

Delft University of Technology

#### Future roles for architects

#### An academic design guide

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# FUTURE ROLES FOR ARCHITECTS

an academic design guide

MARINA BOS-DE VOS | BENTE LIEFTINK & THE FUTURA TEAM



## FUTURE ROLES FOR ARCHITECTS

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an academic design guide

Marina Bos-de Vos | Bente Lieftink | Leentje Volker Jasper Kraaijeveld | Kristina Lauche Armand Smits | Lara Tjoa Li Ling | Hans Wamelink

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## FOREWORD

'Future Roles for Architects' describes the core insights from a research project into new role structures in the Dutch architectural sector, conducted as part of the futurA project on "future value chains of architectural services". For four years a joint team from Delft University of Technology and Radboud University in Nijmegen, working in close collaboration with BNA, the Royal Institute of Dutch Architects, studied the future of the professional roles performed by architectural firms within the broader construction process.

FuturA was one of 23 projects funded by NWO, the Netherlands Organisation for Scientific Research, in 2013 as part of the CLICK.NL programme, to strengthen knowledge about and innovation in the creative sector. The objective of this particular project was to better understand changes to the architectural profession arising out of ongoing social trends and the recent financial crisis, as well as to expose opportunities for the future. I believe that we have accomplished that mission very well.

Our professional consortium made up of De Zwarte Hond, EGM Architects, IAA Architects, JHK Architecten, Rothuizen, Ballast Nedam, Havensteder and the Studio of the Chief Government Architect (Atelier Rijksbouwmeester) has been of inestimable value. Twice a year, they helped us to critically examine our findings in "living lab" sessions against their own experiences in leading their own firms and in cooperating with partners in the building sector. foreword

The members of the consortium and various other industry players were also generous in allowed us to gather data in their organisations. In line with the vision behind CLICK.NL – collaboration between curious researchers and entrepreneurial creative professionals – we have really invested jointly in knowledge and innovation to build a strong economy and a sustainable society. For me personally, this has been a most pleasant and inspiring process. I am therefore convinced that we will continue to work together beyond the duration of this project to enhance the innovative capability of the Dutch creative industry.

The architect "as entrepreneur" has long been a largely neglected topic in research on the construction industry. Thankfully, entrepreneurship has now become an accepted concept within the architectural sector. The Royal Institute of Dutch Architects (BNA), for example, has developed many activities in this field. As a team, we are extremely proud of the enthusiasm with which our PhD students Marina Bos-de Vos and Bente Lieftink have foraged for scientific understanding amidst the forest of interesting practical examples and personal experiences in their respective areas of expertise. As a result of their efforts, we have not only been able to gather solid know-how about the creation and capture of professional, financial and use value, but also gained a good understanding of the various role structures within the construction supply chain, as well as the consolidation of changes to them. This academic design guide for the architectural firm of the future is one of the products of our research. As well as providing theoretical insights into the architectural firm itself and into project collaboration in general, we present four practical role identities that architectural firms can take on within the construction process: "initiator", "specialist", "product developer" and "integrator". The board game with cards accompanying this publication can be used in a variety of ways to stimulate collective reflection about the direction you as a firm want to take with a particular project and about which revenue models and collaborative strategies are best suited to that trajectory.

For each role identity, we present the most crucial professional challenges and opportunities facing the architectural firm as part of the supply chain. This should enable you to design your own role within a given project. But with that our task is complete. From here, it is up to you as a reader of this book and a player of the game to translate the lessons you learn into financially and professionally sustainable roles as an architect of the future.

Enjoy this book, and enjoy your future role!

Leentje Volker Project leader, futurA

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foreword

# WHAT IMPORTANT FUTURE CHALLENGES DO ARCHITECTS FACE?

Dutch Ministry of Finance | MVSA Architecten Photography: Jeroen Musch



## WHAT IMPORTANT FUTURE

## CHALLENGES DO ARCHITECTS FACE?

Architecture is an essential force in our society. At the national and regional levels, it contributes towards quality of life and the environment. In partnership with other players, architects fulfil a number of roles. With their spatial competencies and awareness of societal issues, they help solve complex planning problems. They also connect people, wishes and interests, and they understand the social and spatial requirements associated with feasibility and sustainability. By providing "built happiness", they are of inestimable value to society. But what obstacles do they encounter in achieving their ambitions? What are the most important challenges facing the architect of the future?

In recent years, the architectural profession has come under pressure. A multitude of changes have affected, and continue to affect, the domain of architects and the activities of the firms they work for. For example, the distribution of tasks and responsibilities between project partners is increasingly variable. New forms of co-operation are diversifying the role played by those involved, making negotiations about who does what more commonplace. As a consequence, architects increasingly have to fight for their place within projects, and what they do with it. At the same time, however, such changes also open up opportunities for architects to take on new tasks and to extend their responsibilities.

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One of the developments that has had the most impact is the rise of the integrated contract. Clients want to be relieved of the burden of primary responsibility for a project, so they outsource everything to a single provider such as a contractor or a private consortium. It then shares out the work among a range of subcontractors. In principle, an integrated process of this kind encourages co-creation between participants and so improves the end result. For example, it can allow the architect to take into account specific construction-based limitations from an early stage of the design process. In practice, however, it is not always easy for the architect involved in an integrated project partnership to do much more than just design. More and more, the elaboration of their designs and co-ordination on the ground are being taken over by architectural drawing offices or contractors themselves. This can reduce the role played by the architect and make it harder for them to control the quality of the final product.

We are also seeing greater demand for the use of digital means of communication such as building information modelling (BIM). BIM can help to create more transparency within projects and support co-operation within the building industry. It also enables the work of different disciplines to be integrated effectively at an early stage, which has advantages as the project unfolds. For architectural firms, BIM provides opportunities to take on specific additional tasks. Indeed, those who adopt it extensively may be able to claim a co-ordinating role in the whole process. However, it impacts the way you work and requires additional skills, which will not appeal to every architect. In short, a variety of societal and technological developments in recent years have brought changes to the role played by architectural firms, and that in turn has affected their tasks and the nature of project collaborations. These changes of role can be distilled into three basic challenges facing you as an architect, now or in the very near future, and which also form the basis for this book.

- How do you as an architect deal with your changing role in projects, in relation to your own professional identity?
- At the project level, how can you develop strategies for the successful capture of both professional and financial value?
- How do you institutionalize and consolidate changes to your role?

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architect

challenges for



You as an architect may have only limited influence over trends in the construction industry and society in general, but it is certainly within your powers to determine how you play and fulfil your own role. You do have the opportunity to take charge of your own destiny, to play an active part in shaping your own role within a project and to use that position to decide how you achieve your own goals and those of the client and the end user. Designing your own role is as important as designing the built environment. This academic design guide describes how developments in the world of construction affect the role structures in which architects operate. The guide addresses their own role identities, the tasks of the firms they work for, negotiating roles within projects and institutionalizing new roles in the professional domain. Each chapter provides suggestions to ensure that you as an architect stay in control of your work, and also presents specific challenges you might face in doing so.

The accompanying board game offers guidance in designing your strategy for a project – with regard to the tasks of your own firm and responsibilities in the collaboration with the other parties involved – in accordance with your particular role identity within it. The case studies in the book are included as inspiration for your future role.

## DESIGN YOUR ROLE, DESIGN YOUR FUTURE!

challenges

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architect



The Nova Zembla Lofts project in Buiksloterham, Amsterdam, was developed on a collective private commissioning basis. Twenty combined residential and home-business lofts and two commercial units were delivered in shell form for completion as self-builds. Their differing sizes, high ceilings (340 cm) and flexibility of layout left plenty of scope for the final owners to finish the builds as they saw fit. Bets en Oudendorp Architecten acquired the site, began development of the complex and established a buyers' collective. As the project client, the collective then assumed full control over the appearance and layout of the complex. Having initiated the project, the architects went on to advise the collective and oversee the construction process from beginning to end.

Nova Zembla Lofts | Bets en Oudendorp Architecten Photography: Mark Seelen Fotografie



# HOW CAN YOU NEGOTIATE YOUR ROLE IN A PROJECT?

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Nova Zembia Lofts I Bets en Oudendorp Architecten Photography: Mark Seelen Fotografie

## HOW CAN YOU NEGOTIATE YOUR ROLE IN A PROJECT?

Architectural firms are organisations made up primarily of creative professionals. As such, they usually have a clear vision as to how best to deploy their know-how to a given project. They aspire to a specific set of tasks and responsibilities, with a view to serving the client, the end user and society in general to the best of their ability. In practice, however, this "ideal role" rarely coincides with the one they are asked to perform. For certain tasks, for example, the client will often already have other partners in mind or prefer to perform them in house. In such circumstances, how do you as an architectural firm negotiate your role in a project?

Smartgate Schiphol | JHK Architecten

negotiating a project role

negotiating a project role

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Our research has revealed that, broadly speaking, there are three paths a firm can take to ensure that it is awarded its ideal role in a project.

#### REINSTATING

Architects that aim to reinstate their role try to revert back to their traditional project role, complete with all the associated tasks and responsibilities. Typically, those adopting this approach feel undervalued because they believe that their expertise is not fully appreciated. Their response is proactive: they attempt to expand their role and bring it back into line with the way they used to work in the past by showing the client that that is well within their capabilities. They present the positive results of earlier projects, for example, or provide free services to highlight the added value of their expertise.

#### BENDING

Architects that aim to bend roles recognise that their profession is undergoing change, so they fall into line with the role they are allocated within a project. They adopt a flexible attitude, considering case by case what tasks and responsibilities best fit the overall picture. In so doing, their principal concern is co-operation between all involved and so they deliberately focus upon those areas in which their specific expertise can be deployed to achieve a better overall result.

#### PIONEERING

Architects that aim to pioneer new roles are convinced that the usefulness of their expertise transcends their traditional professional domain. They proactively expand their role by developing new skills and forging new alliances. They consider it important that their profession move with the times, they are constantly challenging themselves to look critically at their own added value for the construction industry and they are open not only to taking on new tasks and responsibilities but also to discarding existing ones.

These three pathways show that different firms have different ideal roles, and each requires its own negotiating strategy in the context of a new project.

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negotiating a project role

## PRODUCT DEVELOPER

THE HUB

#### kraaijvanger • architects



The Hub I Kraaijvanger Architects Photography: Ronald Tilleman



# WHAT ROLE IDENTITY DO YOU WANT TO TAKE ON IN A PROJECT?

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futurA meeting

STOKE.

# WHAT ROLE IDENTITY DO YOU

## WANT TO TAKE ON IN A PROJECT?

The roles that architects fulfil within projects have become increasing diverse in recent years. Their traditional, clearly delineated set of tasks and responsibilities has made way for huge variety, its scope dictated in part by the particular wishes and requirements of the project and in part by the professional identity of the architectural firm itself. Based on our research we have identified four generic role identities. To make the right choices regarding your own activities and governance forms with partners, it is important to clarify which role best fits your situation and ambition. What role identity do you want to adopt for your part in a project?

Our use of four generic role identities is not intended to pigeonhole architects into types. For example, it is possible to assume one role identity in one project and a different one in the next. Moreover, each generic role identities encompass scope for a whole range of individual interpretations. The categorisation is meant only as an aid to help architects respond more specifically to the opportunities and challenges presented by projects.

Parking garage Lammermarkt | JHK Architecten



#### INITIATOR

As an initiator, you are the one who creates and plans the project. You spot opportunities, you seize them with both hands and you persuade other interested parties to get behind the idea and support it. As the driving force behind the project, you feel personally responsible for it and accept co-ownership of the issue it seeks to address.



#### **PRODUCT DEVELOPER**

As a product developer, you deliver a complete product you have been involved with from start to finish. The value that this represents is clear, and with a bit of luck you also develop a business case around it. You form an effective co-creation team. And you also feel responsible for supplying solutions to individual and multiple end users.



#### SPECIALIST

As a specialist, you provide a predefined package of activities and services. If offered a task not part of that package, you either refuse or delegate it. This is a deliberate choice. You excel in your area of specialisation, and position yourself accordingly (e.g. as a BIM specialist, a sustainability expert or a housing consultant).



#### INTEGRATOR

35

ole identity within a project





Powered by EGM is one of the business units at EGM architects, dedicated to a constant quest to optimise working processes and make maximum use of the opportunities offered by building information modelling (BIM). The unit draws upon its BIM know-how to promote innovation, development and knowledge sharing. Clients are supported in all phases and layers of the building column, be they architects, builders, developers, housing corporations or property managers.



# HOW CAN YOU DEAL WITH THE TENSION BETWEEN CREATIVITY AND COMMERCE?

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Parking garage Lammermarkt | JHK Architecten

## HOW CAN YOU DEAL WITH THE TENSION BETWEEN CREATIVITY AND COMMERCE?

For an architect adopting a particular role identity in a project, good interaction between everyone involved is essential in order to successfully create and capture value. True co-creation only becomes possible when you are all in alignment and speak the same language. In practice, though, we still regularly see that project teams or architects and clients talk cross purposes and do not understand each other. The question is, how can you as an architect deal with the tension between creating value for your own firm at the same time as doing the same for the client and other stakeholders?

To discuss value effectively within the context of a project, it is important that you as an architect know where your own added value lies and what services you can provide, taking into account your organisation's particular qualities and financial constraints. Creative professionals like architects often find it challenging to strike the right balance between commercial ends and creative ones. As a rule, it is not in their nature to reflect with any regularity upon the mercantile aspects of their profession, never mind to critically examine the relationship between their own products, the creative process and a revenue model in the context of a particular project.

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futurA meeting

As construction projects are increasingly being decomposed in smaller, far more rigidly delineated parts, it becomes more and more important for architectural firms to design a properly considered business model for each project. This helps to ensure that value is not only created but also successfully appropriated. As well as strengthening the commercial aspects of the project, a good business model provides a sound basis for the financial and professional sustainability of the architectural firm itself.

The board game accompanying this book has been developed to help you make commercially sound choices in respect of projects. It is based upon academic literature on business models, including Osterwalder and Pigneur's "Business Model Canvas", research into project collaborations and interviews conducted with architects and clients specifically for the futurA project. The essence of this board game is interaction between three different types of value: use value, professional value and financial value. Within a project, greater awareness of this interaction helps you as both an architect and an entrepreneur to provide your services in a professional, economically sound manner.

#### THE CORE ELEMENTS OF A BUSINESS MODEL ARE:

#### SERVICE OFFERING

The value the or architectural firm offers the client indirectly the end user.

#### VALUE CREATION

How the architectural firm and the other parties involved collectively create value for the end user, society in general and other stakeholders, and how the architect creates value for their own organisation.

#### VALUE CAPTURE

How the architectural firm successfully claims value for themselves.

tension between creativity and commerce

#### USE VALUE

The value created for and eventually appropriated by the paying customer and other users.



tension between

#### Example

An architectural firm is involved in the construction of a village library. The use value of such a building takes many forms. Thanks to the architect's design, for instance, villagers are able to navigate the building easily and so make use of whichever rooms are relevant for their visit. The local authority also benefits, because the design helps the building fulfil a social function in a deprived community.



#### PROFESSIONAL VALUE 2

The non-monetary value accrued by the architect for their own organisation, such as prestige and a reputation for quality, or innovative knowledge to help the firm develop. Also positive user feedback can contribute to architects taking pleasure in their work.

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The village library had to be designed on a very tight budget. The firm still decided to take on the project, however, because of its social relevance, because it gave staff a chance to gain specific expertise in designing libraries and because it enhanced the organisation's reputation in the domain of public amenities.

# tension between creativity and commerce

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#### FINANCIAL VALUE 3

The price paid for a service provided; the revenue needed to cover costs and make a profit.



#### Example

The firm was paid a fee of €80,000 for designing the library. From this it can pay outgoings such as wages, rent and training costs.





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 DBFMO 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 tissue 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.







## HOW CAN YOU BALANCE

## COMPETING VALUES?

An architectural firm often pursues several goals at the same time. For example, a combination of financial viability, high-quality work and good customer and end-user satisfaction ratings. In each project, it is important to weigh up your various objectives as an organisation in order to find the right equilibrium of use, professional and financial value. But how exactly do you balance these potentially competing values within a project?

Failure to think carefully about the mutual relationships between these different types of values can result in their loss. The firm could end up in a financial tailspin, its reputation might be tarnished, or its employees might might get frustrated. Architectural firms often trade off values against one another in order to ensure that a project better aligns with their own objectives. The following situations were particularly common in our sample.

#### SACRIFICING FINANCIAL VALUE IN RETURN FOR PROFESSIONAL VALUE

An architectural firm is involved in a residential construction project for a housing corporation. The client has indicated that, if successful, similar homes will be built on other sites around the country. If that happens, the firm wants to be involved again. Half-way through the design process, it therefore decides to reinvest a large part of its own project fee to hire an interior designer to enhance the use value of the design.

In this example, the firm opts to appropriate less financial value so as to deliver greater use value. At the same time, it also creates more professional value for itself. It is thus trading in financial for professional value. In this particular case it buys in extra expertise, but the same type of trade-off can also be achieved by supplying free or almost free services in the form of additional in-house design work.

#### SACRIFICING USE VALUE IN RETURN FOR PROFESSIONAL VALUE

#### Example An archite

An architectural firm is involved in a project to renovate a historic private home. During the process, the architect decides to look for bathroom tiles in the original style in order to benefit the quality of the final result and hence the firm's reputation. But the client subsequently rejects them, because she wants a modern bathroom.

In this example, the firm opts to invest additional time to create more professional value, even though the client is not actually interested in that. So use value is traded in for professional value, potentially creating such an imbalance between the two as to cause friction in the architect-client relationship.

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balancing competing values

## UNWILLINGNESS TO SACRIFICE PROFESSIONAL VALUE IN RETURN FOR FINANCIAL VALUE

#### Example

During the design process for a new cinema, it becomes apparent that the assignment is more complicated than the architectural firm originally thought. Several members of staff have to investigate the acoustics in some considerable depth, spending significantly more hours on this aspect than budgeted for. The firm also calls in specialist assistance from its own network. Fearful of damaging its relationship with the client, the firm decides not to pass on the extra costs incurred.

In this example, the firm opts not to revise its previous financial agreements with the client because of concern that this will undermine their relationship, and hence also the firm's chances of appropriating professional value. In other words, it tries to avoid trading in professional for financial value. However, our research indicates that negotiating greater financial value does not necessarily reduce professional value; in general, clients appreciate architects who are frank about a potential loss of financial value in a project. This is because a substantial imbalance between use and financial value can negatively affect the process of co-creation by the architect and the client, and thus also the quality of the end product. In most cases, being open about such issues is a better way to keep professional and financial value in equilibrium.

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Striking the right balance between use value, professional value and financial value within a project is extremely important, but not always easy. It requires, from the outset, explicit consideration in interactions between the client and the other project partners of all three values, their mutual relationships and any potential tensions between them. To this end, determine as early as possible how the values should interrelate and communicate this information to your partners. This makes it easier to intervene in the event of any impending imbalance at a later stage, and to convince the client that corrective measures need to be taken.





The Milk hall I IAA Architecten



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, a 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.



# HOW CAN YOU BALANCE PROFESSIONAL AND FINANCIAL VALUE WITHIN YOUR FIRM?

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The Milk hall I IAA Architecten
## HOW CAN YOU BALANCE PROFESSIONAL AND FINANCIAL VALUE WITHIN YOUR FIRM?

Every project should contribute towards the firm's corporate objectives and boost its bank balance to a greater or lesser extent. Not that these two factors always have to be in perfect equilibrium: one project might be good for your reputation but also entail financial concerns, while the next does offer greater long-term financial security but less in the way of professional challenges. Managing an architectural firm involves operating on a project basis and therefore requires weighing up projects carefully at the portfolio level. But how do you find the right balance between professional and financial value in your activities?

What this comes down to is making sure that you run a financially healthy business while still pursuing your professional ambitions. In practice, architectural firms apply a number of different strategies in order to find the right internal balance between professional and financial value.

Elementary School Zuidland | Rothuizen

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#### POSTPONING THE FINANCIAL VALUE OF A PROJECT

#### Example

An architectural firm is asked to design a new residential block for a housing corporation. Although the client has sufficient financial resources to pay the architect, under its rules full reimbursement is only possible at a later stage, once the board has approved the design. Meanwhile, the firm believes that the project location offers unique opportunities and so proposes a special deal: it will produce the design for a relatively low hourly rate, plus a variable sum related to the finished building's performance. If the firm is able to create a design which achieves substantial energy savings, it is paid an annual bonus once the block is built. As a result, it will eventually receive far more that it would have done had it charged its standard rate up front. In this example, the firm offers to appropriate less initial financial value and instead prioritise use value first. By including a variable, results-related payment component in the contract, it accepts the risk of not generating additional financial value until the building is in use. This strategy enables it to take on an interesting project, even though this does not seem financially attractive in the first instance.

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A strategy of this kind requires very firm written agreements in advance. Only negotiate flexible remuneration deals when you as the architect can actually influence the outcome, you have a realistic prospect of being able to appropriate the additional financial value and your organisation is in a position to bear the risks involved. Although this may seem only logical, our research indicates that, in practice, for architects the lure of professional value in many cases still stifles sensible financial deliberation.

balancing

professional and financial value

#### COMPENSATING LOST FINANCIAL VALUE WITH OTHER PROJECTS

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For architectural firm X, a request to convert a derelict water tower into innovative office space could not come at a better time. In the coming years it wants to focus on exactly this kind of projects. Unfortunately, the client has a relatively small budget and thus limited resources for architectural services. Despite the fact that this means it will probably lose money on the job, the firm decides to accept it anyway, because it is also involved in other projects which are profitable. Meanwhile, this one will give it the chance to gain knowledge and experience of the kind of conversions it hopes to do more of in the future.

In this example, the firm deliberately decides to accept a project it will make a loss on. Fortunately, it is in a position to compensate that potential financial setback with profits from other projects. And if this one is a success, it improves the chance that the firm will receive similar commissions in the future. So this project enhances its reputation and contributes towards its professional objectives.

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Regularly review all your projects at the portfolio level in order to better understand the overall business risk your firm is running. This should help avert financial problems if a profitable project you are using as a "buffer" suffers delays or for some reason fails to deliver its full expected value.

futurA meeting

#### REJECTING A PROJECT

#### Example

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An architectural firm has started to design a sustainable office building with a prestigious regional function. During the construction process, however, the lead contractor decides to change its engineering subcontractor. In the past, the architects have had bad experiences with this new provider and they are convinced that the new firm will not do proper justice to their design. As a result, the architectural firm decides to pull out of the project.

In this example, it becomes apparent during the course of the project that its execution is no longer likely to meet the professional standards the architects have set themselves. In order to avoid damage to its own reputation, the firm therefore resolves to annul its contract. It believes that safeguarding its good name outweighs any financial loss it will incur.

Regularly examine your organisational objectives and professional standards. Before entering into any project, assess how and where it fulfils these aspects of your business and what, if any, risks it exposes them to. This makes it easier to decide whether or not to take on a particular job. Good advance agreements about the project framework and conditions also reduce the chance of unpleasant surprises during the process. In short, it is important to have clear organisational objectives. This makes it easier to determine which projects suit your firm and which do not. Firm agreements with the client and a good understanding of one another's interests are also crucial in order to mitigate the risk of discovering a "mismatch" later on in the process. Regularly reviewing your projects at the portfolio level makes it easier to determine whether you are still on track to achieve your objectives as an organisation and so enables you to maintain the right balance between professional and financial value.







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-andbuild 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 made 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.



# HOW CAN YOU CHANGE YOUR ROLE AS AN ARCHITECT?

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## HOW CAN YOU CHANGE YOUR ROLE AS AN ARCHITECT?

In construction projects a number of distinct roles can be identified: contractor, builder, developer, client and, of course, architect. Their roles are often set out in standard contracts and job descriptions. These tend to be copied from one project to the next, so that – just as in other project organisations such as the film industry – it is always clear who is responsible for what. With a fixed set of roles, a project can be launched quickly, expectations are clear from the outset and everyone pursues the same end result. However, as an entrepreneurial architect, you might want to deviate from such a fixed role. How do you do that, and how does it affect the project collaboration?

What a role entails only becomes clear when it is viewed in relation to other roles. After all, it is the interaction between roles which determines how a project is organised. With the increase in the number of disciplines involved in construction projects, good inter-role cooperation is more essential than ever.

Wiekendael | Rothuizer

To remain of maximum value, architects have to push the boundaries of their role and position within the project organisation. And it goes without saying that, as soon as you as an architect expand – or indeed limit – your own role and hence shift your position in construction process, this has a knock-on effect for the tasks and responsibilities of everyone else involved. If the other parties are not sufficiently aware of this, tasks can be duplicated or, because they fall between two stools, overlooked altogether, with the potential results that the project overruns, exceeds its budget or falls short quality-wise.

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If you as an architect adopt a proactive attitude and expand your role, it is important to bear in mind how this change affects the other project participants. Simply announcing it once at the beginning of the project is not enough; you need to keep drawing attention to the implications of the role change throughout the duration of the collaboration. Changing an established routine takes effort and time. Effort in the form of joint familiarisation with a reflection upon the changes, and time because of the need to consider them repeatedly throughout the process. To adopt a new role successfully, it is vital that you first explain it clearly and then reassert it on a regular basis.

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Smartgate Schiphol | JHK Architecten

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changing your

role

#### EXPLANATION

By clearly explaining your change of role, you ensure that everyone else involved fully appreciates how this will affect the project organisation as a whole and the other roles within it. One way of doing this is to use the old role structure as a reference; that makes it easier for the other parties to understand the change.



Example:

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The architect of a project to build a railway station has claimed an expanded role: in the interests of quality control, he has assumed responsibility for selecting the subcontractors. He also introduces a new tendering procedure, with selection based not only upon price but also upon an innovative solution in the design. The architect organises special meetings with subcontractors to clarify the change of procedure. By explicitly comparing the new version with the traditional one, they are introduced to the modified situation in a transparent manner.



When explaining a change, try to refer to existing roles everyone is familiar with in order to clarify similarities and differences.

#### 2 REASSERTION

With every change, repetition is essential. Explaining it once is not enough. It is therefore important that you return regularly to the changes you have made in each successive phase of the project in order to reassert them. Otherwise, there is a good chance that the organisation will revert to traditional role structures.

#### Example:

In a project to build a school, there was no lead contractor. Instead, the architect acted as "integrator". In this role, he allows both the client and the end user to suggest quality improvements until a relatively late stage in the construction process. However, this demands greater flexibility on the part of the subcontractors. Although all this was explained clearly at the start of the project, as it unfolds the subcontractors increasingly revert to their traditional roles and behaviours. Consequently, it proves impossible to implement the suggestions made by the client and the end user, resulting in huge dissatisfaction all round and a lack of innovation in the final product.

Bear in mind that, when reasserting a new role, you need to address not only what has changed but also how that affects the day-to-day work of all those involved in the project.



Role structures offer stability. Because of this, they enable individuals and organisations that have never previously worked together to join forces on a project with relative ease. The established structures clarify the roles each party will play, and what is expected of them. But when you as an architect want to change your role, such structures can stand in your way. This is why it is important that you explain the change clearly and reassert it regularly during the process.

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#### PRODUCT DEVELOPER DeZwarteHond.

THE URBAN DENSITY GAME

De Zwarte Hond first investigated opportunities to build within an existing urban setting in the city of Leiden. The toolbox it developed was subsequently recast as serious game, the Urban Density Game (Het Verdichtingsspel). This encourages players to think about the complex issues in their own town or city. Local government officials, property developers, architects and designers can play the game not only with their fellow specialists, but also with other less expert stakeholders such as residents and shopkeepers. It is an accessible way to stimulate discussion, to explore development opportunities and to share ambitions and objectives.

the Urban Density Game I de Zwarte Hond



# HOW CAN YOU INSTITUTIONALIZE AND CONSOLIDATE CHANCES

Elementary School Zuidland | Rothuizen

Bibliot

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# HOW CAN YOU INSTITUTIONALIZE

Consider this. You as an architect have had a positive experience with a new form of project collaboration. It has given you greater influence over the construction process, improved quality control and allowed you to introduce more innovations from suppliers. Ideally, you would like more projects to be organised in this way. But for that the new approach has to be accepted as a viable alternative by a variety of stakeholders. You therefore need to create market awareness. But why would you do that and how do you go about it?

Parking garage Lammermarkt | JHK Architecten

izing

and

consolidating change

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There are various reasons why you might want to draw wider attention to a change like a new form of project collaboration, in order to consolidate it. Our research has revealed that three of these predominate:

#### LEGISLATION AND REGULATIONS

When you as an architect want to take part in a European tender, regulations may require competition that prevents you from acting as a sole bidder offering a new form of collaboration. It is therefore important to create sufficient competition by mobilising other architectural firms with a similar identity to adopt your system.

#### FAMILIARITY

It takes a lot of time and effort to repeatedly convince clients of the benefits of a new way of working. But the more a new way of working becomes common practice and is used by other firms as well, the greater its legitimacy in the marketplace and so the more likely clients will be to consider it as an option.

#### IDEOLOGY

Many new standards emerge from an ideological drive to improve the construction sector. Industry professionals are convinced that new forms of collaboration make project organisations more efficient and so deliver better quality for the client.



institutionalizing and consolidating change

To institutionalize any new form of collaboration, it is important that you as an architect publicise it externally and mobilise other stakeholders to back it. United action is essential to winning acceptance, which requires other activities and skills, too. Our research reveals the three activities that contribute significantly towards the consolidation of new initiatives and role patterns:

#### 1 CREATING AWARENESS

Inform as many people and organisations as possible about your new form of collaboration, and as soon as possible. Enthuse them about the solutions it offers to their problems, and how it better satisfies the wishes of all concerned. As well as the other participants in a standard project organisation, tell your fellow professionals, public institutions and other organisations. Use the trade press, social media and television programmes to position yourself as a positive force for change.

#### 2 SELECTIVE NETWORKING

Seek out interaction with interested parties in your potential target group. Carefully select a limited number of networks likely to back your new form of collaboration. Speak at specific industry events and give presentations introducing your approach. By raising your profile among influential players in this way, you legitimise your change.

#### 3 BUILDING COALITIONS

Form a partnership or consortium around your new form of collaboration. Or found a professional group for architects interested in it. Joining forces with like-minded individuals and organisations provides impetus and creates critical mass, substantially increasing your chances of successfully disseminating your initiative.

Institutionalizing and consolidating change thus requires a variety of activities. It is also takes time, and the road is not always smooth. And you need to be aware of the context in which you are attempting it. Persuading fellow professionals in an intimate setting is one thing, but the dynamics are very different when faced with a large group of subcontractors at an industry-wide event. A situation in which you can relate your new form of collaboration to existing practices, where you have considerable influence as a driver of change and with a co-operative atmosphere lends itself particularly well to the introduction and consolidation of change.

When building a coalition for change, it is important that everyone you recruit becomes a genuine stakeholder in that change. You can achieve this by giving them real influence, and by being open about the investments, timescales and processes involved. A licensing strategy may be appropriate if you need to protect a change like a new form of collaboration against copycats.

institutionalizing

and consolidating change





Rothuizen BouwMeesterPro was commissioned by the Groenhuysen Foundation (Stichting Groenhuysen) to restructure its Wiekendael treatment centre in Roosendaal. The objective was to create a regional treatment, care and residential centre for elderly people with specific care needs. Flexibility, a human scale and a homely atmosphere were essential requirements. The client's vision of care, the spatial constraints, the schedule, the budget, and the technical quality, flexibility and sustainability targets were all factors to be considered in achieving optimum value for money. In this project, Rothuizen Bouw-MeesterPro was responsible for the co-ordination of the entire design, engineering and construction process.





**Futur**A

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futurA meeting



# WHICH SPECIFIC CHALLENGES DO

As an architect, you face a variety of tough challenges. Some commercial, some professional, some collaborative. How best to deal with each of these challenges will vary from firm to firm and from project to project. Moreover, each of the four role identities an architectural firm can adopt within a project organisation is associated with specific opportunities and challenges. What specific opportunities and challenges does your future role pose?

Below we present a number of typical challenges and opportunities associated with the four role identities. But these are only the tip of the iceberg – countless more are conceivable, of course. The board game accompanying this publication should help you identify those associated with your specific role identity in a given project, bearing in mind its particular characteristics and those of your own firm.



#### INITIATOR

As an initiator, you have to engage other participants in order to make the project a success. In so doing, you run the risk that they are pursuing different objectives and may thus hinder the creation of professional value. In the end, they might even run off with the spoils.

Do you want limit the other participants' stake in your project as much as possible? If so, ensure that your firm has enough of a financial buffer to get the project off the ground on its own initiative. To achieve that, you may have to buy a building or land, pay legal fees or pre-finance at least part of the cost of construction. At whatever stage you bring in other participants, good initial agreements with them are essential. These should cover such aspects as shared project aims, who does what, who assumes what risks and how the project costs and revenues are to be divided up. It also pays to start thinking at the outset about what final return you expect on your investment in the project, and how you earn that. For example, you might share in the income from selling or renting out the finished property. Whatever the case, before anything else make watertight agreements with your partners.



#### SPECIALIST

As a specialist, you have to persuade other participants about the benefits of new revenue models because the traditional ones may not generate enough turnover for a specialist role. It is also possible that you are better off advertising your activities in an alternative manner, separating them from the traditional role of the architect so that they appeal to a broader customer base.



Ensure that you work to your strengths, making the most of your expertise. Think carefully about what is crucial that you do yourself, and outsource everything else. In this way, you are recognised in the market as the specialist in a specific domain. This focus also helps you keep your expertise up to scratch and so remain at the forefront of your specialist area. If you intend to adjust your revenue model, too, persuade the other participants of the benefits and so engage them with the change. If you raise your hourly rates, for example, then link them directly to specific products or services. Also think carefully about the value you offer your client and how much that should cost them. And look beyond the boundaries of the construction industry: your expertise could add huge value in other fields as well.

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specific challenges per role



#### PRODUCT DEVELOPER

As a product developer, you deliver a complete product which responds to a particular consumer need or demand. To market this correctly, you have to thoroughly weigh up the pros and cons of providing a standard product delivering economies of scale, a bespoke product that better meets the requirements of individual users or a combination of the two.

Enter into lasting relationships with co-creation partners so as to maximise the fruits of your collaboration. Long-term co-operation breeds familiarity, which in turn facilitates efficiency. Also, make sure that your co-creation team covers a broad range of disciplines as this helps you to jointly devise smart ways of pushing down production costs and pushing up demand for your product. Develop a shared revenue model, bearing in mind how this relates to actual use of the product. Interesting earning opportunities might include lease or rental arrangements, or maintenance services.



#### INTEGRATOR

As an integrator, it is possible that you are not commissioned and paid for all the tasks you consider essential for effective integration. It is therefore important that the other project participants accept your linchpin role and are prepared to pay for it. Because integration is at the heart of the project, on occasion some of your own professional goals may have to take second place to project objectives. You therefore need to be able to see the bigger picture of a greater common interest and think accordingly to ensure that the final result satisfies the wishes of everyone involved as far as reasonably possible.



To play the role of integrator, you have to be prepared to step back a little – and sometimes a lot – from many hands-on aspects of the job. So make sure that you have a good variety of expertise in house or in your network. When working with different partners, it is important that they be aware of, and respect, each other's objectives. And that clear joint agreements be reached at the outset as to each participant's tasks and responsibilities within the project. In this way, everyone bolsters everyone else with their work. Finally but crucially, make sure that you find a way to be paid for all co-ordinating efforts.

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specific challenges per role



"Open de Koepel" is an initiative by the Panopticon Foundation to convert Haarlem's historic former panopticon prison complex into a university college campus. By opening up the site, links between eastern Haarlem and the rest of the city will be strengthened, creating new use value in the area. As well as the college, the new campus will feature a conservatoire, housing, hospitality outlets, a hotel and public open spaces. Thijs Asselbergs Architectuurcentrale is one of the initiators of the project.

Koepelcomplex 1 Thijs Asselbergs architectuurcentrale & AnnA 1 Annebregje Snijders architect

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# HOW CAN YOU DESIGN YOUR FUTURE ROLE AS AN ARCHITECT?

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futurA meeting



# HOW CAN YOU DESIGN YOUR

To support you in meeting the challenges you face as an architectural firm, the futurA project has developed a board game. You can use this to develop a strategy for a specific role identity within a project, to strengthen your negotiating position and to reinforce project collaboration. The game comes with a set of cards designed to make the player reflect upon important choices related to their own organisational management and their co-operative relationship with project partners. In other words, how do shape your role identity within a project, and on that basis how do you design your future role as an architect?

When playing the game, you focus upon a specific project. You can make the initial situation even more concrete by first deciding which role identity you have been assigned or want to assume. As you play, you are made aware of possible differences between an allocated role and one you aspire to, given what you stand for as an organisation. The game helps you to make choices in this respect, to justify them and, from there, to align your actual role as closely as possible with your professional identity and the goals you have set yourself.

#### ELEMENTS OF THE GAME

The game has eight elements. The first four, "offer", "expertise", "goals" and "risks", determine what role identity you can and want to fill in a project. Ideally, these should be completed first. The other four elements, "tasks and responsibilities", "resources and partners", "co-operation agreements" and "revenue model", play a supporting role: they help to define your role identity more clearly, thus narrowing the gap between your ideal situation and what you are actually in a position to do.

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#### PROFESSIONAL ROLE ELEMENTS

What you as an architectural firm have to offer the project.

#### EXPERTISE

OFFER

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The expertise you possess and want to contribute to the project.

#### GOALS

The professional and financial goals you set yourself with this project.

#### RISKS

The risks you are prepared and not prepared to take in order to achieve your goals.

#### PROJECT ROLE ELEMENTS



TASKS AND RESPONSIBILITIES Your tasks and responsibilities in this project.



#### RESOURCES AND PARTNERS The resources and partners you need to complete your project tasks successfully.



#### CO-OPERATION AGREEMENTS

The formal and informal agreements you reach with your partners to ensure that the goals set are achievable.



#### **REVENUE MODEL**

How you cover your costs and generate income.

#### HOW TO PLAY

- Start by choosing a case or project.
- Select the card showing the relevant role identity for your chosen project, write the name of the project on it and place it in the middle of the board.
- Add the question cards for your chosen role identity to the set of general cards.
- Go through the questions on the cards one by one. Agree on your answers as a group and write these on the cards, then place them in the appropriate space on the board.
- Place the cards with project-led questions and answers closer to the centre of the board and those with professional questions and answers closer to the edge.
- Move the cards around until you have a clear picture of the situation. You can also remove cards from the board in order to sharpen the focus of your chosen strategy.

#### HOW TO MAKE THE GAME A SUCCESS

- Play the game as a group so that you can discuss the questions and answers. This stimulates your thought processes and encourages you to look at a wider range of alternatives.
- Appoint an independent facilitator to watch the time, monitor the game and ask critical questions.
- Create a setting in which players are comfortable being critical of each other and dare to make real choices.
- Use a marker pen to highlight those elements which require extra attention or take priority so that they stand out.
- Create an active setting. Ideally, the players should be standing.
  Encourage them to play dynamically.
- Allow plenty of time for discussion and to reconsider choices. Multiple rounds should allow you to hone your strategy and better harmonise its underlying elements.
- Play the game how you want to. It can be used in a variety of ways and situations, but it works best when you adapt it to suit your own needs and way of working.

designing your future

role



### SUMMARY

A variety of societal and technological developments in recent years have brought changes to the role played by architectural firms within the construction industry, and with them three basic challenges for the profession:

- How do you as an architect deal with your changing role in projects, in relation to your own professional identity?
- At the project level, how can you develop strategies for the successful capture of both professional and financial value?
- How do you institutionalise and consolidate changes to your role?

This book looks explicitly at the role of the architect, both as a participant in projects and as a professional in their own right. It outlines three strategies they can use in negotiating their project role – "reinstating", "bending" and "pioneering" – and presents four generic role identities filled by architectural firms within project organisations: "initiator", "specialist", "product developer" and "integrator".

Three forms of value are particularly associated with the business model generally adopted by architectural firms, namely use value, professional value and financial value. Interaction between these is essential. At present, values are often traded off against one another, which can create tension within the project organisation and hinder the achievement of some of its goals. The findings of the futurA project should help create and maintain a better value equilibrium in future projects. We then go on to elucidate a number of strategies the architectural firm can use to facilitate that equilibrium, such as postponing financial value in a project, compensating a lack of financial value across projects or rejecting a project.

Following an explanation of the phenomenon of role structure, we describe two techniques you as an architect should deploy if and when you what to change your role on the ground. These are explanation and reassertion. To consolidate a change, however, more is needed. So we also suggest three activities to achieve that: creating awareness, selective networking and building coalitions. The role of an architect is no longer set in stone – it is subject to constant change. The findings of the research undertaken by the futurA project have resulted in this practical design guide for architectural firms to enable them to shape their own future. Both the book and the accompanying game provide useful tips to help them make more considered choices in respect of their own organisational management and their supply-chain partnerships. They also encourage firms to critically review those choices in relation to one another, and to retain or adjust them as necessary in order to keep the organisation moving forward. After all, designing your own role is as important as designing the built environment.

## DESIGN YOUR ROLE, DESIGN YOUR FUTURE!

summary

summary

### WANT TO FIND OUT MORE?

Below is a list of the principal academic publications related to our study.

- Bos-de Vos, M. (2018), Open for business: project-specific value capture strategies of architectural firms. PhD thesis, Delft University of Technology.
- Lieftink, B. M., Smits, A. A. J., and Lauche, K. (forthcoming), Dual dynamics: project-based institutional work and subfield differences in the Dutch construction industry. International Journal of Project Management.
- Brejaart, E. (2018), From start-up to scale-up: a study about the characteristics of starting architectural firms and their business models. MSc thesis, Architecture and the Built Environment/Management in the Built Environment, Delft University of Technology.
- Bos-de Vos, M., Lieftink, B., Wamelink, H., and Kraaijeveld, J. (2017), Challenges in the business models of creative professional service firms. In: Hay, R., and Samuel, F. (eds.), Conference Proceedings of the Professional Practices in the Built Environment Conference, 27-28 April 2017, University of Reading, UK. Reading: Value of Architects, University of Reading, pp. 35-43.
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- Bos-de Vos, M., & Volker, L. (2017), Constructing Business Models around Identity: Tensions in Architectural Firms. In: Chan, P. W., & Neilson, C. J. (eds.), Proceeding of the 33rd Annual ARCOM Conference, 4-6 September 2017, Cambridge, UK. Manchester: Association of Researchers in Construction Management, pp. 491-500.
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future value chains of architectural services

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