integrated project delivery (Lahdenperä, 2012), and the commodification and devaluation of architectural expertise (Ahuja et al., 2017), have altered the scope of work for which architectural firms are commissioned and also had an effect on their professional autonomy. The increasing diversity of tasks and the marginalization of the architect's position in projects is resulting in more heterogeneous and daunting processes of organizational value capture. New roles do not always fit the revenue models that firms employ in projects, or they prevent firms from performing the work that they consider crucial, resulting in unprofitable and/or professionally unsatisfactory projects.

Previous chapters have shown how architectural firms tend to use considerably risky value capture strategies in projects. Chapters 2 and 3 both illustrated that firms are vulnerable to escalating commitment: they tend to continue their activities in a project until they reach an optimal solution, regardless of the hours spent. Architects typically argued that if a project solution was not 'right', the effort and investment to make it right would eventually pay off in terms of a more comprehensive role, better conditions for value capture or the capture of values that contribute to the firm's professional goals. Firms also sometimes deliberately engage in unprofitable projects and take the risk of financial value slippage in projects for the sake of enhanced long-term benefits for the firm, as was illustrated in Chapter 4. While these risky value capture strategies suggest a certain courage and perseverance by architectural firms in managing their businesses, they also demonstrate that firms are particularly vulnerable to unforeseen changes.

This vulnerability became painfully clear during the aftermath of the financial crisis of 2008, when demand fell and huge numbers of even the most renowned architectural firms collapsed because they were not able to respond to changes in the business environment surrounding them. Although the firms still co-created value in projects, they were unable to retain sufficient monetary value from these projects to survive and/or had to engage in work that did not match their professional standards. Architectural firms must thus deal with the value capture challenges that they will encounter in projects on a more strategic level to enhance the sustainability of their businesses and the architectural profession at large.

Research in the field of management has shown that organizations benefit from the continuous management and innovation of their business strategies (Amit and Zott, 2012; Teece, 2010). Strategy tools, such as the 'Business Model Canvas' (Osterwalder and Pigneur, 2010), may be particularly helpful instruments in this regard as they help firms to address the fundamental strategic issues that they face in a simple and systematic way (Clark, 1997; Jarzabkowski and Kaplan, 2015).

Although the use of strategy tools has become embedded in the daily practice of a variety of organizations, such as consultancy and entrepreneurial firms, studies on the strategic management of architectural firms have highlighted that architectural firms primarily focus on the management of their projects and deal with their strategic management issues on a less frequent and more ad-hoc basis (Winch and Schneider, 1993). This is supported by the empirical data collected for this dissertation, which revealed that members of architectural firms often do not know or do not agree on the frequency with which they engage in strategy meetings.

The value capture toolkit that is presented in this chapter offers a way to engage more regularly in strategizing that moves beyond the content of a project. The practitioners who were involved in the research strongly agreed that such strategizing is crucial if firms wish to increase their own and the profession's competitive advantage, but also found that it may be challenging to implement. This chapter addresses both aspects by providing insights into how the toolkit addresses the value capture challenges that firms face in their projects, introducing the specific toolkit components that may facilitate dealing with these challenges (§6.3), and the considerations that should be kept in mind for successful application (§6.4).

§ 6.2 Development of the value capture toolkit

The process of development of the toolkit followed a design-thinking approach (Dorst, 2011) and consisted of five steps, which were repeatedly revisited along the way. We used literature from different disciplinary fields (e.g. strategic management, project management, construction management, professional service firms, marketing), the empirical data collected for the futurA project, and our meetings with practitioners as input for the steps and as a means to validate and further strengthen the outcomes of each step. Figure 6.1 provides a visual representation of the toolkit development process.

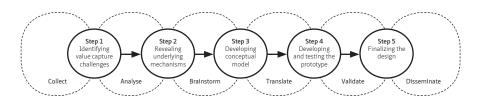


FIGURE 6.1 Toolkit development process

§ 6.2.1 Step 1: Identifying value capture challenges

The first step was analytical and aimed to identify the most salient, generic value capture challenges that architectural firms encounter when working in project constellations. What is it that makes it so difficult to realize multiple strategic goals in the complex, dynamic project environments in which firms work? The step aimed to determine the purpose of the toolkit by identifying the main issues with which architectural firms might need and appreciate support.

To achieve this goal, all of the interview data that were gathered in the futurA project were thoroughly analysed, compared and discussed by the two PhD researchers. The process was repeated multiple times and over an extended period of time. Emerging themes were discussed with the wider research team on a monthly basis and every six months with the consortium partners. Eventually, this led to the shared consensus that architectural firms face two important value capture challenges in their project-based work: 1) they need to acquire and perform a role in a project that is in line with their professional identity, and 2) they need to develop strategies to capture both financial and professional value on the basis of that role.

We refer to the first challenge as the firm's 'role identity challenge'. A role identity provides a socially constructed definition of one's self-in-role and includes 'the goals, values, beliefs, norms, interaction styles and time horizons that are typically associated with a role' (Ashforth, 2000, p. 6). The construct of 'role identity' is commonly used to refer to the role-based identity that results from individuals enacting a certain role (Ashforth, 2000). We use 'role identity' to refer to the role-based identity that emerges from architectural firms performing a certain role within a project. The interview data showed how tensions between a firm's role in a project and the firm's professional identity complicate the co-creation and capture of value. We found examples of firms that provided services for free or spent too many hours on their work to be able to realize projects that they could justify professionally. The respondents considered these investments in a project necessary, as their often marginal role in the project did not provide the right conditions to capture professional value.

Regarding the second challenge, which we refer to as the 'value capture strategy challenge', firms have to determine how they can successfully capture value on the basis of the services and/or products that they propose and create with a certain role identity in mind. Our data revealed that different role identities require different value capture strategies by firms. Disregard for the specific challenges and opportunities associated with a certain role identity may frustrate firms' value capture in projects, because important relationships between strategic decisions or alternative strategies

may be easily overlooked. Examples include projects in which the financial value capture of firms became constrained because they used a traditional revenue model to deliver fewer or different kinds of services.

§ 6.2.2 Step 2: Revealing underlying mechanisms

The second step focused on revealing and detailing core aspects and mechanisms that underlie the two value capture challenges. We systematically looked for reasons that explained why value capture challenges arose in projects and how the strategies employed by firms were or were not successful in dealing with these challenges. We were particularly aware of the need to be thorough and to keep an open mind during the entire process, as aspects that might seem minor or peripheral can also provide valuable clues (Dorst, 2011).

With regard to the role identity challenge, the role negotiations of architectural firms in projects revealed that an architectural firm's professional role identity is strongly related to the *professional expertise* it has and wishes to offer in projects, and the project phases in which it considers this expertise necessary or valuable (see Chapter 2). Differences between the firm's and the client's view on the necessary expertise were found to lead to misalignment of firms' role identities within projects, thereby hindering the capture of financial and/or professional value. For example, firms were often not commissioned to deliver technical expertise during the project's engineering's stage, which prevented them from realizing the project quality that they wished to deliver from a professional viewpoint, or which required additional financial investment to achieve it.

With regard to the value capture strategy challenge, we found that the strategies that firms used to capture value in projects are particularly related to the *hierarchy in goals* that firms wish to accomplish in these projects (see Chapter 3) and the *financial and professional risks* that they are willing to take in pursuing these goals (see Chapter 4). For example, firms decided to postpone or compensate financial revenues in projects, or even rejected projects, to attain and safeguard their professional goals, which shows that they were willing to risk losing money in projects but did not want to risk their professional aims.

Further analysis and comparison of the specific situations in which certain role negotiation strategies or value capture strategies were chosen, revealed three mechanisms that influence firm role identity and value capture in projects. First, decisions regarding

activities and responsibilities in a project affect role-identity alignment and value capture. It was found that architectural firms often failed to capture professional value in projects or feared to do so when they could not enact the role they aspired. Activities also play a key role in the business model literature. In their review of the literature, Zott et al. (2011) identified firm activities as one of the core components underlying the many business model conceptualizations that have been proposed by scholars.

Second, decisions regarding the use of firm resources and partners determine the extent to which the professional identity of the firm and the actual role of the firm in the project are aligned, and whether the firm is able to capture value on the basis of that role. We found situations in which firms particularly depended on performing certain activities in-house to ensure that they could realize project quality that matched their professional standards; attain their reputational goal in their contribution to the project; or were able to capture sufficient monetary value. While traditional views on the business model depict resources as being owned by a firm or its direct co-creation partners, business model literature from an ecosystems perspective emphasizes that resources can be owned by any actor and integration of these resources needs to be facilitated by firms (Wieland et al., 2017).

Third, collaboration agreements and the revenue model played a key role in role-identity alignment and value capture. A lack of agreements with partners involved, or revenue models that did not match a firm's activities in a project, prevented firms from capturing value. Solid agreements regarding a firm's activities and responsibilities in a project, a strong basis of trust among collaborating actors and/or revenue models that were specifically designed to accommodate firm and project needs over the course of the project proved to strengthen a firm's ability to capture value in a project. While the revenue model represents a core mechanism in many business model studies adopting a focal firm perspective and focusing on profit generation (Amit and Zott, 2012; Zott et al., 2011), collaboration agreements are particularly relevant at the boundary of the firm and for the attainment of other goals.

§ 6.2.3 Step 3: Developing conceptual model

In step three, we aimed to arrive at a more holistic understanding of the value capture of architectural firms in projects. We translated the insights of the first two steps into a conceptual overview, in which we particularly focused on how the different value capture challenges and value capture mechanisms were related. This resulted in the conceptual model of Figure 6.2.

Figure 6.2 shows that the role of a firm in a project is always given in by both the project and the firm. The professional identity of the firm determines which goals it aims to achieve by means of the project, what expertise it considers important to employ in order to achieve these goals, and what risks the firm is willing to take to ensure this. In other words, the professional identity that is expressed in goals, expertise and risks determines the role that the firm would ideally perform in the project (see Figure 6.2a). The goals of the client and other stakeholders in the project, the expertise that is requested or already available to attain these goals and the risks that project actors are willing to take, or wish to avoid, in order to realize a successful project, determine the role the firm can actually play in the project (see Figure 6.2b).

As our data show, the desired and actual roles of a firm in a project are often not aligned, leading to tensions in the firm's role identity. Firms may either desire a greater role than they are actually able to perform in the project, or claim a greater role in the project than necessary (see Figure 6.2c).

Carefully thinking through decisions regarding the firm's activities and responsibilities in the project, its deployment of resources and partners, and its collaboration agreements and revenue model, contribute to the firm's ability to capture value when performing a certain role in a project (see Figure 6.2d). This helps firms to specify and justify the role they can perform in a project, which not only makes it easier to decide within the firm what to pursue in a project and what not, but also provides opportunities to narrow the gap between the firm's desired role and its actual role through negotiation with other project actors.

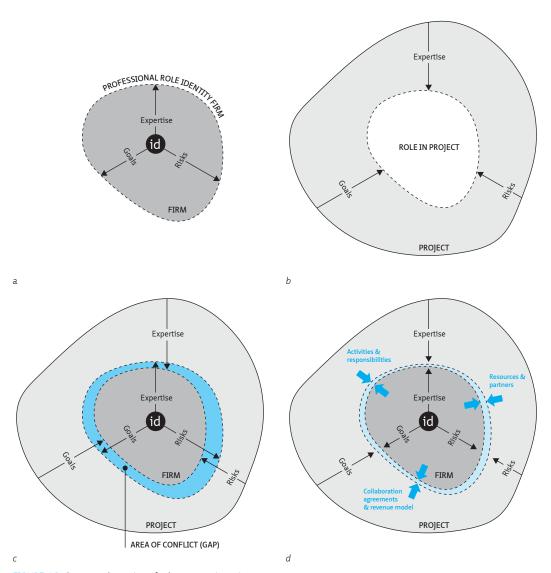


FIGURE 6.2 Conceptual overview of value capture in projects

§ 6.2.4 Step 4: Developing and testing the prototype

The fourth step aimed at translating the conceptual model into a toolkit that would be able to support architectural firms in developing their value capture strategies. Inspired by Osterwalder and Pigneur's Business Model Canvas (2010), we developed a framework for value capture in projects based on the key aspects and their relationships, which were discussed in Step 3 (§ 6.2.3).

Prototype 1

A first prototype of the framework (see Figure 6.3) consisted of three steps that guided users from their value proposition and intended value capture in a project (Step 1) to an alignment between the two by means of a further specification of the activities and risks involved (Step 2), and the resources, partners, agreements, costs, revenues and governance necessary to facilitate this (Step 3). The framework was accompanied by a list of answer options for the topic-related questions that users were asked. This was jointly developed on the basis of our review of the business model and project governance literature and the analyses of the empirical data collected in our own research.

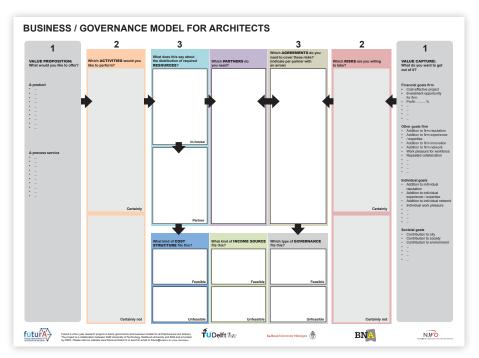


FIGURE 6.3 Prototype 1

Prototype 1 was tested by several members of the research team and then on an individual basis by six consortium members during Living Lab meeting #8 (see Figure 6.4). The participants were first instructed how to use the framework and then all given a description of a hypothetical project for which they were asked to fill in the framework. The participants received stickers with pre-printed answers with which to fill in the boxes of the framework, and they were also given blank stickers to make their own additions. To test the functionality of the framework, the individual sessions each had the same structure and content. All participants were given the same project description, the same stickers and guided through the framework in exactly the same order by one of the futurA researchers. The researcher who guided the process asked the individual participant questions to gain a better understanding of the rationale behind the decisions and in which way the framework was helpful or not in arriving at these decisions. The researcher also observed and audio-recorded the entire process.

The outcomes of the six processes were discussed in a plenary session (see Figure 6.5) to identify important commonalities and differences and to evaluate the design and use of the framework. An important conclusion of this discussion was that the framework revolved around recognizable challenges in the everyday practice of architectural firms and allowed participants to consider these challenges more

thoroughly by making their decisions in a wider context. The interaction between different questions was considered important, as it helped participants to recognize important relationships between their decisions and reconsider these over the course of the process. Participants also mentioned that it was particularly valuable to have someone guiding the process, as this encouraged them to engage in the process with a more critical and reflective attitude. They envisioned that further benefits could be gained from filling in the framework with a larger group of people, and therefore encouraged us to test the framework in a group setting.





FIGURE 6.4 Individual session

FIGURE 6.5 Plenary discussion

In addition to the Living Lab meeting, Prototype 1 was discussed in four meetings with members of the BNA. The responses of the architects and partners of architectural firms who attended these meetings were particularly helpful as they were not biased by involvement in our research. The feedback that was given further strengthened the main conclusions of the Living Lab meeting, but also highlighted the importance of using vocabulary from practice and attractive visualization to encourage architects to use the toolkit.

Prototype 2

Prototype 2 (see Figure 6.6) basically covered the same steps and topics as Prototype 1, but had a different design and used different terms to refer to the framework's topics. For example, the term 'value proposition' was replaced by the term 'offer', the term 'value capture' by 'goals' and the term 'resources' by the Dutch equivalent 'middelen'. The pre-printed stickers were discarded and the different boxes of the framework were left completely blank to encourage users to phrase and thereby think about their own answers. Similar to Prototype 1, the boxes included one or two key questions that were directed at the users to help them to come up with the right kind of answers for each

topic. The size of the boxes was adjusted to the size of post-its, so that users could write their answers on post-its, stick them into boxes in the framework and remove or reposition them later if necessary.

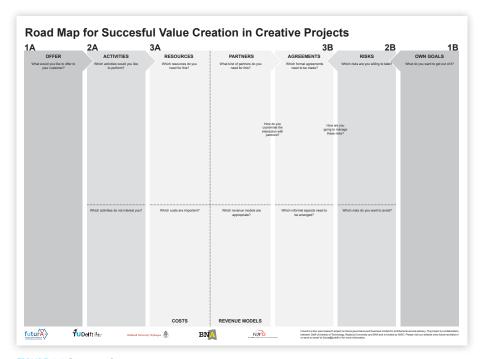


FIGURE 6.6 Prototype 2

Prototype 2 was tested in a group setting in 17 diverse architectural firms (see Figure 6.7 and Figure 6.8) to gather insights into the utility and design of the framework from various, possibly opposing, perspectives. The firms selected were active in different sub-sectors of the field (e.g. housing, health care, cultural, utility buildings, etc.), were founded between 1914 and 2015, ranged in size between 2 and 165 people, and were owned by between 1 to 10 people.

Over a period of two months, we organized a strategy meeting in each of the firms. The meetings involved multiple participants, who were selected by the managers of the firms with the aim of creating a setting that was similar to the firm's regular strategy meetings. To ensure that the content of the meeting would be representative of a firm's regular strategizing activities, we asked the participants to fill in the framework for a project that was recently acquired or was in the process of being acquired and thus still

required strategizing. The project was chosen prior to the meeting or at the beginning of the meeting.

The meetings lasted approximately three hours and were all conducted by the same two researchers to ensure robustness and comparability. My fellow researcher played the role of moderator and guided the group through the framework while asking questions about their decisions and thoughts. I took a participatory observant role, introducing the framework at the beginning of the meeting and instructing the group in how to use it. During the meeting, I kept track of the discussion with an event log, as well as video-recording and taking photographs, and asking questions for clarification purposes. At the end of the meeting, I asked the participants to evaluate the design and use of the framework. The comments were all recorded in writing and compared to develop a coherent understanding of the tool's strengths and weaknesses, as well as its potential for implementation in practice.



FIGURE 6.7 Group discussion



FIGURE 6.8 Filling in the framework

A detailed comparison of the feedback that was provided during the sessions revealed that, in general, participants valued the structured way of working towards strategic decisions. Some participants mentioned how the framework had triggered them to think about aspects that they typically would not consider in-depth, or had revealed important opportunities or risks by considering different topics in relation to each other. Other participants said that although they had already considered the topics and relationships concerned in their projects, the framework helped them to make their strategies more explicit and manageable. The participants also appreciated the guidance of the independent facilitator, as he had continuously triggered them to substantiate their choices and think beyond common strategic decisions.

For two firms, the framework was unnecessary, as they already used their own projectspecific strategy tool, or the participants did not see a match between the creative direction given by the firm's owners and the structured, time-consuming process of filling in the framework. In another meeting, the owner of the firm mentioned that he did not need a framework to make good strategic choices in projects. However, when an employee who had participated in the session said that the framework had given him greater insight into why they were doing things the way they did in the project, the owner changed his mind. He said that although the framework might be redundant in his firm in relation to developing project strategy, it might represent a valuable communication tool.

Recommendations for improvement

The feedback that was provided at the end of the sessions resulted in two important recommendations for further development:

- 1 To make the framework more specific for different kinds of projects, firms or scenarios of use to increase its applicability.
- To distinguish more clearly between answers that are oriented towards the project
 aimed at providing solutions that fit the request of the client (i.e. the actual role of
 the firm in the project) and answers that are oriented towards the firm aimed at
 providing solutions that are in line with the firm's strategic goals (i.e. the desired role of
 the firm in the project), as these two may be very different and may involve tensions.

Purposes of usage

Participant discussions also led to the emergence of five potential purposes for which the framework could be used: A) for the development of firm strategy, B) for the development of project strategy, C) for the development and management of the project portfolio, D) for interaction in the project constellation, and E) for educational purposes. The five potential purposes of usage were discussed in more detail in Living Lab meeting #9, to which we invited a larger group of practitioners. Participants included architects (mainly owners), clients, architecture professors and representatives of the BNA, including the person in charge of the BNA professional training programme.

Following an introduction to the framework and inspirational presentations of two example projects (see Figure 6.9), five groups of 4-6 participants, moderated by a futurA researcher, developed a 'programme of requirements' for each of the five purposes of usage (see Figure 6.10). The programmes were evaluated by one of the other groups, which resulted in an extensive overview of recommendations

and guidelines for further development of the toolkit for each of the use scenarios involved. The results led us to focus the final design of the framework on its use for the development of project strategy by either an architectural firm or the wider project constellation, and on its use for education. The development of firm strategy by means of the framework was dismissed, as this was facilitated by already existing tools, such as the Business Model Canvas (Osterwalder and Pigneur, 2010). Use of the framework for the management of firms' project portfolios was considered less relevant by the participants involved and therefore also dismissed.



FIGURE 6.9 Presentation of example project



FIGURE 6.10 Discussing 'programme of requirements'

§ 6.2.5 Step 5: Finalizing the design

The fifth and final step aimed to further develop the prototype to produce a final design. The recommendations for improvement derived from Step 4 (§ 6.2.4) were all integrated into the final design of the framework. To customize the framework to multiple specific situations, we decided to add specific questions to the general questions to facilitate firms in addressing the main value capture challenges and opportunities for four generic professional role identities that we discovered in our empirical data. We refer to these professional role identities as the 'initiator', 'specialist', 'product developer' and 'integrator'. In § 6.3.1, the professional role identities and accompanying challenges and opportunities are presented in detail.

A graphic designer was hired to adjust the design of the framework to the intended users. In this step, the framework was adjusted to function more as a board game and centred around a core (see Figure 6.11 and Figure 6.12), which allowed users to play the 'game' from all positions around a table. The questions were printed on re-writable

cards that could be positioned on the board, triggering users to communicate about their choices. Five sets of cards were included: a set of generic questions about the topics of the framework and four sets of specific questions for the initiator, specialist, product developer and integrator role identities. The users of the framework are able to decide which cards to use for each individual project. Different firms may decide to use different cards, as they may have different professional role identities in projects, or different experiences in dealing with certain topics. The recommendation to differentiate between project-oriented and firm-oriented decisions was addressed by dividing the framework into two rings centred around one replaceable piece, which represents the specific case for which the framework is being filled in. The inner ring is oriented towards the project; the outer ring towards the firm. The final design of the framework is presented in § 6.3.2.

To inspire and help users to address the challenges of a certain role identity in a project, we added example projects for each of the four role identities. Based on the insights from our interviews, we selected nine examples, including projects undertaken by our consortium partners. For each of these projects, the firm's strategy was filled in for the different topics of the framework by means of a short interview with the project architect, conducted by a futurA team member. The example projects were all visualized in the layout of the framework to increase their explanatory power. Section 6.3.3 includes the different example projects.



FIGURE 6.11 Session with graphic designer

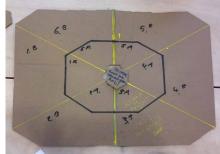


FIGURE 6.12 Prototype board game

§ 6.3 The value capture toolkit

The value capture toolkit consists of four main components, which are introduced in the following sections. Section 6.3.1 presents an overview of four generic professional role identities of architectural firms to specify the project and professional context in which one is involved. Section 6.3.2 includes the board game with cards to develop comprehensive and balanced value capture strategies for projects. Section 6.3.3 then provides an overview of role identity-specific value capture challenges and recommendations to identify common pitfalls and opportunities for the type of role identity one has in a project. Finally, section 6.3.4 presents the example projects for each of the four generic role identities to inspire practitioners and support the generation of well thought through strategies.

§ 6.3.1 Professional role identities of architectural firms

Architectural firms have a strong sense of professional identity, which they derive from well-developed institutions of professionalism (Abbott, 1988). This professional identity provides an ethically based framework that guides their actions and decisions (Empson et al., 2015; Muzio & Kirkpatrick, 2011). It is formed in relation to institutionalized ideas of the role of the professional (Chreim et al., 2007) and can be defined as 'the relative stable and enduring constellation of attributes, beliefs, values, motives, and experiences in terms of which people define themselves in a professional role' (Schein, 1978 in: Ibarra, 1999, p. 764). Historically, architectural firms performed one clearly defined role in a constellation with other actors (Burr and Jones, 2010). As this role has become increasingly diversified, the professional role identities that firms take on in projects have also started to differ across and within firms. We differentiated between the 'initiator', 'specialist', 'product developer' and 'integrator' role identities, which we describe in more detail in Table 6.1 The four generic role identities are not meant to be exhaustive and can break down into various sub-forms; however, they cover a wide spectrum of contemporary project-based work that architectural firms engage in or see themselves performing in the near future.

	INITIATOR	SPECIALIST	PRODUCT DEVELOPER	INTEGRATOR
Example descriptions	Creator or inventor of a project	Consultant, idea factory, BIM specialist, housing advisor	Maker, advice provider	Spider in the web, guardian of quality
Characteristics				
Key activities	Identify, seize and sell a project opportunity	Deliver and master a fixed set of activities	Develop and execute a business case and design for a product	Bring together and coordinate different disciplines
Key responsibilities	Create support among stakeholders	Become and remain frontrunner in a certain domain of expertise	Compose an effective co-creation team	Create common understanding and shared goals
Key professional values	Feels responsible for addressing societal problems	Feels responsible for advancing project, client and/or field on the basis of expertise	Feels responsible for providing a solution to customer needs	Feels responsible for safeguarding product and process quality

TABLE 6.1 Professional role identities of architectural firms

§ 6.3.2 Board game for value capture in projects

The board game for value capture in projects (see Figure 6.13) is intended to support architectural firms in identifying and managing the key value capture challenges of a project. It is accompanied by a set of re-writable cards that ask the users questions regarding the firm's offer, its expertise, the goals and risks of a project and how these are supported by the firm's activities, responsibilities, resources, partners, collaboration agreements and revenue model for the project. Although the framework was specifically designed for architectural firms involved in construction projects, it may be helpful for any actor involved in a complex, unique project, as it increases the ability to gain an overview and respond to the challenges of the project.

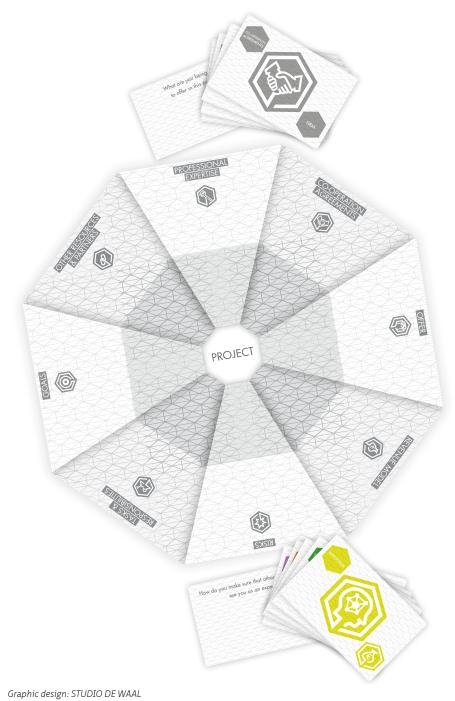


FIGURE 6.13 Board game for value capture in projects

Role identity-specific value capture challenges § 6.3.3

The role identities that architectural firms take on in projects all have unique value capture challenges. Table 6.2 provides an overview of the most salient challenges that firms may encounter when adopting a certain role identity in a project.

	INITIATOR	SPECIALIST	PRODUCT DEVELOPER	INTEGRATOR			
Value capture challenges:							
Goals & risks	Financial value Stakeholders become engaged and may take over the capture of financial value Investment required to perform key activities Professional value Stakeholders may have different goals and complicate the process of reaching professional goals	Financial value Traditional revenue models may not match the type of work; thus, may not generate sufficient revenues Other actors need to be persuaded to agree with new revenue models Professional Peripheral activities that may also generate work pleasure need to be outsourced Activities need branding that may diverge from the label 'architect'	Financial value Tensions between repetition and customization: repetition increases earning power, while customization increases desirability Professional value The co-creation effort for a product may not visibly contribute to firm reputation	Financial value Not always commissioned and/ or paid for all necessary activities Professional value Professional goals may have to give way to project goals			

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	INITIATOR	SPECIALIST	PRODUCT DEVELOPER	INTEGRATOR			
Value capture recommendations:							
Resources & partners	Create a financial buffer to invest Find like-minded partners with financial resources Look for suitable partners with financial resources in an early stage, good experiences in earlier collaboration may be particularly beneficial	Only perform work around the core of your expertise to continue having unique expertise, and outsource everything else	Try to develop sustainable relationships with co-creation partners to increase efficiency in and the results of collaboration	Develop strategic partnerships with various experts or include different types of expertise in-house to optimize your ability to manage and control the process			
Collaboration agreements	Communicate goals and agree on your share of the pie in advance	Make sure that you and your partners share goals Show partners the need for and benefits of a different revenue structure	Make sure that you and your partners share goals Develop one revenue model for the product with your partners that includes the revenues for all parties involved	Make sure that different experts in-house and partners know and respects each other's goals and activities Co-develop and discuss clearly demarcated sets of activities and responsibilities among types of expertise/partners			
Revenue model	Develop innovative revenue models that do not directly depend on a paying customer, but may become profitable over the lifecycle of the project or end result (e.g. commission model, rental or leasing model)	Ask higher hourly rates in a fee-for-service model or develop new revenue model connected to the package of expertise that you deliver (e.g. licensing model)	Develop a revenue model with your partners that is connected to the sale, lease, maintenance, operation or customer benefits of your product (e.g. subscription model, rental or leasing model, freemium + premium model)	Look for opportunities to earn money for your coordination work			

TABLE 6.2 Role identity-specific value capture challenges

§ 6.3.4 **Example projects**

Example projects (see Figures 6.14-6.22) are provided for each of the four generic professional role identities that architectural firms take on in projects. They show, in detail, how the framework can be filled in, provide inspirational material for enacting a certain role identity and highlight some of the challenges and opportunities that firms may encounter when adopting a certain role identity in a project.



Image: Thijs Asselbergs architectuurcentrale & AnnA | Annebregje Snijders architect, Graphic design: STUDIO DE WAAL



FIGURE 6.14 Example project 1: Koepel complex, Haarlem by Thijs Asselbergs architectuurcentrale



Image: IAA Architecten, Graphic design: STUDIO DE WAAL





IAA Architects itself took the initiative to save the historic industrial complex of the former Lonneker Co-operative Dairy (Lonneker Coöperatieve Melkinrichting) in Enschede from demolition. Together with developer Vincent Spikker and a group of enthusiastic entrepreneurs, $\alpha\ plan\ was\ formed\ to\ regenerate\ the\ buildings\ and\ their\ grounds.$ In a reinterpretation of the co-operative concept behind the original dairy, a number of user alliances have been formed, with a focus upon energy, facilities and healthy eating respectively. In the project's early stages, the enormous "milk hall" at the heart of the complex has become a central meeting place for all the new users. New housing is also being constructed on part of the site, and together with the heritage buildings, this will form the hitherto missing link between the town centre and another new residential district, De Boddenkamp. What was once a closed industrial site is thus being transformed into a very varied public space.

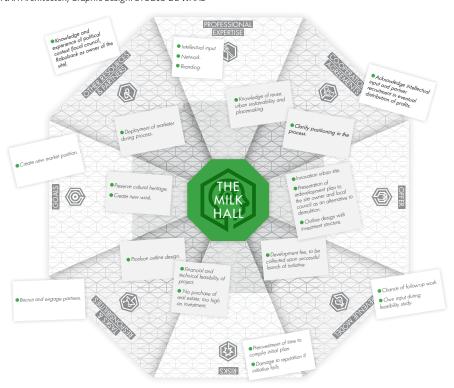


FIGURE 6.15 Example project 2: The Milk Hall, Enschede by IAA Architecten



SPECIALIST

HU
UNIVERSITY
OF APPIED
SCIENCES
UTRECHT

After winning an open selection competition, JHK Architecten is now working closely with the client and a team of advisers on virtually every aspect of the relocation of HU University of Applied Sciences. Utrecht to a single campus. From strategic advice to the elaboration and review of various renovation and construction projects, plus the compilation of performance requirements for a number of design-and-build commissions. To ensure that this ambitious operation runs as smoothly as possible, a strategic advisory report has recommended linking the hardware (existing buildings and infrastructure) and software (project plans and objectives) aspects so that the right choices are maded during the process. As part of this, the university's property portfolio is being cut back from about 180,000 m2 (gross floor area) to about 120,000 m2. From the design-and-build phase all the way to completion, JHK Architecten is heavily involved in ensuring that everything meets the exacting standards set.

Photography: JHK Architecten, Graphic design: STUDIO DE WAAL

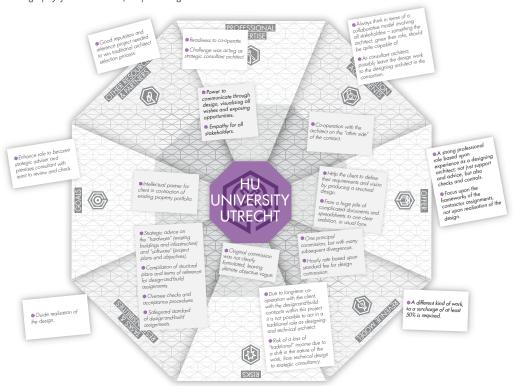


FIGURE 6.16 Example project 3: HU University, Utrecht by JHK Architecten



Photography: EGM, Graphic design: STUDIO DE WAAL

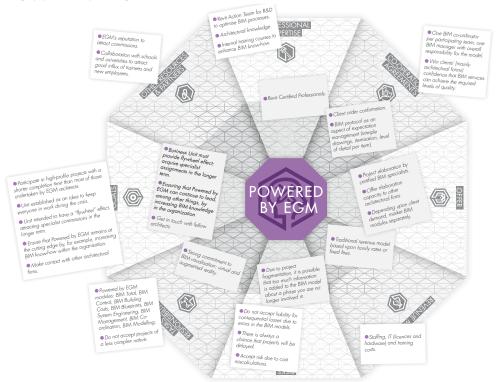


FIGURE 6.17 Example project 4: Powered by EGM



Photography: Mark Seelen Fotografie, Graphic design: STUDIO DE WAAL



FIGURE 6.18 Example project 5: Nova Zembla Lofts, Amsterdam by Bets en Oudendorp Architecten



Photography: Ronald Tilleman, Graphic design: STUDIO DE WAAL



FIGURE 6.19 Example project 6: The Hub by Kraaijvanger Architects



Photography: De Zwarte Hond, Graphic design: STUDIO DE WAAL

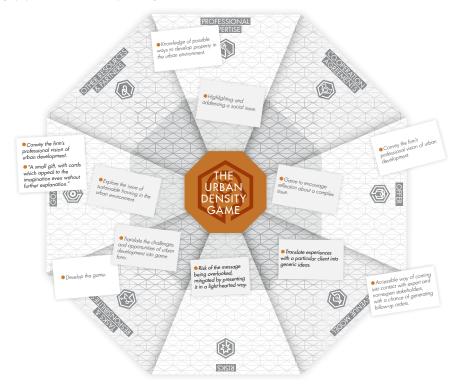


FIGURE 6.20 Example project 7: The Urban Density Game by De Zwarte Hond







As a partner in the Safire consortium, Meyer en Van Schooten Architecten was commissioned to produce a design for the renovation of the Ministry of Finance in The Hague. This was one of the first BBFMO projects conducted on behalf of the Dutch Real Estate Agency (Rijksvastgoedbedrijf). While it was important to maintain the building's brutalist style, Jeroen van Schooten's design completely overhauled its fabric to anchor the structure in the urban lissue of The Hague. For Meyer en Van Schooten Architecten, this participation in a DBFMO consortium was a test project to determine whether such an integrated approach represents a good alternative to traditional forms of collaboration.

Photography: Jeroen Musch, Graphic design: STUDIO DE WAAL

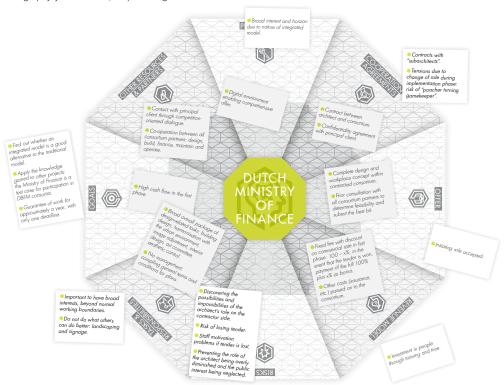


FIGURE 6.21 Example project 8: Dutch Ministry of Finance, The Hague by MVSA Architects



Photography: Rothuizen, Graphic design: STUDIO DE WAAL

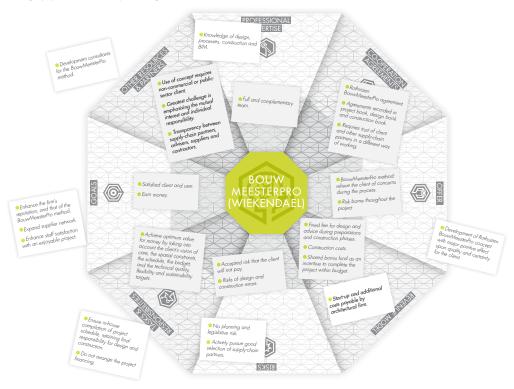


FIGURE 6.22 Example project 9: BouwMeesterPro (Wiekendael, Roosendaal) by Rothuizen

§ 6.4 Notes on using the value capture toolkit

§ 6.4.1 When to use the value capture toolkit

The value capture toolkit can be used for multiple purposes, both within the architectural firm, in collaboration with other actors and in education. In this section, I discuss four potential ways of using the toolkit.

First, the toolkit can be used by architectural firms to develop strategy for a project. It supports firms in generating a comprehensive and detailed understanding of their business approach to a project through a more careful consideration of potential role identities and the associated restrictions and opportunities. This enhances a firm's ability to optimize its value capture strategy at the start of a project and monitor and improve this over the course of the project. Use of the toolkit encourages discussion between partners and/or employees. This discussion is crucial to arrive at better informed decisions on whether or not to engage in a certain project and how to approach the project.

Second, the toolkit may be helpful in the negotiation with clients and/or other project actors. It can contribute to making the intangible value that is co-created in a project more tangible by detailing the activities, resources and risks that the creation of certain project values require. This may facilitate architectural firms in being more explicit about what they do and what this entails, and may increase the understanding of other actors concerning what the architectural firm's role in the project is worth in monetary terms.

Third, the toolkit can be used to strengthen collaboration between project partners. It helps actors to align their desired roles in a project, based on a more thorough evaluation of the implications of a certain role identity. The toolkit helps to create a better balance between the inputs and outputs of both project and firm. In this way, it helps to generate an overview of the needs of all actors involved and identify any misalignments or areas of potential conflict, thereby contributing to the creation and management of shared goals and a better understanding of each other's motivations and constraints in the project.

Fourth, the toolkit can be used as an instrument to educate architecture students and practitioners. Since it includes different 'chunks' of information that can be explained

in-depth, shown as specific illustrations of what business considerations architects are confronted with in daily practice, and used in various exercises, the toolkit supports different didactic approaches and can be used for educating different types of student groups.

§ 6.4.2 How to make the most of using the toolkit

Based on participant feedback in the trial sessions and validation workshops, we have a few recommendations that may contribute to the usefulness of the toolkit.

Discuss and think aloud

Conscious engagement in project-specific value capture is stimulated and improved by discussing with each other and thinking aloud. Different perspectives on the topic help to strengthen a critical and reflective attitude, which is crucial to developing strategies that have the potential for success. We highly recommend a group setting for engaging in value capture-related strategizing. This not only leads to more substantiated strategies, it also helps to create a shared understanding of the reasons for choosing a certain strategy.

Involve an external moderator

Working on strategies for value capture under the guidance of an external moderator is highly productive. A person who is not part of the project or the organization may probe deeper into aspects that seem obvious to the firm. In this way, users are triggered to think outside the box and/or to substantiate why they prefer to do something in a particular way. A fellow architect, client or other building professional might be considered as an interesting option to act as an external moderator in the session.

Dare to choose and dare to be different

With many possible roles in projects and a plethora of opportunities to engage in these roles, firms may be easily seduced into holding on to the possibility of playing different roles in different projects and attempt to develop coherent value capture strategies for each of these projects. However, focusing on a certain role identity

and/or part of the value capture framework may also represent an easy opportunity $% \left(1\right) =\left(1\right) \left(1\right)$ for firms to strengthen their organizational identity, further develop their unique competitive advantage, make this more explicit and thereby reveal their worth to other project actors.