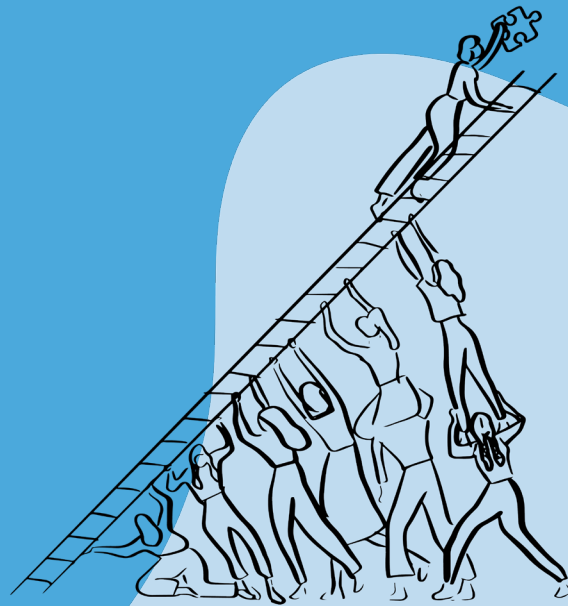


Demonstrating the impact of participatory design on citizens' empowered citizenship

A framework and tool for understanding and demonstrating the impact of participatory design on citizens' empowered citizenship



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Master thesis

Strategic Product Design, TU Delft

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PREFACE

Dear reader,

Hereby I present to you the result of my graduation project for the master Strategic Product Design at the Delft University of Technology. It gives me great pleasure to introduce it to you, but I would also like to take a moment to thank all the people who made this project possible!

First of all, this project would not have happened without Zeewaardig and the designers there. Thank you for your cooperation and dedication to this project and the wonderful openness with which you were willing to look critically at your design practice with me. More specifically, I would like to thank Renate for her keen eye for detail and for helping me to intertwine the theory with the participatory design practice at Zeewaardig. In addition, the philosophical conversations about the design practice with Bjørn were incredibly helpful for my view on participatory design and insight into the origins of this project. Finally, to all the colleagues at Zeewaardig, thank you for always thinking along, making me feel welcome and part of the team!

I would also like to thank Nynke and Froukje for the meetings where we could really dive into the content together. This research deals with a complex subject but your guidance has helped me time and again to shape and continuously refine my thoughts on it.

Then there are the experts, city staff, residents and participatory designers from other design studios who were willing to participate in interviews/sessions. I thank you for your time and most importantly your input. It is precisely all of these enjoyable conversations that helped me pull the project from theory to practice and the contributions were invaluable to my project.

Finally, I want to thank my friends and family. You were always there when I wanted to talk about my project, for advice, but also just to get away from it all. When things got tough, you were there. A special thanks to Violet, because graduating alongside you made it a lot less lonely. Thank you for always thinking along, for all the laughter, and for the amazing breaks in the sun. I can't think of a better graduation buddy. Last but not least, I would like to thank my parents. I would be lying if I said that graduating in summer was easy. When the temperatures rose above 30 degrees, however, you arranged an air conditioner for my 'home office'. This made the last stretch a lot more bearable. For me this is exemplary of your incredible support. Thank you for always proofreading, for listening, for your patience and your endless emotional support.

Finally, to the reader, thank you for your interest in my research. I hope you enjoy the read!

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EXECUTIVE SUMMARY

Society is increasingly faced with complex and wicked problems (Hervieux & Voltan, 2019). As a result, organisations face complex and open challenges and design has become more popular as an approach to address this (Dorst, 2011). Due to these global changes, the social design field is growing (Tromp & Vial, 2022). Participatory design is part of this field and has also gained more acceptance over the years (Smith & Iversen, 2018). The concept of citizen participation is experiencing growth due to rules and regulations that encourage this in government projects (e.g. the Omgevingswet (IPLO, n.d.)). Municipalities hire design studios like Zeewaardig to help guide these participatory processes, because of their expertise in the field of participatory design. Literature shows that there is often still a need to demonstrate the value of design to clients (Schmiedgen et al., 2016). This research is commissioned by Zeewaardig, a design studio working on participatory design, who also want to demonstrate the value of their approach. However, little is known about the impact of a participatory design approach on participating residents.

This research proposes the concept of empowered citizenship as a key form of impact that can be made on residents through a participatory design approach. It further details this concept in a framework that outlines the various components that make up empowered citizenship and the participatory design activities that are related to this impact. Empowered citizenship consists of two components: citizen empowerment (which consists of voice, agency and opportunity structure) and responsible citizenship (which consists of a sense of collectivity and citizenship abilities).

This framework was evaluated with designers. Furthermore, it was used to explore how the framework could be used to evaluate impact through a case study analysis. The findings from the case study further validated the framework, but also provided more learnings on participatory design and the measurement of impact.

Based on the learnings from literature and the case study the 'Are we making impact?' tool is introduced (see Figure A). This impact demonstration tool consists of a poster and a booklet. Both are set up around the same three elements: 1) What is impact in the participatory design context, 2) How to think about impact in participatory design projects, and 3) Demonstrating impact, step by step. The first two elements use the framework and impact considerations to help designers become aware of impact in their projects, better understand it, and be able to make informed decisions about it with clients in a kick-off. The third element provides an overview of the steps designers need to take to demonstrate the impact of their participatory approach.

The tool was evaluated with Zeewaardig and other participatory design studios. This demonstrated its value as a tool that helps designers to make more effective agreements at the front end of a project. This in turn will give them more freedom to work towards empowered citizenship. In addition, the tool helps to demonstrate impact and thus improve their practice and have more credible arguments towards (future) clients.



Figure A: An impression of the 'Are we making impact?' tool

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01 | INTRODUCTION

This chapter introduces Zeewaardig and provides a theoretical background to the research topic and its relevance.

01 | INTRODUCTION

1.1 Zeewaardig Service Design

This research was commissioned by the Rotterdam-based design studio Zeewaardig Service Design (see Figure 1). Zeewaardig works in the social domain with clients like municipalities, housing corporations and educational organisations. Their work consists of different projects such as participation trajectories, designing interventions to stimulate behavioural change, and learning/coaching trajectories in design thinking. The common thread in these projects is that Zeewaardig brings a designerly way of working into the world of non-designers. By applying design thinking in participation projects, Zeewaardig aims to increase the empowerment of participants. The design studio believes that a participatory design approach can make a

difference in addressing complex and social problems. However, the demonstration of the effect of their approach proves to be a difficult task.

Nevertheless, Zeewaardig would like to be able to substantiate this effect better towards their clients. Who, in turn, often want to see that Zeewaardig delivers on their promises. To gain more insight into the matter, this graduation project focuses on the relationship between the participatory design approach of Zeewaardig and the degree of empowered citizenship experienced by participating residents. In addition, it examines how this effect can be better substantiated and proposes the 'Are we making impact?' tool.



Figure 1: The design studio Zeewaardig

1.2 Introduction to this research

In today's world, we as a society are increasingly faced with complex and wicked problems (Hervieux & Voltan, 2019). As a result, both profit and non-profit organisations face complex and open challenges and seek new strategies to address them better (Dorst, 2011). The designer way of thinking and working has become more popular as it is often viewed as a new way of dealing with these complex problems (Dorst, 2011). There is a growth of design practices that can take shape in various forms. Organisations have different design activities, levels of design expertise, layers of design practice (Dorst, 2011) and levels of design maturity (Björklund, Hannukainen & Manninen, 2018).

One field that is growing due to the aforementioned global changes is social innovation. It has become a hot topic in recent years because of its potential to help solve complex societal problems (Hervieux & Voltan, 2019). Muratovski (2015) found that design contributes to the overall success of such social innovation projects. Along with social innovation, the social design field is also growing (Tromp & Vial, 2022; Kimbell, 2021). The overall goal of the social design field is to design for the common good. However, design interventions with this goal can be driven by different values and focus on varying outcomes. The following five components of social design have been identified by Tromp and Vial (2022):

1. Care-driven design activities for the well-being of underprivileged people,
2. Responsiveness-driven design activities for good governance,
3. Political progress-driven design activities for empowered citizens,
4. Social capital-driven design activities for beneficial communities and,
5. Resilience-driven design activities for sustainable future systems.

A project is considered to be social when there is an aim to make an impact within one or more of these five categories. One part of this social design field is a group of designers working on participatory design.

Participatory design has gained more acceptance over the years, but this has also diluted the meaning of participation (Smith & Iversen, 2018). In this research, participatory design (PD) refers to:

'A design practice involving different stakeholders (usually non-designers) in a variety of design activities throughout the design process.'

(adapted from Stangel & Szóstek, 2015)

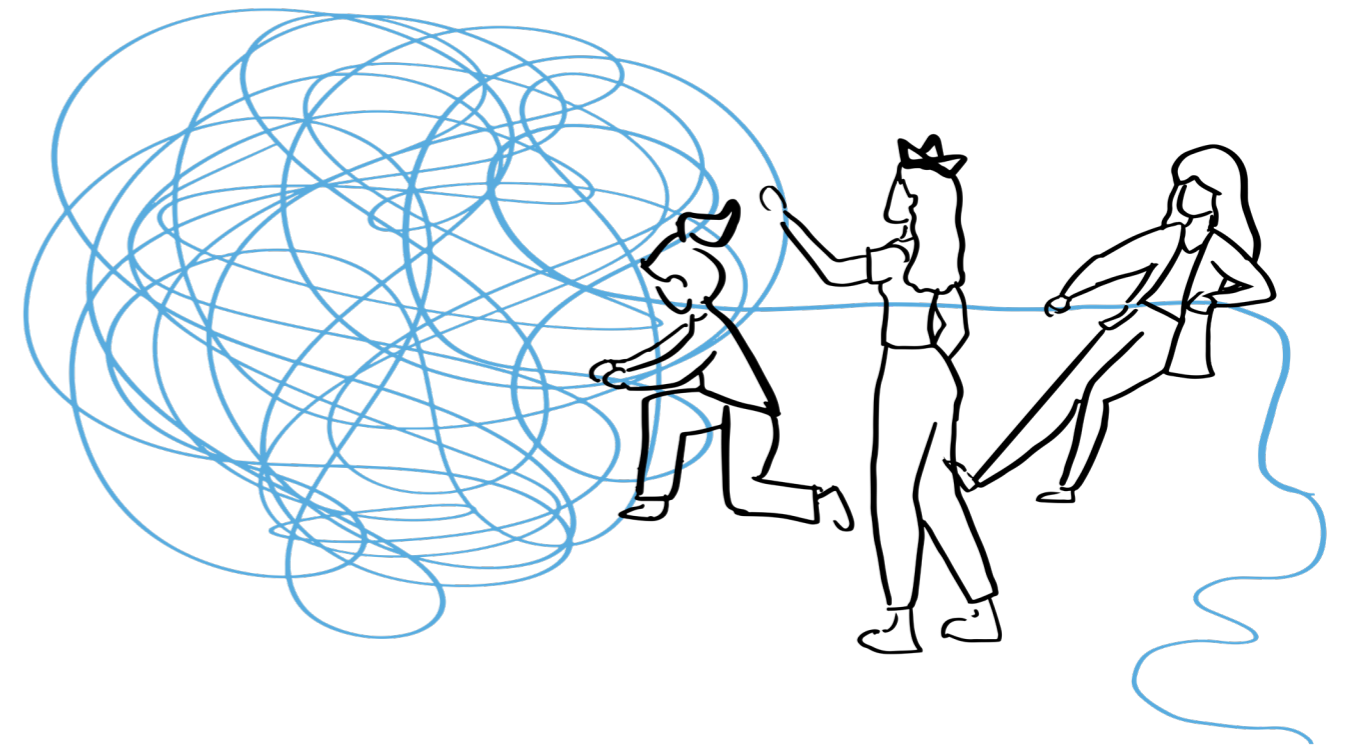
Participatory design is often associated with the empowerment of participants (Spinuzzi, 2005; Bannon & Ehn, 2012; Bødker & Kyng, 2018; Harrington, Erete & Piper, 2019) and good governance (Gaventa & Barrett, 2012). Rules and regulations, such as the Omgevingswet (IPLO, n.d.), are also drawn up to encourage citizen participation in government projects. As a result, the concept of citizen participation is experiencing tremendous growth.

Municipalities hire design studios such as Zeewaardig to help guide these participatory processes, because of their expertise in the field of participatory design. In practice, this approach is often associated with social impact to empower citizens and increase their trust in government. Available literature has also shown that feelings of trust can be both a consequence of being empowered (Bob & Gilliam, 1990; Duffy, Vine & Page, 2008), as well as an antecedent for becoming empowered (Barton & Barton, 2011). The relationship between citizen empowerment and trust in government is thus mutually reinforcing (Hoxha, 2015; Kumagai & Iorio, 2020). For this research, however, it was decided to focus on the construct of empowerment, since this is more fundamental to the vision of participation while increasing trust is often a secondary goal.

From the social design perspective, it is conducive to the impact made if designers not only give people a stronger position in which they dare to stand up for themselves (empowerment), but also contribute to their responsible behaviour in a (political) community (Ten Dam, Geijsel, Reumerman & Ledoux, 2011). Therefore, this research explores the concept of empowered citizenship, which can be seen as the convergence of citizen empowerment and responsible citizenship. In this research it is defined as:

'The enhanced ability of an individual/group to take charge of his/her life, to demand his/her rights, and at the same time to take a collective stance within his/her membership of a (political) community'.

However, little is known about the effect that a participatory design approach has on the (perceived) level of empowerment and responsible citizenship of participating citizens. This research seeks to fill this knowledge gap by investigating the relationship between participatory design and empowered citizenship, and how designers can demonstrate this effect. This study was specifically undertaken in the Dutch context regarding urban projects.



02 | EMPOWERED CITIZENSHIP IN THE CONTEXT OF PARTICIPATORY DESIGN

This chapter will examine the relevant literature on participatory design in the urban context, empowered citizenship, and the measurement of empowered citizenship in relation to participatory design.

02 | EMPOWERED CITIZENSHIP IN THE CONTEXT OF PARTICIPATORY DESIGN

2.1 Participatory design in the urban context

This section outlines participatory design in the urban context through relevant literature on the history and value-centredness of participatory design and on citizen participation.

History of participatory design

The design field of participatory design, although young, has seen quite some changes in the past decades. Participatory design started off in the 70s as an approach to provide manual workers with more democratic control (Schuler and Namioka, 1993). It was a collaborative design approach to support democracy in response to social phenomena where power imbalances affect the design of a system (Harrington, Erete & Piper, 2019). Since that time participatory design has been recognised for a wider use, so more people could benefit from being included into projects and change processes. The people significantly impacted by participatory projects are mostly non-designers, since the approach is about the inclusion of other stakeholders into the design process (Stangel & Szóstek, 2015). The setting in which participatory design takes place has shifted from purely focused on democratic control to also addressing more sociological and structural problems (Bannon, Bardzell and Bodker, 2018). Many participation projects are also increasingly concentrating on more complex and long-term involvement of groups of people in transformation processes (Smith & Iversen, 2018). Power relations, differences in interests/opinions (Bossen, Dindler & Iversen, 2010) and heterogeneity (Bannon & Ehn, 2012) are key aspects in almost every contemporary participation project.

Value-centredness of participatory design

Participatory design is a value-centred approach, in which the value of participation and democracy are historically central to the process (van der Velden, Mörtberg, Van den Hoven, Vermaas & Van de Poel, 2014). Therefore, the process is as essential as the final outcome of the project, since it provides value

independent from the final result (van der Velden et al., 2014). This value can come from the attainment of other goals like mutual learning, reflection and skill acquisition. The process of participatory design can include co-creation (Bannon & Ehn, 2012). Co-creation or -design workshops can be used to evoke values that would otherwise remain latent. It was found that values can emerge within co-design processes even without purposely aiming for them and that they can change over time (Halloran, Hornecker, Stringer, Harris & Fitzpatrick, 2009). Participatory design can both be helpful for this elicitation of values as well as to handle conflicting values (Iversen, Halskov & Leong, 2010).

Paying attention to and listening to a variety of voices is an important component of the PD approach, but this can also lead to value conflicts (van der Velden, Mörtberg, Van den Hoven, Vermaas & Van de Poel, 2014). In the practice of PD the design process serves as a contact zone for conflicting interests and values (van der Velden, 2010). These emerging value conflicts can be helpful by using them as a resource in the problem-solving process (Gregory, 2003), but only when they emerge at the proper scale (i.e. solvable within the scope of a project).

Citizen participation

Participatory design is increasingly used within or for public spaces. Researchers suggest a PD approach with a focus on creating long-term collaborations to design collaborative services, rather than focusing solely on designing products (Gooch, Barker, Hudson, Kelly, Kortuem, Linden & Walton, 2018). Furthermore, PD can be a contributor to the goal of a more inclusive and cohesive society (Gaventa & Barrett, 2012). The urban context for citizen participation is quite challenging. Cities, for instance, are complex,

everchanging socio-technical systems that can both be the context for design as well as the object to design in PD projects. Designers should be aware of the social groups, spatial structures, infrastructure and human operations that make the city (Gooch, Barker, Hudson, Kelly, Kortuem, Linden & Walton, 2018).

In addition, designers should be aware that even though citizen involvement often produces positive outcomes, it can also have negative consequences. Examples include disempowerment and a reduced sense of agency, dependence on knowledge intermediaries, or participation that is perceived as symbolic (Gaventa & Barrett, 2012). The risk of participation being perceived as symbolic was identified by Arnstein (1969) under the term tokenism. It was associated with certain levels on the participation ladder (see Figure 2). This ladder was first introduced in 1969 (Arnstein, 1969) and has been slightly adapted by practitioners since. Although the ladder is used in different forms it usually includes steps along the lines of: 1) citizen control, 2) co-decision, 3) partnership/co-production, 4) advise, 5) consult and 6) inform (De

Omgevingsverbinder, n.d.; EXPOO, n.d.; NJR, n.d.). Tokenism is associated with a low place on the ladder (4-6), because only participation at the top three positions on the ladder provides citizens with some degree of power (Arnstein, 1969).

Tokenism aside, another concern with citizen participation is that the demographic composition of the participants is often skewed. Education, income and socio-economic status are generally accepted as positive predictors of civic engagement (Kavanaugh, Carroll, Rosson, Reese and Zin, 2005). To reach a wider group of citizens (for less skewed participation), one can use a variety of initiatives and engagement strategies that appeal to other segments of the population (Gooch, Barker, Hudson, Kelly, Kortuem, Linden & Walton, 2018). However the type of approach to engagement also affects the levels of locality in responses. A personal face-to-face approach, for example, was found to lead to more locally-oriented responses and an online method to more general answers (Gooch, Barker, Hudson, Kelly, Kortuem, Linden & Walton, 2018).

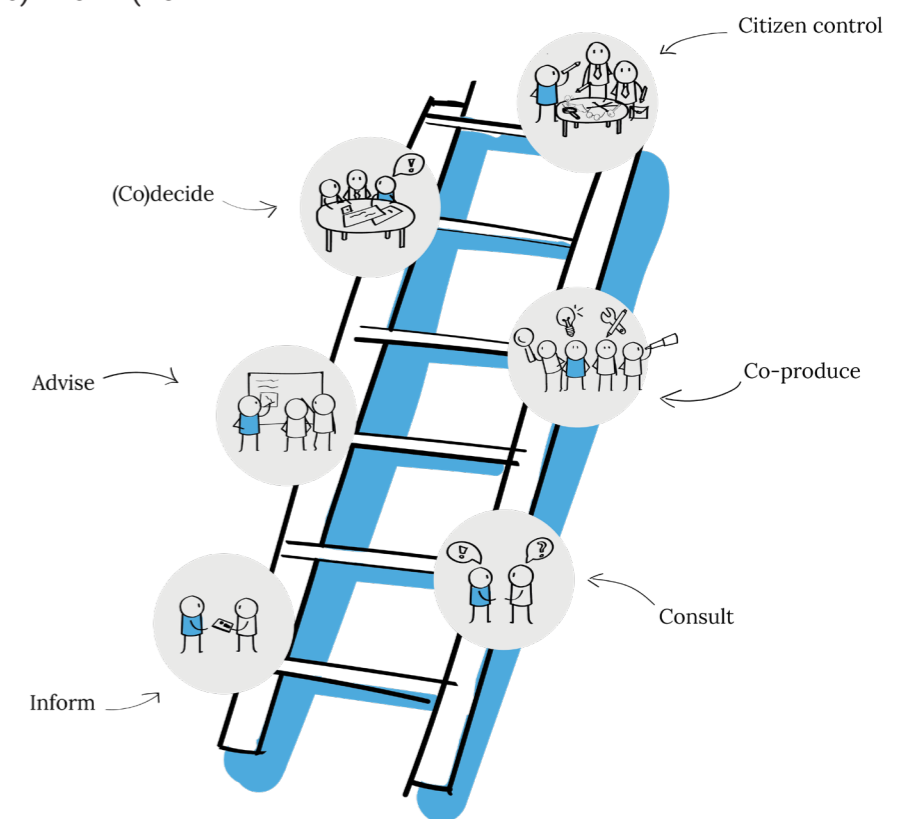


Figure 2: the participation ladder as used by Zeewaardig

2.2 Empowered citizenship

This section describes the construct of empowered citizenship through relevant literature on citizen empowerment and responsible citizenship.

Importance of empowered citizenship

Participatory design is often associated with the aim of empowering citizens (Spinuzzi, 2005; Bannon & Ehn, 2012; Bødker & Kyng, 2018; Harrington, Erete & Piper, 2019). Interventions aimed at empowerment typically find support for their intrinsic value as an end in itself or their instrumental value in relation to a broader set of goals (Combaz and Mcloughlin, 2014). Furthermore, citizen participation and empowerment are essential for democratic governments because they are seen as a prerequisite for democratic decision-making (Alathur, Ilavarasan and Gupta, 2011). Moreover, it is important for government organisations that citizens are not only empowered, but also possess the competences for responsible citizenship. After all, government organisations are there to serve the general interest, which is supported by citizens who recognise their place and responsibility in relation to the collective.

Much of existing literature on the impact of projects in terms of participation and empowerment focuses on the poor and disadvantaged in the context of developing regions. However, research by Lokshin and Ravallion (2005) found that the feeling of having almost no power is also present among people with higher levels of wealth. They concluded that empowerment may be a goal for a far larger target group than is often considered. This view is adopted in this research given the Dutch context.

Conceptualising empowered citizenship

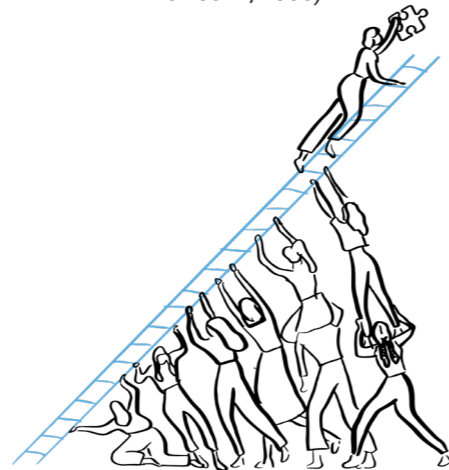
The construct of empowered citizenship consists of two components: citizen empowerment and responsible citizenship.

Citizen empowerment

Empowerment can be both a process (empowering a group of people or an individual) or an outcome (a group of people or an individual is empowered) (Alsop and Heinsohn, 2005). In this research, we want to demonstrate the (experienced) empowerment that citizens gain as an outcome of their participation in a participatory design project. Of the five different expressions of empowerment found by Ertner, Kragelund and Malmborg (2010), empowerment in this research is seen as the strengthened position of citizens through genuine participation. It is about enabling citizens to exert more influence on topics and issues that affect their lives. Therefore we use the following definition of empowerment:

'The enhancement of an individual's/group's capacity to control his/her life and claim his/her rights'

(adapted from Oxford University Press, n.d.; Alsop and Heinsohn, 2005)



Responsible citizenship

Responsible citizenship is associated with the ability to evaluate different perspectives critically, reflect on issues of e.g. justice and (lack of) equality, and behave responsibly in a community (Ten Dam, Geijssel, Reumerman & Ledoux, 2011). In line with this, the term in this research refers to the following definition:

'The capacity of citizens to act as responsible members of a community or society in which they are equal and have equal responsibility towards that community or society.'

(adapted from Wilschut and Nieuwelink, 2016)



2.3 Measuring empowered citizenship in a participatory design context

This section provides an overview of the existing knowledge on measuring empowered citizenship in a participatory design context. To this end, relevant literature related to the motives and challenges surrounding the measurement of, and indicators for, empowered citizenship are outlined.

Motives for carrying out measurements

Design studios are increasingly working for 'non-design' organisations as there is a growing interest in an approach based on design thinking (Dorst, 2011). Literature shows that although there is an interest of (large) organisations in the design thinking mindset, there is often still a need within these organisations to demonstrate its value (Björklund, Hannukainen & Manninen, 2018; Schmiedgen et al., 2016). Designers working in the participatory design field also need to demonstrate the value of the approach.

Proving your value can be one reason for the measurement of performance. Aside from that, improving a process or outcomes and learning are common reasons as well (Hervieux and Voltan, 2019). Social impact measurements can be beneficial to justify impact to funders, to champion the role of design in service delivery, to argument and make a strong case at the start of a new project, to effectively allocate resources, to continuously improve, to communicate the value of work better, and to learn to formulate the right questions (Wood & Leighton, 2010; Eurodiaconia, 2015).

Challenges of measuring empowered citizenship in the participatory design context

Some challenges exist around measuring social impact in design projects and the measurement of empowerment specifically.

Challenges of measuring in the design context

The field of measuring the impact of design is still young (Hervieux & Voltan, 2019). Not everyone using measurements in the design context believes their approach is valid (Schmiedgen et al., 2016). This uncertainty raises the question: what makes measurement more difficult in the design context compared to the business context, where impact measurement is more common? An explorative study by Schmiedgen, Spille, Köppen, Rhinow and Meinel (2016) found that the impact made by design seemed to be most noticeable in 'intangible' areas or 'soft facts'. They conclude that traditional performance measurements focusing on 'hard' facts are unsuitable for assessing this kind of impact/outcome. Other difficulties in measuring impact in design projects arise because design practices come in varying forms and sizes (Dosi, Rosati & Vignoli, 2018). Additionally, time lag, intervening variables and the breadth of potential impact are associated with the difficulty in measuring impact in this context (Björklund, Hannukainen and Manninen, 2018).

Other possible barriers to measuring impact in design projects include: not knowing what to measure, too little experience with design thinking in an organisation, a lack of resources, and considering measurements unnecessary or impossible (Schmiedgen et al., 2016). In design projects, it can also be challenging to capture the impact of a single organisation as there are often many different parties involved, and external influences can also be significant (Hervieux & Voltan, 2019).

Finally, social impact is a complex and multi-dimensional concept that is created in a social design project through an extensive journey. Existing output-based do not fully capture the complexities associated with social impact (Antadze and Westley, 2012).

Challenges of measuring empowered citizenship

There are also some challenges specific to the measurement of empowerment. In this regard, Nayaran (2005) has described challenges in the selection of indicators for these measurements. Some of these are also relevant to this research, such as the choice between measuring intrinsic or instrumental empowerment. In other words, whether to measure the empowerment people want to have or the one they actually have (even if they do not necessarily value it). In this research, the interest lies in both. This can be measured by using decision-making to explore the empowerment people have and the motivation to learn about the empowerment they value (Ibrahim and Alkire, 2007). Moreover, empowered citizenship will be measured context-specific (i.e. participatory design projects in the urban context in the Netherlands) rather than universally. This allows for a deeper understanding of the phenomenon in the context in which Zeewaardig is active (Toufigue, 2016). Nayaran (2005) also describes that empowerment is a relative construct. Therefore, it can be helpful to compare it to a baseline measurement. Finally, it has to be determined whether this will be measured quantitatively or qualitatively. In this

research, the focus lies on a mixed data collection approach, since this provides the most reliable and complete picture of the concept that is studied (since this balances out weaknesses) (Fetters and Freshwater, 2015). The mixed data approach can be executed in parallel, sequential or iterative.

Indicators for the empowerment of citizens

In the context of citizen participation, empowerment is often associated with voice and agency, since these are closely related (Viveros, Kalfa & Gollan, 2018; Ibrahim & Alkire, 2007). Therefore, voice and agency will be used as indicators of empowerment in this research, since they comprise more measurable sub-components. The following definitions of voice and agency are used:

'Voice is the ability of citizens to express their preferences and be heard by the state, either through formal or informal channels, in written or oral form.'

(Combaz and Mcloughlin, 2014)

'Agency is an actor's ability to make meaningful choices; that is, the actor is able to envisage options and make a choice.'

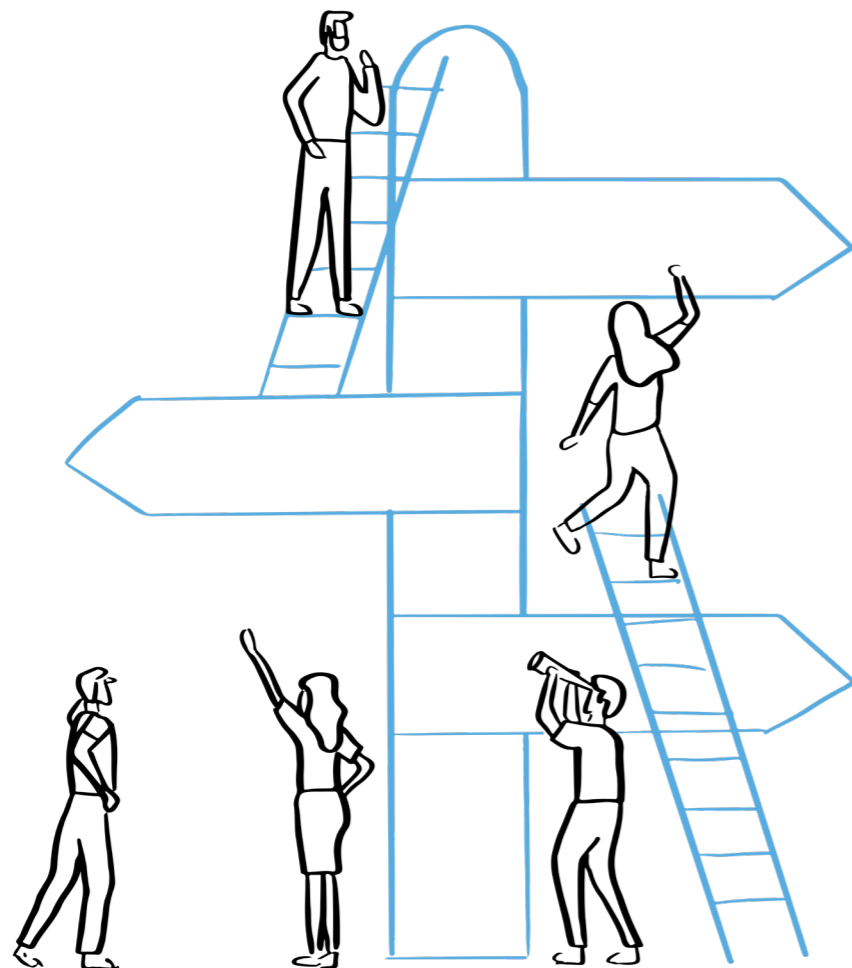
(Alsop and Heinsohn, 2005)



Indicators for voice are how well people can express their preferences and how heard they feel while doing that (Combaz and Mcloughlin, 2014). Agency can be indicated through three main expressions: decision-making, collective action and leadership (Bill and Melinda Gates Foundation, n.d.). In this research, decision-making is indicated by the question whether someone has a choice, uses a choice and is able to realise this choice (Alsop and Heinsohn, 2005). It also looks at the autonomy behind this choice to determine whether someone actually wishes to have it. Collective action refers to citizens uniting to bring about change. It encompasses the possibilities that people have to achieve this (Bill and Melinda Gates Foundation, n.d.). Finally, leadership refers to citizens taking the lead to bring about change for their community and living environment.

Aside from agency, Alsop and Heinsohn (2005) use opportunity structure to measure empowerment.

Opportunity structure is an important addition as an indicator for empowerment, since it provides insight into the influence of context on whether people can actually take advantage of certain rights or opportunities. The opportunity structure indicates aspects of the context that can contribute to or hinder the achievement of voice and agency. This can happen in three different domains, in which a person acts as a civic, economic or social actor. In the context of this research, only civic and social are relevant. Finally, these domains can take place at different levels: local, intermediary and national. This research focuses mainly on the local since it is about projects on a municipal level. It is worth realising that a change in someone's empowerment at one of the levels does not necessarily imply the same effect at the others.



Indicators for responsible citizenship

Responsible citizenship is indicated by a sense of collectivity and citizenship competence. A sense of collectivity is necessary because citizens need to feel involved in a group before they are willing or able to take responsibility for it (Wilschut & Nieuwelink, 2016). If citizens have a sense of belonging and feel responsibility, they need the appropriate competencies to be able to contribute as responsible citizens (Ten Dam, Geijssel, Reumerman & Ledoux, 2010). In this research, these competences are associated with being able to participate in a (political) community, deal with

differences and deal with conflicts. To be able to do that citizens need knowledge, attitudes, skills and reflection (Ten Dam et al., 2010). A sense of collectivity and citizenship competence refer to the following definitions:

'A sense of collectivity is a citizen's feeling of involvement and belonging to a collective group or community.'

'Citizenship competence is a citizen's ability to act as a responsible member of a community or society.'

(adapted from Wilschut & Nieuwelink, 2016)

2.4 Conclusion

The literature presented in this chapter helps us to better understand participatory design projects in the urban context. Moreover, it helps to further explore and comprehend the concept of empowered citizenship. It has been established that this is a multidimensional construct consisting of two components: citizen empowerment and responsible citizenship. Citizen empowerment can be measured by voice, agency, and opportunity structure. Both instrumental and intrinsic empowerment are of interest in this research. Since empowerment is a relative concept, it is best measured using, for example, a baseline measurement for comparison. In addition, it should be measured context-specifically. Responsible citizenship can be measured by a sense of collectivity and responsible citizenship. These insights will be used for the development of an empowered citizenship framework in Chapter 3.

Furthermore, this chapter teaches us a few things about the development of a tool for impact measurement in participatory design projects with citizens which is discussed in Chapter 6. First, to measure social impact in a design context it is essential that the measurement method can capture the often intangible nature of impact in a design project. On top of that, designers should consider the measurements to be valid. One way to achieve that is through the use of a combined measurement approach with both 'soft' and 'hard' data. Besides, the method should address the following common barriers to measurement in this context: not applicable in projects of different shapes and sizes, intervening variables, the breadth of potential impact and not knowing what to measure, and a lack of resources.

03 | EMPOWERED CITIZENSHIP FRAMEWORK FOR PARTICIPATORY DESIGN PROJECTS

This chapter introduces the empowered citizenship framework. This framework can be used to evaluate the social impact in the form of empowered citizenship as a result of participatory design efforts.

03 | EMPOWERED CITIZENSHIP FRAMEWORK FOR PARTICIPATORY DESIGN PROJECTS

3.1 Introducing the framework

This section introduces the framework for empowered citizenship and explains its structure

The framework presented in Figure 3 shows the relationship between participatory design activities and empowered citizenship. It can be used to learn more about specific indicators of empowered citizenship. This can help to learn to look for the right signs. Voice, agency, and opportunity structure indicate empowerment of citizens and a sense of collectivity and citizenship competence indicate responsible citizenship. At its core, participatory design often aims to create empowerment for participants. In citizen participation, this is complemented by the wish that residents are not only empowered but that they also assume a responsible position within their community. Moreover, the framework can be used to learn more about the impact that a participatory approach can have in this regard. Finally, it can be used to inform and improve the participatory design process to achieve the highest possible impact.

Structure of the framework

Empowered citizenship consists of two main components: citizen empowerment and responsible citizenship; these are represented in the framework by dotted grey outlines. For both components, several indicators are depicted with light blue boxes. Within the frames of these indicators, the corresponding sub-indicators are represented by dark blue boxes. Common elements of a participatory design approach are shown in the green boxes. Finally, the previously mentioned relations between participatory design activities and empowered citizenship are indicated in the framework by black arrows.

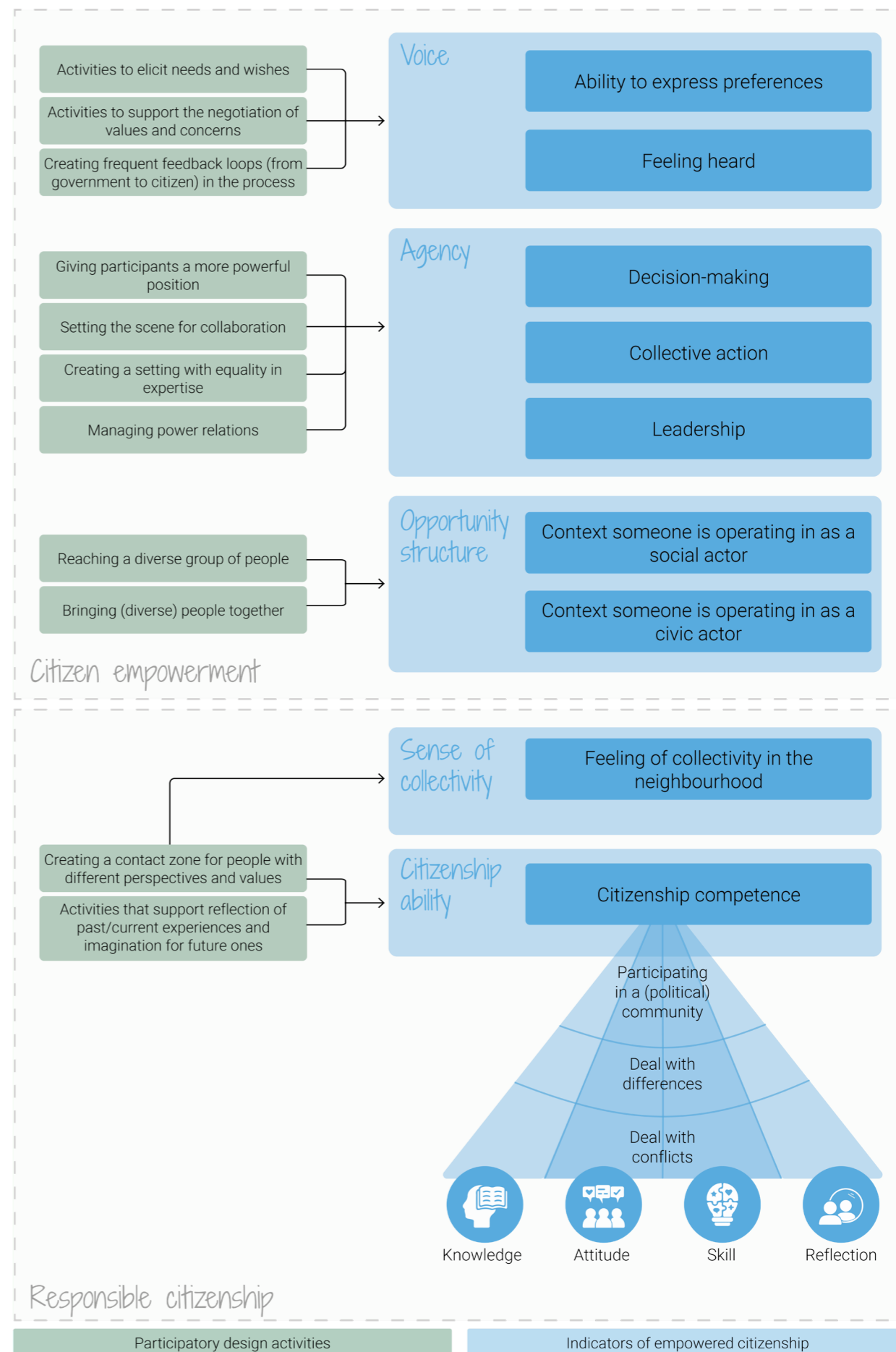


Figure 3: A framework for empowered citizenship

3.2 Approach

This section takes a closer look at the process that led to the creation of the final framework for empowered citizenship.

Defining common elements of participatory design

The common elements of a participatory design approach presented in the framework (in green) were developed in several iteration steps (see Appendix 3 for a complete overview of the iteration steps).

For the development of the common elements of participatory design, the literature and the participatory design practice of Zeewaardig were explored in parallel. The work of Hansen, Dindler, Halskov, Bossen, Basballe and Schouten (2019) was used to create the first basis to define common participatory design elements. This basis consisted of five overarching activities in participatory design: field studies, workshops, prototyping, infrastructuring and evaluation. Each of these overarching activities contains common elements.

To learn more about the participatory design approach of Zeewaardig, a small collaborative session was organised. First of all, each designer was asked to answer individually which elements recur in Zeewaardig's participatory design projects. Then they were asked what makes the Zeewaardig approach unique compared to other participatory designers. An overview of Zeewaardig's activities

was created and related to certain social impacts. Subsequently, the designers were asked to point out adjustments, additions and questions. The activities that emerged from this session and those from the literature were then compared to examine the differences and similarities. This revealed a great deal of similarity and allowed a selection of generally applicable activities (i.e. not specific to Zeewaardig) that recur in the participatory design approach and seem to have a relation to the components of empowered citizenship.

Together with the designers of Zeewaardig, these activities were revisited in relation to the framework. This showed in particular that some descriptions were quite complicated or too specific. Therefore, the descriptions of the activities were redefined to make them more understandable and more widely applicable. As an example, 'Manage power relations so participants are comfortable to share and contribute' has been redefined into 'Managing power relations'. The reason behind managing power relations was omitted in the iteration, as it was too specific and there can be several reasons for it. This iteration step resulted in a list of common participatory design activities, that are recognised by the designers of Zeewaardig, and seem to be related to empowered citizenship.

Defining indicators of empowered citizenship

The indicators of empowered citizenship were based on the knowledge from literature. To arrive at the representation of empowered citizenship shown in the framework, several iterations were necessary (See Appendix 3). Earlier versions looked separately into citizen empowerment and trust in government. It was decided to focus on empowerment for this research since trust in government can be a study in itself. The concept of citizen empowerment was also extended to empowered citizenship, as this provides a more appropriate picture of the underlying goal of participation in citizen participation. Finally, the framework was simplified down to the core to make it more applicable. During the course of this research, some elements were added to make the framework more complete. As such, it emerged during the case study analysis that 'leadership' had been removed during the simplification, but was in fact very relevant. In addition, the entirely new indicator 'sense of collectivity' was added under responsible citizenship. This one also emerged during the case study and was then examined in more detail in the literature and later added. Finally, the specific wording of the indicators has also been refined where necessary during the research.

3.3 Components of the framework

This section introduces and explains all the elements of the empowered citizenship framework.

Common elements of a participatory design approach

Ultimately, eleven common elements of a participatory design approach were identified and linked to the framework's components.

To achieve voice, and to support the expression of preferences in particular, participants can be supported through PD activities that help elicit their needs and wishes and negotiate their values and concerns. Furthermore, it is beneficial in making participants feel heard, that strong communication is established and that participants are frequently informed through feedback loops.

In addition, one of the most defining activities that affects agency, and more specifically decision-making, is giving a more powerful position to participants. Activities to manage power relations are often also related to decision-making. Moreover, preparing and setting the scene for collaboration is associated with collective action.

Activities designed to reach and bring together a diverse group of people are related to the opportunity structure that people can build through these interactions during their participation.

Finally, activities that create a contact zone for people with different perspectives and values are related to the effect on the responsible citizenship indicators. Similarly, activities in which people reflect on past or present experiences or dream about future ones are related to citizenship ability.

Components of empowered citizenship

Empowered citizenship consists of two components: citizen empowerment and responsible citizenship. Citizen empowerment is often seen as the primary goal of participatory design processes. In many participatory projects with citizens, however, the aim is not only to empower an individual or a group of people but also to promote people's citizenship. Responsible citizenship then refers to residents behaving as responsible members of a community or society, with an eye for the common good in relation to their personal interests.

Citizen empowerment

Citizen empowerment is about someone's capacity to control their life and claim their rights. This capacity is shaped by voice, agency and opportunity structure. Voice enables the expression of one's wishes, agency helps to act to realise those wishes, and opportunity structure can contribute to or hinder this sense of voice and agency.

Voice

Voice is about the ability of citizens to express their preferences and be heard by government organisations. It can occur through formal or informal channels and in written or oral form (Combaz and Mcloughlin, 2014). Hence, the first sub-indicator for voice is how well residents can make their preferences known to a government organisation. To have a real say, however, it is

necessary not only for residents to express their preferences and be heard, but also to feel heard. Being heard and feeling heard do not always go hand in hand, and the feeling has a rather predominant effect on someone's experience of voice. Therefore, the second sub-indicator for voice is the extent to which residents feel heard by the relevant government organisation.

Agency

The construct of agency refers to a person's ability to make meaningful choices. One of the sub-indicators of agency is decision-making. Decision-making concerns whether citizens have a choice about events affecting their lives or living environment, and whether they exercise that choice and can realise it. In addition, it is essential for decision-making that citizens feel in control and have autonomy. That is, they can make decisions based on personal values and interests.

Another sub-indicator of agency is collective action. Collective action refers to the uniting of citizens to bring about changes in, for example, their neighbourhood that they would be unlikely to achieve on their own. This requires the presence of some infrastructure, such as knowing the right people and being able to reach them.

The final sub-indicator of agency is leadership, which refers to citizens taking the lead to accomplish change for their community and living environment.

Opportunity structure

The opportunity structure refers to the context in which a citizen acts. It can both contribute to or hinder the attainment of empowerment. This can either happen in a civic context concerning a government organisation or a social context such as a community. For example, the opportunity structure may prevent citizens from making use of opportunities such as participation projects to make decisions for their own neighbourhood.

As such, certain norms and values, or the form of participation (e.g. online-offline, language and timing) may hinder participation for certain groups of people (such as women, young people, foreigners and the elderly).

Responsible citizenship

Responsible citizenship is about the capacity to act as a responsible member of a community or society. This ability is shaped by citizens' sense of collectivity and citizenship ability. A sense of collectivity supports citizens' willingness to act within a group or community and to take responsibility. Citizenship competence then enables citizens to act responsibly through appropriate competences.

Sense of collectivity

A sense of collectivity refers to the feeling of belonging to a collective group or community that a citizen may have. Becoming part of such a group is a two-way process: a citizen should want to become a member of the group, and be accepted by others as part of that group. When citizens have a sense of collectivity, they are more willing and able to play an active role and take responsibility. A sense of collectivity can also influence people's worldviews, and the extent to which they interact with people with different perspectives (from outside their group).

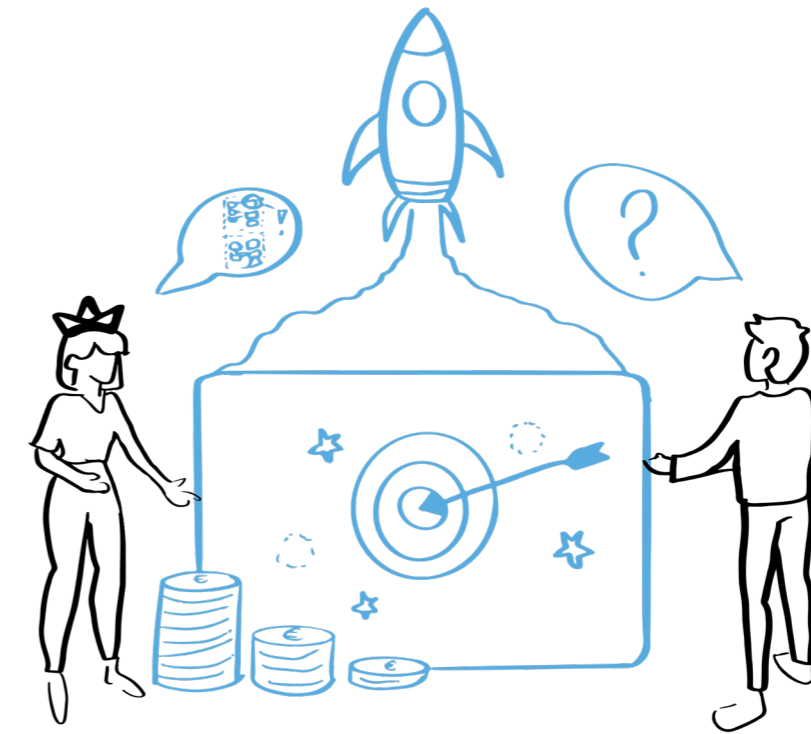
Citizenship ability

Citizenship competence refers to the ability of citizens to act as responsible members of a community or society. This ability is built through four different competence components: knowledge, attitude, skill and reflection. These components are necessary to support citizens in learning to perform social tasks important for responsible citizenship. These social tasks include participating in a (political) community, dealing with differences and dealing with conflicts.

3.4 Evaluation of the framework

The final framework was eventually evaluated one more time with the designers of Zeewaardig (see Appendix 4). This evaluation revealed that the designers recognise empowered citizenship as a goal in their citizen participation projects. Often this goal is actually something they strive for subconsciously. Therefore, the designers appreciate that this has been made explicit and that they can recognise it. The purpose of empowered citizenship can be present in their projects to varying degrees. It is present to a greater degree in some projects than in others.

The designers indicated that the framework is valuable for them as it helps them understand and become more aware of empowered citizenship. The different components of empowered citizenship specifically help in this regard. It allows the designer to think more consciously about impact in projects. This in turn, enables designers to have more informed conversations with the client in a kick-off and make more informed decisions about the impact they want to pursue. Clarifying the impact goals can also be helpful when they want to evaluate this impact later on.



“ *Deze verschillende aspecten sta je aan de voorkant niet altijd even veel bij stil. Onbewust ben je er mee bezig en weet je wat je wilt bereiken. Het framework helpt in gesprek met de opdrachtgever om er beter bij stil te staan en er een goed gesprek over te voeren.* **”**
- Designer at Zeewaardig

3.5 Conclusion

Drawing on the indicators for empowered citizenship that emerged from the literature research (in Chapter 2), this chapter introduces the empowered citizenship framework. This framework illustrates the different components of empowered citizenship and how they relate to participatory design activities. In doing so, it fills a knowledge gap that has existed in the literature to date.

The evaluation of the framework with the designers of Zeewaardig showed that the framework supports their desire to demonstrate their impact better. The most outstanding value in this regard is that the framework helps to understand their impact better, have a good conversation about it with the client at the start of a project, and make more informed decisions. Thus the framework can be used to understand impact in the context of participatory design projects with citizens. It can also provide the basis for measuring empowered citizenship in this context. Hence, the framework will be used in the case study analysis in Chapter 5 and for the impact demonstration tool in Chapter 6.

04 | RESEARCH APPROACH

This chapter details the research approach of the case study, by describing the selection of the case, a description of the case and the method.

04 | RESEARCH APPROACH

4.1 Purpose of case study analysis

A case study analysis will be carried out on the basis of the empowered citizenship framework introduced in Chapter 3. The case study can help to learn how empowered citizenship is manifested in an existing participatory project. Moreover, the case study analysis can be used to explore how the indicators from the framework can be used to measure empowered citizenship.

Besides serving as illustrative material the case study analysis will result in a better understanding of 1) needs and wishes for a measurement tool on empowered citizenship in participatory projects, 2) indicators for empowered citizenship in the participatory design context, and 3) the relation between participatory design and social impact.

The case study will be used to explore the following research questions:

- If present, how are the **components of empowered citizenship manifested** in the case and what activities of the participatory design approach contributed to this?
- What **other indicators can be found** in these cases for the measurement of empowered citizenship?
- How does the **empowered citizenship framework contribute to the understanding and measurement** of this impact in the project?
- How can you **make the indicators** for empowered citizenship best **measurable**? What kind of wording do stakeholders use themselves, what can they recollect and what can they put into words?

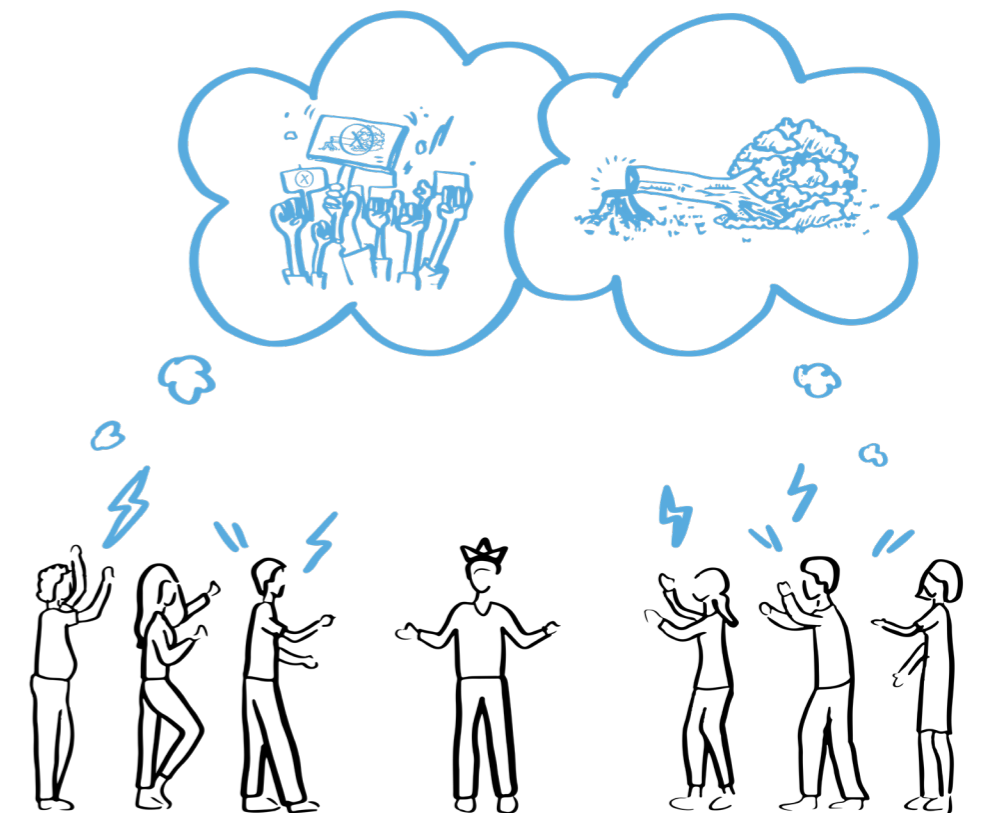
In addition, the case study is used to see if we can get some insight into:

- The needs and wishes of stakeholders' concerning the measuring of social impact in participatory design projects,
- Other kinds of impacts that stakeholders experience during and after the participatory design project.

4.2 Selection of a case

The phenomenon of interest in this study is the social impact in terms of empowered citizenship that is created by participatory design projects in an urban context. Therefore, the case should include a high level of citizen participation (in step 1-3 of the participation ladder) in a design project and have a social aim. In order to explore the influence of Zeewaardig's participatory design approach, the chosen case should reflect most of the typical practices identified in the framework. Additionally, since empowered citizenship is researched through the indicators citizen empowerment and responsible citizenship, the chosen case should be considered to have influenced at least one (and preferably both) of these constructs. Stakeholders within the project should also be approachable and open to cooperation for the analysis. Finally, Zeewaardig must have completed their assignment within the project.

These criteria have led to the selection of the Eikakkerhoeven project as a case. First of all, since this is a project that resonates with the way Zeewaardig prefers to address municipal projects in a participatory way. In addition, the project provides an opportunity to compare with a municipality's non-design approach to participatory design. The Eikakkerhoeven project has been quite a journey. It began as a project carried out by the municipality, but they could no longer come to an agreement with the residents and as a result the project was temporarily halted. After some time, Zeewaardig was hired to pick up the project as an expert in participatory design. Finally, Zeewaardig involved the residents on a high level of the participation ladder. The designers are curious to learn more in the case study about the effect of this effort.



4.3 Case description

This section describes the history of the Eikakkerhoeven project, as well as the goals, role division and all participatory design activities of the project as carried out by Zeewaardig.

History of the project

Let's start with a look back at the history of the project (see Figure 4). The project was initiated, in the neighbourhood the Eikakkerhoeven is a part of, because both the municipality and the neighbourhood council were often approached by residents about nuisance from trees, a lack of light, leaves and loose branches. Therefore, it was decided that the neighbourhood would be revitalised. A resident evening was organised by the municipality and together with more than 100 participants, a future vision was concluded for the revitalisation. Afterwards, designs were made for two streets of the neighbourhood and successfully completed. The municipality moved on to the next area. This is where the part of the project starts in the street that this case study focuses on: the Eikakkerhoeven. Three resident evenings were organised and consequently a design was made for the revitalisation of the Eikakkerhoeven. The residents, however, were alarmed by the number of trees that would be removed in this design. Hence,

the municipality started a workgroup that could go through the plans tree by tree and try to come to a consensus; five emotional evenings followed.

During these meetings, two opposing sides emerged. One group was in favour of the preservation of the trees and the other was in favour of felling some of the trees. The people who wanted to keep the trees were quite prominent and loud in the discussions, which provoked counter-reactions from those who favour cutting down some trees. A number of the participating residents indicated that they did not feel this group gave a good representation of the neighbourhood and that the opinions of a number of people in particular were voiced in the discussions. In the end, these discussions escalated and even ended in swearing. These evenings were no fun for anyone and everyone went home with a sour aftertaste. After this, the involved parties could not work things out with each other anymore.

The municipality did not manage to reach a consensus with all residents in the workgroup, but decided to move on with the plan anyway and applied for felling licences. Some of the residents came together in action groups and in the end, 89 objections to the felling licences were submitted by residents. The municipality was unsuccessful in opening up a follow-up conversation. That's when the municipality temporarily halted the project since they were searching for another way to resolve it. When some time had passed the municipality decided to hire Zeewaardig to restart the project.

In this report this first phase where the municipality set-up the project will be referred to as the pre-project. The process that was later set up by Zeewaardig (commissioned by the municipality) will be referred to as the (Eikakkerhoeven) project.

Project goals

The primary assignment of the municipality to Zeewaardig was to create support (in Dutch 'draagvlak'), so the revitalisation efforts could occur. A subgoal to achieve this was finding residents' agreement on what revitalisation should

mean for their street. In addition to the main assignment, the lead designer of Zeewaardig also had some personal goals for the design. First, she wanted to reduce the residents' mistrust by offering them a different experience of what participation can be. Second, she tried to build consensus between residents and reduce the tensions between them. Third, she wanted residents to have greater ownership and control over their living environment. In retrospect, looking at it from the empowered citizenship perspective, it is notable that these goals fit very well within this concept.

To accomplish these goals, the designer of Zeewaardig designed for the following four values:

- **Voice:** To make participants feel heard.
- **Visibility:** to make participants see what happens with their input throughout the process.
- **Transparency:** To explain among others the (design) choices to participants.
- **Equality:** To treat participants equally, and ensure their input is equally valued.

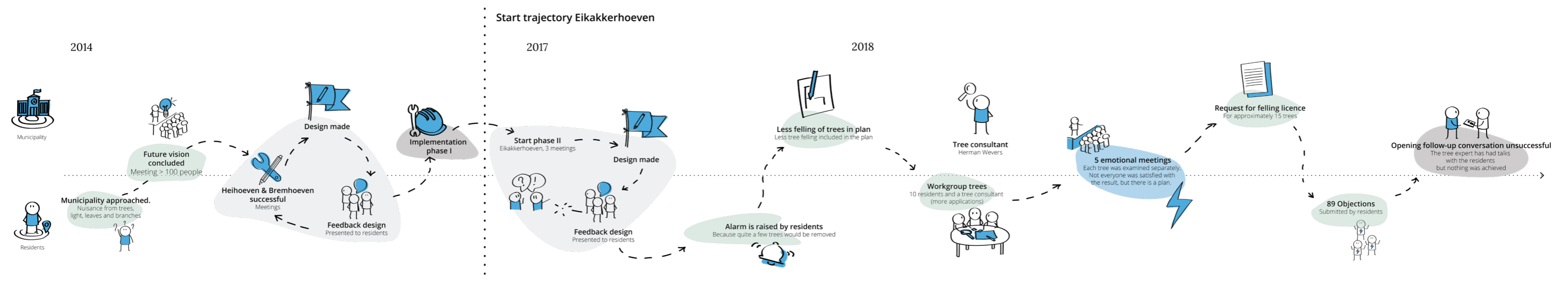


Figure 4: History of the Eikakkerhoeven project (later referred to as the pre-project)

Role division between stakeholders

Several stakeholders were involved in the Eikakkerhoeven project (see Figure 5). Zeewaardig ensured that the role of each stakeholder in the process was clearly defined and agreed upon at the start of the project. Zeewaardig became the independent facilitator of the project. The municipality took a step back from its role in the pre-project and had a more informative and monitoring role. Ultimately though, they were the ones responsible for the project and the final decision. This decision, however, would be based on the decisions of residents in the workgroup. The members of the workgroup took their seats

to represent the collective. To also be able to represent other points of view than their own they investigated the opinions in the neighbourhood and proposed solutions accordingly. The collective consisted of all residents of the Eikakkerhoeven; they were able to share their opinions and wishes. Finally, multiple experts, such as a landscape designer and a tree expert, gave independent advice based on their expertise.

The Eikakkerhoeven project executed by Zeewaardig

The Eikakkerhoeven project was carried out by Zeewaardig in two phases: the research phase and the design phase.

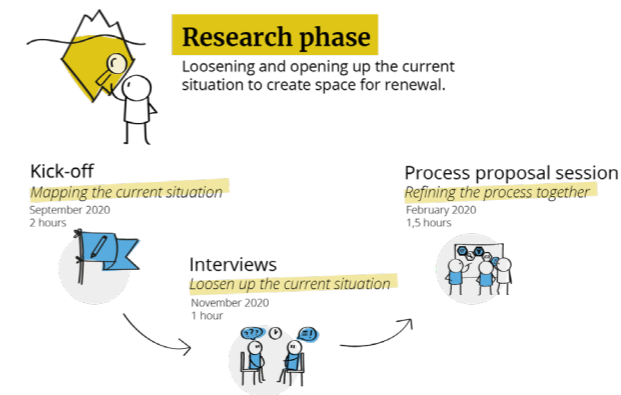


Figure 6: Overview of the research phase

Research phase

For an overview of the research phase see Figure 6. The research phase was used to learn more about the history of the project, what went wrong and what could be learned from it. A kick-off meeting and seven interviews with residents who had participated in the pre-project were used to map out the current situation and ascertain what the residents wanted in this newly established participation project. These interviews were also used as a starting point to determine the level of participation (on the participation ladder) that seemed desirable and necessary. It was decided that residents needed to be able to decide on the revitalisation plans and that the municipality would take over the residents' decisions. Based on all the information that Zeewaardig had now acquired, they designed a process proposal for the participatory design approach. This was presented to the residents during a session, where they could ask questions, discuss and suggest adjustments and additions to the proposal.

Insights gained during the research phase

The main insights gained from the research phase are concluded in Figure 7. Residents felt that the municipality's motives were unclear, that facilitation was lacking quality and that the municipality provided insufficient feedback. Furthermore, it did not feel like collaboration and residents felt like decisions were made one-sided. Moreover, residents became increasingly polarised during the pre-project. For the residents who were against the municipality's revitalisation designs, the objections to the licences for felling felt like a last resort to give the process a reset. In the restart of the project that is organised by Zeewaardig, they wish for greater transparency, with clarity on the motives of the municipality and experts.

Furthermore, residents want to be involved genuinely and sincerely and co-produce results with the municipality and experts. Finally, they wish to have a clear process with agreements on the roles beforehand. With this information in mind Zeewaardig designed a participatory process with moments for the organising side (Zeewaardig, municipality, experts) and residents to get on the same page about 1) the process, 2) the role division, 3) the goals and principles, 4) the room for exploration and resident ideas, 5) the collaboration and 6) the decision-making. Furthermore, it was critical to test the collective's support (in Dutch 'draagvlak') for the new revitalisation design and to provide feedback more inclusively to all the residents. Finally, Zeewaardig indicated the following opportunities for the project: to include insights from the neighbourhood vision, make good use of the energy and involvement of residents in the Eikakkerhoeven, and discover together how participation can work well.

Role division



The municipality

- Takes and motivates decisions in process
- Sets the frame conditions
- Monitors budget and planning
- Thinks along integral lines, shares information and helps to find appropriate solutions



The workgroup

- Thinks along from a collective viewpoint
- Is open to multiple points of view
- Suggests solutions
- Explores the opinions in the neighbourhood



The collective (residents Eikakkerhoeven)

- Gives his/her opinion about the plan
- Gives voice to specific wishes



The expert

- Provides independent advice based on expertise



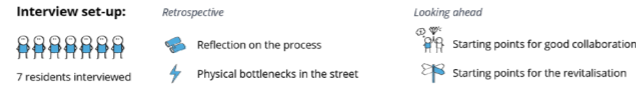
The process facilitator (Zeewaardig)

- Directs the process
- Keeps track of the goal and makes continual adjustments

Figure 5: Role division between the different stakeholders in the Eikakkerhoeven project

Research phase

Resident interviews Eikakkerhoeven



What did not work?



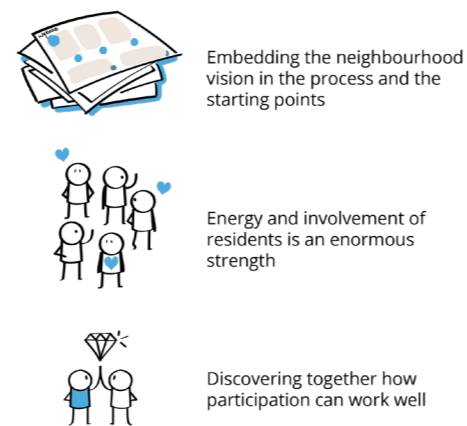
What are the residents' needs?



What does this mean for the new process?



What are the opportunities?



Kick-off design phase

Once the participatory process was designed and agreed upon, the design phase could be started. For an overview of the design phase see Figure 8. The design phase was launched with a kick-off for all residents. The purpose of this meeting was mainly to introduce Zeewaardig, introduce the process they designed and discuss the goals and principles of the municipality for the project. In addition, wishes and points of attention were collected that the members of the workgroup could take into account during the design process. Residents were also invited to join the workgroups. To this end, invitations had already been distributed through the neighbourhood council, neighbourhood website and door-to-door letters.

Workgroup sessions

The workgroups had place for a maximum of 28 residents divided over 4 workgroups. Eventually, 17 residents took part in three workgroups. The division between the groups was based on three corners of the street, and the people who lived on a particular corner together formed a workgroup.

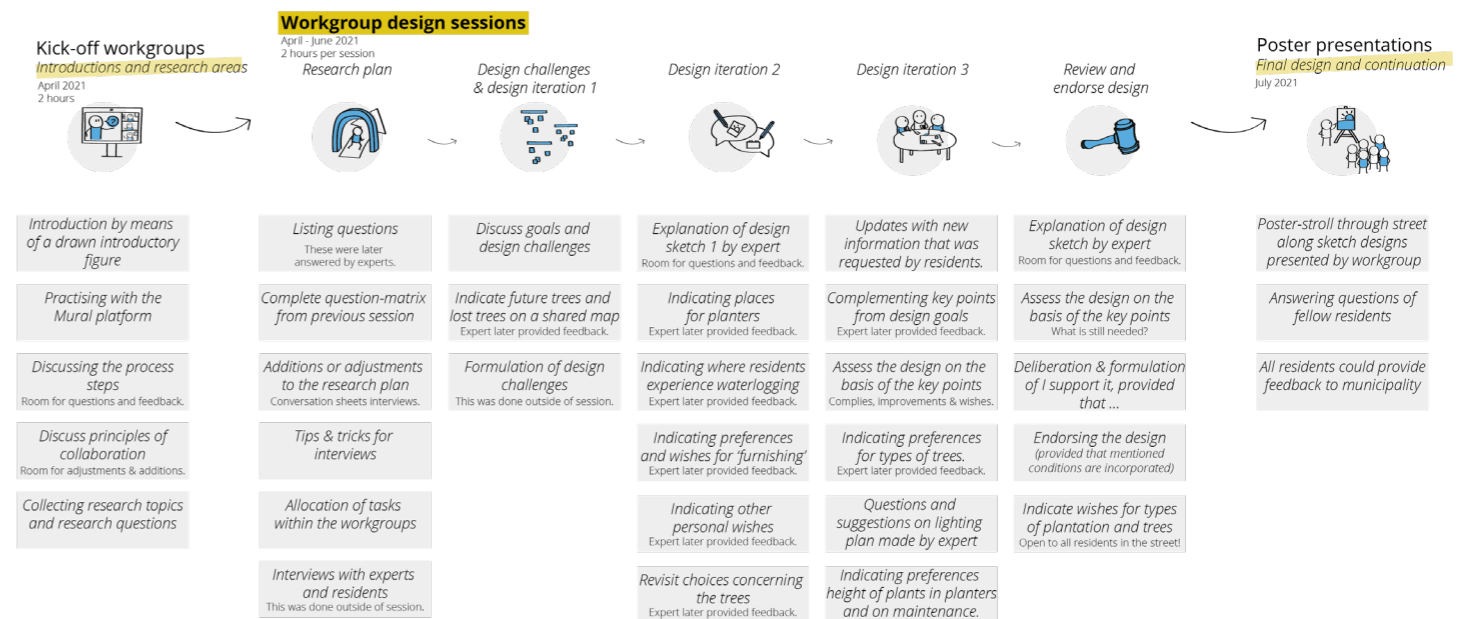


Figure 8: Overview of the design phase

Figure 7: Findings of the research phase of the Eikakkerhoeven project

Kick-off workgroups

The workgroup sessions started with a kick-off where residents in the groups got to know all participants, that is: each other, the designers of Zeewaardig, the municipal employees and the experts. Furthermore, they practised with the Mural platform that was used for the remainder of the project. The process and principles of collaboration were discussed and, where needed, complemented (see Figure 9). Finally, research topics and questions were drafted up (see Figure 10).



Figure 9: Collaboration principles

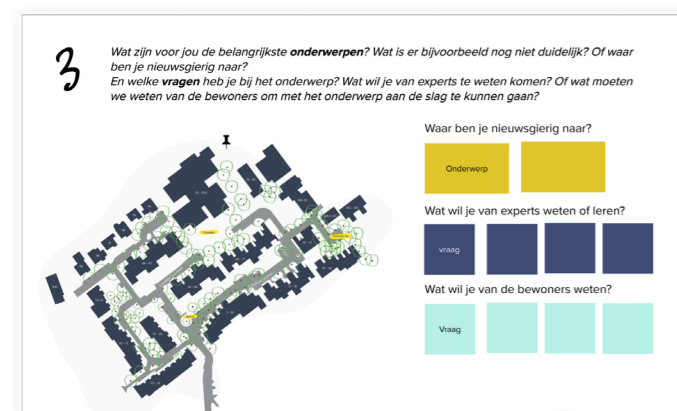


Figure 10: Assignment to collect research topics and questions

Research session 1: Research plan

The first substantive session was focused on research. Questions were collected and the questions from the kick-off were further supplemented. In addition, the research plan drawn up by Zeewaardig, including conversation sheets for interviews with residents and experts and an insight format, was reviewed. Residents could also indicate adjustments or additions, which were later processed by Zeewaardig. Subsequently, tips and tricks for conducting the interviews were shared. Furthermore, the tasks were divided among the various members of each workgroup. After this session residents also started to have interviews in their own time with fellow residents and experts. For this purpose, they could use the conversation sheets in Figure 11.



Figure 11: Part of conversation sheets for interviews with fellow residents (top) and with experts and employees of the municipality (bottom)

Design session 1: Design challenges and iteration 1

In the first design session, the wishes and challenges for the revitalisation plan were formulated, based on insights of for example interviews, and discussed together. Residents used this information to formulate design challenges together as 'homework' before the next session (see Figure 12). After the discussion of the design challenges, residents went through an assignment designed to help them start designing the revitalisation plan. In the assignment, they had to indicate future trees and lost trees on a map in the online Mural board (see Figure 13). These decisions were later also provided with feedback by the experts.

Ontwerpuitdagingen 25 min.			
VB: Met de vitalisering willen we	een gefaseerd meerjarenenplan voor de bomen maken	zodat de Eikakkerhoeven duurzaam groen wordt en blijft	rekening houdend met een waardevolle groenbeleving in alle fasen
VB: Met de vitalisering willen we	kleur, geur en diversiteit in de plantvakken	zodat de plantvakken aantrekkelijker worden voor het oog en de biodiversiteit versterken	rekening houdend met dat het goed onderhouden kan worden door de gemeente
Werkgroep 1			
Met de vitalisering willen we	de bomen en overig groen voorbereiden op 25 jaar groen	zodat de bomen gezond blijven en het groene karakter van de wijk gewaarborgd blijft	rekening houdend met dat het voor sommige bomen noodzakelijk is om groenoplossingen te maken voor de toekomstbomen
Met de vitalisering willen we	een goede balans vinden tussen de aanwezigheid van publieke openbaar en alle bewoners gezamenlijk als met wat het weer niet kappen van bomen	zodat Er zoveel ruimte is voor nieuwe bomen maar een kapverplichting voldoende groen behouden behouden om een boom of bomen juist wel of niet te kappen	rekening houdend met dat er bewoners zijn die een sterke mening hebben om een boom of bomen juist wel of niet te kappen
Met de vitalisering willen we	meer publieke laadpalen toevoegen voor elektrische auto's	zodat de wijk is voorbereid op de boename van elektrische auto's	rekening houdend met dat we geen groen willen opofferen voor extra parkeerplaatsen

Figure 12: Example of design challenges drawn up by one of the workgroups



Figure 13: First design iteration for residents by indicating future trees and lost trees

Design session 2: Iteration 2

Based on the first iteration of future trees and lost trees the landscape architect made a design. If deviations from the residents' plans were necessary, an explanation was given in the Mural. It was also stressed that this was not a final design decision, but rather a decision taken to illustrate what it would lead to. The design shows what would happen if you only keep future trees and let them grow over the coming 5, 10 and 20 years. This design was made to illustrate and explain to residents that trees need room to grow, and if you give them that room, they will become fuller and

greener (see Figure 14). After the presentation, there was room for questions about the design and feedback. Afterwards, residents had the assignment to retake a look at the map and draw in planters, indicate places with water logging issues, and suggest wishes for furnishing and personal wishes in general (see Figure 15). Besides, they were asked to revisit their first iteration with future trees, and see if they wanted to adjust it now that they had seen the design made by the landscape architect. The landscape architect later provided feedback to the choices in the Mural again.



Figure 14: Design to illustrate how chosen future trees can grow if they have enough room



Figure 15: Second design iteration by indicating planters, water logging issues, furnishing and personal wishes and revisiting the future tree decisions

Design session 3: Iteration 3

Before taking a closer look at the design again, the key points from the design goals were discussed. These were also supplemented and refined. Subsequently, the residents went back to work on the design. The design was assessed on the basis of the key points of the design goals. Based on the insights gained from this assessment, the plan could be improved if necessary (see Figure 16). Afterwards, the residents had the opportunity to indicate their wishes with regard to the planting beds. They could express their preference for the height range, their thoughts on maintenance and wishes for the types of plants to be planted in the beds. Moreover, the residents could indicate their preferences for the types of trees that would be replanted in the plan. Finally, they could ask questions about the lighting plan that was drawn-up by a municipality expert.



Figure 16: Third design iteration by assessing the design and indicating types of plantation and trees

Decision-making session: Review and endorse the design

Prior to this last workgroup session, the landscape designer prepared a new sketch based on the residents' wishes and sketches (see Figure 17). During this final session, this revitalisation plan design was presented to the residents and questions and feedback were discussed. Afterwards, the design was assessed on the basis of the key points of the design goals again. Workgroup members went into deliberation based on the assessment. Together they formulated conditions for the finalisation of the design. These

had the form of "I support the design, provided that ...". Finally, they endorsed the design (provided that their conditions were taken into account as well) and the team captains signed it. After this session, everyone in the neighbourhood (so also non-workgroup residents) was invited to share their preferences on the types of plantation and trees in the planters before the beginning of July.

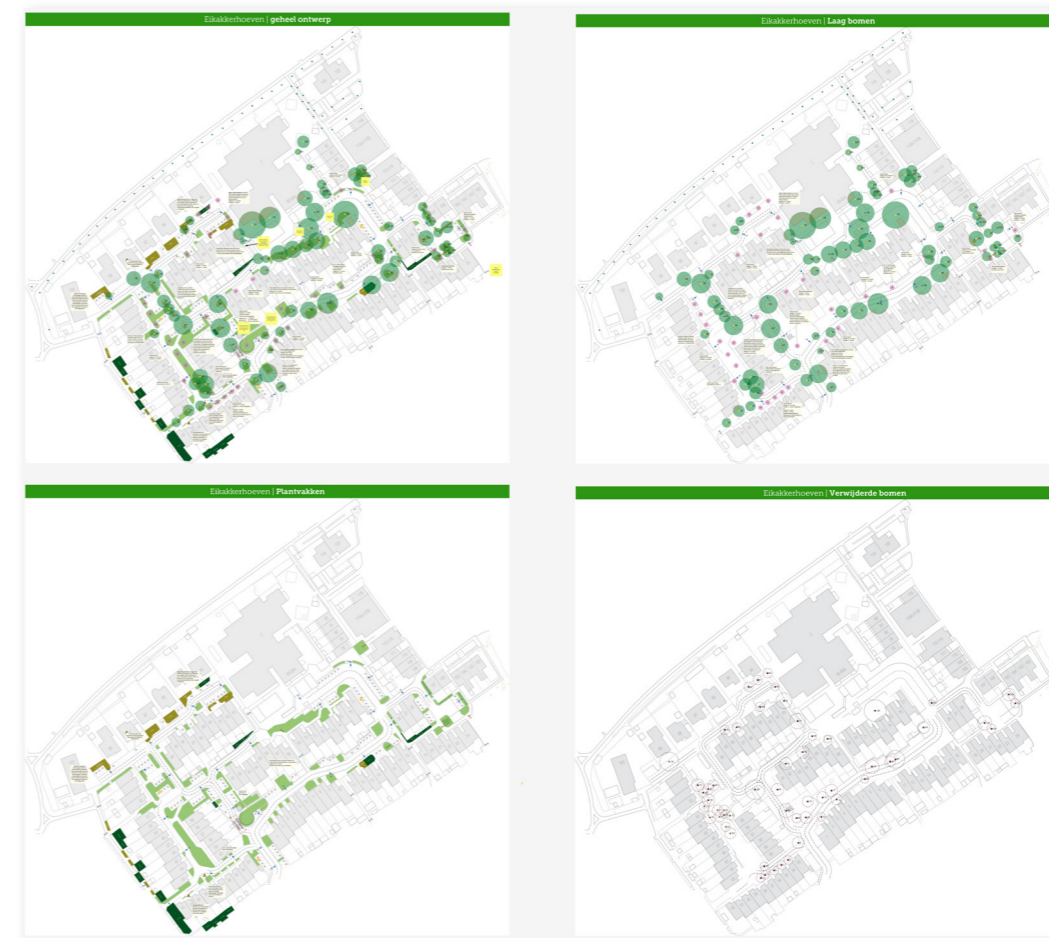


Figure 17: Final sketch design results from workgroup sessions

Poster presentation

Given that the residents in the workgroups had made a design for the revitalisation of the Eikakkerhoeven that they also endorsed, this design could now be presented to the rest of the residents. This was done by means of a poster presentation evening where residents could take a walk through the street past various posters about the new revitalisation plan (see Figure 18

and 19). The posters were placed at different locations in the street and presented and explained by workgroup members. There was also room for questions and the municipality collected any minor adjustments or questions that came up. This input was later evaluated, processed and the result, accompanied by an explanation, was communicated back to the residents.

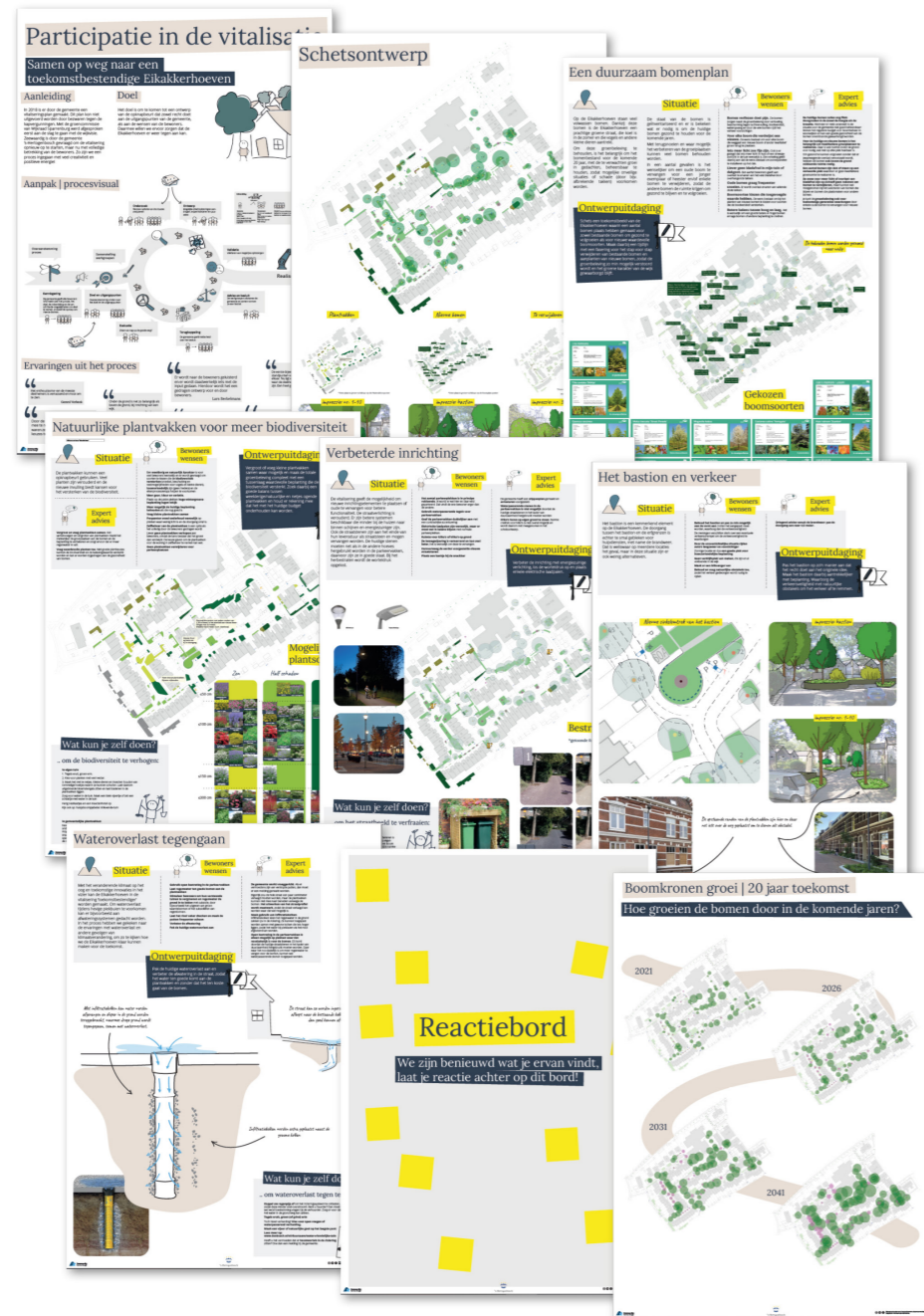


Figure 18: Posters with the designs that were presented at the poster presentation



Figure 19: An impression of the poster presentation evening



Evaluation session

The assignment of Zeewaardig ran until the poster presentation. After that, the municipality took over the lead again to further develop the design and move towards implementation. Zeewaardig did still organise an evaluation session with the workgroup residents on their experiences of the process (see Figure 20). This evaluation dived into highlights, challenging moments and learning points/insights in the process. Communication, information provision, collaboration and guidance were also discussed. Moreover, the satisfaction with the final sketch design and what is still needed to safeguard the results were examined. Finally, points for improvement for future participation projects of Zeewaardig were discussed.

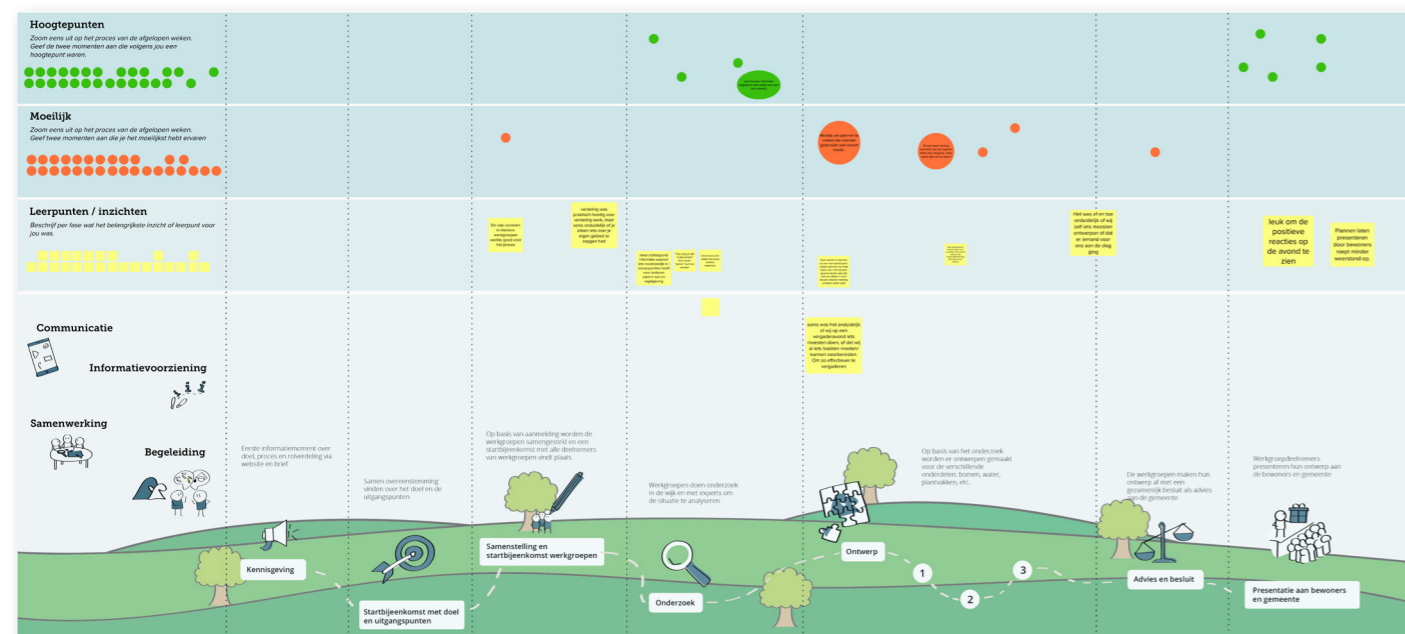


Figure 20: Third design iteration by assessing the design and indicating types of plantation and trees

4.4 Method

To review and explore the framework, a single in-depth case study analysis is carried out in several phases. First, data is collected, then processed and finally analysed.

Preparation

Before the data can be collected, some preparations must be made, such as recruiting respondents for the interviews. In addition, interview guides are prepared based on the empowered citizenship framework. Different interview guides are made for the various types of stakeholder: the Zeewaardig designers, the municipality and experts, and the residents (see Appendix 5).

Data collection

Three approaches will be used to collect data: the collection of existing materials from the project, and of new information through interviews and a questionnaire. Seven semi-structured interviews will be conducted, four of which are with residents who participated in the workgroups (referred to as resident in the workgroup 1- 4). The other three interviews are with other stakeholders of the Eikakkerhoeven project: a municipal employee, an expert and the lead designer from Zeewaardig. All interviews will be conducted through the online meeting tool MS Teams and recorded with permission. The first interview will be with the designer of Zeewaardig to gain a good understanding of the project and the rationale behind the designed activities, before interviewing the other stakeholders. In addition to the interviews, a questionnaire will be distributed. In retrospect two residents responded to the questionnaire, one of whom was a member of a workgroup (referred to as resident of workgroup 5) and the other was not (referred to as non-participating resident 6).

Processing of the data

All interviews will be transcribed and quotes will be collected from the transcripts. Several

important phrases are then written down from the respondents' verbatim words, for example about the effects experienced and what caused this effect. All these phrases are collected and then clustered. The empowered citizenship framework will be used to categorise the data around its components. Subsequently, clustering will again be used to find the different themes within each framework component. In addition, the researcher is open to finding other striking themes, or possible new components missing from the framework. In short, a hybrid model of inductive and deductive thematic analysis will be used (Fereday & Muir-Cochrane, 2006).

Analysis of the data

The clusters will be used to describe the results of the interviews for each part of the framework. Here the literal quotations or wording of the respondents will be used as much as possible. Based on the results, the researcher will examine what can be learned about the relations between participatory design activities and the components of empowered citizenship experienced by residents. In addition, the researcher will examine whether the clusters reveal other interesting findings about participatory design. For the findings the researcher will again use the wording of respondents as much as possible, to prevent it from being too much of a personal interpretation. Finally, the results and findings will also be discussed with several other designers for triangulation of the findings.



05 | CASE ANALYSIS

This chapter presents the case study analysis of the Eikakkerhoeven project. Findings on the relations between participatory design activities and empowered citizenship are presented. Finally, insight is given into considerations that influence the potential impact in participatory design projects.

05 | CASE ANALYSIS

5.1 Results

In this section, the results of the case study are presented in relation to the components of the empowered citizenship framework.

Voice

Expression of preferences

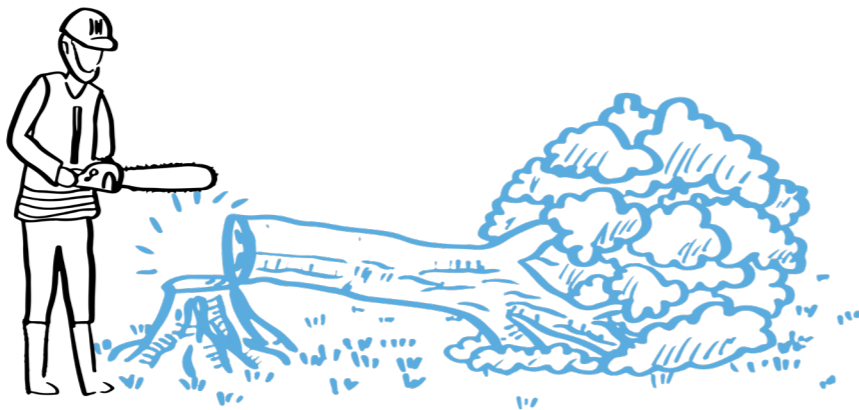
In the pre-project, experts and residents noticed that the people who were in favour of tree removal were under-represented and less vocal in the discussions than the tree preservationists. The interviews that workgroup members conducted with fellow residents were helpful to support the expression of wishes from both sides of the spectrum. In general, it was found that residents are now more likely to provide feedback on the plans of the municipality than before the project. In other words, they are more likely to express their preferences in the future. This is mainly due to the interest and seriousness with which the municipality dealt with the opinions and expertise that the residents had about their neighbourhood. Furthermore, residents became sharper in forming and articulating their opinion and wishes, as they learned more about the topic and possibilities from experts.

Bewoners wisten steeds beter waar ze het over hadden en waren daardoor in staat om een scherpere mening te vormen en het beter te verwoorden.

- Expert

Nou, ik vond het wel leuk dat ze dat deden voordat ze met de kettingzaag in de straat stonden zeg maar. Dus wat dat betreft vond ik het allemaal wel... interessant, maar toen had ik ook wel meer zoiets van uhh... weet je, ik ben het er op zich niet zo heel erg mee eens wat ze hier van plan zijn? Maar ja, dit is wat ze willen gaan doen, en wie ben ik dan om daar wat op tegen te hebben hè? Ze zullen toch wel niet luisteren naar mijn input. En dat gevoel is echt wel veranderd, ja.

- Resident in the workgroup 1 [about the pre-project]



Feeling heard

In the pre-project, some residents appreciated that the municipality took the step to ask for residents' feedback, even though it ended disappointingly. The main intervention used by the designer of Zeewaardig to boost the feeling of being heard, after this experience, was to give citizens a high place on the participation ladder as co-producers (see chapter 2.1). This was achieved by establishing decision-making power for residents, and making sure that the municipality would use the input of the residents' for the implementation. By going a step further in terms of participation, residents indeed felt more heard. Municipal employees also heard positive reactions at the final poster presentations. They received only a small number of questions and adjustments since residents' concerns and values were mostly considered already by the workgroups. Besides the high involvement of the residents, that effect is positively associated with the involvement of experts based on the information needs of residents. Moreover, that effect is associated with the provision of good explanations and argumentations on the possibilities and consequences of decisions.

Residents are in eager and nervous anticipation of the implementation. The nervousness stems from the fact that the residents' end result was a sketch plan and that the municipality still needs to further develop the plans and look at all the detailing. Residents now wonder if changes need to be made and if they will be communicated and explained to the residents if that is the case. The way this is handled will also be of influence on the trust residents have in the municipality and how heard they feel in the long-term.

Ik heb me gehoord gevoeld omdat juist dat proces heel inzichtelijk was en hoe die stappen gezet werden en ook waarom je soms uiteindelijk niet tot iets kan komen wat je misschien wel had gewild.

- Resident in the workgroup 2

We hebben nog een bewonersavond [poster presentation] uiteindelijk gehad met het concept van de bewoners wat verder uitgewerkt, en dat in principe, waren allemaal hele positieve reacties. We hebben nog weinig wijzigingen gehad. We hebben nog wel een paar kleine kleine dingetjes gehad, maar dat houd je altijd. Dus daaruit kan ik wel concluderen dat het goed werkt allemaal, dat iedereen zijn wensen gehoord zijn. En waar niet hebben we gewoon duidelijk antwoord onderbouwd gegeven van waarom het niet kon.

- Project leader within the municipality

Agency

Decision-making

Choice and control in neighbourhood decisions

As mentioned before, the participation in this project was arranged to be high up on the participation ladder by establishing decision-making power for residents. The designer also made sure that the municipality did not meddle in these decisions and would use the residents' sketch design. Residents had varying experiences of power due to this intervention. One of the residents did not really feel like she had power. She felt like she was there to think along, but the municipality was still ultimately responsible. In the interview she seemed to have a negative association with the word power. She did, however, go to the municipality on her own initiative when some changes were made to the plans that did not comply with what the residents had indicated. This was sorted out with the municipality and they adjusted the plans according to her concerns. It seems that even though she did not perceive it as power, she did have influence on the outcome of the project. In contrast, most other residents felt like they were handed a serious degree of power, since it would be their design that the municipality would implement in the end. Despite the differences in experienced power, all residents experienced more voice (in Dutch 'inspraak') and influence than they had before in for example the pre-project. They also feel like they were able to have a serious influence on the final plans.

Ik vond dit traject een heel fijn voorbeeld waarin ik dat gevoel wel had dat ik een keus had in de veranderingen, in mijn wijk, als bewoner.

- Resident in the workgroup 3

Although the decision-making power was associated with a lot of positive effects by both residents, designers, experts and the municipality, it also had some negative effects. For the municipality, the main concern about providing residents with this much power is that it needs

to be guided very well and that it costs a lot of time, energy and money. For upcoming projects, they are looking for a balance between a less time-consuming approach and still involving the residents in the process. It is a great puzzle for the municipality to find out where and when to involve or not involve residents in decisions for their neighbourhood.

Gaan wij, als gemeente, elke keer aanbieden aan bewoners van welke kleur stenen wil je in de straat? Maar er zijn ook bij ons ook interne landschapsontwerpers die gewoon zeggen, oké, deze wijk moet deze uitstraling hebben, dus daar moet overal die paarse steen komen. Dus dat is nog wel een dingetje van, hoe ver gaan we met dit proces?

- Project leader within the municipality

For some workgroup members in the Eikakkerhoeven project, the power also felt like a responsibility they weren't sure they wanted to have. The designer recalled that, after laughingly chopping trees with axes in an online map in the mural, a moment of realisation came: the residents were actually going to make these decisions. Not only for themselves but also for their neighbours. This was quite intense for them, but they did pick themselves up afterwards by identifying what they needed to be more confident in their decisions. Even though the carte blanche was experienced as refreshing for residents, some still felt like they did not have the expertise to make the decisions so freely. They feel like they received a summary of expert knowledge, but did not know about all the aspects typically considered in these types of projects. Residents feel like they might have missed out on knowledge they needed to base the decisions on, and some feel uncertain if they made the right decisions.

Maar nu lieten ze het wel héél erg vrij, waardoor ik er een beetje een negatief gevoel bij overhield dat het een soort van verantwoordelijkheid op mijn schouders legde, hè, die ik eigenlijk niet zo wilde dragen. [...] Als ik nu in mijn tuin zit. Dan zie ik die boom staan en denk ik, had ik die boom wel moeten kiezen? Heb ik daar nou goed aan gedaan of had ik toch die andere beter kunnen doen?

- Resident in the workgroup 1

Residents' ideal set-up for this project would have been that after they collected all the insights and wishes, the experts would have made a few rough proposals. These proposals would then form the basis for discussion and residents would still be able to decide and discuss adjustments afterwards. Thus, they still have the same decision-making power, but within a more defined scope to ensure the proper expert knowledge is used as well.

De carte blanche was heel verfrissend. Maar aan de andere kant, ja, moest ik gaan bepalen. [...] over zaken waarvoor je eigenlijk allemaal experts nodig hebt. In mijn idee, was het fijner geweest als er iets meer een voorstel lag van de verschillende experts.

- Resident in the workgroup 3

The landscape designer also emphasised that she cannot train residents to become landscape designers in such a short time. She gave them the most essential information and knowledge needed to make the decisions. A result was that residents were cautious about taking larger interventions, which was understandable to the expert since they do not possess the knowledge to foresee what that intervention will bring for the future. At one point the designer of Zeewaardig and landscape designer turned the process around. They went from choosing which trees to cut, to which trees were most important to keep for residents and why. This helped to light up a discussion and provided a base to explain what those decisions would mean for the other trees around it and in turn helped to start designing and making decisions.

The landscape architect did indicate that if she had made the design, it would have looked completely different, with larger interventions. She mentioned that residents will probably always make different choices than an expert, but the intention here was also that it would be the residents' design and she felt like that was accomplished. In the end, she was also glad with the outcome of a sustainable sketch design that is strongly supported by the neighbourhood.

En op een gegeven moment hebben we de bomen laten groeien. Dat heb ik laten zien en toen moesten mensen een toekomst boom gaan aanwijzen. Dus een boom die absoluut moest blijven staan en heb ik eigenlijk het proces omgekeerd in plaats van mensen bomen aan te laten wijzen die weg moesten. En dan krijg je de discussie, 'ik wil die', 'nee ik wil die' en waarom dan en hoe groeit hij dan? En dan kun je gaan helpen, dan kun je gaan zeggen, oké als je deze wilt behouden, dan betekent dat dat die zo groot wordt, dus dat al die andere bomen die dan binnen de kroonprojectie staan weg moeten. 'O nee, dan willen we toch die andere houden'. Dus zo konden we wel gaan ontwerpen.

- Expert

Bewoners gingen van 'nee blijf van de bomen af' naar 'Ja, die bomen mogen weg en eigenlijk die ook nog en die ook nog'. Dus ook nog bomen in die wij niet hadden geduid als te verwijderen, kwamen ze met goede argumenten waarom die ook weg moesten. Waardoor er eigenlijk een heel duurzaam ontwerp is ontstaan, wat ook gedragen wordt door de buurt, dus ja beter kan je het eigenlijk niet hebben.

- Expert

Autonomy in decisions in the neighbourhood

The primary motivation of the residents for participation was their motivation, so they acted for autonomous reasons. The workgroup members mostly shared the motivation that they wanted to make their voices heard for the issues in the neighbourhood that they found important. There

was also one resident who indicated that she and her partner had a different view of the revitalisation and that she therefore hoped to contribute from a more nuanced point of view. Participation was also seen as a way to hear all the arguments and gain a good understanding of the final decisions. Finally, a motivation was to get to know more people in the street.

Collective action

Residents notice that more initiatives are emerging in the neighbourhood. Multiple groups of people have taken collective action recently, since they disagreed with plans from the municipality or other organisations. This, however, seems more part of the neighbourhood's characteristic with articulate and involved citizens than that it is an effect of the Eikakkerhoeven project. The project did create some infrastructure that can support collective action. For example by providing a setting where residents got to know each other and already learned methods that can be helpful for collaboration. One of the residents also reported that she had used some of the methods she learned during the Eikakkerhoeven project when organising her own walk-in event for a residents' initiative in the neighbourhood.

Ja wel meer, ik weet niet hoeveel, maar ja, ik denk wel meer, je ziet ook meer initiatieven ontstaan.

- Resident in the workgroup 3

Kijk vanavond, bijvoorbeeld, hebben we een inloopavond georganiseerd voor de hele wijk over een bepaald onderwerp en daar, ja, heb ik heel veel dingetjes die ik geleerd heb door aan dit soort werkgroepen mee te doen en vooral ook de manier waarop Zeewaardig dat doet. Die kan ik daar ook weer gelijk gebruiken.

- Resident in the workgroup 4

Leadership

Several signs of increased ownership in the neighbourhood were found. Firstly, residents talk more about other projects or issues in the neighbourhood. Furthermore, residents indicate that they are now more inclined to approach the municipality and share their input. An example is when a workgroup member went to the municipality when changes were made to the revitalisation plan that were not in line with the residents' input. From her position as a 'former' workgroup member, action was taken to sort this out with the municipality. Moreover, a resident also initiated some improvements on an issue that was outside the scope of the Eikakkerhoeven project and the municipality took this seriously.

Waar ik toen ook eens een keer heb geroepen in dat proces van nou ja ook vanuit mijn achtergrond [as a designer]. Ik vind het wel leuk om naar de gebruiksvriendelijkheid van dat soort straatnaambordjes te kijken. Dus als jullie eens iemand willen, iemand uit de straat om mee te denken dan roep maar. En daar sprongen ze echt bovenop, dus toen heb ik echt met een man die over de over de straatnaamborden ging en een projectleider van de gemeente met zijn drieën een rondje gelopen door de straat langs alle borden en aantekeningen gemaakt. Ze stonden daar heel erg open voor input en zo dus dat was wel heel leuk.

- Resident in the workgroup 1

Both designer, municipality and expert noticed that the design became that of the residents and that they started to take a stand for it. They also presented it to their fellow residents. This was seen as a great move by Zeewaardig since residents spoke passionately and you could tell that it was coming to life in the neighbourhood. It also helped people to know who to approach for questions.

Besides, residents are more prone to believe that their neighbour has acted in their best interest than someone from the municipality. It helped the designer that the results came to life in the neighbourhood, since this made it easier to step out of the process.

The workgroup members became experts on the project and topic towards fellow residents. Due to their role as interviewers in the neighbourhood, they were recognised on the streets, served as a point of contact for questions and provided information on the final plan to non-participants. This is a role that they took on, but now that the workgroup has delivered the final sketch design, it is up to the municipality to further develop and implement it. Workgroup members are no longer informed and miss a point of contact or referral within the municipality for questions of fellow residents.

Ja, ik heb meer te zeggen over mijn buurt en burenvragen ook aan je wat de status is van het project.

- Resident in the workgroup 5

Dus ik zat zelf meer van, ja, hoe gaan we nu verder? Of met name voor ons als bewoner kunnen we verwijzen als er vragen zijn en wordt het dan ook opgepakt?

- Resident in the workgroup 2



Opportunity structure

As a civic actor

Residents indicate that for smaller things that happen in the neighbourhood, they would use the app that the municipality has to report such things. For larger wishes, changes or initiatives they find it more difficult as a citizen to get in touch with the right people in the municipality. Residents gained some new entry points into the municipality through this project. Even if they end up in the wrong department, it might be a good starting point since they can be referred to the right people. This can be helpful when residents want to accomplish something and need to come in contact with the municipality. The municipal employee emphasises that the department that executed this project will not do another revitalisation for many years. Hence, residents will probably be in contact with other departments in the coming years.

Het probleem is altijd natuurlijk dat je niet zo goed de ingang de gemeente in weet. Dus dat is natuurlijk met dit project wel handig dat ik nu een aantal ingangen weet. Dus als ik iets met die specifieke onderwerpen zou willen, dan weet ik wel waar ik zou moeten zijn. Ja en misschien is dat wel een goede start, want die kunnen je dan natuurlijk altijd weer doorverwijzen naar iemand anders ofzo.

- Resident in the workgroup 1

As a social actor

During the project, residents gained new contacts in the neighbourhood, which can provide them with more opportunities within the community. Socially some dynamics might have influenced people's experienced voice and agency. Particularly at the beginning of the project, it was easier for residents who lived in the street longer to confer because they already knew each other. This did not feel conducive to inclusiveness for some newer residents on the street. During the process, this became less of a problem. Mainly because of the setting where the same workgroups came together for the sessions led by a facilitator. The facilitator

also steered the discussion and paid attention to the involvement of everyone in the group. In the end, residents did not feel that the old/new resident dynamic affected the results.

Ja, je merkt natuurlijk wel dat bewoners die er al heel lang wonen, dat die dat die wat makkelijker met elkaar connecten. Ik woon nog niet zo heel lang in deze straat. Dus je krijgt wel een beetje klikjesvorming af en toe. [...] Nee, het heeft eigenlijk niet echt invloed gehad op het eindresultaat.

- Resident in the workgroup 1

In the end, perhaps not the most diverse group participated in the workgroup. For example, no one from the rental housing sector took part in the workgroup. The question is whether this is due to barriers or choice. A possible barrier to participating may have been that about 90% of the process took place online and in Dutch. The municipality later received input by a letter from an elderly resident. They think she was hindered from participating because of the online setting in Dutch.



Furthermore, the most significant barriers mentioned in the interviews were the motivation to participate and the ability and willingness to invest the time. Residents indicated that they would have liked more transparency about the time investment beforehand, but that it was manageable in the end. This is also a point of concern for the municipality. The comprehensive approach to this participation project took a lot of time, energy and money. The municipality believes that the process was worthwhile, but sees this project as an exception. They want to go through the revitalisation of the following streets and neighbourhoods in a shorter process.

De belemmering was eigenlijk gewoon, dat dat lag alleen bij jezelf, als je de tijd er niet in wilde steken.

- Resident in the workgroup 1

Ik vond de tijdsinvestering best flink. Er waren veel meetings. En ja, uiteindelijk was het, ik vond dat best lang, niet te lang, maar aan het eind had ik wel zoiets van, ja, het moet niet nog 4 keer een avond zijn, weet je. En toen ik dus die afspraak vergeten was, die laatste, dacht ik ook van ja whatever, ik heb al zoveel bijgedragen, prima dat ik het een keer vergeet.

- Resident in the workgroup 3

Sense of collectivity

Now, almost a year after the participation in the project ended, residents know more neighbours, have more frequent contact and feel more connected. One major reason for this increased connection between neighbours is that the process helped them to work toward a shared goal and come to a result together, despite their differences. They feel like they came out stronger and grew closer together. Furthermore, residents now realise more that they all came to live in that neighbourhood for a reason and see more what they have in common and why people care about specific topics. The residents have more sense of collectivity in the neighbourhood.

Zeker, omdat we daar met zijn allen ook uit zijn gekomen. Het is ook een soort, ja, collectieve ervaring geweest die moeizaam was die niet altijd even fijn is geweest. Waar we dan toch met zijn allen uit zijn gekomen. Nou ja, hè? Kijk naar vriendschappen of relaties. Hoe meer van dat soort ervaringen je hebt. Hoe dichter je naar elkaar toe groeit.

- Resident in the workgroup 3

Ja ik denk het wel. Ik kende burens via hoi en hallo, maar nu is er veel meer interactie.

- Resident in the workgroup 5

Citizenship ability

Participating in a (political) community

Residents indicated they would want to participate again in similar participation processes, mainly due to the good organisation by Zeewaardig. The residents appreciated the facilitation, the steering of the discussions and the documentation of the input and the results. Residents also became more active in the community and municipality in other initiatives. One resident, for example, initiated the improvement of street signing. Something that was not part of the revitalisation, but taken up enthusiastically by municipal employees. The resident felt the municipality took his input very seriously. This example also boosted the feeling of other residents that the municipality is open to resident input in other areas, and was experienced very positively. Especially, since residents noticed in the past that many people in the neighbourhood like to be involved, but the municipality did not always comply with that wish. The municipality has also indicated that it is searching for a way to approach residents becoming more articulate and assertive in indicating what they want.

Je merkt dat het een wijk is die gewoon heel graag mee wil denken. [...] En ja, dan is het gewoon fijn als de gemeente daar ook gehoor aan geeft [...] en dat wordt nog wel eens gemist.

- Resident in the workgroup 2

Deal with differences

Residents indicate that they have learned about each other and how other residents behave, communicate and participate. In this project, Zeewaardig decided to divide the workgroups based on the corners of the street where people live. This division largely prevented only people with the same perspective from ending up in one group. In the end, this also ensured that only one group was left with somewhat more difficult discussions instead of the entire street. Conducting interviews with fellow residents as a workgroup member, helped a lot in learning more about the different perspectives in the neighbourhood. The residents became milder by hearing other opinions and

especially by seeing a red line in what many of their fellow residents mentioned and appreciated. Hereby, it became easier to let go of one's point of view. As a result, some residents changed their minds because they understood the stories of others better. Residents' attitudes towards the municipality also changed. Many were initially very adamant about their viewpoint and against the felling of the trees. Gradually they understood better why action was needed in the neighbourhood and became more open to it. This understanding was mainly created by the emphasis placed on informing and explaining the considerations, possibilities and consequences of the residents' decisions. Herewith, the residents experienced what the municipality typically has to deal with when making these kinds of decisions. The residents also realised that you could never keep everyone 100% satisfied.

Ik ben veel kalmer dan ik was in de eerste jaren dat ik daarmee begonnen ben [...] Ik weet dat ik daar al wat stappen in gezet heb. Vroeger was ik veel activistischer en nu zie ik het nut in van het vinden van compromissen, want je kan het nooit iedereen naar de zin maken. [...] Als je niet naar elkaar luistert, dan kom je helemaal niet verder. [...] Met een beetje reflectie, en intussen heb ik heel veel gelezen en gedaan en ik heb ook wat wat dingetjes met Zeewaardig meegedaan. Je kunt gewoon merken dat je daar van leert.

- Resident in the workgroup 4

It proved difficult for residents to think in terms of common interests and to be able to put their interests completely aside during the process. In the end, however, the residents succeeded to incorporate the opinions of many other residents in the final plans. It was helpful to base decisions as much as possible on facts, reasoning and a shared vision formulated in advance. In doing so, residents tried to avoid getting too involved in one-to-one situations. Moreover, the conversations with fellow residents were a good source of information to learn about the wishes and needs of the neighbours. Another incentive to be considerate of others is that the neighbourhood is close-knit, and

workgroup members do not want to quarrel with their neighbours. It therefore helps to step toward neighbours with different opinions and look for a middle ground together.

For most residents, the project helped to deal with people with different views and to see how to bring them together into one design. However, according to the expert, it was a bit more difficult for some to come out from their standpoint. For the facilitators that is difficult, since they try to keep the participation process open to everyone and all opinions. The aim of this project, however, was to reach some kind of consensus. The expert noted that if the participants are unwilling to change their stance even a little, neither the facilitator nor the participant will benefit from the participation.

Another challenging attitude that experts and residents noticed is that residents often want something to happen, but not in front of their own house. To tackle this, it helped to collectively look where an intervention would cause the least inconvenience to the neighbourhood. Moreover, it helps to have a list of solid reasons the municipality provides to base decisions on. The municipality also learned to be more open to ideas and questions, and collected these up to the poster presentations. This input was considered as much as possible, and decisions and arguments were fed back to the residents who raised them. However, some workgroup members miss feedback in this part of the process. After all, they were the ones who came up with the design, knew the rationale behind it and would like to be informed of any changes.

Deal with conflicts

In the pre-project, the cooperation among residents and between residents and the municipality was tense. Residents indicated that this process was not fun for anyone, and even ended in shouting matches that appeared quite aggressive. Things were very different in the second part of the project with Zeewaardig. The cooperation within the workgroups was even considered fun by residents since they also got to know each other better.

Things didn't escalate as much now, and there was less confrontation. One reason for this was that people were less animated in their discussions and less likely to talk past each other. The online setting from behind the webcam also helped to make the discussions less heated, as people were alone in their rooms and took turns speaking more naturally.

There was also less finger-pointing, because people could better let go of their opinions. Several things contributed to this. First of all, it helped that some time had passed since the pre-project before, so the most severe anger from the previous attempt had worn off a bit. It also helped that Zeewaardig, as an independent party, was the project's facilitator. They moderated the process and, together with experts, looked for possibilities to prevent rigid yes/no discussions. It was important that residents felt safe to share their opinions and felt taken seriously. One resident shared that she was more confident that the process would lead to something since she took part in the interviews that Zeewaardig conducted as a starting point for their process. The interview was very open and professionally set up. Furthermore, the step-by-step process with a Mural with plenty of room to express one's opinion encouraged constructive discussions at specific moments. Seeing their contributions reflected in the plans drawn up, or clear explanations as to why this did not happen, helped residents to trust and understand the process.

The possibilities, relevant considerations and consequences of choices were explained extensively. Finally, residents indicated that the type of assignments in the Mural had a disarming effect. The creative approach took people out of their normal state of mind and often brought them into a different energy. One resident remarked that he does not see the municipality carrying out a project in such a way any time soon. He would like the municipality to include a specialist in participation as part of the costs. Participation had better be done well, the residents say, then it will be worth the investment.

Door ons zo'n digitaal bord geven waarin we ook een soort van moeten knutselen. Dat zijn allemaal van die dingen waarmee ze net wat uit die verkramping komen. [...] In één keer moet je met je muis, moet je plaatjes gaan zitten slepen. Dan kom je toch weer even in een andere energie.

- Resident in the workgroup 3

Bycatch of the project

Bycatch refers to the positive or negative impact the project had on people other than the one it was specifically designed for. Aside from effects relevant to the framework's elements, different effects were also mentioned in the interviews. One of these effects is that residents learned new skills and working methods. One resident, for example, indicated that she could learn something from working step by step towards a solution. Working with the Mural tool was also a new skill for many participating residents.

Moreover, residents gained knowledge on how the municipality works concerning revitalisation, which considerations are essential when making decisions in this context and how much it entails. Some residents mentioned to the designer that they respected the municipality more after this experience. Simultaneously, the involved municipal employees noted they had also gained a better understanding of residents. They realised that, as a department, they might sometimes be too technical and that residents might simply not understand why something is important. Therefore, they learned that they could put more effort into explaining why they needed to do something. Furthermore, an employee of the municipality stated that he realised he could compromise more with residents. An example of such a compromise is to cut down trees in a neighbourhood in phases to make it less shocking for residents. He also liked the method of having residents indicate future trees on a shared platform, so that residents can also see the opinions of others in the neighbourhood. Hereby, residents can see whether something is supported in the neighbourhood and not only what the municipality wants.

Nou, ik vond die die Mural heet dat, zo'n programma. Kijk ik, ik werk in de gezondheidszorg, dus wij zitten natuurlijk helemaal niet zo op al dat soort dingen. Maar het is wel zo dat ik heel veel projecten doe. En ik dacht van, nou, de manier waarop er informatie verzameld is en hoe daar uiteindelijk besluiten in genomen zijn. Dat vond ik wel een proces waarvan ik dacht, ja, dat is wel heel inzichtelijk. [...] Dus daar heb ik ook wat van geleerd in dat opzicht.

- Resident in the workgroup 2

In addition, the contacts within the workgroups and informal conversations with other neighbours during the project helped residents to get to know each other better. It emerged in many interviews that this street is unique and that every street and neighbourhood is unique. In addition, the designers, experts and municipality indicated that participation is not something you can use a fixed process for.

Ieder participatieproces is eigenlijk anders. Je kunt daar geen vast, ja, vast stramien op toepassen.

- Expert

Finally, residents of other streets that have yet to undergo a revitalisation process have shown an interest in the approach used in the Eikakkerhoeven. However, the municipality does not have the resources to offer such a comprehensive approach to all its projects.

Nou, daarmee kan je uiteindelijk een soort precedent vormen. We hebben een heel leuk traject en allemaal bewonersavonden en clubjes die bij elkaar komen. Dat kost voor de gemeente ook ontzettend veel tijd, want er moeten allemaal specialisten [...] bij die avonden zitten. Nou ja, als je ziet wat voor projecten we hebben, dan is die tijd er gewoon niet. Dat betekent dat we toch iets minder tijdsintensief moeten doen, maar toch proberen iedereen mee te nemen in het proces. Dus daar moet ik een beetje goede verdeling in vinden.

- Project leader within the municipality

5.2 Participatory design activities that influenced the created impact

Based on the results, relations between the participatory design activities and the impact on each of the components of empowered citizenship were identified. In addition, it was evaluated whether Zeewaardig impacted the degree of empowered citizenship of the workgroup members in the Eikakkerhoeven case.

Voice

Activities to elicit needs and wishes

By **having workgroup members conduct interviews with each other and with fellow residents**, the preferences and wishes of both articulate and less articulate, and participating and non-participating, residents were uncovered. This was largely achieved by approaching people personally, that would typically not share their views (in a group or at all).

Activities to support the negotiation of values and concerns

By **giving residents decision-making power and taking over these decisions** as a municipality, residents felt heard by the municipality.

By **designing a step-by-step process with clear space and time to discuss opinions and concerns**, workgroup members knew that the moment to share would come and were more patient knowing that they would be listened to.

Creating frequent feedback loops (from government to citizen) in the process

How the municipality **will communicate and give feedback to the residents in the further development and implementation** of the design, when Zeewaardig is no longer involved, influences how long residents continue to feel heard.

Other participatory design activities

By showing **interest as a municipality in the expertise that residents have on their living environment** and taking this expertise seriously, residents will be more likely to give feedback on the municipality's plans in the future.

By **acquiring the necessary knowledge** within the project, residents could form increasingly sharp opinions and articulate them better.

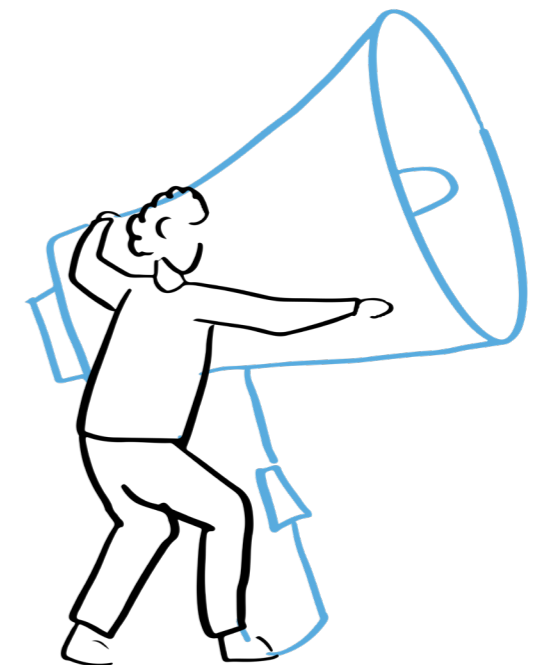
By **providing a lot of explanation about the available possibilities and the consequences** of certain decisions, residents felt that they were truly taken seriously.

By **involving experts according to the needs of the residents**, residents felt that they were being listened to properly.

The created impact

It turned out that both articulate and less articulate residents, and both participating and non-participating residents, were able to express their wishes whereas only a small group expressed their preferences before. In addition, workgroup members were increasingly able to articulate their wishes and are more likely to provide feedback to the municipality in the future. They also felt that they were taken seriously and that their ideas were genuinely listened to, making them feel more heard.

Concludingly, residents have gained more voice as a result of the project. The question remains how long this effect lasts, because it is related to the course of the implementation phase. This impact can be related to the following participatory design activities from the framework: uncovering wishes and needs, opening a conversation about concerns and values and having continuous feedback loops. In addition, a relationship was found with some other activities that are not part of the framework. These are: taking the expertise of a resident or his/her neighbourhood seriously and multiple activities for acquiring knowledge.



Agency

Giving participants a more powerful position

By giving residents **decision-making power and taking over these decisions as a municipality**, residents felt they had more influence and control than before.

By giving residents **decision-making power so freely**, residents felt a responsibility they were not sure they wanted to have due to the uncertainty on how well of a decision they could make without expert knowledge.

Creating a setting with equality in expertise

The **feeling of lacking specific expert knowledge needed** to make confident decisions made some residents feel uncertain about the decisions made.

By **providing a lot of information on the available possibilities and the consequences of certain decisions**, residents were better able to make decisions since they had more knowledge on the topic.

By **seeking workgroup participants based on intrinsic motivation**, they can make choices based on their values and interests.

Managing power relations

By **letting workgroup members present the end result to their fellow residents**, the topic came to life in the neighbourhood because the presenting residents were enthusiastic. Other residents were also more receptive to their fellow residents' input than the municipality's.

Setting the scene for collaboration

By **tackling the project from a different perspective** (indicating future trees instead of trees to remove), residents could better discuss and start making decisions since this was a more acceptable perspective for residents. This helped to establish good cooperation and a positive starting point before returning to the more difficult discussion at a later stage.

By first **seeking an acceptable future vision for residents** and then continuing to work from there, residents can more easily make compromises and choices within that frame.

By **creating an infrastructure where people in the neighbourhood feel connected and have also learned how to work together**, it will be easier for residents to take action together in the future.

Other participatory design activities

By **explaining why decisions needed to be made** and showing this visually, residents were better able to make the decisions because they understood the need for it.

By **becoming a contact person in their street**, workgroup members developed a kind of leadership and network that supports them in bringing about change in the future.

The created impact

The residents felt they had more influence because they were given the power to make choices they would typically not be able to make. This feeling was reinforced by the municipality adopting the residents' decisions. Due to the emphasis on information provision, residents understood better why choices had to be made and on what basis they could make them. Nevertheless, they felt they lacked knowledge and were uncertain about their choices. It also gave them the feeling that a responsibility was handed to them that they did not wish to have. In short, residents could now make more choices regarding their living environment, but not at the desired level. The project has also created an infrastructure within the neighbourhood, where people know each other more intimately and know more about the municipality's role. Thus, making it easier for them to take collective action and show leadership in this context in the future.

The position within the highest three levels of the participation ladder was valued by the residents and had positive effects. However, the positive impact on their agency remained smaller, due to the negative feelings around responsibility and especially the freedom in decision-making. To conclude, there was a positive effect on the agency of residents, but this could have been more significant. The effects were related to the following participatory design activities from the framework: activities that give residents a more powerful position, that manage existing power relations, that create a setting with equal expertise among stakeholders, and that help to set the scene for collaboration. Furthermore, another relevant activity for the creation of the agency was the provision of information and explanations.

Opportunity structure

Reaching a diverse group of people

By **conducting the sessions in one language and one setting**, some residents might have been hindered from participating.

By **setting up a time-intensive participation process**, residents who do not have or do not want to spend the time may be discouraged from participation.

By **seeking participants in workgroups based on intrinsic motivation and not making any further demands**, the whole street could, in principle, participate. However, residents who were not motivated could be discouraged from participating.

Bringing (diverse) people together

By **working together with employees of the municipality**, residents have gained some entry points to the municipality they can use in the future to be better able to initiate projects or provide the municipality with feedback.

By **working with fellow residents and speaking to other residents**, workgroup members have created better connections that can help when initiating projects in the community.

By **conducting interviews with fellow residents and talking to them informally**, workgroup members have gained more contacts that can help when initiating projects in the community.

The created impact

Both in the municipality and in the neighbourhood, the participating residents now have a better idea of the paths they can take if they want to achieve something in the future. As a result, the participating residents have built up better opportunities to realise their wishes in the future. In this project there is little insight as to why people did not participate and whether this was due to obstacles or choice. Therefore, nothing can be stated about the opportunity structure of this group. The positive impact on the infrastructure can be associated with the participatory design activities of reaching and bringing together (diverse) people.

Sense of collectivity

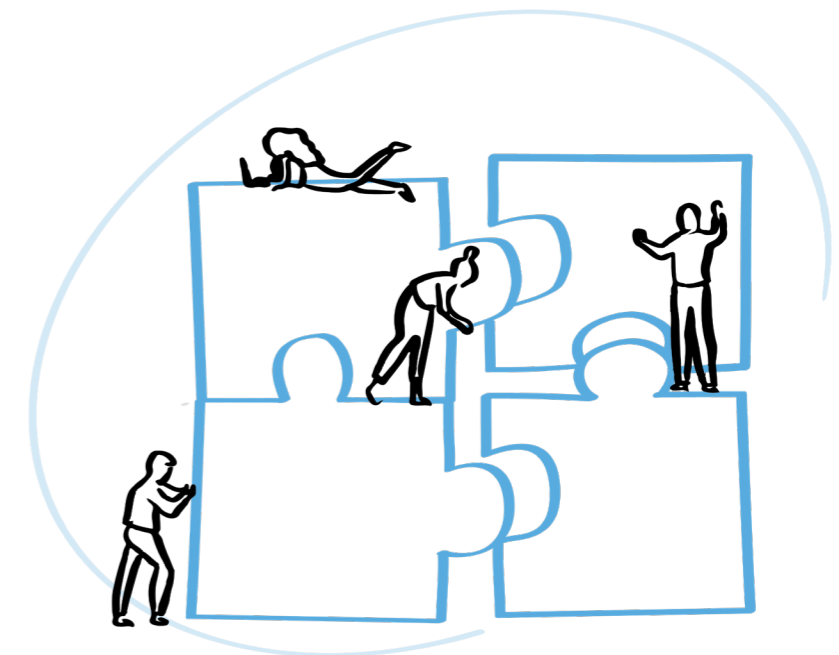
Creating a contact zone for people with different perspectives and values

By **working towards a shared goal and overcoming differences**, residents feel more connected to their neighbours.

By **working together to achieve a final result that is supported by the neighbourhood**, residents also notice what they have in common with their neighbours rather than how they differ.

The created impact

Residents got to know more people and bonded with the neighbourhood. They also look more to similarities than differences now that they understand each other better. From this we can conclude that the sense of collectivity has grown. This impact is related to the participatory activity of bringing people with different values and opinions together through a contact zone.



Citizenship ability

Creating a contact zone for people with different perspectives and values

By **conducting interviews with fellow residents and talking to them informally**, workgroup members learned about other perspectives in the neighbourhood.

By **learning about other opinions and seeing how many people value something different**, workgroup members became a bit milder in discussions.

By **gaining an understanding of the stories of others**, workgroup members were able to change their minds in the project.

By **developing a shared vision**, it was easier for workgroup members to not get too caught up in one-to-one situations, but to look at the bigger picture.

By **jointly looking for a place where the intervention would cause the least inconvenience**, workgroup members were better able to take into account other perspectives instead of merely looking at their own inconvenience.

By **designing a step-by-step process with clear room for people's opinions**, workgroup members knew that the moment to share would come and were more patient.

By **having a space (Mural board) where workgroup members could always place their thoughts, questions and concerns**, they felt like they could express their values and concerns well.

Activities that support reflection of past/current experiences and imagination for future ones

By **providing residents with a positive experience of participation** (with good organisation, moderation and documentation), they would like to participate again in municipal projects in the future because they have more confidence that it will lead to something.

By **listening and responding to residents' initiatives as a municipality**, other residents also feel that the municipality is open to their ideas, input and initiatives.

By **providing the needed information and explanation on considerations, possibilities and consequences for/of decisions**, workgroup members understood better why the municipality needs to take specific action.

By **conducting interviews at the start of the project to reflect on the pre-project, set up the participation level and design the process accordingly**, workgroup members had more trust in the process.

Other participatory design activities

By **having an online setting where everyone joined from behind a webcam in their own home**, residents were less animated in discussions and took turns in talking more.

By **having an independent party as the facilitator**, workgroup members had more trust in the process and it was less of a resident versus municipality discussion.

By **looking for possibilities to prevent rigid yes/no discussions**, workgroup members could have more constructive discussions with each other.

By **continuously incorporating residents' feedback and input into plans and providing explanations if something was not incorporated**, workgroup members became calmer in discussions because they felt they were being heard.

By **using creative (visual and crafty) methods and assignments**, workgroup members were put into a different kind of energy.

The created impact

Many of the residents indicated that they would like to participate again in future projects in the neighbourhood. In addition, residents were more open to changing (or adapting) their opinions. Moreover, residents have more understanding of the municipality and how they must consider the general interest. Residents have also learned how to think in terms of possibilities to reach a compromise and that sometimes time and several steps are needed to reach an agreement.

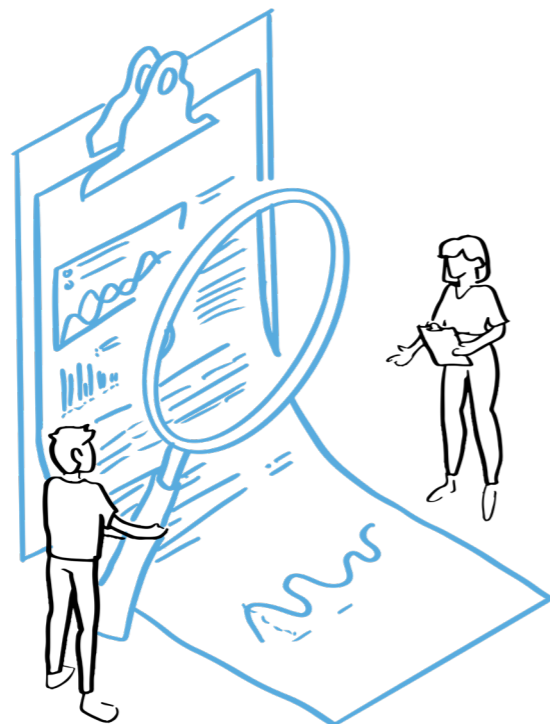
To conclude, residents are more open to participation and better able to deal with each other's opinions. As a result, their citizenship competences have improved. This does not apply to all participants, however, as some already possessed these skills prior to the project. The impact is associated with the following participatory design activities from the framework: activities that create a contact zone for people with different opinions and activities that help to reflect on past and current experiences. Moreover, some impact is related to activities that are not yet in the framework, such as the use of creative assignments and always looking for possibilities to prevent rigid yes/no discussions.

Conclusion

In conclusion, the participatory design activities from the framework clearly emerged in relation to the empowered citizenship components in the case study. However, some other participatory activities have surfaced that seem to have a relation to the impact made as well. These should be further investigated in several other projects to find out whether they were project-specific or more widely applicable and can be added to the framework.

It was found from the impact evaluation in the case study through interviews that the participatory design approach certainly made an impact on the degree of empowered citizenship of the participating residents. The change compared to the pre-project was most evident in voice, sense of collectivity, and citizenship ability. Especially regarding agency, there are clear opportunities for improvement. It seems that the impact on this component can be increased by better alignment of the roles and expertises of experts and participants.

Through the measurement method in the interviews, changes and effects on the empowered citizenship of residents could be discovered. However, it remains difficult, if not impossible, to determine the magnitude of these effects. This is partly attributable to the fact that there was no baseline to compare against. The case study did not provide this opportunity, but some comparative material was found in the pre-project experiences. However, the difficulty of assessing the magnitude of impact is primarily related to the nature of qualitative data from the interviews (Ravitch & Mittenfeller, 2015). A combination with quantitative data could have strengthened the determination of the magnitude of the effects, especially to indicate how substantial these changes are.



5.3 Considerations for participatory designers that affect the potential impact of their projects

Apart from providing insight into the relations between a participatory design approach and empowered citizenship, the case study also provided insight into this participatory design approach itself. There is, for example, a paradox around placing residents higher on the participation ladder, as it can both support the creation of more empowerment but also create uncertainty and unwanted responsibility. Furthermore, it was found that there is a risk of clients falling back into old patterns after the end of a commission. Appendix 6 contains a further explanation of these and other insights. These aspects can be of influence on the impact in a participatory project. Therefore, based on these insights, it was investigated which considerations are relevant for participatory designers as they influence the potential impact that can be made in projects. Ultimately, three major impact considerations were found that are not specific to a particular design studio or context and can therefore be used on a larger scale within the participatory design field.

knowledge on a subject that residents (generally) do not possess. Nevertheless, an expert does not have the same expertise about a specific residential area and the way it functions as the residents of the area have.

For participatory designers, it is essential to find out what knowledge residents and experts need from each other, to be able to make the necessary choices in the project. In this regard, residents can bear greater responsibility if they possess or acquire the relevant knowledge. Based on the necessary knowledge exchange between residents and experts, an appropriate form of interaction and division of roles between the two can be chosen. In other words, the type of involvement of residents and the degree of influence residents can exercise within a project can be determined.

The interaction between the position and role of a resident in a project and impact

Participatory projects should address the question of how and to what extent residents will be involved in the project. A higher position on the participation ladder usually contributes to greater impact in terms of empowerment. However, a position too high or undesirable can hinder such impact due to feelings of insecurity or unwanted responsibility. This contradiction also touches on the consideration of what kind of choices a resident can make and at what moments experts are truly indispensable. Experts have specific



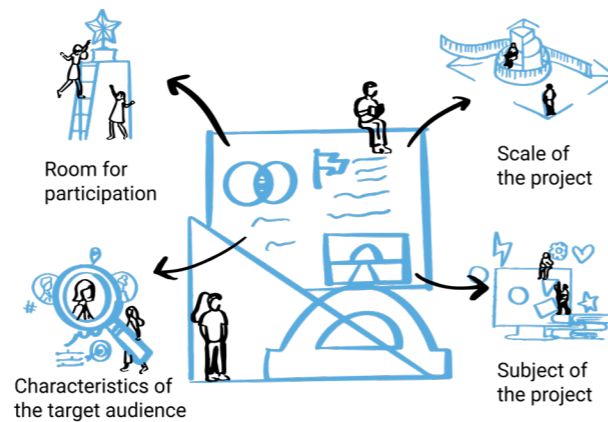


The interaction between time and impact

A greater impact on residents, especially in terms of empowerment, can be achieved when they become more involved in participation projects. However, more time is needed to reach residents to participate. Besides, time is required to support residents' role in decision-making when they are higher on the participation ladder. Each level up on the participation ladder will generally require a greater investment of time. Moreover, with more time, a greater impact can be achieved by the construction of the necessary infrastructure to support long-term effects. This infrastructure can be used in three areas in particular: 1) to embed the design studio's approach within the client's organisation, 2) to support the sustainment of the social effects after the end of a commission, and 3) to link the project to other (future) projects or visions in a particular area to make them mutually reinforcing. The aforementioned positive aspects of spending more time on participatory projects are contrasted with the higher costs involved. Additionally, there is a risk that a time-intensive project will feel too demanding for the participating residents or that the client is reluctant to accept it.

For participatory designers, this means that they must carefully consider what time investment is appropriate for their project. It should always be ascertained whether the benefits outweigh the additional costs. A large project with a high time investment and therefore also a higher budget may

be justified, for instance, if the right infrastructure can then be developed to ensure that the project has an effect on a larger scale and in the long term. In addition, when choosing a step on the participation ladder, the consideration must be whether it is of great benefit to the specific project (and target audience) to involve the residents more intensively and to invest the associated time. If so, the ability and willingness of the residents to undertake this time commitment must also be assessed.



The interaction between the kind of project and impact

Finally it is essential in participatory projects, to realise that the type of project affects the potential impact that can be created. The kind of project can be identified in several ways; 1) the room for participation in a project, 2) the scale of the project, 3) the characteristics of the target audience, and 4) the subject of the project. All of these affect the potential impact of a project in a way.

Room for participation

As mentioned before, the role of the participants in a project influences the impact of the project. This is related to the degree of participation, which can be determined using the participation ladder. Herein, a higher level on the ladder usually results in a higher potential impact on empowered citizenship. In some projects, it is however, no

longer possible to attain a high level on the participation ladder. Reasons for this are, for instance, that clients do not have or are willing to provide the necessary resources, designers are involved too late in the project or participants only have influence over a small part of the project. In these cases, careful consideration should be given to the project's goal in terms of impact and whether a participatory approach aimed at empowered citizenship is appropriate.

The scale of the project

The scale of a project can affect the impact that can be achieved in two ways in particular. First, the intimacy of participation affects the number of people one can reach, the amount of interaction among residents or between residents and municipal employees, and whether different people participate each time. The effect is more widespread when more people participate since a larger group of people are affected. However, the effect on responsible citizenship tends to be smaller in magnitude because there is little interaction. On the other hand, with a smaller group, a greater (in magnitude) yet less widespread effect can be achieved.

Secondly, the scale of a project influences the extent to which the local residents have a direct interest in the project because of their proximity to the subject. When people have a greater interest, they often wish to have a say in the matter. Participation can then help to bring about this desired empowerment. This effect can also be achieved with people who do not have a direct interest from the outset, but people often do not pursue such involvement if they have no personal stake in it.

The characteristics of the target audience

The characteristics of the target audience of a participation project are of influence to the potential impact of a project. Some residents are already articulate and involved and therefore more open to participation. On the one hand, this can result in a greater effect because people want to participate and do so by their own motivation.

On the other hand, when people already possess certain qualities of empowered citizenship the difference a designer can make becomes smaller. With less articulate and involved residents prior to the project, designers can achieve a lot if they manage to reach them. However, this step is more difficult to achieve compared to the group mentioned before. For the quality of the participation, however, it is generally desirable to not only reach well-spoken and involved people, but to reach a representative group of people to participate. Moreover, each group of residents usually consists of people with different characteristics. Therefore, it is advisable to consider how the process can appeal to these different groups.

The subject of the project

Finally, the subject of the participation project can also influence the possible impact that can be created. There are subjects where it is possible to use a relatively objective approach and knowledge to base decisions on (e.g. the arguments surrounding the felling of trees in the Eikakkerhoeven case). If on the other hand, the topic is subjective (e.g. the arguments surrounding the layout of a public space with either a basketball court, benches or a playground) it is more difficult to reach a consensus apart from a "most votes count" approach. Therefore, it becomes harder to contribute to the creation of more understanding and willingness to compromise. In such a case, it will be more difficult to achieve impact in responsible citizenship.

5.4 Conclusion

Some conclusions can be drawn regarding the research questions raised in Chapter 4.1 that were central to this case study.

It was found how the components of empowered citizenship were manifested in the case and which participatory design activities contributed to this. An impact was made on the empowered citizenship of participating residents. Moreover, the components presented a clear picture of the construct of empowered citizenship. Nevertheless, two other indicators of empowered citizenship were identified during this process: 'leadership' and 'sense of collectivity'. As the framework was designed iteratively, these components were added to it (see Chapter 3). Leadership had previously been part of the framework but was removed because it did not seem relevant in the Dutch context. In the case study, however, it turned out that leadership, like collective action, depends on the infrastructure residents have to take action for their living environment. In this respect, the formation of leadership is also very relevant to empowerment. In addition, sense of collectivity was a new indicator found in the case study. Many of the interviews showed that the qualities of citizenship were linked to a sense of collectivity in the neighbourhood. Further exploration in the literature showed that this concept was indeed related to taking responsibility or action for a group (Wilschut & Nieuwelink, 2016), which is relevant to building responsible citizenship and was thus added to the framework.

The case study also found the participatory design activities and their relations to impact as presented in the framework. These findings further

underline the relevance of these components to the framework. Some other activities were also identified that seemed to relate to the created impact in the case. For example, using creative assignments, approaching the residents as an expert in their neighbourhood, finding ways to avoid rigid discussions and providing information and explanations. Activities that allow participants to gain knowledge were found in relation to multiple components. As these activities are not grounded in literature, testing them in several projects is worthwhile to see if they recur. These tests help to determine whether the activities are project-specific or can be added to the framework. Unfortunately, this does not fit within the scope of this research and is recommended for future research.

In the case study, measurements of empowered citizenship were conducted through interviews. The framework provided a helpful structure of components to ask questions about. It was also explored how best to formulate questions about the framework components to make sure residents understood them and were able to recollect relevant experiences. Through this method, it was possible to identify changes in residents' empowered citizenship and what contributed to this. However, it remained challenging to say anything about the size of that effect. It became clear that both measuring against a baseline and combining this data with a more quantitative method would help to demonstrate the magnitude of the impact better. These insights will therefore be included in the development of the impact demonstration tool in Chapter 6.

Moreover, a meaningful by-product of the case study analysis was that it provided a better understanding of the participatory design approach itself. In this regard, three key impact considerations were identified that are relevant for participatory designers to reflect upon since they influence the potential impact of their projects. These considerations can be a valuable guide in discussions with the client, about the desired impact, at the front end of a project. These insights will be used in Chapter 6 for the development of the impact demonstration tool.

Finally, the interviews provided some insight into other impacts than empowered citizenship. It appeared, for example, that residents know more people and feel more connected due to their participation in the project. This impact can be categorised into the social design component of social capital that can contribute to the creation of beneficial communities (Tromp and Vial, 2022).

06 | THE CONCEPTUALISATION OF A TOOL FOR IMPACT DEMONSTRATION

This chapter discusses the conceptualisation of an impact demonstration tool based on all the knowledge gained from the literature and the case study analysis. It first describes how the tool was developed, then presents the “Are we making impact?” tool, and finally makes recommendations on how the tool can be used and implemented by Zeewaardig.

06 | THE CONCEPTUALISATION OF A TOOL FOR IMPACT DEMONSTRATION

6.1 Development of the tool

This section describes the development of the impact demonstration tool using the learnings from literature, case study analysis, and wishes and needs of Zeewaardig. On this basis, guidelines are drawn up for the design of the impact demonstration tool.

Purpose of the tool

The purpose of the tool is to help designers understand the relationship between a participatory design approach and the impact on participants. In addition, it is intended to help the designer to demonstrate this impact.

Learnings from literature

To achieve the purpose of the tool, the tool must help to overcome current barriers to measuring impact. The main barriers to overcome are: the difficulty of capturing the intangible nature of impact in design projects, the sheer breadth of potential impact, not knowing what to measure, the different shape and size of different design projects, and a lack of necessary resources (Schmiedgen et al., 2016; Dosi et al., 2018; Björklund et al., 2018).

Learnings from the case study approach

The approach in the case study analysis has taught us several lessons for the creation of an impact demonstration tool based on the empowered citizenship framework (see Chapter 4 and 5). First, about the way of recruiting participants. During the case study, three different ways of recruiting respondents were used. A direct approach, where the involved designer of Zeewaardig asked workgroup members to participate in an interview, undoubtedly produced the best response. A

request via a local, active Facebook group to fill in a questionnaire (with similar questions as the interview, but in a condensed form) yielded little response. In this case, asking the participants of the interviews to share the questionnaire with other residents also did not generate much response. To achieve a higher response rate more attention can be paid to emphasising the value of the response for the residents themselves. To conclude, a direct inquiry seems to be the most fruitful, but it should be tested whether this is project-specific or not.

Second, information was collected in two different forms: in-depth interviews and an online questionnaire. The questionnaire data were collected through open questions and Likert scales. The Likert scales were accompanied by a question to explain the answer and to indicate whether project activities had contributed positively or negatively to this assessment. In general, one could see that the same questions asked in an interview led to much more comprehensive and in-depth answers than asking them in an online questionnaire, even without considering the possibility of asking follow-up questions in interviews. In the questionnaire, people answered very to-the-point and concisely. An example is the following question: 'Has participation in the project brought you any personal benefits? Can you please explain your answer?'. Online that resulted in the following answer:

Kennis uitbreiding van het willen en kunnen uitvoeren van de vele wensen. Ook technisch.

- Resident in the workgroup 5

In the interviews, however, people gave the following answers to the question 'Has participation in the project brought you any personal benefits?':

Nou, ik heb veel geleerd, vooral van de experts van de gemeente, en zo, die er dan bij gehaald werden over bomen en over .. verkeersveiligheid, over de tools die je allemaal tot je beschikking hebt. Als jij uit een bepaald stuk straat een lagere snelheid wil hebben, of zo, wat je dan kan doen. Dus wat dat betreft heeft me meer kennis gegeven. En dat vind ik wel heel leuk.

- Resident in the workgroup 1

Nou, ik moet ook een beetje keuzes gaan maken van waar ik me allemaal mee wil bezighouden. Ik heb dat nu twee keer gedaan en ik weet niet of dat de volgende keer nog zou doen. Maar het heeft mij wel persoonlijk gebracht tot de realisatie dat ik het leuk vind om zo te werken. En dat we, kijk vanavond bijvoorbeeld, hebben we een inloopavond georganiseerd voor de hele wijk over een bepaald onderwerp en daar, ja, daar heb ik heel veel dingetjes die ik geleerd heb door aan dit soort werkgroepen mee te doen en vooral ook de manier waarop Zeewaardig dat doet. Die kan ik daar ook weer gelijk gebruiken, dus wat dat betreft, ja, het is gewoon leuk om te realiseren dat ik merk dat het me wel een beetje ligt.

- Resident in the workgroup 4

Third, the interviews were used to test formulations of questions around the framework's components. Based on the insights from this exploration, the interview guide was continuously improved for subsequent interviews. These insights can also be used to determine the formulation of questions in the measurement formats. Moreover, it became clear that interviews provide deeper insight into the motivations behind a sentiment, but are much

more time-consuming compared to questionnaires. To conclude, interviews often provide insight into the existence of a certain effect and why people feel this way, but little insight into the size of this effect.

Finally, the interviews brought up some wishes of various stakeholders regarding measurements of social impact in municipal participation projects. Residents attach great importance to measuring whether a participation project achieves what it promises and, for example, to what extent they are listened to. In their view, the measurements are primarily intended for the municipality, but that they must be transparent and open about them. They also see an opportunity to use measurement results to reach a different group of people in future participation projects, because it shows them whether participating is worthwhile. For the local government, the motivation for measuring is mainly to learn whether they are performing well and whether they need to make adjustments to scale up a project, for example. Both residents, municipal employees and designers are interested in measuring residents' trust in the municipality and whether this changes due to a participation project.



Wishes and needs of Zeewaardig's designers for the tool

Alongside the insights from the case study analysis, two collaborative sessions were organised with the designers of Zeewaardig to gain more insight into the needs and wishes surrounding the demonstration tool for impact in their participatory projects (see Appendix 2 and 7). From these sessions, the following needs and wishes emerged:

- **The purpose:** The designers wish to show (future) clients how Zeewaardig can be of service to them and what the effect is of their approach. In addition, they wish to learn from projects and improve their approach continuously. Finally, they want to use the tool to discuss impact at the front end with clients and be better able to shape the project accordingly.
- **The scope:** Zeewaardig wishes to measure both the impact of the project outcome and the impact of the process. They would like to demonstrate that the project's intended effect has been achieved (outcome) and what the impact is of their approach (process). In this research, the main focus lies on the latter.
- **Timing:** The designers all wish to measure before and after the project. Many of them also state the importance of intermediate measurements to be able to make adjustments within the same project already. Furthermore, it can be insightful to sometimes conduct a measurement a long time after the project to see if the project reached a sustained and long-lasting impact.

- **Time investment:** The designers indicate that the time investment ideally depends on the size of the project. When a client also understands the importance of measuring, a higher time investment can be made than when it is only done internally for Zeewaardig.
- **Responsibility and payment:** It is most desirable for the designers of Zeewaardig to share the responsibility of impact measurement with the client. If a client is not interested in measuring impact, and Zeewaardig is, then Zeewaardig can take on this responsibility independently. If Zeewaardig wants to measure by default, then the method should remain straightforward and cannot be too expensive or time-consuming. However, the effect measurements can also be sold to the client as part of the process. The designers also indicate the importance of ensuring that the person taking and interpreting the measurements is not too biased. Measurements might not be very objective if the main stakeholders carried them out themselves.
- **Wishes for the form of the tool:** The designers of Zeewaardig would like to receive an instrument with standard questions with which they can start measuring in different urban projects, and they can then improve the tool as they go.

Design guidelines for the tool

Based on the lessons from the literature, the case study and the wishes and needs of Zeewaardig, the following design guidelines for the tool can be established:

- The tool should serve at least three purposes. That is to be **better able to demonstrate** to (future) clients what the impact of Zeewaardig's work is, to **learn** from projects so Zeewaardig can continuously keep improving their approach, and to **guide discussions with clients** to shape participatory projects.
- The tool should be able to **capture the intangible nature of impact** in design projects.
- The tool should provide **guidance on what to measure**.
- The tool should be usable for **projects in different forms and sizes**.
- The tool should be suitable for **use with a variety of available resources**.
- The tool should offer a **standard framework or set of questions** that can be used to start demonstrating impact.
- The tool should **measure relatively**, with at least one measurement before and one after the project.

6.2 The 'Are we making impact?' tool

A tool for impact demonstration was designed on the basis of the empowered citizenship framework, the impact considerations and the design guidelines. The tool consists of a poster and a booklet. Both are set up around the same three elements: 1) What is impact in participatory design, 2) How to think about impact, and 3) Demonstrating impact, step by step.

Form of the tool

The tool consists of two components: a poster and a booklet (see Figure 21 and 22). This choice was made to ensure that the poster attracts attention and that the tool does not end up on the bookshelf, gathering dust and being forgotten. Moreover, the poster focuses on the first stage of implementation: awareness. It can be hung on a design studio's wall to constantly remind designers to think about the impact of their projects. In addition, the poster already provides some general information. When designers are ready to start on impact demonstration, they will find all the necessary information in the booklet. The booklet contains extensive explanations, a step-by-step process and the formats that can be used in the process.

What is impact in participatory design?

One of the difficulties of measuring impact is that there are many possible forms of impact (Björklund, et al., 2018). Therefore, the tool starts by explaining what impact is in a participatory design context. Empowered citizenship is introduced as a frame for participatory designers to examine impact of their participatory projects.

How to think about impact

Now that designers know what empowered citizenship means, they can relate it to their own design practice. The impact considerations from Chapter 5.3 are used for this purpose. The considerations can help designers to think more consciously about the impact they can make in their participation project. In addition, they can also better explain the consequences of certain decisions to the client during the shaping of a project. This will ultimately allow them to make well-considered decisions together with the client.

After the impact considerations, empowered citizenship is explained in more detail using the framework from Chapter 3. The designers can now relate the framework better to their design practice because they were already thinking in this direction. By looking at the framework from this perspective, it becomes more concrete and less theoretical.

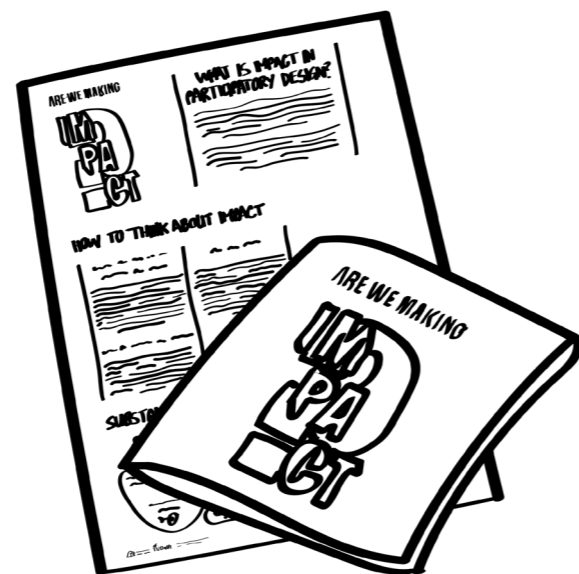


Figure 21: An impression of the tool

ARE WE MAKING

IMPACT

A tool for participatory design with citizens

WHAT IS IMPACT IN THE PARTICIPATORY DESIGN CONTEXT?



As a participatory designer, you involve residents because you **believe it is meaningful for them to have a say in these decisions**. Afterwards you wonder: **To what extent did this project succeed in giving those residents a real voice?** Were they allowed to make choices in the design plans? **Were those choices adopted by the client?** Could everyone who was interested participate in the process? All these questions relate to the impact of the participation process on the empowered citizenship of participants.

Empowered citizenship is a frame to look at impact, and can be understood as: **The enhanced ability of an individual or group to take control of their lives, claim their rights, and at the same time take a collective position within their community.**

HOW TO THINK ABOUT IMPACT IN PARTICIPATORY DESIGN PROJECTS

It is helpful to consider how empowered citizenship is part of your design practice. Three impact considerations were identified that are highly relevant for participatory designers. These considerations have an important role when designing the project with the client. If you want to create high social impact it is recommended to make deliberate choices on the role of the citizens, the kind of project and the time investment.

Position and role of citizens

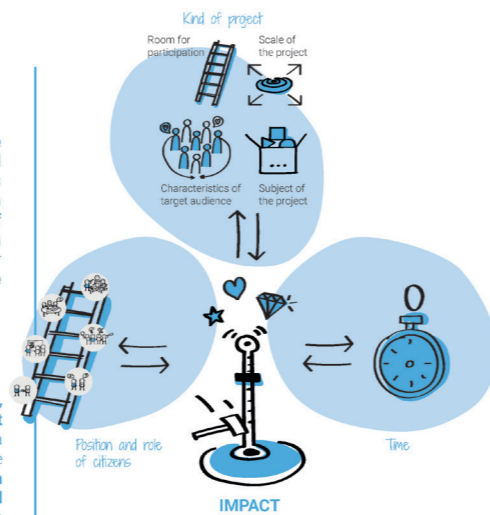
A higher level on the participation ladder contributes to greater impact in terms of empowerment. A position that is undesirable, however, can hinder that impact through feelings of insecurity. For participative designers, it is essential to find out **what knowledge residents and experts need from each other** to be able to make choices. With more knowledge, residents are able to bear greater responsibility. Based on the necessary knowledge exchange **a suitable form of interaction and role division can be chosen.**

Time

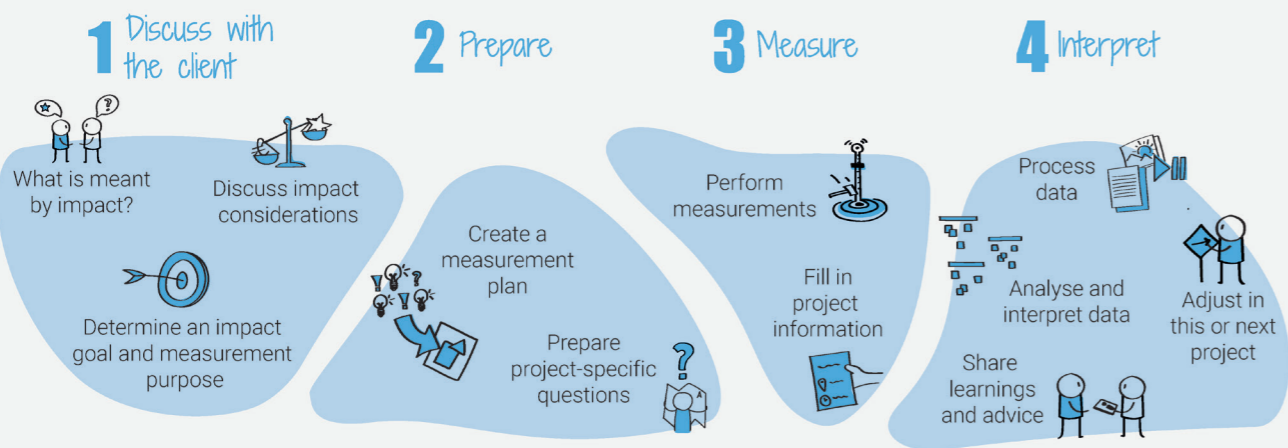
Designers should carefully consider **what time investment is appropriate** for their project. It should always be considered whether the benefits outweigh the additional costs. A greater impact can be achieved by **increasing the involvement of residents** and by creating **infrastructure** to sustain the impact in the long term. However, this greater impact comes at the **cost of a higher time investment and corresponding budget.**

Kind of project

The **room for participation, scale of the project, characteristics of the target audience and subject of the project** all influence the potential impact of a project. Furthermore, a trade-off must often be made in participatory projects between **pursuing a widespread effect that is smaller on an individual level or a less widespread effect that is greater on an individual level.**



DEMONSTRATING IMPACT, STEP BY STEP



Want to start making a better case for your impact as a participatory designer? Then also look into the 'Are we making impact?'-booklet for more information!

Demonstrating impact, step by step

With the acquired knowledge and insight into impact in participatory design projects, designers can start taking steps to demonstrate impact. The booklet offers a detailed step-by-step plan and formats to guide this process. The approach consists of four general steps: 1) discuss with the client, 2) prepare, 3) measure, and 4) interpret (see Figure 23).

1. Discuss with the client

What is meant by impact?

At the start of the project, it is advisable to have a good discussion with the client about impact. In doing so, it is useful first to discuss what is meant by impact. The information from the previous sections of the tool can be used for this purpose. Having this conversation and writing down a shared conclusion creates a shared language for impact in the project. This can be valuable in the rest of the project to communicate on the same level.

Discussion of impact considerations

Once a shared language on what constitutes impact has been established among stakeholders, the project can be further shaped. In a participatory

process, there are always decisions that need to be made concerning the level of participation, the scale of the project, the target group, the scope of the project, and the time and resources available. Usually, some of these factors have already been decided upon, while others can still be determined or revised. The impact considerations from the chapter 'How to think about impact' can be helpful to discuss the considerations that affect the potential impact of the project together with the client. This conversation can also help to build consensus and make stakeholders aware of the corresponding commitment to certain decisions.

Determining an impact goal

In conjunction with the discussion of the impact considerations and the shaping of the project, a goal should be set for the impact that the stakeholders want to achieve together. These two steps are not linear and can therefore be approached iteratively during the discussion. However, it is helpful to have formulated an impact goal that both parties support by the end of the discussion. This impact goal can be a valuable starting point for the design and a reference point for the impact demonstration.

Setting a measurement purpose

After clarifying the goals around impact for this project, it should be discussed whether the

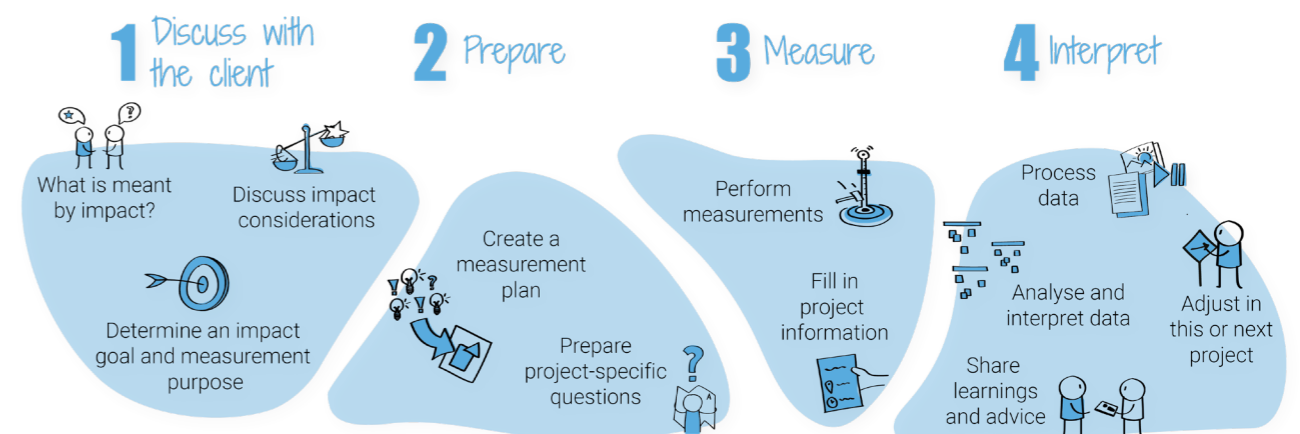


Figure 23: Overview of the steps to impact demonstration

Figure 22: An impression of the tool

stakeholders want to measure and demonstrate this impact. This conversation should take place as early as possible, to ensure that the right resources can still be secured. There are many different purposes to demonstrate impact, including: 1) to justify the impact to funders, 2) to defend the role of design in service delivery, 3) to make a strong case at the start of a new project, 4) to allocate resources effectively, 5) to continually improve, 6) to better communicate the value of the work, and 7) to learn to ask the right questions (Wood & Leighton, 2010; Eurodiaconia, 2015). These purposes affect the appropriate set-up of the measurement plan. Examples of decisions that depend on the measurement goal are the scale of the measurements and the time and budget allocated to them. Therefore, it is crucial to agree on the measurement goal so that further choices and agreements can be made.

2. Prepare

Create a measurement plan

With the knowledge of the desired impact and the measurement purpose, a plan for carrying out the measurements can be drawn up. In this plan, a choice must be made on how many measurements will be carried out and when. A baseline measurement and final measurement must always be conducted (see Figure 24). The baseline measurement should be carried out before the

first intervention by Zeewaardig. During the project, it is also optional to carry out intermediate measurements. These measurements can be used to learn about the impact made by the process and make adjustments accordingly. At the end of the project, the final measurement will be carried out. For this, Zeewaardig's intervention in the project should be completed. A decision needs to be made as to how long the measurements will be carried out after this intervention. After a longer time, more can be learned about the permanence of impact, which is meaningful in social design. However, over time, it becomes increasingly difficult to directly relate impact to one specific project, as all kinds of variables have an influence (Björklund, et al., 2018). In the context of a project, it must be determined which moment is most appropriate. One may decide to take two measurements at the end of a project, one immediately after completion and one after a more extended period of time. Once the number and types of measurements are determined, the exact dates should be planned.

In addition to the timing of the measurements, the desired number of respondents for both the questionnaire measurements and the accompanying interviews should be considered. For the interviews, a minimum of five is often recommended as a starting point (Dworkin, 2012). If more information is needed after the

first five interviews, more interviews can be held until no new insights emerge (Boddy, 2016). The appropriate sample size for the survey depends on the size of the population to be surveyed, the margin of error and the level of confidence sought. For a statistically significant sample size, the sample size calculator from SurveyMonkey can be used. This instrument bases its calculations on the formula in Figure 25 (SurveyMonkey, n.d. A). However, it is not always necessary to have a significant sample size for both the interviews and the survey, as many insights can be gained even without that size. Moreover, the diversity of the respondents is also of interest to obtain a representative impression of the target group through the measurements. Therefore, it is recommended that the sample size for each project is determined based on the purpose of the measurement, the target population, and the available resources, keeping in mind the significant sample size.

With the desired number of respondents in mind, one should consider the best way to recruit them. For interviews, it is advisable to ask people during contact moments within the project directly. In addition, the questionnaires can also be carried out as part of a session to avoid taking up too much of the respondents' time. In the urban environment, door-to-door distribution of questionnaires or

existing structures such as newsletters and active Facebook groups can also be used. It should be noted, however, that these will generally not yield a large response rate. When distributing a questionnaire without any relationship to the recipients, the response rate will probably be around 10-30% (SurveyMonkey, n.d. B). When sending a survey to people who are already more involved, the response rate will probably be on the higher side of this range.

Finally, it must be determined who will perform and interpret the measurements in the project. This decision depends on the possibilities and resources within the project as well as the measurement purpose. Attention should be paid to the potential conflict of interest of the person carrying out the measurements.

Prepare project-specific questions

In addition to drawing up the measurement plan, the questions must also be critically examined. Based on the purpose of the measurements, it can be decided whether all or a selection of the questions will be asked. Moreover, any context-specific questions can be added or adjusted.

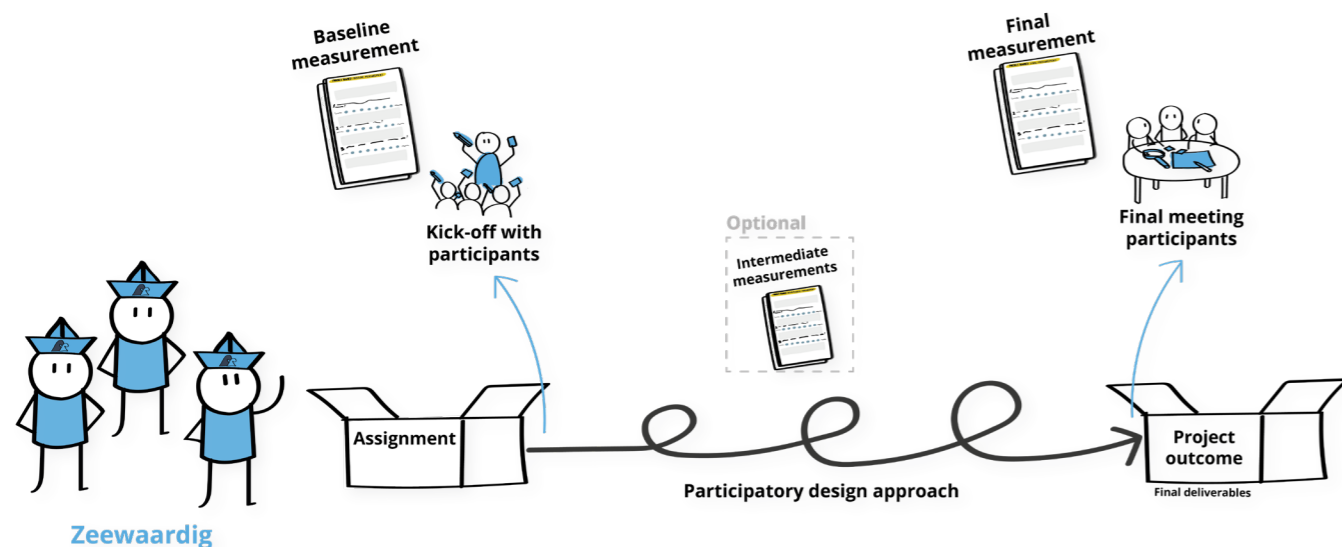


Figure 24: Overview of timing measurements in the design process

$$\text{Sample size} = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

N=population size

e= margin of error

z=z-score (based on confidence level: 80% z-score 1,28; 85% z-score 1,44; 90% z-score 1,65; 95% z-score 1,96;99% z-score 2,58)

Figure 25: Formula to calculate a significant sample size for surveys

3. Measure

Perform measurements

The measurements can be carried out based on the measurement plan and the measurement format (see Figure 26). The measurement format consists of three types of measurements that are all based on the framework: a baseline, intermediate and final measurement (see Appendix 9).

In the baseline measurement question 1 is added to learn about the main motivations of residents for participation. Furthermore, questions 2 - 4 are added for the measurements of voice, 5-11 for agency, 12-13 for opportunity structure, 14-15 for a sense of collectivity and finally 16-18 for citizenship ability. The questionnaires consist of some open questions, but mainly 7-point Likert scales with an explanation. This was decided because many people are already familiar with this way of answering from previous experience with questionnaires, and it is therefore easier for them to complete the questionnaire. In addition, a 7-point scale provides enough options to differentiate a feeling/attitude, but not so many that a respondent becomes overwhelmed by the choices (Joshi, Kale, Chandel & Pal, 2015). An explanation is asked alongside the Likert scales to gather some information that can help with the interpretation of the data.

Apart from question 1, the questions from the baseline measurement are repeated in the intermediate and final measurements. The format

used is almost the same, with only one difference. In the baseline measurement, an explanation of the Likert scales is asked about what makes someone feel this way. In contrast, the final measurement asks for an explanation of which activities in the participation project did or did not contribute to this feeling and in what way. In addition to the questions from the baseline, some open-ended questions were added to the intermediate and final measurement. These are mainly about the experiences and outcomes of the project for the respondent. Such questions can help to uncover the bycatch of the project. Finally, questions concerning satisfaction with the end result of the participation were added to the final measurement. These questions can give an idea of the satisfaction with the final delivery and whether this represents a supported design.

In addition to the questionnaires, it is also crucial to conduct interviews. It is recommended to conduct a semi-structured interview, using the questions from the measurement form as a basis for open-ended questions.

Fill in project information

In addition to conducting the questionnaires and interviews with the residents, interesting facts of the project, such as duration, budget, number of participants reached, etc. can be collected and listed in the project summary format (See Figure 27 and Appendix 8 for a blank and, by way of illustration, completed format).

4. Interpret

Process the data

Once all questionnaires and interviews have been carried out, the data can be collected and processed into a suitable format for analysis. The questionnaires can be imported into Excel, the recordings or notes from the interviews can be retrieved, where needed transcriptions can be made, and if relevant, other video material and so forth can be collected.

Analyse and interpret the data

For analysis, the Likert scales of the baseline and intermediate/final measurement can be juxtaposed. Additionally, insights from the interviews, and open-ended questions from the questionnaires, can be clustered into key themes that emerge from the data. The effects from the Likert scales can then be interpreted using these themes and insights. To communicate these findings clearly and convincingly graphs and visuals can be created. These visuals can show the effects in a combination of numbers and clarifying quotes.

Adjust in the current/or following projects

Based on the results of the measurements and the established impact goal, it can be determined whether it is needed to make adjustments. If intermediate measurements are carried out, this can be done for the remainder of the ongoing project. If only final measurements are conducted, the findings can either be used when e.g. scaling up or be translated to other (similar) projects.

Share learnings and advice

Finally, the lessons and advice learned from a project can be shared within the design studio so that all colleagues learn together. It would be even better if designers also share learnings with other design studios, offer advice, and continue to improve the participatory design process together. When doing this jointly, the participatory design field can create even more social impact in the future!

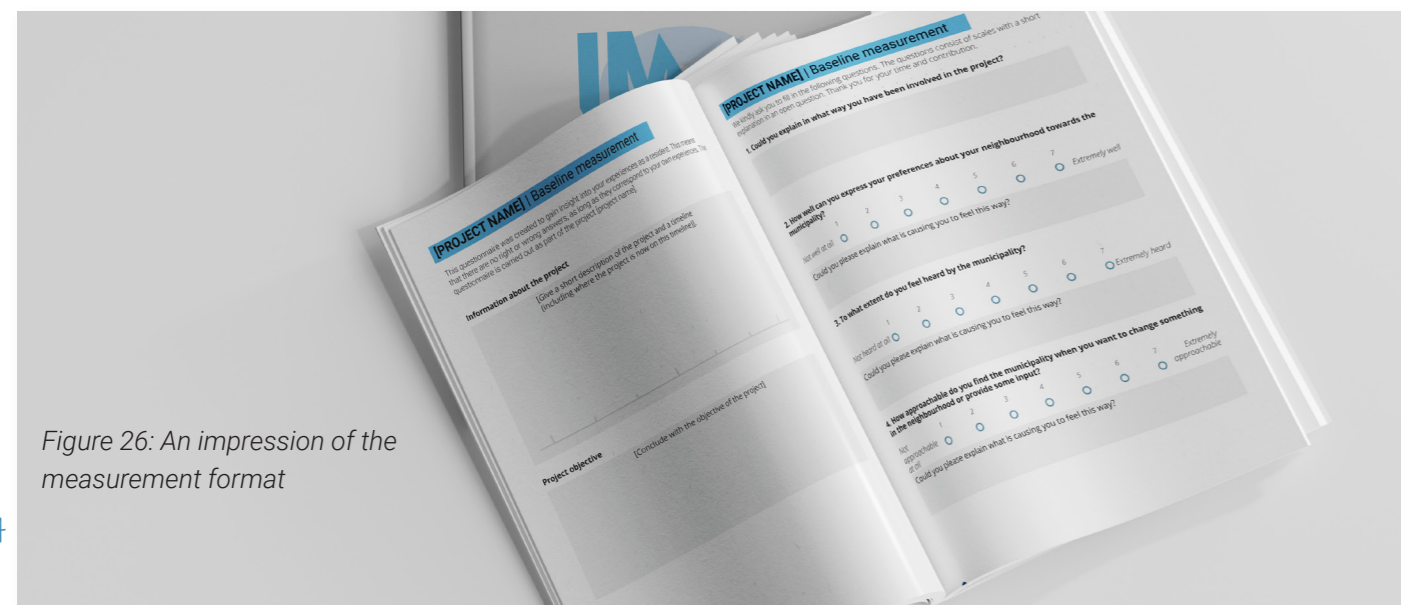


Figure 26: An impression of the measurement format

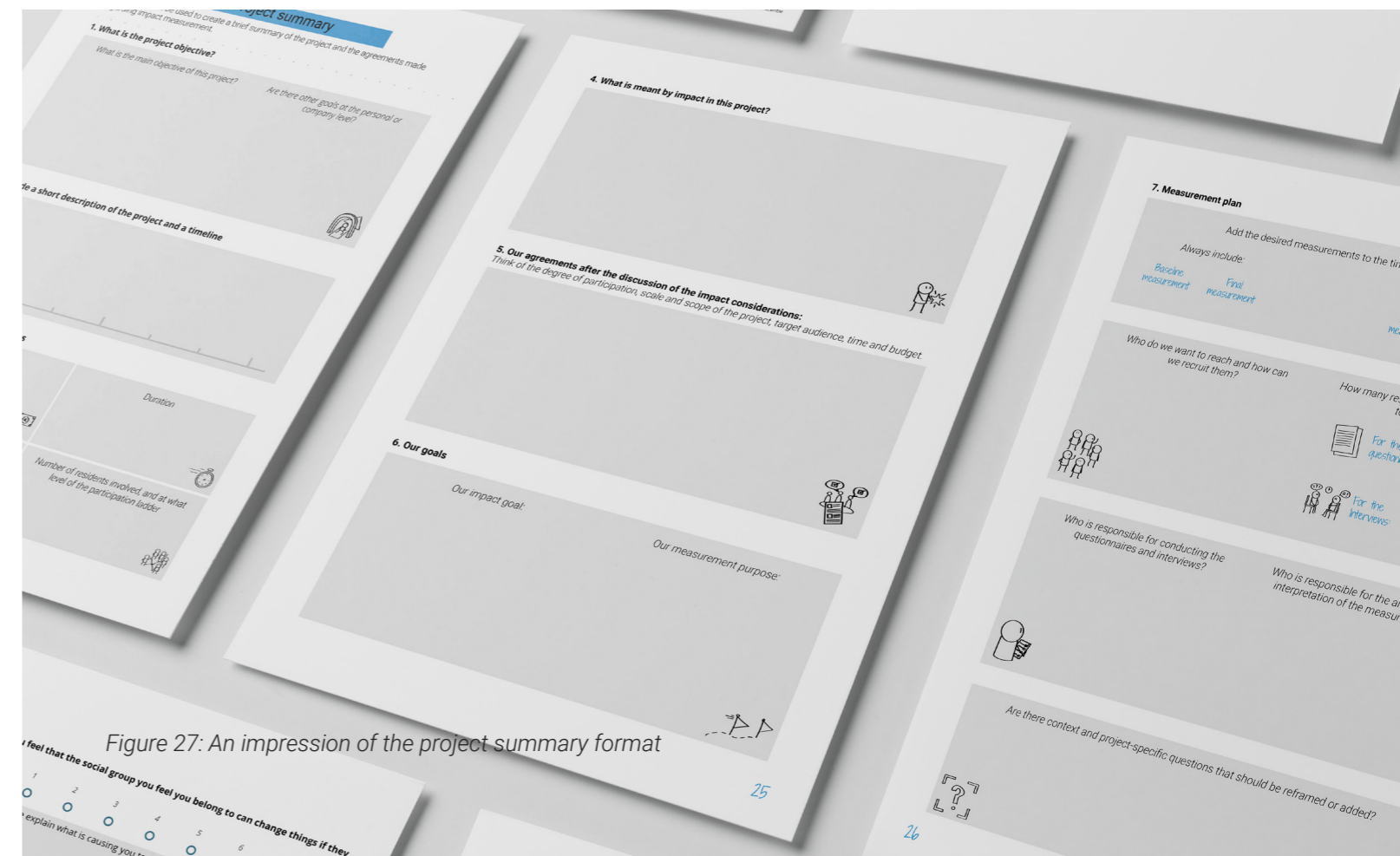


Figure 27: An impression of the project summary format

Recommendations for Zeewaardig regarding the use of the tool

A different approach for different measurement purposes

To better demonstrate the value of a participatory design approach to future clients, it is advisable to choose several projects where measurements can be carried out on a larger scale. In other words, carry out measurements with a significant sample size at the start of the project, in between, just after the last Zeewaardig intervention and for a longer period after the completion of the entire project. The insights from these measurements can then be used to build a showcase. In day-to-day work, when demonstrating the impact of the approach to the client, it is only necessary to carry out a baseline and a final measurement. If, on the other hand, the intention is to learn from the measurement and also to be able to make adjustments and improvements during the ongoing project, intermediate measurements should also be carried out.

Scaling the time investment to the size of a project

Zeewaardig works on projects of all shapes and sizes. It is recommended that the time investment for measurement is tailored to the project to make implementing impact demonstration in daily practice more feasible. The measurements can be tailored to a project in several ways: 1) in the determination of the desired number of respondents for the questionnaire and interviews, 2) in the recruitment method of respondents, and 3) in the choice of the form and timing of the measurements (i.e. on paper during a session, in the street, in the mailbox, or online on websites, in active Facebook groups, or via e-mail).

Recruitment of respondents

Which groups to include in the measurements depends on the measurement purpose. When wanting to learn about the impact of the participatory design project on the level of

empowered citizenship of participating residents, you only have to include participating residents for the measurements. This can be done at, for instance, a kick-off of the participation and at a closing activity. However, measurements should be carried out with both groups when you want to learn about the difference of impact on empowered citizenship between participating and non-participating residents. In this regard, it should be understood that reaching non-participating residents for the measurements is more challenging.

Selection of questions

It is not necessary to cover the entire questionnaire in every project. It is recommended to do so for the showcase projects. To make the measurements manageable for both the designers of Zeewaardig and the respondents, however, it is advisable to select the most relevant questions from the measurement formats for other projects. It is critical, however, to include the same questions for each measurement moment in one project. By not asking too many questions, the risk of respondent fatigue (where respondents get tired of too many questions and answer less and less accurately toward the end of a questionnaire) is also reduced (Ben-Nun, 2008). Another strategy to combat respondent fatigue is to clarify at the start of each questionnaire what the value is for the respondent.

Responsibility for conducting and interpreting measurements

As mentioned before, it is a risk that the person who conducts the measurements is biased. Therefore, it is best to appoint a person in charge who is not directly involved in the project. Nevertheless, it is valuable for Zeewaardig if measurements are conducted similarly for different projects, since this enables them to learn from multiple projects alongside each other. The use of an independent party can be considered, but this may hamper the integration of measurements into daily practice, as it comes at a price and is likely to lead to resource problems. Therefore, despite the

disadvantages, it is recommended that Zeewaardig conducts the measurements themselves. Other stakeholders can then be involved for the sake of triangulation and to enhance the credibility and validity of the results.

For Zeewaardig, it is best if two people drive the implementation of this demonstration tool. They can then, as relative outsiders, conduct and interpret the measurements in their colleagues' projects. The choice of two people is made to ensure that the number is small enough to take the time to specialise in the concept of empowered citizenship and the measurement method. Another reason was to ensure that the measurements can be assessed by the same people and are therefore comparable. At the same time, having two people allows for consultation and mutual learning. There is also someone who can take over when the other is absent.

Implementation of the tool in Zeewaardig's participatory design practice

The use of the project summary format and the information on empowered citizenship and impact considerations can be used right away in for example the kick-off meeting with clients. Before implementing the measurement part of the tool in the practice of Zeewaardig, however, it is important to develop the tool one step further. It is necessary to validate the questionnaires with residents to check whether the questions are understandable and correctly interpreted. After this validation, it is advisable to conduct a pilot project. For the pilot, it is recommended to choose one project in the context the tool was developed for: participatory design projects with residents. It is equally important that a client is open to the conduction of this pilot in the project.

In the pilot, the step-by-step plan should be followed and input and feedback can be collected from all stakeholders at every step. During the analysis it is useful to take the time to experiment with each other to see what kind of information

can be obtained from this measurement. But also what representation of these insights best suits Zeewaardig and its objectives for the measurements.

All the insights gained from the pilot can be used to iterate on the tool. Once the tool has been tested and improved, it can be run again and improved further. After this enhancement effort, the tool can be used more widely and included into the daily work of Zeewaardig (in residential projects). Once Zeewaardig is familiar with the tool and feels confident in using it in projects with residents, they can begin to look at using the tool more broadly in other contexts. For this purpose it is advisable to first examine the extent to which the framework and questionnaires fit these contexts. If the framework and questionnaires are not suitable for this context, one should determine why this is the case and what adjustments are needed to use the tool in this context. Consequently, the tool can be further developed and extended for wider use.

07 | EVALUATION

This chapter describes the evaluations of the tool with designers from Zeewaardig and with participative designers from other design studios.

07 | EVALUATION

7.1 Set-up

Aim

The purpose of the evaluation sessions is to assess the value of the designed tool. Moreover, to see to what extent the tool achieves the intended effects, i.e. raising awareness among participatory designers for, and supporting them in, the demonstration of their participatory project's impact on participants. Another aim is to learn whether the designed tool can be used more widely than the scope for which it was designed (i.e. participatory projects of the design studio Zeewaardig in the urban context with citizens).

Participants

Several participative designers will be included in two evaluation sessions. The first session is with four designers of Zeewaardig (Rotterdam). The second session is with designers from external design studios. Participants are recruited based on their work in participatory design and their interest in the measurement of impact. Employees from design studios in different cities in the Netherlands are sought to create more variety in the group of participants. In the end, six designers from the firms Afdeling Buitengewone Zaken (Rotterdam), Muzus (Delft), DIG (Utrecht), Morgenmakers (Eindhoven) and Studio Sociaal Centraal (Eindhoven) participate. The decision to bring designers from different studios together in one session, instead of individual interviews, is made to allow for interaction and be better able to see where similarities and differences lie.

Method

Internal evaluation

The session with Zeewaardig will take place physically. It will start with a short presentation of the tool based on the poster and the booklet (see Figure 28 and 29). The designers of the team have already been introduced to the content of this project several times, so the presentation does not have to touch on every aspect of the design. The presentation is followed by a

discussion around questions in four categories: 1) clarity, 2) employability, 3) value and 4) further developments. During the discussion, participants first write an answer on a post-it, which will then be discussed. Any additions from this discussion will be written down on a post-it again to create a good overview of the input. The post-its will be analysed to find the answers to the evaluation questions.

External evaluation

To make it easier to bring together designers from studios in different cities, the session with external designers will take place online using MS Teams. Since these designers are not yet familiar with the project, a more detailed presentation will be given. This will cover the following aspects: the research question and scope of this research, the purpose of this session and an explanation of the tool. The explanation will be given by means of the three elements of the tool: 1) What is impact in a participatory design project, 2) How to think about impact in participatory design, and 3) Demonstrating impact, step by step. In between, there is time for questions and discussion on the recognizability of these parts in the designers' practice. Finally, the applicability and value of the tool in the designers' practice will be discussed, as well as requirements or wishes for further development.

As the designers are pretty busy, it is decided to ask for one hour of their time for this session. This means that the time for the session is fairly short, so choices have to be made on what to focus on. The discussion is most interesting to learn about the wishes of participatory designers from different design studios on this topic. In order to be able to pay more attention to each question, only a few key questions about the applicability, value and needs and wishes for development will be asked. The session will be recorded to allow the facilitator to focus on the discussion, and no further documentation will be done during the session. The input from the sessions will be analysed by reviewing the transcript to evaluate the answers to the evaluation questions.

7.2 Results

Internal evaluation

Clarity

The purpose of the tool is clear to the designers. They advise to be very clear in the framing of the tool (that it is about participatory design and that we are talking about the impact on citizens). The designers mentioned that the tool has made them reflect on impact in their projects. They note that the impact considerations in particular help to understand impact in the participatory design context. These considerations help to frame impact and talk about it with others (e.g. within the team or with clients). In addition, the designers think the tool can be used to make impact more understandable for clients. The steps to start impact demonstration and measurement are also clear to the team.

Employability

For Zeewaardig, the tool fulfils a wish they have had for quite some time. As one of the designers said: "This will make Zeewaardig even more credible". The designers of Zeewaardig consider the steps for impact demonstration to be a good starting point to base decisions on and to put them into practice. The designers can play around with the tool and try it out in ongoing projects to learn how best to apply it and continuously improve it.

De tool helpt vooral ook om keuzes te maken en te gaan doen.



Figure 28: An impression of the evaluation session

Furthermore, the designers see great value in the use of the tool at the front end of a project in conversation with the client. One of the designers indicated that in an earlier project, for example, it could have helped to better formulate how Zeewaardig views impact. The tool can guide discussions with potential clients on whether there is enough room to approach the project in a participatory way and make an impact on the empowered citizenship of participants. The designers of Zeewaardig also see the step of writing down the conclusions and agreements in the project summary format as an opportunity to reach a real agreement on impact at the start of a project with a client. The designers talked about the possibility of even signing it. In addition to the contract, which is about money and the commission, one would then also make mutual agreements about impact and the measurement of it.

Je kan zelfs symbolisch een handtekening zetten om met opdrachtgever echt voor impact en meten te gaan.

The designers also indicate that the tool can be used in non-residential projects. After all, Zeewaardig tries to support those involved by strengthening their voice and agency in many projects. Thus, empowerment is more widely applicable within Zeewaardig, also in other contexts. In contrast, Zeewaardig's focus on responsible citizenship seems more bound to the residential context. In some projects, there is less room for decision-making by the participants, and

“ Een tot nu toe onzichtbare kracht van Zeewaardig wordt nu bewerkelijk. ”

- Designer at Zeewaardig

more focus on informing them or giving them a voice in the smaller influence they can still have. In these cases, empowerment as a whole is less applicable, but the component of voice can still be interesting to consider. Finally, the designers indicated that the way of thinking about impact and the impact considerations can be applied in any Zeewaardig project and in any context.

Moreover, the designers indicated that the tool itself could be an instrument to help them achieve their goal of making residents feel more heard, since it shows that Zeewaardig takes their experiences very seriously.

De tool is op zichzelf al een instrument om de bewoner zich meer gehoord te laten voelen.

Further developments

Before the designers of Zeewaardig can use the tool themselves, they want to read up more to feel more confident in the subject matter. Even though they are eager to start measuring and demonstrating impact, they are still a bit hesitant on how to begin. Therefore, they would appreciate some more advice on the implementation of the tool in their daily work and design approach.

In addition, it was suggested to test the applicability of the questionnaires to different target groups in Zeewaardig projects with different contexts in order to find out whether they can be applied in such contexts or whether other versions could/should be developed.



Figure 29: An impression of the evaluation session

External evaluation

Empowered citizenship

A number of the designers indicated that they design from a different starting point within their design studio. They work on the basis of a question or problem from the client, which usually does not encompass empowered citizenship. The goal of empowered citizenship is referred to as more activist, while the participating designers often involve people from a more functional point of view. Moreover, they often work with a broader target group and not necessarily at the city or neighbourhood level. One of the designers, who does work with municipalities in projects, indicated that she does recognise that clients increasingly see the goal of activating residents as a secondary objective to participation. The tool and framework mainly provided added value for the designers that actively work with municipalities and residents, since the model can support them in conducting evaluations for projects of this kind.

De framing in die zin die jij gebruikt is wat activistischer voor mijn gevoel, ook bijna van we willen burgers een stem geven en daarmee iets bereiken. Terwijl je kan dat ook bij wijze van bijna functioneel inzetten, zo van zij weten gewoon het beste wat er speelt.

We hebben wel een aantal projecten waarbij ik denk: ja dat doel van active citizenship dat is echt wel onderdeel van die projecten en dat zouden we dan op die manier kunnen evalueren. Dus ja, voor ons is dat wel interessant.

Even though empowered citizenship was not immediately recognised as a goal, almost all designers mentioned at some point during the session that they work with empowerment in varying ways. One designer stated that she always tries to include the activation of people in her projects, provided that there is room for this (which is not always the case in reality). Other designers mentioned empowerment as part of their approach or of their end results. Although empowered citizenship as a whole does not seem to resonate with all participatory designers as a goal, the

empowerment component of the framework seems to be more relevant to them. Moreover, the designers recognised the sub-component voice in particular as an aspect of their participatory work.

Wij kijken wel altijd of die ruimte er is om echt te kijken; hoe kun je mensen activeren. Maar ja, het is ook niet zo dat ieder project daar ruimte voor heeft.

De voice en feeling heard daarvan denk ik, dat is iets waar we altijd bij stil moeten staan in het onderzoek doen. Ja, dus ik dacht, nou er zitten misschien ook wel elementen in die dan juist wel overal toepasbaar zijn?

Reflection on impact in participatory work

Several of the designers indicated that the tool makes them think and reflect more about impact. One of the designers also stated that the tool could help their company to think more explicitly about the impact they want to make within each project since they are not doing that yet. In addition, this tool focuses on the impact of the participatory design approach and not directly on the end result. The designers found this interesting and of added value. Certainly, one of them stated, since they were only working with tools concerned with measuring or demonstrating impact of the end result of a project at her design studio. While the approach rather than the end result is often sold and advocated in design research. The tool provides a way to think critically about and reflect on the approach. In that respect, there is still a desire for further development to learn more about the relationship between this measurement of the approach's impact and the impact of the project's end result.

Ik denk nu van nou we zouden explicieter bij elk project na kunnen denken van welke vorm van impact willen we met elkaar bereiken? Dat is iets waarvan ik wel nu denk van ja, dat zouden we misschien meer kunnen doen. Of daar in ieder geval ook in een kick off over na kunnen denken.

Wat ik eigenlijk merk in jouw verhaal is veel meer een reflectie op de aanpak. [...] En dat is natuurlijk,

zeker in ontwerpend onderzoek waarin we eigenlijk vaker de aanpak verkopen aan mensen als het ware en ook een pleidooi voor voeren, interessanter om daar kritisch op te zijn en daarop te evalueren. [...] Dat vind ik wel interessant.

Unpacking impact

The designers also value the framing of a vague term such as impact into a more specific frame like empowered citizenship on residents, since it helps in thinking and talking about the topic. Finally, a designer mentioned that pulling the problem apart helps to get out of the fuzziness of designers. As they often do many things interchangeably and do not always provide real arguments or hard data. Therefore, she pointed out that the decisions to pull impact apart, to focus on impact of the approach, and to combine interviews and a questionnaire help to be able to evaluate more critically.

Juist door dingen uit elkaar te trekken kan je wel iets specifieker over iets, ook ja, kritisch zijn of evalueren. Dus ik denk dat dat heel waardevol is.

A participatory approach to impact evaluation

A few of the designers indicated that it might be a missed opportunity in a participatory project not to involve the participants in the evaluation of the project. However, they did indicate that this is an ideal vision and that, in practice, this will certainly not be possible in every project.

Ik denk dat het juist interessant is om te kijken of je de manier van participeren ook participatief kan vormgeven en ook het evalueren participatief kan doen. Tegelijkertijd is de realiteit dat dat in heel veel projecten niet lukt, omdat er geen tijd, geen geld, voor is.

7.3 Conclusion

The evaluation has shown that the purpose, information, steps for demonstrating impact, and possible use cases were clear to the designers of Zeewaardig. In addition, the tool fulfils a long-held wish of the organisation to be able to better demonstrate the impact they make. For Zeewaardig the value of the tool lies in the following two areas in particular: 1) in guiding their thinking and conversations on impact, and 2) in guiding their ability to demonstrate impact better. The most prominent use cases of the tool are therefore the discussion with the client when shaping a project, and the evaluation of the impact of a project. The tool proves to be well suited to projects with residents and Zeewaardig also sees opportunities to expand it to other contexts. It should be further investigated which parts of the tool can also be used in these contexts. Another of Zeewaardig's wishes for further development was to receive some advice on the implementation, therefore this was included in Chapter 6.

The evaluation with other participatory designers intended to gain insight into the wider practice and how generalisable the tool is. From the session it became clear that the goal of empowered citizenship did not resonate directly with all the participatory designers from other design studios. One of the reasons is that the studios interpret participatory design in various ways. There seems to be a scale that goes from involving people from a functional perspective (to achieve a better end result) to involving people from a more principled perspective around empowered citizenship (people should be able to be part of the decisions that affect their lives). All the partaking design studios

can be placed on this scale, but some tend more to the left while Zeewaardig tends more to the right (which the tool is also tuned to) (see Figure 30). As this research is concerned with social design projects it is worth noting that with a participatory design approach aimed at empowered citizenship, the approach itself is social design. It belongs to the political progress-driven social design component of Tromp and Vial (2022). With a more functional approach, however, the approach in itself is not social design. Nevertheless, these designers may be practising social design in terms of the final result rather than the design approach, or be more focused on one of the other four social design components. In short, the other design studios work in a variety of contexts with a different approach and purpose, and it became clear that the tool is context-specific. The tool is most workable in citizen participation projects aimed at residents. It is therefore valuable to re-evaluate the tool with designers that work in the exact context the tool was designed for.

Even Zeewaardig cannot apply the framework in its entirety in all projects, even though they aim to achieve empowered citizenship. This is the case, for example, in projects with too little room for participation to be able to strive for empowered citizenship. The tool at hand may help in the future to argue more clearly, when talking to a client, why more room for participation is sought in a project and what the consequences are for certain choices in terms of the potential impact of a project. Moreover, the tool can still be useful in various ways for projects with a different context. For example, by using the framework

flexibly and including only the relevant parts of the framework for a specific project. It appeared from the evaluations that in general the empowerment aspect and especially voice are often applicable to participatory projects in other contexts and also in other design studios. Responsible citizenship, on the other hand, appeared to be most tied to the context of citizen participation and the practice of Zeewaardig. It seems logical that voice is broadly applicable, as helping people to express their preferences and make them feel heard in the process also underpins a functional perspective on participation.

The most significant value of the tool for the other participatory designers was that it helps them to be more conscious about the desired social impact in their projects. This awareness and reflection is mainly supported by the impact considerations and the project summary format that helps to guide them in taking the necessary steps. The designers also indicated that framing the vague term 'impact' is helpful, as it makes it easier to work with and provides them with a guideline for measuring impact. Finally, the designers who actually work in the residential participation context noted that the tool is useful in such projects. As the tool provides a model that designers currently lack to use in evaluating impact. For follow-up research the designers would like to see how the measurements can be used in different contexts and be carried out in a more participative way. Besides, they are interested to learn about the convergence of measuring the impact of the process and measuring the impact of the final result.

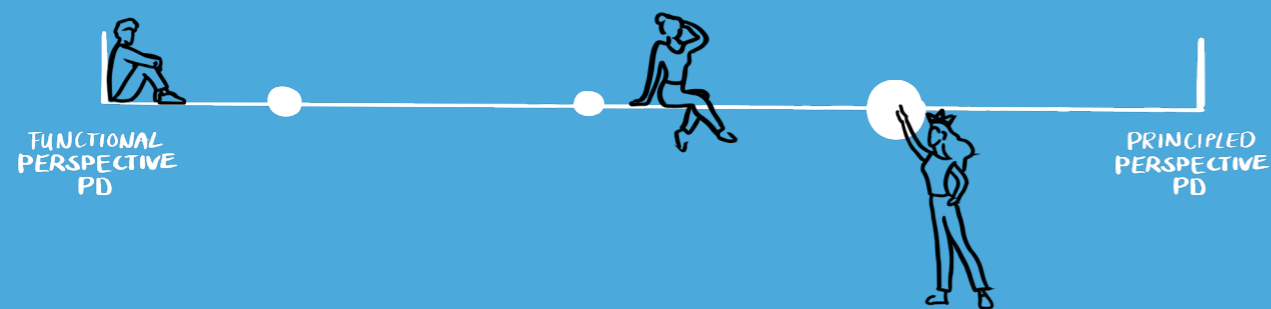


Figure 30: A scale of participatory design (PD), from a functional to a principled perspective

08 | DISCUSSION

This chapter reflects on the purpose of this research and the extent to which the results contribute to both literature and practice. Moreover, it describes the limitations of this research and recommendations for follow-up research.

08 | DISCUSSION

8.1 Discussion

The number of large and complex problems in the world is growing (Hervieux & Voltan, 2019). Participatory design is applied because designers believe it can contribute to these problems. In order to genuinely contribute to this, it is necessary to critically examine one's own design approach. Therefore, demonstrating impact is highly relevant to continuously improve the field of participatory design to create even more social impact in the future.

This project stems from the desire of the design studio Zeewaardig, to better demonstrate and measure the impact they make through a participatory design approach. Therefore, the purpose of this research was twofold: 1) to investigate the relationship between participatory design and the impact that is made on participants, and 2) to investigate how designers can demonstrate this impact. This research was then carried out within the scope of residential projects.

A total of 23 different people were involved during this research. Throughout the course of this research, nine designers from Zeewaardig participated in various formations during seven small collaborative sessions and one evaluation session. Furthermore, the case study involved one designer of Zeewaardig, one expert, one municipal employee and six residents. Finally, the evaluation session with external participatory designers involved six designers from five different design studios.

The relation between participatory design and the impact made on residents

Based on a literature review in combination with an analysis of participatory projects of Zeewaardig, this research proposes the concept of 'empowered citizenship' as a key form of impact that can be made on residents through a participatory design approach. It further details this concept by

outlining the various components that make up the empowered citizenship framework. Additionally, the relations between the participatory design approach and these components of empowered citizenship are presented in the framework. An evaluation with Zeewaardig revealed that the framework indeed supports them in understanding empowered citizenship and the relationship between their participatory design approach and impact in their projects. Finally, the findings from the case study further underlined the relevance of these components to the framework.

Demonstrating the impact of an urban participatory design project

The 'Are we making impact?' tool gives participatory designers guidance on how to demonstrate the impact of their approach. Firstly, by providing information and framing impact, using the framework, to help designers to understand impact in the participatory context better. This step is vital as one of the main difficulties in measuring impact in design projects is the breadth of potential impact (Björklund, et al., 2018) and therefore not knowing what to measure (Schmiedgen et al., 2016). The designers of the evaluation session thought that the framing helped to work with that type of impact. The empowered citizenship frame in its entirety turned out, however, to be quite context-specific to more activist participatory design projects with residents.

Secondly, the tool provides an overview of three relevant impact considerations that need to be made in participatory projects, as they influence the potential impact of a project. These were developed based on the case study analysis. From discussions with both Zeewaardig internally and other design studios, it became clear that these considerations were recognised as highly relevant interactions in participatory design projects in almost any context. The considerations support a designer in their thinking about impact, making well-considered decisions and understanding the

consequences when shaping a participatory design project.

Finally, the tool provides a step by step plan for the demonstration of impact. The step by step plan starts with a thorough conversation between designer and client about impact in their project and the demonstration of it. The sessions with the participative designers have shown that this is a crucial step in both creating sufficient room for participation in the project and getting the client to be committed to the impact goal and the measurement. This may also help to overcome the obstacle of obtaining sufficient resources to conduct measurements (Schmiedgen et al., 2016).

Literature shows that measuring impact in design projects is difficult, because of its intangible nature that does not emerge well from traditional measurements (Schmiedgen et al., 2016). The "Are We Making Impact?" tool overcomes this hurdle by offering a mixed data approach, of interviews and questionnaires, with an emphasis on eliciting the experienced empowerment that currently often goes uncaptured. With this approach, the different types of data can complement each other and help to better understand the concept being studied (Fetters & Freshwater, 2015). Some of the hard data is collected in the project summary format. Besides, the experienced empowerment is measured. Results can demonstrate impact with hard facts and figures, and support these with interpretation through quotes and stories from the interviews.

Other difficulties in measuring impact in design projects arise because design practices come in different shapes and sizes (Dosi, Rosati & Vignoli, 2018). In practice, even each participatory project is different and requires a different approach. To be able to implement the tool as well as possible in these different circumstances, the measurements in the tool are adjustable. Amongst other things, the number of measuring moments, respondents and questions can be adjusted to the conditions of a project. This possibility also makes measurements in daily practice more feasible. For example, one can make a more

considerable investment in some projects where all measurements are conducted as completely as possible, so they can serve as showcase projects. However, in day-to-day practice, one may also choose to measure only one component of empowered citizenship or measure with a smaller sample, depending on the purpose of the measurement. The tool is also designed to be used on a project basis and can be used for just one project, to enable participatory designers to measure on a smaller scale if they do not have, or want to spend, much budget and time.

As Gaventa and Barrett (2012) pointed out, participatory design can also negatively affect residents. The tool is designed to capture both the positive and negative impacts. Although this can provide a great deal of insight and learning opportunities, it also presents one of the greatest risks for designers in applying this tool. What if the outcome is that the desired impact is not achieved? How do their clients respond to this? As a designer, it is therefore vital to communicate with the client beforehand that a possible outcome is that the goal wasn't achieved and discuss how you will deal with this.

This research is about the impact of a participatory design approach on the participants. It should be emphasised, however, that it is not the intention to make every project participatory. The impact considerations can assist in making a well-considered decision in this regard.

Contributions of this research

The theoretical contribution of this research to existing literature on participatory design methods and impact measurement is fourfold. The findings contribute to understanding 1) the impact of a participatory design approach in residential projects by introducing the concept of empowered citizenship, 2) the different indicators of empowered citizenship, 3) the relations between common participatory design activities and the components of empowered citizenship, and 4) how to demonstrate impact in a participatory design project with residents.

Furthermore, the findings of this research have implications for design practice, since the tool supports designers to better understand impact and talk about it more effectively. As a result, the tool can help designers to make more effective agreements at the front end of a project. This in turn will give them more freedom to work towards empowered citizenship. In addition, the tool helps to demonstrate impact and thus improve the designer's practice and have more credible arguments to (future) clients.



8.2 Limitations

In the case study, a larger sample of residents would have been preferred. Due to privacy issues, the collection of participants depended on other people, making it more difficult to find respondents. It was attempted to obtain input from residents through alternative channels (e.g., via other respondents or Facebook groups), but these did not yield a large response rate. Furthermore, given the limited time available for this project (and Covid-19), it was decided not to go out on the streets or go door to door to collect input. As a result, there is a fairly solid picture of the residents who participated in the workgroup. However, it is possible that this gives a distorted picture of the project, because it mainly gives an insight into the active and involved group of residents. Consequently, it is unclear whether residents who did not participate in the Eikakkerhoeven project felt inhibited to do so or if this was a deliberate choice. As the research focused primarily on the effect on the participating residents, this was less of a problem. However, the results should be presented and interpreted with this nuance in mind.

Due to time constraints, it was decided to analyse only one case to really go in depth. As a result, a lot was learned about empowered citizenship and participatory design. However, it is difficult to determine which aspects are context-specific in a single case study. Examining more projects would help identify patterns to draw more valid conclusions about what is needed to be able to use the tool for different projects. Moreover, in the case of the Eikakkerhoeven, there was no possibility to compare with a baseline measurement. In order to still have a reference point, a comparison with the pre-project was made. This means that the conclusions about the impact drawn in this project

may be less accurate. However, the case study was used to explore the evaluation of impact rather than conduct an exact impact measurement. Therefore, it was less crucial to be able to draw solid conclusions about the exact impact.

This research was conducted based on a first version of a tool. Due to the time limitations of the research, the tool has not yet been tested in real life. As a result, it was only learned how the designers think they will use it, and not how they actually use it. This means that the results after using the tool in practice may differ from the current outcome.

One of the difficulties of measuring impact in design projects is that it is difficult to isolate the impact of one intervention (Hervieux & Voltan, 2019). In this research, this was addressed by asking open-ended questions for each measurement item that explored the underlying events that caused this response. Measuring other intervening variables takes extra effort and time and does not match Zeewaardig's desire to keep the measurement accessible. Therefore, other potential influential indicators are not measured. As a result, the measurements will never solely isolate the impact of the current approach. It is important to realise this limitation of the measurement method when using the tool.

Given that this was a solo project, the results were also interpreted by one researcher. Some effort was made for triangulation by presenting the results to other designers to see if this was a shared interpretation. However, it is still possible that another researcher would have come to different conclusions.

8.3 Recommendations

The presented framework contains components that are grounded in literature and further validated in a case study. Nevertheless, some new participatory design activities that seemed to have an effect on the components of empowered citizenship were found during the case study. It is recommended for further development to test in various projects what other activities influence empowered citizenship. This will help to determine whether these are project dependent or should be added to the framework.

The tool is by no means finished. It can be considered a first version that needs to be tested and iterated. One of the things that is recommended is the validation of the questionnaires with residents. It is crucial to test whether residents understand the questions and whether the questions are interpreted as intended (with the knowledge from the framework). In addition, it is useful to test the questionnaires with other target groups to test their applicability to other target groups and projects in a different context. The instrument should also be tested in an ongoing project at Zeewaardig by means of a pilot. Finally, the knowledge gained can be used to optimise the tool in terms of, for example, formats and questionnaires but also the chosen form (poster, booklet and their layout).

In this research, a tool was developed that focuses on the impact of a participatory design approach on the participants, whereas a project can have impact on other fronts as well. One can, for instance, think of the impact of the end result and any bycatch of the project. During

the interviews in the case study analysis, it was noticed that by talking about impact and people's experiences with the project, some insight into the possible by-catch of the project can also be obtained. For questionnaires this is less likely to be the case, as they collect shorter, to-the-point answers. Nevertheless, a lot can still be learned about the impact of a project by conducting further research into the demonstration of the impact of the end result and the by-catch of a project. In addition, it is worth exploring ways to merge the measurement of the impact of an approach with the measurement of the impact of an end result.

The tool was designed with and for Zeewaardig. An evaluation with other participatory design studios has shown that the tool is not always directly transferable to the working methods of other design agencies. It would be worthwhile to conduct another evaluation with only participative designers working on residential participation projects, to see if it is indeed true that the empowered citizenship framework is applicable to other companies working in this context. This seemed to be the case, but there were too few companies in the evaluation that work within this context to say this with certainty. It can also be examined whether this research can be used as a guideline to make such a framing for other types of projects and types of impact as well. This is relevant for Zeewaardig and other participatory design studios who work on projects in other contexts. This way, the tool can be expanded to include multiple frames for impact in different contexts, to allow designers to choose the relevant frame for their project context.

For the further development of the tool beyond use at Zeewaardig, it may be advantageous to take a closer look at the positioning of the tool. Since they commissioned this research, it is now positioned as a tool for participatory designers (at Zeewaardig). At the moment, it is not feasible in every project on the designer's side to aim for empowered citizenship. One of the reasons for this is that it is often not part of the assignments designers receive and is not a big enough personal goal for themselves. Also, designers are not always given the necessary space for participation by clients, which prevents them from striving for empowered citizenship. It seems that the tool could create a more widespread impact by introducing a version aimed at the other party at the table; the municipality. After all, this is the party that needs to comply with the Omgevingswet, who hires designers and shapes their assignments. It is also the municipality, as it serves the common good, that strongly supports the goal of citizen empowerment and responsible citizenship. If the municipality gives more thought to the impact they want to make and understands what is needed to achieve that impact in participatory projects, they can better organise their assignments and resources for this kind of participation from the start. Moreover, there is often a considerable need for impact measurement on the part of the municipality, and it is best to secure resources when they take this component of the project into account from the outset. To conclude, it seems like the tool can contribute more comprehensively by supporting municipalities to shape participation projects differently from the very start.

09 | REFERENCES

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