

A study on the stimulation of citizen initiatives for urban development by using online platforms

Lieke Muusse



# Colofon

#### From idea to reality:

A study on the stimulation of citizen initiatives for urban development by using online platforms

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Name: Hannelieke Yenthe Muusse

Studentnumber: 4212037

Institution: TU Delft

Faculty: Faculty of Architecture
Mastertrack: Management in the Built

Environment

Graduation Lab: BOLD Cities

1<sup>st</sup> mentor: Prof. Dr. E.M. van Bueren

2nd mentor: A. Mauri External examiner: A. Ouwehand





"Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody".

Jane Jacobs (1961)

# **Abstract**

With smart governance, citizen participation for the delivery of services and the transformation of society to a participation society, there is an increased focus of governments on the stimulation of citizen initiatives and the usage of their knowledge for the delivery of services. What is seen more and more nowadays is that online platforms are introduced which collect, connect and help citizen initiatives for the city. Not only governments benefit from the interaction with citizens and citizen initiatives, the initiatives often need the local government for the realization of the initiative. However, for a lot of citizen initiatives, the current revenue-models and legal & bureaucratic systems are not always suitable for the citizen initiatives. So, there is a mismatch between the government and its governance and the pursuit of citizen initiatives. Besides, governments are rather slow in adapting and utilizing certain platforms. So, local governments have to find ways to guide the organization through the process of necessary change in order to be able to stimulate citizen initiatives. However, there is a lack of usable mechanism and frameworks that give insight in and promote bottom-up collaboration and participation. Hence, insight is needed in the organizational structure of local governments for the stimulation of citizen initiatives. Besides, insight is needed in the (possibilities of) online platforms for citizen initiatives and the usage and added value of the platforms. This research combines an extensive literature review on smart governance, citizen engagement and literature on citizen initiatives and online platforms with an empirical study that follows municipalities and online platforms for citizen initiatives in the Netherlands and examines the case studies on six elements: strategy, technology, organization, people, environment & success. Besides, the research includes an analysis of the usage of online platforms for citizen initiatives and their impact on the built environment. The main goal of the research is to provide recommendations on how local governments can stimulate citizen initiatives.

# Reading guide

This report starts with an introduction, explaining the context of the research.

The second part focuses on the research method, defining the research questions that are used for the graduation research and considers the type of study, the used methods, techniques and data collection and analysis.

The third part of the report consists of a theoretical framework, answering the first three research questions by literature.

The fourth part is the empirical research, investigating a set of 18 online platforms on their characteristics, followed by an intensive in-depth research focusing on a selection of four of the investigated platforms, and three municipalities, concluded with a data analysis on the usage of online platforms for citizen participation and their impact on the built environment.

The fifth part of the research is called the synthesis and combines the findings of the empirical research and the theoretical framework in order to give an answer on the main research question and to provide recommendations for municipalities.

# **Executive summary**

## Problem definition

With smart governance, citizen participation for the delivery of services and the transformation of society to a participation society, there is an increased focus of governments on the stimulation of citizen initiatives and the usage of their knowledge for the delivery of services. According to Nederhand, et all (2014, p.2), new public services can be realized if governments strive to use the capacity of citizen initiatives and grass-roots organization. Not only governments benefit from the interaction with citizens and citizen initiatives, the initiatives often need the local government for the realization of the initiative. Both parties are searching for ways to collaborate (Kennisland, n.d., p.14). However, for a lot of citizen initiatives, the current revenue-models and legal & bureaucratic systems are not always suitable for citizen initiatives. They strive for new systems but are bound by the current (governmental) systems of society, which does not positively influence space of experimentation. So, there is a mismatch between the government and its governance and the pursuit of citizen initiatives (Kennisland, n.d., p. 10). According to Meijer, et all (2009, p.99), important for public participation is the interaction between citizens. Many of these interactions nowadays take place on the internet. Citizens search for platforms where they can exchange ideas and pursue common goals. Understanding these online platform interactions and being able to use or facilitate these processes is crucial for steering in the public sector (Also mentioned by Khasawneh & Abu-Shanab, 2013, p. 10). What is seen more and more nowadays is that municipalities introduce online platforms (also mentioned by Schmidthuber, et all, 2017, p.457) where municipalities collect, connect and help citizen initiatives for the city. The platforms facilitate innovation and interaction. Governments often have a more facilitating role (McKenna, 2016, p. 95).

The potential of citizen participation and the usage of online platforms for stimulating citizen initiatives is promising. However, governments are rather slow in adapting and utilizing certain platforms. This is also pointed out by Gooch, et al (2018, p. 1): 'Many smart city projects are beginning to consider the role of citizens. However, current methods for engaging in urban populations in participatory design activities are somewhat limited'. There supposedly is a gap between the promising ideas of new technologies and the actual operation of the technologies in governmental organizations (Meijer & Thaens, 2010, p. 114)(Meijer, et all, 2012, p. 59)(Meijer, 2015, p. 198). According to the WRR (2012, p. 12), it is shown that, in order to fully benefit from citizen potential and citizen initiatives, policy-makers should create space for engagement and initiatives. So, local governments have to find ways to guide the organization through the process of necessary change in order to be able to stimulate citizen initiatives (Meijer & Zouridis, 2004). However, there is a lack of usable mechanism and frameworks that give insight in and promote bottom-up collaboration and participation (Khan, et all, 2017, p. 48). This is also pointed out by Townsend (2015, p. 210): 'As new styles of urban research extend their partnership to include citizen groups as well, the complexity of stakeholder management will multiply. But active citizen involvement has the potential to make the research process more transparent, accountable, and ultimately useful for improving the lives of city dwellers. The great challenge for new urban scientists won't be creating new knowledge but creating the frameworks that establish an open and level playing field for all involved'. Hence, insight is needed in the organizational structure of local governments for the stimulation of citizen initiatives. Besides, insight is needed in the (possibilities of) online platforms for citizen initiatives and the usage and added value of the platforms.

#### Method

#### Main research question

How can citizen initiatives for urban development, facilitated by Dutch municipalities, be stimulated by using online platforms?

#### Research sub questions

The sub questions help in building up the answer to the main research question and guide the research:

- 1. What is smart governance?
- 2. In what ways do governments engage and participate with citizens?
- 3. How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives?
- 4. How can municipalities facilitate citizen initiatives for urban development?
- 5. What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment?

#### Research method

To give answers to the research question, a hybrid research method is used. The research method combines empirical and theoretical research.

The research starts with an explorative literature review. This literature review forms a theoretical framework that provides answers to the first three sub questions.

Sub question one: What is smart governance? Provides a contextual understanding of contemporary governance practices that focus on smart collaborations with stakeholders. It also touches upon the topics of open governance & egovernance. The literature research uses different sources like journal articles, scientific papers, books and internet pages. The chapter results in an overview of frameworks for smart governance and a general understanding of contemporary governance practices.

The second sub question: In what ways do governments engage and participate with citizens? Focusses on the citizen perspectives in smart governance. It shows how and in which ways governments engage and participate with citizens. Again, different sources like journal articles, scientific papers, books and internet pages are used to provide and answer to the sub question. The chapter results in an overview of ways that governments use to engage with its citizens, from the provision of information to the active collaboration with citizens.

The third sub question: How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives? Provides an overview of how local governments deal with citizen initiatives, and what the role of online platforms is when dealing with citizen initiatives, based on the review of different sources like journal articles, scientific papers, books and internet pages, but also based on policy documents from the Dutch government and local municipalities. The result of the chapter is an overview of literature insight on citizen initiatives and policies on participatory governments.

After the explorative literature review, the empirical research starts. According to Cahoy (2017), empirical research focusses on observations and derives the knowledge from real life experiences instead of deriving knowledge from theories. The empirical research provides answers to both sub question four:

How can municipalities facilitate citizen initiatives for urban development? And sub question five: What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment? Answers to both sub questions are given by the analysis of case studies.

According to Yin (1994, p. 8), a researcher can choose for a case study when the researcher has no control of or access to the actual behavioral events. Since in this research there is no control on how governments facilitate citizen initiative platforms and characteristics of the online platforms and their impact on the built environment, a case study research is relevant. 'The case study's unique strength is its ability to deal with a full variety of evidence – documents, artifacts, interviews and observations (Yin, 1994, p.8). The case study research reviews the available documents and artifacts and conducts in depth semi-structured interviews with diverse stakeholders that are involved with the case studies and analyses online platforms and their data. It is chosen to do a multiple case study to compare the results of the case study. According to Yin (1994, p. 45), 'the evidence from multiple case studies of often more compelling and the overall study is therefore regarded to be more robust'. The case studies are compared by a cross case analysis. A cross case analysis can mobilize knowledge from multiple case studies. It 'facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies'. The individual cases are compared and contrasted and by doing so, new knowledge is created (Khan & VanWynsberghe, 2008).

The final stage of the research is called the synthesis. A synthesis combines different parts into a new 'whole' (Bloom, et al, 1956). The results from the theoretical framework and empirical research are used to provide an answer to the main question. The explorative literature review and the empirical case study research have an inductive approach. According to Bryman (2012, p.26), with inductive research, the outcome of the research is theory. The theory is drawn from observations. The literature review and the case study research form the input for the synthesis. In this stage of the research, theory and recommendations are established that show how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms.

# Main findings

# How can citizen initiatives for urban development, facilitated by Dutch municipalities, be stimulated by using online platforms?

Online platforms for citizen initiatives can be used as a form of smart governance, if municipalities decide to play a role in the online platforms for citizen initiatives. According to Giffinger et al (2007, p.4), the four elements of smart governance are participation in decision-making, public & social services, transparent governance, political strategies and perspectives, some of them also mentioned by Meijer (2016, p.74) & Viale Pereira, et all (2017, p. 4 & 21). Besides, it's a managerial way to organize collaborations between governments and other stakeholders (Meijer, 2016, p.74), facilitated by technology (Garcia Alonso & Lippez-de Castro, 2016, pp. 336-337). Online platforms can facilitate these elements, if they are built in the right way and if municipalities are actively engaged in the platforms, by giving reactions/ feedback to the initiatives, openly show which initiatives are supported and why and by actively asking citizens for help/ ideas in certain projects. Essential for citizen participation is the fact that citizens opinions are actually heard and evaluated (Bertnzen & Johannessen, 2016, p. 303). Considering de Zeeuw & Pieterse (n.d., pp. 11-13, 23), platforms only work when citizens get a real influence on the decision making. Digital democracy does offer the tools, but these tools need to be a part of the decision making process in order to work. The online platforms for citizen initiatives provide online tools for engagement and collaboration, for instance tools that facilitate voting and giving reactions, tools that show the involvement of the municipality with certain initiatives, tools that show the location of initiatives and

tools where municipalities or other parties can ask for specific ideas on specific locations. It can be decided to let the platforms focus on self-organization, co-production or only information sharing.

ICT, big data, social media and other platforms boost the interaction between governments and the public. Besides, (local) governments can facilitate participation, co-creation and/ or citizen initiatives, by creating space, developing frameworks and guiding and assessing the processes and outcomes. Online platforms for citizen initiatives have the ability to provide this space, these frameworks and the guiding and assessing of the processes and outcomes. Actively showing the possibilities for participation, co-creation and citizen initiatives to citizens is seen as a strength. However, this does not mean that all municipalities in the Netherlands are using online platforms for citizen initiatives. From the 18 platforms that were assessed, on 1/3 of the platforms there was no involvement of municipalities on the platform.

This does not mean that those municipalities do not focus on citizen participation, co-creation and/ or initiatives at all. Municipalities often doubt if online platforms for citizen initiatives are the best 'form' or 'model' to facilitate citizen participation, co-creation and/ or initiatives. Municipalities often experience difficulties in generating traffic to the online platforms for citizen initiatives. The platforms often need a continuous stimulation and promotion, otherwise the amount of initiatives and interaction on the platform stagnates or decreases. Besides, there are often difficulties in checking if initiatives are realized or not and keeping this information up-to-date. Also, there are quite some platform where the municipality does not react or actually does something with the initiatives (the municipality is not involved). When looking to the ladder of participation from Arnstein (1969, p. 217), many platforms stay at the level of tokenism, citizens 'hear and are heard', but they do not have the power to make sure that their views become powerful/ are used by the ones with power. There are some exceptions where the platforms go a level further to the levels of 'citizen power', which are levels where the citizens actually take part in decision making (for instance the platform Stem van West).

Municipalities do not need to develop online platforms for citizen initiatives on their own. Involving web developers in the development and maintenance of the platforms can be of great benefit. Municipalities sometimes already use other channels (both online as offline) for participation, co-creation or initiative purposes. Forcing the usage of online platforms for citizen initiatives can be a threat if the other channels are already very well used and if they already generate a lot of content.

However, it is a strength when municipalities facilitate citizen participation, co-creation and/or initiatives, especially when the higher level of the municipal organization allows for experimentation on these matters. It is a weakness when municipalities do not have citizen participation, co-creation and/or citizen initiatives as a fixed item in the municipal organization. According to VNG (2017), for municipalities, it is no longer the question if citizens come up with initiatives, but how municipalities can work together with the citizen initiatives, what the roles and responsibilities are and what this means for the democratic processes at the municipalities. Following Scholl & Scholl (2014, pp. 166-168) participation & collaboration need to be applied in many elements of the municipal organization: norms, policies, practices, information, technologies and skills. This also means that it needs to be applied in multiple and various departments of the municipal organization, which is not yet happening. According to Scholl & Scholl (2014, p. 165), a smart government manages the city by using ICT's and actively involves and collaborates with stakeholders. Also, smart governance uses 'nonhierarchical and nonmarket forms of organization in the public sector', with networking environments that are necessary for public management due to the complex networks of organizations (Rodriguez Bolivar, 2016, pp. 53-54). What is seen is that quite some municipalities are experimenting with using ICT's and collaboration with stakeholders, but that it is often in the starting phase and not used or done by the whole municipal

organization. One can argue that the municipalities in the Netherlands are starting to become smart governments, with an emphasis on starting.

This does require a change of mindset from civil servants, from the traditional ways of working into participatory ways, which is also mentioned by Scholl & Scholl (2016, pp. 166-168). Serious gaming can be used to change this mindset of civil servants and to get them known with citizen participation, co-creation and/ or initiatives. It is seen as a strength when municipalities show their vulnerability and ask citizens for help in the design of policies and in decision making. Though, municipalities need to be aware that they do learn from their experiments and pilots on citizen participation, co-creation and/ or citizen initiatives, and that they implement their lessons into the municipal organization. Besides, municipalities should be aware of the fact that citizen participation, co-creation and/ or citizen initiatives not only require a different mindset from the municipal organization, but also from the citizens. Therefore, expectations of citizens for citizen participation, co-creation and/ or initiatives need to be managed, and the frameworks in which this happens need to be clear.

The influence of municipalities that use online platforms for citizen initiatives and the influence of municipalities that are active on those platforms is not to be underestimated. The research shows that the only variable that is of influence on the phase of the initiative (if an initiative gets realized or not), is the involvement of the municipality. So when the municipality is involved in an initiative, there is a higher change that the initiative gets into the process of realization and/or gets realized. Besides, the amount of votes and the average household income in an area influence the involvement of the municipality. The higher the amount of votes on an initiative, the higher the likelihood that the municipality is involved with an initiative. Also, the higher the average household income in an area, the higher the amount of initiatives where the municipality is involved. It also shows that the higher the average amount of household income in an area, the higher the amount of votes on an initiative. Besides, the research shows that if there is a high percentage of children in an area, the amount of votes decreases, and the higher the percentage of adults in an area, the higher the amount of votes. This is shown in figure 1.

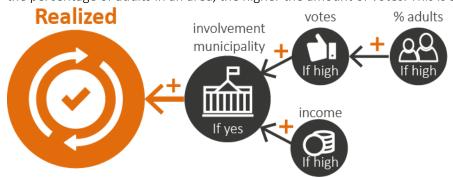


Figure 1. Influence on the phase of the initiative (Own illustration, 2018).

It is interesting to see that the chance that the municipality is involved in an initiative is high in areas where the average income is high. In general, the areas with a high income are often the better areas in the city, where the involvement of the municipality in making an area better is not as much 'needed' as it is in the low income areas. Meijer (2016, p.75) calls this the 'nature of the problem domain'. Situational characteristics such as culture, democratic institutions, local economy and the physical environment matter for the effectiveness. One might expect that the involvement of the municipality should be higher in the low income areas. However, municipalities tend to be more involved with initiatives & projects that are well-thought-out. In the interviews, it became clear that one of the success factors for initiatives is a clearly thought out initiative, well-written text, it's about selling an initiative. In high-income areas, residents/initiators often have more possibilities and capabilities to make this happen, they are often

better educated, or often have more people in their neighborhood/ network with certain knowledge or expertise that might help with a certain initiative (please note that this has not been scientifically tested in this research, so it stays an assumption). This is sometimes called the 'Matthew-effect', first noticed by Merton (1968, pp. 56-63). In the Bible in Matthew 13:12, the apostle Matthew teaches: 'Whoever has will be given more, and they will have an abundance. Whoever does not have, even what they have will be taken from them'. This can be roughly translated to 'the rich will get richer and the poor will get poorer'. Uitermark (2012), states that self-organization (initiatives) is inventive if initiators have a strong network and a better capacity for self-organization. People with strong networks that are often close to the (local) government, have more chance to develop plans together with the (local) government. Engbersen & Snel (2015), point out that citizen participation only works in the rich and white neighborhoods, where privileged social and economic positions yield extra benefits. Their research shows that in neighborhoods with the lowest incomes and a high level of ethnic diversity, citizen participation is happening significantly less often compared to the richer neighborhoods in the city.

So far, the conclusion from this research sound the same as the conclusions from the research of Engbersen & Snel (2015). However, according to literature, ICT should provide and facilitate new possibilities for participation, with the combination of different networks and the collaboration between different networks, where the innovativeness of different parties is combined in these collaborations with active involvement from every sector of the community, enabled by ICT, big data and social media (f.i. McKenna, 2016, pp. 90-94). Due to ICT usage, a network of stakeholders (government and the public) can cooperate more efficiently. The ICT platforms can facilitate the sharing of information and create a collaborative environment because of increased interoperability (Lee, et all, 2014, pp. 83-85). Individuals have the possibility to reach a large amount of people through the network possibilities of online platforms (Priester, 2017, p.4). According to van der Graaf & Veeckman (2014, p. 76 & 78), with the right types of ICT, every citizen should be able to have an active role in the development of their urban space. Besides, governance 2.0 & ICT improved citizen-to-citizen communication & collaboration. Online platforms for citizen participation often facilitate the creation of networks and communities, which results in the sharing of different fields of knowledge (Falco & Kleinhans, 2018, p. 4). Also, formerly, coproduction was limited by the government's (in)ability to coordinate citizens and their actions and limited by the (in)ability of regular citizens to self-organize themselves. Online platforms for citizen participation reduce these limitations by the interactive possibilities of the platforms (Linders, 2012, p. 446). So, according to theory, with the help of ICT and online platforms, citizens should have a more equal possibilities for participation, since networks are combined online. So, citizens in the poor city areas should be able to reach the knowledge or help from citizens in the rich area, due to the online connection of networks. If one believes the theory, the average area income should not have an influence on the involvement of the municipality with certain initiatives, since citizens should be able to reach the same networks online. Apparently, the theory has a more 'utopian' and inclusive view on online citizen participation, co-creation and/or initiatives facilitated by ICT than what is actually the case in real-life.

Besides, initiators often experience difficulties in getting their initiative realized, which is shown in both the interview research as the platform data research. Most of the initiatives that are posted on the platforms stay in the 'idea phase', meaning that they are put online on the platforms, after which nothing is done with the initiatives (yet). People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea, or have difficulties with getting their initiative realized. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline). Though, it is noticed that initiatives often require extra help from municipalities or other parties in the form of advice, networks or money, which is also mentioned by for instance WRR (2012, p. 62 and

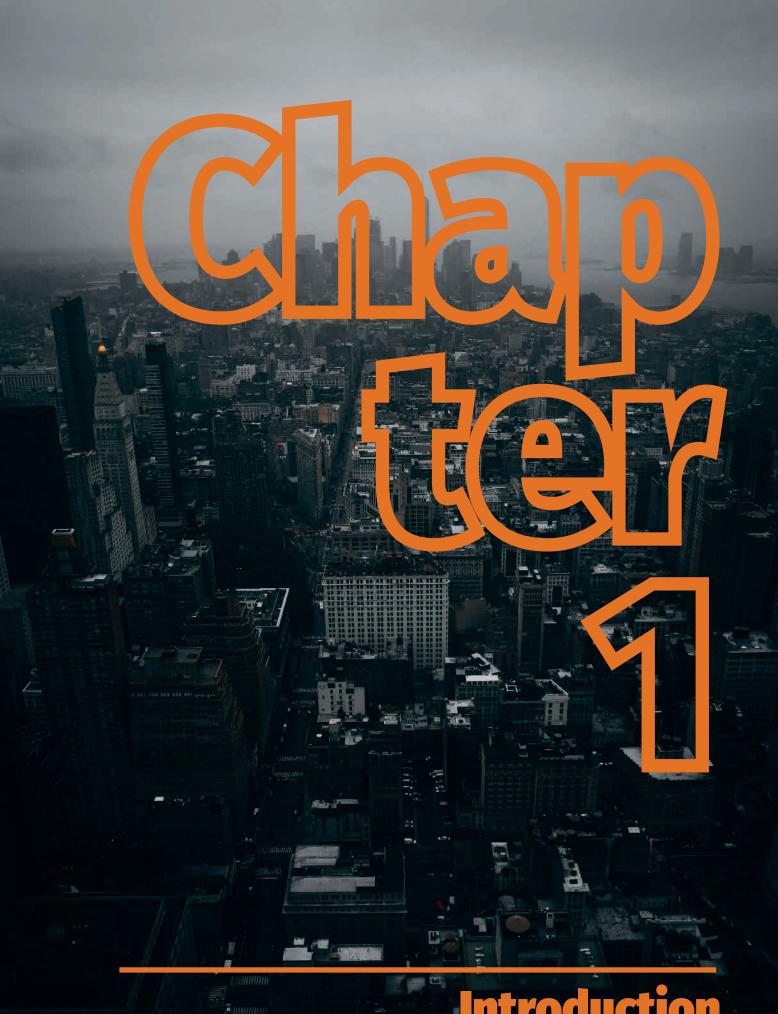
pp.107-128). Municipalities can set up focus and network groups that help citizens with the realization of their initiative. Initiators benefit from clear contact with municipalities. This can be in the form of 'one entrance' for initiators, where all the information about (the process) of citizen participation, co-creation and/ or initiatives is provided and where the initiatives are helped. Online platforms for citizen initiatives can be the medium that facilitates/ provides this information. Besides, analyzing the content that is generated on the platforms provides insight to the municipalities and helps municipalities to better facilitate their citizens with participation, co-creation and/ or citizen initiatives. Besides, initiators that are active on online platforms and active in getting their initiatives realized create a lot of knowledge, valuable for other initiators and for municipalities. Municipalities can (indirectly) influence participation, co-creation and citizen initiatives by clearly informing their citizens and by bringing together active citizens with ideas and organization power on online platforms and offline meetings. Often, the (social) worth of citizen participation, co-creation and/ or initiatives is not acknowledged by other parties. The new environment and planning act brings the possibility to legally enforce the rules for participation, forcing the external parties to acknowledging the worth of citizen participation, co-creation and/ or initiatives.

#### Recommendations

- 1. Do not see online platforms for citizen initiatives as the (main) key to success for the facilitation of citizen participation, co-creation and/ or citizen initiatives.
- 2. Be actively involved with citizen participation, co-creation and/ or citizen initiatives and keep a continuous stimulation of citizen participation, co-creation and/ or citizen initiatives and the online platforms.
- 3. Keep track of the online data generated by the platforms, the data provided by the municipality itself and keep the data up-to-date.

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# Introduction

#### Context

The urbanization of the world is a visible concept for already more than half a century and still continuing. The world population keeps on locating themselves in cities. In 1995, more than 50% of EU citizens lived in urban areas, which increased to 75% of EU citizens living in urban areas in 2010. It is forecasted to grow to 85% over the coming 40 years. Besides, the average size of urban areas and cities substantially increased (Caragliu, et all, 2011, pp.65-66). This leads to what Kourtit, et all (2017, p.14) call 'the rise of the urban century'. Urban agglomerations gained a strong position with metropolitan areas. These areas are the 'rulers' in the world that shifted to an urbanized world. However, Kourtit, et all (2017, p.14) also points out that these urban areas are faced with many challenges, amongst others environmental decay and climate change, with in particular scarce resources, greenhouse gasses and water shortage, but also the exclusion and segregation of groups of citizens and safety issues.

## City livability

The magnitude of the problems caused by rapid urbanization gained a lot of attention of governments all over the world and resulted in counteractions that led to sustainable urban development (Yin, et all, 2015, p. 449). The high velocity of urban growth and urbanization results in sustainable urban development to be crucial in affecting the long-term outlook of humanity and the world (Yin, et all, 2015, p.449). Sustainable urban developments are supposed to make a city more 'livable'. With cities increasingly growing, 'cities become the means by which humans can live sustainable lifestyles, balancing environmental, economic and social priorities, taking advantage of economies of scale and their concomitant efficiencies (Leach, et all, 2017, p.80)'. According to Liu & Han (2017, p. 1681), 'It is reasonable to believe that livability, which calls for a harmonious nature—human living environment for citizens, will be the ultimate goal for city development'. Liu & Han define that the key characteristic of livability is 'a city or region that is attractive to people's living and wellbeing (Liu & Han, 2017, p. 1682)'.

# Smart cities as a solution for city livability

Urban planners design complex systems that deal with the challenges of urbanization and livability. The quality of these systems and their input have a direct relation to the quality of life and the livability for the city's residents (Caragliu, et all, 2011, p.65). The growing awareness on the challenges caused by rapid urbanization 'urges urban development to not only minimize the use of resources and the spatial displacement of environments, but also improve the efficiency (Yin, et all, 2015, p. 450)'. This urge for efficiency desires the necessity of urban models that promote efficiency, like 'smart grids' and 'smart cities' (Amado, et all, 2016, p.478). However, another challenge for urban agglomerations is the complexity of urban development caused by the large number of actors and forces involved in (sustainable) urban development. Cities with an 'integrated and balanced' urban management, which considers the actors and forces that influence the urban development, are believed to achieve a higher performance than cities that lack integrated urban management (Kourtit, et all, 2017, p.15). In an essay about democracy, van Reybrouck (2013, pp. 10-13), explained that every political system needs to find a balance between efficient solutions and legitimate solutions where citizens agree upon. However, the trust in parliaments, governments and political parties is historically low. Besides, research also showed that many politicians thought that citizens had other and less valued ideals, which results in a massive gap between governments and the public.

#### Smart governance

ICT systems offer new possibilities for governments to engage with stakeholders in order to design more legitimate solutions for a livable and sustainable city. According to Viale Pereire, et all (2017, p. 1), 'ICT has an important role in supporting information sharing and integration between government agencies and external stakeholders, including citizens', which is also pointed out by (Oni, et all, 2017, p. 317). The role of citizens in participatory governance is not to be underestimated: due to their competence, local knowledge and awareness of issues, better plans and services can be designed. Besides, communities also expect a higher level of engagement in the planning of their communities and cities (Khan, et all, p. 48). However, Thomas, et all (2016, pp. 2-4), found out that in most smart city literature, the residents of the smart city are mostly absent and uninvolved with smart city research. 'People are not at the core of the smart city; rather, people matter merely because of their ability to provide the data that drives the smart city'.

## Citizen participation

Smart governance is partly based on the collaboration with external parties, not only with professional private parties, but also with the 'regular' citizens of the city. Citizen participation and engagement is one of the four key components of the Open Government Partnership Declaration (Barns, 2016, p. 558). Besides, smart cities and communities can benefit greatly from citizen participation (Berntzen & Johannessen, 2016, p. 303). According to Viale Pereira, et all (2017, p. 6), there's a growing interest, both in governmental practice as in academic research, in the transformed 'relations between the state and citizens enhanced by ICT, especially in public participation or decision-making with citizens participation', which is also pointed out by Khan, et all, (2017, p. 47), Berntzen & Johannessen (2016, p.302) and de Mello Miranda, et all (2016, p. 316). According Gooch, et al (2018, p. 2), it can be morally argued that citizens have the right to be involved in the design of the city. Pragmatically, it is noticed that the input of users improves the success of designed solutions since it meets the user's needs. Besides, in the Netherlands, society is changing from a welfare state (verzorgingsstaat), to a participation society. Citizens are ought to take more responsibilities for their living environment and the government pulls back with a more facilitating role. This process is accelerated by the economic crisis in 2008. Cut backs in government spending resulted in more space for social and bottom-up initiatives for service delivery (Kennisland, n.d., p.14).

During the congress 'Back to the Future', organized by VNG, the association of Dutch municipalities on the 28<sup>th</sup> of March, 2018, managing director Jantine Kriens and Irma Woestenberg, head of the taskforce collaboratively organizing of VNG, discussed the challenges and directions for Dutch municipalities. They stipulated the fact that nationwide policy is no longer sufficient and that municipalities need to focus on local policies, focused on realization in practice. Policies should be facilitated by technology to get closer to the citizen. Besides, municipalities should collaborate and learn from each other. The VNG realized that municipalities were lagging behind companies, not enough and especially way too late realizing that the public value is important. Besides, municipalities need to substantially change service delivery for their citizens, right now, accompanied by a digital transformation (also mentioned by Bekkers, 2017). Otherwise, the digital transformation will outpace the municipality and will make the municipality unnecessary. The main priority is that citizens need to be facilitated by the municipal organization, which currently is not always the case.

## Online platforms

One of the main digital trends according to the VNG, is the usage of online platforms, where transactions between providers and users can take place expeditiously (VNG, n.d.), which is also mentioned by many companies and institutions world-wide (Accenture, 2016) (CMS Wire, 2017) (G2 crowd, 2018). The role of citizens is changing, they have multiple channels to show their disagreement and they are increasingly using these channels to show their disagreement. As a result, there's an urge for municipalities to change their communication, but also for the creation of space in the decision-making processes for new forms of input, acknowledging the changing role of citizens. With the creation of platforms for participation, municipalities can enable citizens to take part in the decision making process and structurally involve citizens in these processes. Not only to react on plans, but also to take part in the design of the plans (de Zeeuw & Pieterse, n.d., p. 8). According to Falco & Kleinhans (2018, p. 1), there is an increased attention for collaboration and participation of citizens in government activities in many disciplinary fields, derived from the potential of new media, digital platforms and other digital tools for the interaction between municipalities and citizens. A publication by van Dijck, Poell & de Waal (2016, p. 9), learns us that in the past couple of years, many platforms arose in the Netherlands that aim to improve the life and the interaction between citizens in their neighborhoods, by providing an online meeting place, a platform, where neighbors can communicate and interact to improve the livability of the neighborhood.



# Research method

#### Research relevance

## Problem definition & Knowledge gap

With smart governance, citizen participation for the delivery of services and the transformation of society to a participation society, there is an increased focus of governments on the stimulation of citizen initiatives and the usage of their knowledge for the delivery of services. According to Nederhand, et all (2014, p.2), new public services can be realized if governments strive to use the capacity of citizen initiatives and grass-roots organization. Not only governments benefit from the interaction with citizens and citizen initiatives, the initiatives often need the local government for the realization of the initiative. Both parties are searching for ways to collaborate (Kennisland, n.d., p.14). However, for a lot of citizen initiatives, the current revenue-models and legal & bureaucratic systems are not always suitable for citizen initiatives. They strive for new systems but are bound by the current (governmental) systems of society, which does not positively influence space of experimentation. So, there is a mismatch between the government and its governance and the pursuit of citizen initiatives (Kennisland, n.d., p. 10). According to Meijer, et all (2009, p.99), important for public participation is the interaction between citizens. Many of these interactions nowadays take place on the internet. Citizens search for platforms where they can exchange ideas and pursue common goals. Understanding these online platform interactions and being able to use or facilitate these processes is crucial for steering in the public sector (Also mentioned by Khasawneh & Abu-Shanab, 2013, p. 10). What is seen more and more nowadays is that municipalities introduce online platforms (also mentioned by Schmidthuber, et all, 2017, p.457) where municipalities collect, connect and help citizen initiatives for the city. The platforms facilitate innovation and interaction. Governments often have a more facilitating role (McKenna, 2016, p. 95).

The potential of citizen participation and the usage of online platforms for stimulating citizen initiatives is promising. However, governments are rather slow in adapting and utilizing certain platforms. This is also pointed out by Gooch, et al (2018, p. 1): 'Many smart city projects are beginning to consider the role of citizens. However, current methods for engaging in urban populations in participatory design activities are somewhat limited'. There supposedly is a gap between the promising ideas of new technologies and the actual operation of the technologies in governmental organizations (Meijer & Thaens, 2010, p. 114)(Meijer, et all, 2012, p. 59)(Meijer, 2015, p. 198). According to the WRR (2012, p. 12), it is shown that, in order to fully benefit from citizen potential and citizen initiatives, policy-makers should create space for engagement and initiatives. So, local governments have to find ways to guide the organization through the process of necessary change in order to be able to stimulate citizen initiatives (Meijer & Zouridis, 2004). However, there is a lack of usable mechanism and frameworks that give insight in and promote bottom-up collaboration and participation (Khan, et all, 2017, p. 48). This is also pointed out by Townsend (2015, p. 210): 'As new styles of urban research extend their partnership to include citizen groups as well, the complexity of stakeholder management will multiply. But active citizen involvement has the potential to make the research process more transparent, accountable, and ultimately useful for improving the lives of city dwellers. The great challenge for new urban scientists won't be creating new knowledge but creating the frameworks that establish an open and level playing field for all involved'. Hence, insight is needed in the organizational structure of local governments for the stimulation of citizen initiatives. Besides, insight is needed in the (possibilities of) online platforms for citizen initiatives and the usage and added value of the platforms.

#### Social relevance

With the shift from a welfare society to a participation society, Dutch local-governments pull back to have a more facilitating role, putting more responsibilities on citizens for the care-take of their living environment, resulting in more space for social and bottom-up initiatives for service delivery (Kennisland, n.d., p.14). This changes the traditional ways in which governments and citizens interact with each other. According to Nederhand, et all (2014, p.2), new public services can be realized if governments strive to use the capacity of citizen initiatives and grass-roots organization. Not only governments benefit from the interaction with citizens and citizen initiatives, the initiatives often need the local government for the realization of the initiative. Both parties are searching for ways to collaborate (Kennisland, n.d, p.14). However, the systems used by governments for the collaboration with citizens mismatch the systems that are needed for citizens to pursue their initiative. Online platforms for citizen initiatives, facilitated by local governments, can decrease the mismatch between these systems. Insight in the organizational structure of local governments that is needed for the stimulation of citizen initiatives and insight in the usage online platforms for citizen initiatives is relevant for development of citizen centered livable cities.

## Scientific relevance

According to Viale Pereira, et all (2017, p. 6), there's a growing interest, both in governmental practice as in academic research, in the transformed 'relations between the state and citizens enhanced by ICT, especially in public participation or decision-making with citizens participation', which is also pointed out by Khan, et all, (2017, p. 47), Berntzen & Johannessen (2016, p.302) and de Mello Miranda, et all (2016, p. 316). There is an increased focus from governments on online ways to pursue collaboration with citizens, for instance with online platforms for citizen initiatives. However, governments are rather slow in adapting and utilizing certain platforms. There is a gap between the promising ideas of new technologies and the actual operation of the technologies in governmental organizations (Meijer & Thaens, 2010, p. 114)(Meijer, et all, 2012, p. 59)(Meijer, 2015, p. 198), also due to a lack of usable mechanisms and frameworks that give insight in and promote bottom-up collaboration and participation (Khan, et all, 2017, p. 48) also pointed out by Townsend (2015, p. 210). Besides, according to Falco & Kleinhans (2018, p. 15), many scholars stipulate the fact that 'internet-facilitated co-production has not yet been systematically studied. Also van Gooch, et al (2018, p. 2), mention that there are few empirical studies on the process of involving citizens at scale in city development where citizens are seen as collaborators rather than users. Besides, the insight in meaningful procedures to include citizens in urban scale design is limited. This research aims to provide an scientific base on the organizational structure of municipalities for the stimulation of citizen initiatives and participation and the deployment of online platforms for citizen initiatives in the Netherlands. Besides, no research was found on the impact on the built environment of online platforms for citizen initiatives. This report aims to fill this gap in literature and research.

# Research questions

# Main research question

The central focus point of the research which helps to reach the research objectives is the main research question stated below:

How can citizen initiatives for urban development, facilitated by Dutch municipalities, be stimulated by using online platforms?

#### *Research sub questions*

The sub questions help in building up the answer to the main research question and guide the research:

- 1. What is smart governance?
- 2. In what ways do governments engage and participate with citizens?
- 3. How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives?
- 4. How can municipalities facilitate citizen initiatives for urban development?
- 5. What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment?

#### Research Method

The research process is divided in five different phases (p1-p5). Each phase consists of the collection and analysis of data and every phase gives input into the next phase. This paragraph explains the methods that are used in the research process.

## *Type of study*

To give answers to the research question, a hybrid research method is used. The research method combines empirical and theoretical research.

The research starts with an explorative literature review. This literature review forms a theoretical framework that provides answers to the first three sub questions.

Sub question one: What is smart governance? Provides a contextual understanding of contemporary governance practices that focus on smart collaborations with stakeholders. It also touches upon the topics of open governance & egovernance. The literature research uses different sources like journal articles, scientific papers, books and internet pages. The chapter results in an overview of frameworks for smart governance and a general understanding of contemporary governance practices.

The second sub question: In what ways do governments engage and participate with citizens? Focusses on the citizen perspectives in smart governance. It shows how and in which ways governments engage and participate with citizens. Again, different sources like journal articles, scientific papers, books and internet pages are used to provide and answer to the sub question. The chapter results in an overview of ways that governments use to engage with its citizens, from the provision of information to the active collaboration with citizens.

The third sub question: How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives? Provides an overview of how local governments deal with citizen initiatives, and what the role of online platforms is when dealing with citizen initiatives, based on the review of different sources like journal articles, scientific papers, books and internet pages, but also based on policy documents from the Dutch government and local municipalities. The result of the chapter is an overview of literature insight on citizen initiatives and policies on participatory governments.

After the explorative literature review, the empirical research starts. According to Cahoy (2017), empirical research focusses on observations and derives the knowledge from real life experiences instead of deriving knowledge from theories. The empirical research provides answers to both sub question four: How can municipalities facilitate citizen initiatives for urban development? And sub question five: What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment? Answers to both sub questions are given by the analysis of case studies.

According to Yin (1994, p. 8), a researcher can choose for a case study when the researcher has no control of or access to the actual behavioral events. Since in this research there is no control on how governments facilitate citizen initiative platforms and characteristics of the online platforms and their impact on the built environment, a case study research is relevant. 'The case study's unique strength is its ability to deal with a full variety of evidence – documents, artifacts, interviews and observations (Yin, 1994, p.8). The case study research reviews the available documents and artifacts and conducts in depth semi-structured interviews with diverse stakeholders that are involved with the case studies and analyses

online platforms and their data. It is chosen to do a multiple case study to compare the results of the case study. According to Yin (1994, p. 45), 'the evidence from multiple case studies of often more compelling and the overall study is therefore regarded to be more robust'. The case studies are compared by a cross case analysis. A cross case analysis can mobilize knowledge from multiple case studies. It 'facilitates the comparison of commonalities and difference in the events, activities, and processes that are the units of analyses in case studies'. The individual cases are compared and contrasted and by doing so, new knowledge is created (Khan & VanWynsberghe, 2008).

The final stage of the research is called the synthesis. A synthesis combines different parts into a new 'whole' (Bloom, et al, 1956). The results from the theoretical framework and empirical research are used to provide an answer to the main question. The explorative literature review and the empirical case study research have an inductive approach. According to Bryman (2012, p.26), with inductive research, the outcome of the research is theory. The theory is drawn from observations. The literature review and the case study research form the input for the synthesis. In this stage of the research, theory and recommendations are established that show how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms.

## Methods, techniques and data collection & analysis

As already explained above, the research consists of three different stages, all with a different method. An overview of the different stages, used methods and techniques and the sub questions which they apply to, is shown in figure 2, Research method phases.

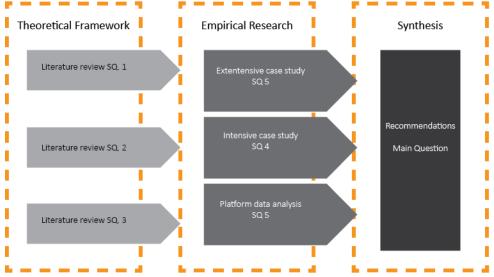


Fig. 2. Research method phases (Own illustration, 2017).

#### Theoretical Framework

An explorative literature study provides answers to sub question 1: What is smart governance, sub question 2: In what ways do governments engage and participate with citizens and sub question 3: How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives? The literature research uses different sources like journal articles, scientific papers, books and internet pages, but also policy documents from the Dutch government and local municipalities.

#### **Empirical Research**

A case study research is conducted, where a cross case analysis compares case study documents and the results from semi-structured interviews with relevant case study actors to give answers on sub question 4, how can municipalities facilitate citizen initiatives for urban development? And sub question 5, what are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment?

The first part of the empirical research is an extensive research that examines 18 online platforms for citizen initiatives on their characteristics. Thereafter, an intensive case study research is conducted, using semi-structured interviews investigating four online platforms and three municipalities. The final part of the empirical research consists of a platform data analysis, analyzing the data of the online platforms, focusing on initiatives for the built environment, in order to analyze the impact on the built environment of online platforms for citizen initiatives.

The case studies for the extensive research are collected through an internet research that searched for online platforms for citizen initiatives. All case studies use an online platform (site) for the purpose of collecting and publishing citizen initiatives. The case-studies that measured up to these characteristics are used for the extensive case-study research. The research uses a cross-case analysis, analyzing the case studies on the following aspects, with the data that was found online on the websites of the platforms:

- Owner
- Timeframe
- Location
- Amount of initiatives
- Tools
- Level of website interaction possibilities
- Level of citizen government relationship
- Focus on actively offering help to the initiatives in the process of realization

Several case studies from the extensive case-study research were contacted and municipalities that actively focused on facilitating citizen initiatives, participation and/ or co-creation were contacted as well. The case studies that responded positively and agreed to collaborate with the research were chosen as case study for the intensive case-study part.

The case studies that are used for the intensive case study research are four online platforms and three municipalities:

- Municipality of Utrecht
- Municipality of den Bosch
- Municipality of Delft
- Stadslab Breda (http://www.stadslabbreda.nl/default.aspx)
- Droomstad den Bosch (https://droomstaddenbosch.nl/)
- Stichting initiatief op Scheveningen (http://initiatiefopscheveningen.nl/)
- Buurbook (<a href="https://buurbook.nl/">https://buurbook.nl/</a>)

The interviews are semi-structured interviews and have open questions. Semi-structured interviews 'refer to a context in which the interviewer has a series of questions that are in the general form of an interview schedule but is able to vary the sequence of the question'. Semi-structured interviews offer the possibility to ask further questions in response to the answers of the interviewee (Bryman, 2012, p.212). This can help to go in-depth to any specific characteristics of the different case studies.

The interviews and the case study research focus on the STOPE development profile (Bakry, 2004). The STOPE development profile is a framework that can be used for the analysis of egovernment development. It provides a common base for developing and improving (electronic) government services. Thus, it can be applied to government led facilitation of online platforms that stimulate citizen initiatives. According to Falco & Kleinhans (2018, p.10), 'redefining how public agencies and urban stakeholders connect, interact, negotiate and make decisions according to a paradigm of co-production is of key importance'. The STOPE development profile consists of five elements:

- Strategy, elaborates on the vision (target) and the mission (reason) of the strategy.
- **Technology and data**, focusses on the technology that enables the development, like the IT that is used, the communication infrastructure and the internet services structure.
- **Organizations**, includes all organizations that deliver content to the development (partners), and organizations that use the development.
- **People**, consists of the users of the platform, and the staff and managers of the platform.
- Environment, is associated with three dimensions: knowledge, economy and management.

To give a complete answer to the research questions, an extra element is added to the STOPE framework: Succes and realization. According to Franzen, et all (2011, p.219), all governance activities in the end aim to lead to a successful development. This is the same for the establishment of platforms for citizen initiatives. The platform has no goal if it does not yield successful citizen initiatives. Therefore, it is relevant to investigate the factors that make a citizen initiative successful.

The case study research focusses on these six elements and compares the elements across the different case studies, as shown in table 1:

Type	Platform	Platform	Platform	Platform	Municipality	Municipality	municipality
Case	Stadslab Breda	Droomstad	BuurBook	Stichting initiatief op Scheveningen	Municipality of Utrecht	Municipality of Delft	Municipality of Den Bosch
Element				Scheveningen			Doscii
Strategy							
Technology/							
data							
Organizations							
People							
Environment							
Succes/							
realization							

Table 1. Case study analysis.

Several online platforms from the extensive case-study research are used for the final part of the empirical research: the platform data analysis. All over the world, a lot of digital platforms for citizen initiatives have been developed to facilitate co-production between citizens and sometimes also between citizens and governments. Previous studies have tried to give some overview of the platforms and tried to classify them. However, this has been done in a rather fragmented way (Falco & Kleinhans, 2018, p.1) and none of the previous studies have focused exclusively on the Dutch platforms. Besides, no research is found that investigates the impact of online platforms for citizen initiatives on the built environment. This part of the research aims to fill this gap in scientific research. The Platform data analysis analyses the data that is published on the online websites of the platforms for citizen initiatives. The online platforms

provide a lot of information on the type of initiatives that are proposed for the built environment. Besides, some platforms identify if the initiatives are realized or not and if for instance the municipality was involved with the plans. Additionally, since the location of the initiatives is often given, the data of the platforms can be linked to general data on the neighborhood of city. Combined, this data can provide information on the impact that the online platforms and the initiatives have on the built environment. The following data is analyzed (table 2):

Label	Variable
Platform data	
Name of the initiative	х
Platform	х
Year when initiative is posted on the platform	х
City	х
City area	
Initiative type	Street, park, building, sports location, playground, harbour/dock, river, square, boulevard
Initiative phase	Finished, in realization, idea, quit
Involvement municipality	Yes / no
Amount of reactions	Number
Amount of followers/ voters	Number
Aim of the initiative	Safer, greener, community, art, new location
Linked data	
Amount of residents in neighborhood	Number
Amount of non-western residents in neighborhood	percentage
Amount of residents in neighborhood with age below 19	percentage
Amount of residents in neighborhood with age between 20-64	percentage
Amount of residents in neighborhood with age older then 64	percentage
Amount of houses in neighborhood	number
Amount of houses owner-occupied	Percentage
Amount of houses rental	Percentage
Household income	Number
Amount of households single	Percentage

Amount of households living together, marries, partners, kids	Percentage
etc (non-single)	

Table 2. Platform data analysis framework (Own Illustration, 2018).

The platforms that are analyzed are:

- https://droomstaddenbosch.nl/
- https://wijzijndroomstadnijmegen.nl/
- https://halloijburg.nl/
- https://stemvanwest.amsterdam.nl/
- http://www.zocity.nl/
- http://www.jijmaaktdebuurt.nl/
- https://goudabruist.nl/

The linked data that is used is derived from the following websites:

- https://www.buurtinzicht.nl/
- https://www.ois.amsterdam.nl/feiten-en-cijfers/buurtmonitor
- https://www.kennispunttwente.nl/cijfers-trends/cijfers-trends-enschede/
- https://gouda.incijfers.nl/
- https://s-hertogenbosch.buurtmonitor.nl/
- https://nijmegen.buurtmonitor.nl/

The selection is based on the information that is provided on the website. Besides, the disclaimers and privacy statements on the websites were checked to make sure that is was allowed to analyze the information provided on the website. The platforms that are analyzed all contain a description of the initiative, a location and an option to give reactions or follow the initiative. The analysis is carried out with the program SPSS. In total, 429 initiatives are analyzed.

#### **Synthesis**

Input from the theoretical framework and the empirical research is used to establish conclusions and recommendations that explain how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. It gives the answer to main question. The input from the case study research and literature study form the content of the conclusion and recommendations.

#### Data Plan

The data that the research uses and creates, will be processed with respect to the FAIR guiding principles (Wilkinson, et al. 2016, p.4).

- Findable: the data used for the literature review will be referenced according to APA6th in text and in the reference list. The data that is provided from the case studies might be anonymized if that is the wish from the case study due to confidentiality. The interviews will be transcribed.
- Accessible: with the help of the reference list, used data can be found online and accessed. The output of the research is published online at repository.tudelft.nl and will be handed to the case study participants. The transcribed interviews will be attached in the appendix.
- Interoperable: data use a formal, accessible, shared, and broadly applicable language for knowledge representation and uses qualified reference to other data
- Reusable: the output of the research will be released and made available on repository tudelft.nl.

#### Fthical considerations

The ethical considerations of the research are based on the six key principles that are set out in the ESRC Framework for Research Ethics (Economic and Social Research Council, 2015, p. 4).

- The research is designed in a way that the quality and integrity of the research is ensured.
- Research mentors are informed about the purpose, research methods and intended use of the research. This is the same for the participants of the research.
- The confidentiality and anonymity of the research participants is respected and ensured.
- The participants of the research participate voluntarily.
- Any harm to participants is avoided.
- The research is independent and impartial.

# Research output

#### Goals and objectives

The main goal of the research is to provide insight in how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. Sub goals are:

- To get insight in smart governance.
- To get insight in how governments collaborate with citizens.
- To get insight in how local governments deal with citizen initiatives.
- To get insight in the role of online platforms when dealing with citizen initiatives.
- To get insight in how local governments can facilitate citizen initiatives.
- To get insight in the strategy, technology, data, organizations, people, environment and initiative success & realization factors that are imperative to facilitate citizen initiatives.
- To get insight in the characteristics of online platforms for citizen initiatives.
- To get insight in the impact and usage of online platforms for citizen initiatives on the built environment.

#### **Deliverables**

The end goal is to give recommendations to Dutch municipalities on how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. Besides, the goal is to provide an overview of the type of online platforms for citizen initiatives that are used in the Netherlands and to provide an overview of usage of certain platforms, focused on the built environment.

#### Dissemination and audience

The research is written for Delft University of Technology. The research provides insights for the university in how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. Secondly the research is written for Dutch municipalities and provides insight and recommendations on how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. Furthermore, the actors involved in the case studies will benefit from the results of the research and can implement the results into their own work.



# **Theoretical Framework**

# SQ1. What is smart governance?

Smart Governance is one of the main characteristics of smart cities according to Giffinger, et al (2007, p.4). They identify six characteristics of smart cities: smart economy, smart people, smart governance, smart mobility, smart environment, and smart living. A smart city performs well in a 'forward looking way' on these characteristics. The six characteristics are described by 33 factors as shown in fig. 3, and have the following factors:

- Participation in decision-making.
- Public and social services.
- Transparent governance.
- Political strategies and perspectives.

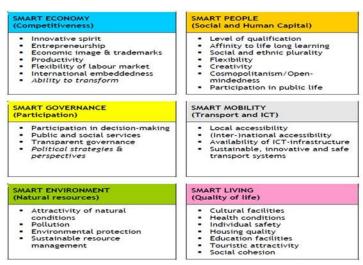


Fig. 3. Characteristics and factors of a smart city (Giffinger, et all, 2007, p. 4).

According to Scholl & Scholl (2014, p. 165), a smart city is supposed to have an innovative culture, a high level of livability, is global competitive and is both economic and environment sustainable. A smart city has a smart government which manages the city according to the characteristics mentioned above by using ICT's and actively involves and collaborates with stakeholders. Smart governance is a form of governance that deals with the knowledge society and redesigned traditional governance while it still maintains the democratic principles and the free market economy (Scholl & Scholl, 2014, p.166). Smart governance deals with multiple challenges like complexity, uncertainty, building competencies and achieving resilience. To deal with these challenges, smart governance has the following key factors: problem focus, feasibility, implementability, stakeholders contributability, continued engagement, coordination, access to open data, shared information, see fig. 4 (Scholl & Scholl, 2014, p.166).

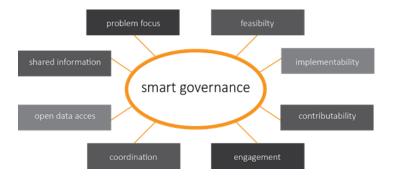


Fig. 4. Factors of smart governance, own illustration (based on Scholl & Scholl, 2014, p. 166).

Besides, Scholl & Scholl (2016, p. 167) define eight areas where smart governance can be applied:

- Budgetting / controlling / evaluating (the shrinkage of governmental spending while maintaining investments in future oriented areas).
- Electronic government/ administrative modernization/ process streamlining.
- Security and safety (data security and privacy).
- Infrastructure overhaul and high-speed connectivity.
- Electric mobility.
- Participation and collaboration.
- Open data / big data provision and use.
- Open government, transparency and accountability.

On all of these areas the 'infrastructural elements' of smart governance need to be applied with the elements being: norms, policies, practices, information, technologies and skills. However, these elements need to be remodeled from its traditional governance forms in order to be applicable to current smart governance practices. For example, in the area of budgeting and controlling, new norms, standards and budgetary algorithms need to be developed since 'current spending levels and debt financing schemes cannot be maintained (Scholl & Scholl, 2016, pp. 166-168).

Due to the technological revolution, rapid urbanization and environmental decay, governments all over the world face complex challenges and to solve them, governments are required to work together with non-profit organizations and private organizations. Governments need to share responsibilities, decision-making authority and actions with more than one stakeholder. Collaborations can be threefold: intersectional, cross-sectorial and through a government-public relationship (Viale Pereira, et all, 2017, pp.3-4).

Considering Viale Pereira, et all (2017, pp. 1-3), the main goal of smart governance is to optimize public services and to improve the quality of life. The use of ICT is imperative to establish electronic services in order to improve the relationship between the government and the citizens, which is also pointed out by Meijer (2016, p.74). Besides, smart governance engages stakeholders in the provision of public services and in the decision-making process and it takes a key position in smart cities. Smart governance uses new technologies like the internet of things, citizen sensors, open data etc. to collaborate with the public. One of the most important elements of smart governance is collaboration, across departments, stakeholders and the public. It is believed that ICT helps to make governance processes more efficient and effective.

According to Rodriguez Bolivar (2016, pp. 50-53), governments are promoting the use of ICT's to improve public services, political participation and public policies more and more due to the growth of smart cities. Besides, governments are increasingly collaborating across departments and with external parties

with the help of ICT's, which is also pointed out by Lee, et all (2014, p. 81). As a result, governments are no longer centralized and concentrated entities. With the collaboration of urban actors, a more distributed urban intelligence is generated (Meijer, 2016, p. 74). This new role of governments is called 'smart governance'. Smart governance transforms traditional ways of communicating, interacting and the deliverance of public services. Smart governance is not seen as a way to solve societal problems but more a managerial way to organize collaborations between governments and other stakeholders. Governments need to take a leading role in the efficient management of the city. Smart governance considers collaboration, cooperation, partnership, citizen engagement and participation.

According to Garcia Alonso & Lippez-de Castro (2016, p. 336), with smart governance, the decision-making process is based on interdependent networks of actors (government, private, and civil actors). Networks are important for open innovation cooperation (Lee, et all, 2014, p. 83). This indicates a 'nonhierarchical control model characterized by formal and informal rules, structures, and processes in a context of a greater degree of cooperation and interaction between public and private actors'. The provision of services is no longer the task of only the government, but should be discussed between multiple actors (both the public and private sector). Smart governance enforces a more informal decision-making process, where decisions are made outside the traditional institutions of liberal democracy with multiple actors collaborating, interacting and deliberating on public affairs. In this regard, technology facilitates the interactions between the actors and plays an important role in the improvement of effectiveness and efficiency in the delivery of services and in communication. Nowadays, urban performance not only depends on hard infrastructure and physical capital of a city but also on the quality and availability of social and communication infrastructure. Smart governance therefor needs the implementation of smart governance infrastructure that is accountable, responsive and transparent (Garcia Alonso & Lippez-de Castro, 2016, pp. 336-337).

According to Viale Pereira, et all (2017, p. 4), smart governance has 6 defining elements:

- The use of ICT,
- External collaboration and participation,
- Internal coordination to achieve collective goals through collaboration,
- Decision-making processes,
- Administration and the ability of government agencies to interact with the public for service delivery,
- Achievement of specific outcomes like participation of public in service delivery.

To promote partnerships in smart cities, the capacity of data management, information processing and information sharing are crucial. In terms of data and information, smart cities use data from physical and virtual sensors, real time data is integrated and shared amongst city services on a platform and analytics are used in decision-making (Viale Pereira, et all, 2017, p. 6).

To enable smart governance, the sharing of information and the integration of systems and departments are imperative. The (lack of) interoperability of systems is often seem as the main barrier for collaborative and smart governance. Another crucial aspect for enabling smart governance is the performance of governments as moderators and the establishment of platforms for collective intelligence which is adaptable to new technologies, processes and mechanisms (Viale Pereira, et all, 2017, p. 20-22).

Viale Pereira, et all (2017, p. 21-22), established a framework for the use of ICT to enable smart governance (See fig. 5). The governance model is 'based on a hierarchical structure, with a collaborative/participative decision process in which decision-making is authoritative or shared,

depending on the context, and in which the leadership plays a distinctive role'. Besides there are some elements of importance: coordination, prioritization of processes, shared & autonomous decision-making processes and collaborative decision-making processes.

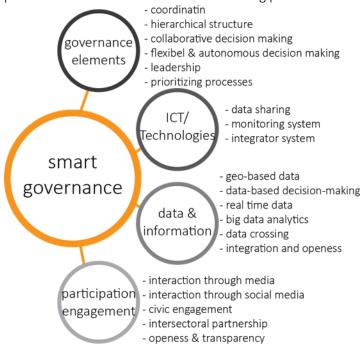


Fig. 5. Framework of results on the use of ICT to enable collaborative governance (Viale Pereira, et all, 2017, p. 21).

Based on extensive literature research, Rodriguez Bolivar (2016, pp. 53-54), defines six dimensions of governance and their definition (Table. 3). Smart governance is different from traditional governance, in that it uses 'nonhierarchical and nonmarket forms of organization in the public sector', with networking environments that are necessary for public management due to the complex networks of organizations. Governance models can differ from cities that are completely governed by the organizations of the network, which is called self-governance, to cities where local governments are a centralized 'network broker' and manage the development of the city, which is called a bureaucratic model.

Steering	Steering should be understood about setting priorities and defining goals (Peters and Pierre 1998)
Boundary conditions	Conditions that determine the mission, resources, capacity, responsibility, and accountability of the task to be performed (Kettl 2006)
Alignment dimension	Alignment refers to which party coordinates the smart city development (Span et al. 2012)
Conceptions of public interest	Public administrators must contribute to building a collective, shared notion of the public interest, not to find solutions driven by individual choices (Denhart and Denhart 2000)
Role of local governments	This could be arrayed along a spectrum, as a continuum of top-down to bottom-up processes (Span et al., 2012), ranging from the role of "executor (commissioner)", to the role of "initiator (facilitator)"
Structure of governance	The pattern or structure that emerges in a sociopolitical system as a common result or outcome of the interacting efforts of all involved actors (Koiman 1993)
Governance model	It refers to the model of governing societies in a situation where no singe act can claim absolute dominance (Fazekas and Burns 2012)

Table 3. Dimensions of governance and their definition (Rodriguez Bolivar, 2016, p. 54).

According to Meijer (2016, p. 75), there are two contextual values that help to understand the specific context of smart governance. The first one is the 'local cooperative knowledge potential'. The success of smart governance is dependent on the match between new technologies and the knowledge of relevant actors. Therefore, it is not advised to roll out a central mode of governance that can be applied in the same way in every city. Every city is different and so are the stakeholders that are capable and willing to cooperate with the local government. 'The local cooperative knowledge potential refers to the availability of relevant knowledge among citizens and stakeholders, and the willingness to contribute this knowledge to collective problem-solving (Meijer, 2016, p.75).

The second contextual value is the 'nature of the problem domain'. Situational characteristics such as culture, democratic institutions, local economy and the physical environment matter for the effectiveness of smart governance. For every model of governance these characteristics can be beneficial or limiting. With the two situational characteristics in mind, Meijer (2016, p. 76), developed a governance model (fig. 6). The model highlights the following relations:

- Smart governance contributes to the quality of the urban environment by making better use of available resources and producing smarter solutions to problems.
- The effect of smart governance depends on the availability of local cooperative knowledge potential and on whether the problem-domain beneficial or limiting.
- Smart governance improves the urban environment both directly as indirectly by influencing the nature of the problem-domain and strengthening the local cooperative knowledge potential.
- Improvements in the urban environment can have a feedback effect on the problem- domain and the local cooperative knowledge potential.

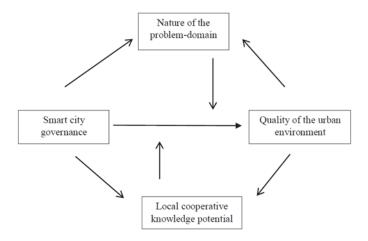


Fig. 6. Contextual model for smart city governance (Meijer, 2016, p.76).

Meijer (2016, pp. 77-78), also defines three different models of smart governance. To produce value, the governance models need to be connected to human capital, common pool resources and open innovation.

- Concentrated intelligence. New technologies help governments to 'strengthen their intelligence, provide more integrated services, develop better policies, and steer other actors in the city more effectively'. The quality of the decision making is dependent on the management of information. It is mostly limited to governments, but collaboration between the government and a few private parties is also possible.
- Distributed intelligence. New technologies for various actors to effectively collaborate. The quality of policies can be strengthened by managing the relations between stakeholders and by effectively making use of their intelligence. Collaborative learning is at the heart of distributed intelligence. Distributed intelligence can be with a heavily involved government but also in the form of self-governance.
- Hybrid intelligence. 'Hybrids may lean towards one of the extremes or form a balanced combination of concentrated and distributed forms of governance'. The configurations are a result from political choices (not choices of technology).

## Egovernance

As mentioned above, ICT plays a substantial role in smart governance. ICT changed the processes of public administration. Governments increasingly use ICT's for their public administration. The use of ICT in governments started decades ago with digitally streamlining internal processes and with the restructuring of external communication. The last decade, usage of new and innovative forms of ICT transformed digital governance to another level, often called egovernment/ egovernance and often framed with the emergence of the information society and the network society (Meijer & Bekkers, 2015, p. 237 & 239). There is a worldwide egovernment movement happening with a lot of similarity between the programs. There is a redesign of governmental departments and services in order to put services on the internet (Meijer & Zouridis, 2004, p.565). Egovernance can be described as 'the use of ICT in order to design new or redesign existing information processing and communication practices in order to achieve a better government (Meijer & Bekkers, 2015, p. 237)'. And as the increasing use of new technologies for the support of network interactions between government and citizens in order to solve societal problems collectively (Meijer, 2015, pp. 198-199). Egovernance is the outcome of resource politics and the choices of officials and politicians. Some of the key variables of egovernance are technology, work processes and

organizational structure. Egovernance can be explained by the 'stage' it reached. The development of egovernance follows a 'stage model', which starts with being present on the web and evolves into vertical and horizontal integration of services and leads to a transformation of 'a whole joined up government service' (Meijer & Bekkers, 2015, pp. 238-239). However, the transformation power of governments is not as spectacular as first anticipated: 'After some basic transaction and information services have been put on the web, we tend to hear less about these e-government programs. And, in fact, in some countries we even observe a stagnation (Meijer & Zouridis, 2004, p.565)'.

Meijer (2015, p. 199), identified multiple phases of egovernance with different barriers:

- Idea generation. Interpretative barriers can play a role in this phase. Many actors do not want to change.
- Idea selection. In this phase, political and organizational barriers play a role. An idea needs to compete with other ideas before it is selected.
- Idea testing. In this phase, technological, organizational and institutional barriers are identified. The idea needs to be developed and tested on a small scale in real life.
- Idea promotion. Financial and capacity barriers play a role in this phase. The idea needs to be implemented on a large scale.
- Idea roll-out. Technological and organizational barriers are identified. The idea requires a robust technology that is accepted by a large group.

For egovernance, there must be personnel capacity, legal ability, technical capacity, financial capacity and political & management support, leadership and coordination. Governments need an organizational change in order to substantially deal with egovernance. The processes of public service delivery have to be standardized and rationalized. Besides, the structures of organization have to adapt to the redesigned processes (Meijer & Zouridis, 2004, p. 568).

## Open governance

Integral to the initiatives of smart governance and egovernance are the notions of open and transparent governance. According to Scholl & Scholl (2014, pp. 163-164), the 21st century confronted governments and the public with complex and intertwined challenges like the third industrial revolution which converted the industrial activity from fossil fuels to sustainable energy. This was encouraged by the technological & information revolution which facilitates immediate availability of information and resulted in efficient economic exchanges. Secondly, these changes happened rapidly whereas governments and companies needed 'more time' to anticipate and intervene on these changes. This resulted in several global crises. Old and traditional mechanisms proved to be no longer sufficient to deal with these revolutions and new modes of governance needed to be applied.

Resulting from the technological and information revolution, governments started to open-up their information. Obama introduced the open government administration in 2009 by proactively sharing government information. As a reaction, governments all over the world started to openly share government information. The aim of the initiative was 'to provide transparency to government decision-making, improve accountability, and foster collaboration and stakeholder participation (Scholl & Scholl (2014, p. 165)' (Viale Pereira, et all, 2017, p.4) (Barns, 2016, p.555, 558) (Lee, et all, 2014, p. 85). The documents were made available to the public in electronic form. Besides, each department was required to provide a plan for collaboration with other stakeholders. The direct involved from external stakeholders in service provision and decision making was supposed to safeguard that governments were not falling back into non-open government practices. Besides, the involvement of third parties in service provision resulted in 'lean government' that aimed to do 'more with less' often fostered by ICT (Scholl & Scholl, 2014, p. 165).

In 2011, the U.S. signed together with 7 other countries the Open Government Partnership Declaration (OGPD). In 2016, the OGPD was supported by 66 countries. The OGPD has four key components that change traditional governments (Barns, 2016, p. 558):

- Accountability. The rules that force governments to justify their actions.
- Technology and innovation. The embracement of providing open access to technology and increasing citizens capacity to use the technology.
- Citizen participation. The mobilization of citizens to participate public debate.
- Transparency. The opening up of information about government activities and decisions.

According to Barns (2016, p. 556), open data enables citizens with smartphones to engage in a more dialogical relationship with the government. Open data platforms are used by municipalities to facilitate the smart city goals in a practical way. These open data programs facilitate data-driven solutions to governance and policy challenges. Besides, the programs provide 'a marketplace for the delivery of third party software services to citizens'. Open data is data that is made available without restrictions in a machine-readable format. The OECD defined open government data as 'a philosophy—and increasingly a set of policies—that promotes transparency, accountability and value creation by making government data accessible to all'. Open data should result in relationship change between governments and citizens by making governance more effective and legitimate (Barns, 2016, pp. 557-558).

The EU action plan 2016-2020 is guided by the following vision (European Commission, 2016, p. 3): 'By 2020, public administrations and public institutions in the European Union should be open, efficient and inclusive, providing borderless, personalized, user-friendly, end-to-end digital public services to all citizens and businesses in the EU. Innovative approaches are used to design and deliver better services in line with the needs and demands of citizens and businesses (which is also pointed out by van der Graaf and Veeckman, 2014, p.75). Public administrations use the opportunities offered by the new digital environment to facilitate their interactions with stakeholders and with each other'. Central to this vision are the Open eGovernment Services with as main features openness, collaboration and technology. All three of the features must be present for a service to be classified as Open eGovernment Service.

#### Conclusion

The research question 'What is smart governance' can be answered the following way: Smart governance is closely linked to smart cities. Literature defines smart governance as a new form of governance where governments no longer work in their traditional ways, but where governments actively involve and collaborate with external parties and the public in their decision making and service delivery processes. Responsibilities are shared with multiple stakeholders. ICT is used to make this collaboration and governance processes efficient and effective. Information and systems are shared and integrated between departments and stakeholders. Due to the development of ICT and its possibilities for the facilitation of smart governance, governance processes are increasingly digitalized, resulting in online governance, also called Egovernance, in order to achieve a better government. With Egovernance, online collaboration and interaction is supported and facilitated. Smart governance and Egovernance are supported by open governance, that provides transparency to the decision and policy making processes by opening up governmental information in order to foster collaboration. Smart governance is summarized in the illustration below (fig. 7).

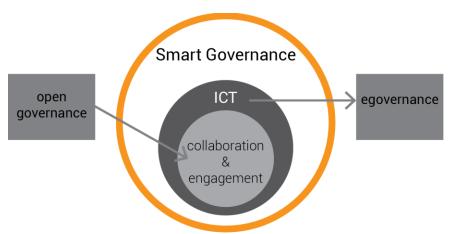


Fig. 7. Smart Governance (Own illustration, 2017).

# SQ2. In what ways do governments engage and participate with citizens?

As already shown in the chapters before, smart governance is partly based on the collaboration with external parties, not only with professional private parties, but also with the 'regular' citizens of the city. Citizen participation and engagement is one of the four key components of the Open Government Partnership Declaration (Barns, 2016, p. 558). Besides, smart cities and communities can benefit greatly from citizen participation (Berntzen & Johannessen, 2016, p. 303). It is shown that participation may lead to increased citizen inclusion in agenda-setting and an increased inclusion in grassroots movements (Bertnzen & Johannessen, 2016, p. 306).

People and the way they interact are critical to cities. A driver for smart cities is creativity, which encompasses people, knowledge, learning and education. All society sectors should be involved and participate in this (McKenna, 2016, pp. 94-95). Citizen participation is believed to gain more effectiveness, more efficiency, increase customer satisfaction and increase citizen involvement (Voorberg, et al, 2014, p. 12). According to Viale Pereira, et all (2017, p. 6), there's a growing interest, both in governmental practice as in academic research, in the transformed 'relations between the state and citizens enhanced by ICT, especially in public participation or decision-making with citizens participation', which is also pointed out by Khan, et all, (2017, p. 47), Berntzen & Johannessen (2016, p.302) and de Mello Miranda, et all (2016, p. 316).

A more open, social, communicative, interactive and user-centered form of electronic governance is often called government 2.0. In government 2.0 or governance 2.0, services and policies are designed through a cooperation with citizens and external organizations instead of only by the government (Meijer, et al, 2012, p.59). The participation of end users can be indicated as co-creation. In the private sector, end-users are co-producers who take over specific segments of the production chain because corporations have to produce their goods more efficiently. End-users can also be co-creators when their experience adds value to products or services from corporations. These phenomena are also seen in the public sector with governance 2.0 (Voorberg, et al, 2014, p.1333).

Due to ICT usage, a network of stakeholders (government and the public) can cooperate more efficiently. The ICT platforms can facilitate the sharing of information and create a collaborative environment because of increased interoperability (Lee, et all, 2014, pp. 83-85). Citizen participation is not necessarily a new phenomenon. Traditional methods for citizen participation were referenda, public hearings, public surveys, conferences, town hall meetings, public advisory committees or focus groups. They almost all required physical attendance, which often caused difficulties. New ICT technologies help to overcome these difficulties (Kleinhans, et al, 2015, p. 238), hence resulting in more efficient and effective ways for citizen participation.

According to McKenna (2016, p. 94), for collaboration, nowadays innovative tools and systems are used. As already mentioned before, a major focus of smart governance is the collaboration between multiple stakeholders. The innovativeness of different parties is combined in these collaborations. It is believed that 'entrepreneurship that comes out of social and human capital has the potential to foster emerging industries. Existing enterprises may move into new business sectors, while new entrepreneurial firms may emerge from both horizontal linkages (between firms) or vertical linkages (alliances between entities that operate at different levels in smart city)'. This also included the knowledge and innovation potential of citizens (Lee, et all, 2014, p. 85). According to Lee, et all (2014, pp. 83-85), the open public services help to facilitate the coordination of 'peoples participatory living-playing-working activities'. This can promote social interactions which involve the participation of citizens in public life, collective decision making and strengthen the participation level of citizens. Smart cities can serve as an open innovation platform where

citizens and communities are able to engage with each other and empower each other which intensifies the possibilities of co-creation.

Participation can be defined as the involvement of other parties in governmental decision-making. It provides a two-way communication between the state and the public. With egovernance, citizens are the focus of ICT-based participation tools which results in the increase of possibilities for citizens to participate in all stages of the governance process: planning, decision-making, implementation and evaluation. It is believed that citizens are more willing to interact with the government when governments are open to interaction and integrate the viewpoint of citizens in their decision making (Viale Pereira, et all, 2017, pp. 6-7) (Kleinhans, et al, 2015, p.238). According to Khan, et all (2017, pp. 48-49), due to the competence and local knowledge of citizens, better governmental services are produced. This transformed traditional top-down governance into bottom-up community planning. Service delivery is no longer only the responsibility of the government, but is being coproduced by the government and communities of citizens, facilitated by ICT (Meijer, 2012, p.3). However, this is only truly beneficial with inclusive and active citizen participation. Essential for citizen participation is the fact that citizens opinions are actually heard and evaluated (Bertnzen & Johannessen, 2016, p. 303).

According to Hollands (2015, p. 63), real smart cities focus on the city itself and the social problems instead of looking to technology. Smart cities require 'participatory urban technologies, greater social and economic inclusion, and a substantial shift in power from corporate business and entrepreneurial city leaders to ordinary people and communities that make up cities'. However, Hollands (2015, p.70), points out the lack of democratic decision making and citizen participation in smart city projects. This is also pointed out by Gardner & Hespanhol (2017, p. 2), smart cities often 'overlooked the human-scale implications of its proposed technological systems'. Smart city initiatives were often led by the government and hardly ever focused on the citizen scale, even though cities often grow from the bottom-up, from the individual to the metropolis level. Hence, 'urban interactions can reflect different levels of intensity, such as more intense at the level of the individual citizen, yet smoother at the level of the metropolis'. The lack of a citizen inclusive view of smart cities resulted in the search for small-scale community based and socially-progressive use of technology (Hollands, 2015, p.70).

In 1969, Arnstein (Arnstein, 1969, pp. 216-217), defined citizen participation as citizen power, and explained that citizen participation is a categorical term for citizen power. 'It is the redistribution of power that enables the have-not citizens, presently excluded from the political and economic processes, to be deliberately included in the future'. Besides, Arnstein designed a ladder of citizen participation and the categories of the citizen power. The ladder consists of 8 steps, divided into 3 categories (fig. 8).

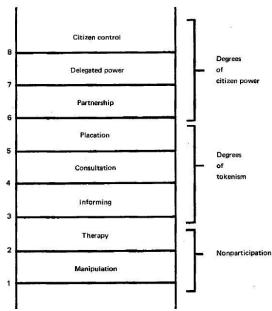


Fig. 8. Ladder of participation (Arnstein, 1969, p.217)

At the level of non-participation, the objective is not to let citizen participate, but for the ones in power to educate the people. At the level of tokenism, citizens 'hear and are heard', but they do not have the power to make sure that their views become powerful/ are used by the ones with power. The levels of citizen power are levels were the citizens actually take part in decision making (Arnstein, 1969, p. 217).

According to Gardner & Hespanhol (2017, pp. 5-6), citizens can be engaged by the government in three dimensions:

- Granularity: The level of personalization (from equally addressing al citizens to tailored personification).
- Accountability: 'The ability and responsibility for initiating, planning, implementing, deploying and maintaining an urban initiative, service, or program'.
- (Plasticity): The extent to which a service is adaptable to another scale.

The dimensions of citizen engagement can range from 4 scales: metropolis, community, individual, personal. The three dimensions and four scales of citizen engagement can be combined into a model (See fig. 9).

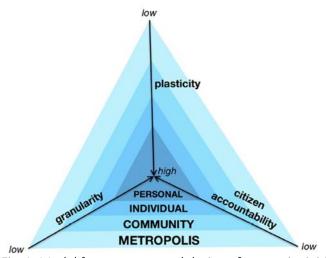


Fig. 9. Model for user-centered design of smart city initiatives (Gardner & Hespanhol, 2017, p. 2).

According to McKenna (2016, pp. 90-93), smart cities are learning cities. They use human resources to learn, from education level to family and community level. Besides, it uses social media as platforms of interaction to engage with citizens and organizations that have innovative potential. Smart cities can work successfully built-up from top-down or bottom-up. The key however is active involvement from every sector of the community. ICT, big data and social media make the city an interactive city. There's a two-way communication from governments to the citizens and organizations. The public is no longer only consumer, but also contributor. Developing services with the citizens who are going to use the services is important. To enhance the usefulness of citizen engagement, there is a need for useful, relevant, and complete government information. Considering Wang & Wu (2016, p. 261), to create culture and knowledge, smart cities should inspire and motivate its residents to collaborate.

According to Berntzen & Johannessen (2016, p. 300), citizen participation in governance can be in three different forms:

- Citizens' competence and experience. Experience of citizens can improve service delivery and their competence can add value to the government. Early involvement can reduce risk of failure.
- Citizens as data collectors. Citizens can collect data as input for the delivery of services.
- Citizens as democratic participants. Active engagement enhances democracy.

Besides, citizen participation has two dimensions (Berntzen & Johannessen, 2016, p. 302):

- Agenda setting
- Decision-making

Effective participation requires a combination of software and social media and a combination of both online and offline communication channels. There are multiple and various techniques that governments can use for the involvement of citizens (Berntzen & Johannessen, 2016, p.303):

- Focus groups (experts and users)
- Interviews (experts and users)
- Testing of usability, accessibility and functionality
- Encouragement of real-time commenting
- Log file and log analysis
- Provision of interacting help screens and assistance

Janssen & Helbig (2015, p. 1), also list social networking, advanced simulation websites and gaming tools as techniques to involve citizens in the political process.

Besides, Berntzen & Johannessen (2016, p.305) list the activities of citizen participation:

Online voting

- Online debates
- Decision-making
- Activism
- Consultation
- Campaigning
- Petitioning

This can be done with the use of two technologies (Berntzen & Johannessen, 2016 pp. 305-308):

- Proprietary platforms. Platforms hosted and controlled by governments, like voting systems and information sharing & discussion platforms.
- Social Media. The use of social media to engage with citizens is believed to increase participation. It is used to reach citizens for instance during elections. It is mostly used to establish a two-way communication from government to citizens. It is also used to generate data about the city for service delivery. It can be an enabler for co-production and citizen input in smart city strategies.

Table 4. Shows the opportunities and challenges of the use of proprietary platforms and social-media.

	Opportunities	Challenges
	Possibility for tailoring to purpose, such as voting and discussion systems	Often general purpose systems are used in specific contexts. Not always the best match for the purpose
Proprietary platforms		
	Systems have been developed for several areas: collaborative writing, geographic information systems, participatory budgeting and urban planning tools for implementation of citizen feedback in the decision-making process	Some of these systems remain at a conceptual level and are not tested beyond a single case or project
	Voting advice applications helpful for decision-making	Security issues can be a challenge, especially for voting systems
	Can facilitate inclusion of citizens and grassroots movements	Mostly engages those who already are politically active
Social media	Can be more inclusive than proprietary systems, attracts regular users	Politicians have limited time and resources to follow up their social media presence
	Numerous examples showing different ways of using social media	Few studies go beyond describing a single case. Need for reviews and guidelines
	Can utilize crowdsourcing, co-creation through collaborative systems and location-based data from smartphones etc.	Requires at least some proprietary software for analysis
	Aggregation of data from blogosphere and other social media can provide valuable information	Information overload, while still not covering every viewpoint, danger that analysts can overlook the fact that these are not necessarily representing general public opinion

Table 4. Summary of technology opportunities (Berntzen & Johannessen, 2016, p. 307).

In the table below (Table 5), Janssen & Helbig (2015, p. 5), map the different policy stages and the tools for citizen engagement and the impact on governance.

Step	Policy developments	Impact on governance
Problem definition and agenda setting	Collecting data by citizens/businesses (e.g., sensors) for agenda setting	Citizens identify the problems Petitions for agenda setting
Policy development	Simulation; Serious games; Crowdsourcing; co-creation	Citizens involvement as contributors; providing insight into policy options; being involved in selecting options
Policy implementation	Public-private sector collaboration	Co-creation between governments, citizen and businesses
Policy enforcement	Camera surveillance, use of smart phones, use of sensors	Citizens and businesses monitor using technology

Table 5. Mapping policy stages to developments and impact on governance (Janssen & Helbig, 2015, p.5).

Many cities in Europe developed online environments for collaboration through electronic participation, electronic services, knowledge networks and partnerships and collaborative environments where citizens and companies can contribute their content and can use open government data to build applications for instance for the improvement of service delivery. It is believed that investment in these types of social and human capital spur sustainable economic growth and life quality whereas with the use of participatory governance natural resources are balanced (de Mello Miranda, et al, 2016, p.317).

According to de Mello Miranda, et al (2016, pp. 320-322), there can be facilitating and inhibiting elements of electronic government participation (with Brazil as test case). The facilitating elements are shown below in Table 6 and 7.

Rank	Facilitating elements
1	Growth in adoption of computers and the Internet by Brazilians in recent years
2	Choice of an appropriate technology for easy, intuitive, and friendly use
3	Use of social media and other virtual tools
4	Growth in ICT education reduces barriers to their use
5	Exponential growth of resources for discussion, sharing, and collective learning in social media
6	Ubiquitous expansion of mobile telephony
7	Positive experiences of creation and use of these spaces in Brazil
8	Growth of "digital native" population
9	A combination of political will with a well-prepared bureaucracy to create eParticipation spaces
10	Choice of topics that attract public interest for the initial implementation

Table. 6. Facilitating elements (de Mello Miranda, et al, 2016, p. 321).

Rank	Inhibiting element
1	Fragmentation of ICT management in governments
2	ICT is seen as a tool rather than inductor of change in public administration
3	ICT is not part of government strategy
4	Lack of maturity of governance models
5 6	Lack of culture of transparency in governments
6	Government officers and public managers do not ascribe importance to eParticipation
7	Interface or user environment nonintuitive, hard to use
8	Broadband is still incipient in Brazilian households
9	Lack of interest among a large part of public managers to use ICT to expand citizen
	participation
10	Digital exclusion

Table 7. Inhibiting elements (de Mello Miranda, et al, 2016, p. 322).

The OECD acknowledge three levels of participation (Garcia Alonso & Lippez-de Castro, 2016, p. 340):

- Information. A one-way relationship where governments produce and deliver information to citizens.
- Consultation. A two-way relationship where citizens provide feedback to governments. However, governments define the issue for consultation.
- Active participation. Partnership between government and citizens where citizens engage in the process and content of policy-making.

Voorberg, et al (2014, p. 8), distinguish three types of co-creation:

- Citizen as co-implementer. Citizens only perform implementation tasks, suggested by the government.
- Citizen as co-designer. Initiative often lies with the government, but citizens decide how the service delivery is designed.
- Citizen as initiator. The government is an actor that follows the idea of the citizen.

According to van der Graaf & Veeckman (2014, p. 76 & 78), co-design & co-creation in public service delivery at the local level can happen if 'different toolkits aligned with the specific capacities and skills of the users are provided'. In that case, every citizen should be able to have an active role in the development of their urban space. A toolkit is a specialized software application and is custom-made for a specific purpose, digital platform or service. It lowers the threshold for user participation in government services.

# New environment and planning act

The Netherlands are changing from a welfare society to a participation society (Kennisland). This process is accelerated by the 'nieuwe omgevingswet' (new environment and planning act). The current environment law is often in the way of sustainable and innovative developments and does not take the regional differences enough into account. Current and future developments require more flexible regulations, which makes it possible to anticipate on future developments. The current law consists of many different objectives and is not coherent (Ministerie van Infrastructuur en Milieu, 2016, p.2). Therefore, the Dutch government decided to enforce a new law, which combines 26 former environmental laws into one all-encompassing environment and planning act in order to simplify the rules for development. The current laws concern infrastructure, space, nature, water, environment and living.

It is expected that the new environment and planning act will be officially legally enforced in 2021. However, it is already made possible to make use of the new law right now by the Crisis en Herstelwet (crisis and recovery law) (Rijksoverheid, n.d.)

The new environment and planning act has multiple objectives (Ministerie van Infrastructuur en Milieu, 2014, p.1):

- It needs to be simpler, more efficient and better. Projects need to be tackled together and per area, procedures should no longer be taking an endless amount of time and regulations should be predictable, transparent and affordable. This is expected to result in lower research costs
- Certainty and dynamics. The protection of citizens keeps on being an important goal. Apart from that it needs to invite new initiatives and developments, instead of having a really specific frame of rules up front.
- Space for sustainable development. A lot of the former rules are in the way of pursuing innovative and sustainable developments. Instead of discouraging, the new law should stimulate the transition to a sustainable society.
- Space for regional differences. Regions are not the same nor is their environment. The new law is therefore flexible which gives provinces and municipalities the possibility to deliver locally customized results.
- Active and qualitative performance. The old law is focused on protecting sub objectives and therefore defensive. The new law offers transparent and effective procedures, which is supposed to stimulate administrators into active behavior based on trust and responsibility.

The table below shows the legal differences between the current law and the new law (table 8):

Current law	New environment law
26 laws and 4700 articles	1 law, 349 articles
120 general 'measures of governance'	4 general 'measures of governance'
120 ministerial regulations	Around 10 ministerial regulations

Table 8. Legal differences between the current and new law (Based on: Ministerie van Infrastructuur en Milieu, 2014, p.1).

The objectives are made concrete by six instruments (Ministerie van Infrastructuur en Milieu, 2014, p.2):

- Environment vision, a coherent plan for the environment, focused on the living environment. Every province has to design one environment vision. Municipalities can decide if they adhere to the vision or not.
- A program, with concrete measures for the protection, management, usage and development of the living environment.
- Decentralized regulations, all the regulations of the decentralized governments have to be combined into one regulation that covers the area.
- General rules for activities. For some areas it is better to have national regulations for the protection of the area. To keep it flexible and useful for every area there are some instruments that increase the flexibility of the general rules.
- Environment permit. The permit checks upfront if an initiative is possible and legal. The judgment has been kept simple which results into shorter procedure times. Initiatives only have to make one application that combines all their activities.
- Project decision. There is a uniform procedure for the decision on applications for complex projects that are derived from the responsibilities of the provinces or the state, which makes it possible to deviate from an environment plan.

The new environment and planning act consists of four 'general measures of governance' (algemene maatregelen van bestuur). These general measures of governance are (Aan de slag met de omgevingswet, n.d., A.):

- Environment decree, which focusses on citizens, companies and governmental bodies and shows which procedures are applicable in certain situations and the legal authorities. Besides it shows rules for the environmental impact report.
- The decree quality living environment, which points to the legal authority, and shows legal norms for municipalities, provinces, water authorities and the state. It's about national aims and objectives and international obligations.
- The decree activities living environment contains the direct regulations for activities of citizens, companies or governmental bodies in the living environment. It shows the regulations, the space to deviate from those rules and when a permit is necessary.
- The decree building structures living environment shows the general rules of state for activities, like maintaining, building or demolishing building structures. These rules mostly apply to citizens and companies.

All these objectives and instruments are supposed to make it possible to develop quicker and easier, with more space for initiatives. It is supposed to simplify the process of starting a development and building project and it is supposed to simplify the involvement of different and multiple objectives of a project (Platform 31, n.d.). The new environment and planning act is developed according to the motto: 'Space for development, safeguarding quality'. This motto has been translated into two social aims:

- A safe and healthy environment while maintaining and reaching a living environment with quality
- Manage, develop and use the living environment effectively for the fulfillment of social goals.

But why then does the new environment and planning act accelerate the transition process from a welfare society to a participation society? The central focus point of the new environment and planning act is the user. This is shown by the fact that there is only one permit, the principal of 'yes, but...' instead of 'no, unless...', the fact that all the regulations are in one place, the possibility of participation in the front stages of policy development and space for anticipation (Aan de slag met de omgevingswet, n.d., C). Besides, an important element of the new environment and planning act is the participation of citizens and companies in the decision making process of plans, visions and projects. During the process of policy and decision making, participation and legal protection play an important role. The new environment and planning act gives governing bodies some freedom to design this process themselves within set procedures. The governing bodies can decide themselves if they want to add methods for involving other parties (citizens, companies, etc.) in the process of decision making, which make area-tailored decision making processes possible (Aan de slag met de omgevingswet, n.d., B). The people that live and work in a certain area are the ones that can benefit most from good decisions but are also that ones that have the biggest disadvantage due to bad decisions. Because of that, they are often willing to participate in the preparations prior to decision making. This often result in more support for developments, which uncomplicates the continuation of the development process. Governments need to show how they dealt with participation at the environment vision, the environment plan and at program or project decisions. The new environment and planning act challenges citizens and companies to actively come up with ideas and initiatives for the development and improvement of the living environment. With the new environment and planning act, both municipalities, citizens and companies are responsible for the (protection and usage of the) living environment (van den Broek, et all, 2016, p.7). The new environment and planning act makes early participation in the decision making process possible. With participation, the law means the partaking of citizens, companies and social organizations in the decision and policy making process. It is necessary for sharing information, knowledge, aims and objectives and is supposed

to lead to a qualitative better decision, more support and a shorter process duration. However, the new environment and planning act does not set the standards or rules for participation. Municipalities, companies or anybody that wants to develop something are (almost) free to design this process themselves. For complex and far-reaching projects the law does set some rules for the participation process (Ministerie van Infrastructuur en Milieu, 2016, pp. 3-4) (Aan de slag met de omgevingswet, n.d., B). According to Nicole Fikke, projectleader new environment and planning act at the department of infrastructure and environment (Platform 31, 2016), with the new environment and planning act, it is new that people with initiatives need to show how they engaged with their environment about the project in order to get a permit. It contributes to the quality of the project and has the possibility to adhere to social developments. This makes it logical to use new forms of participation for the participation process, for instance with online resources to increase support.

It can be said that the new environment and planning act is about collaboration and shared responsibility for the living environment. For the early participation in the decision making process and the design of a widely supported environment plan, plan makers need to collaborate with many stakeholders, and plan makers need to have the input of other stakeholders for the plan. This leads to some critical notes on the new environment and planning act. Municipalities are pulling back en people get more responsibilities for their living environment. Not everybody has the time, knowledge and resources to own up these responsibilities. Thus, there need to be clear conditions for information, communication and support in order for citizens and organizations to be a serious partner of municipalities. Setting these conditions is the responsibility of the municipalities and the state. So, not only citizens and organizations need to be participative and responsive to municipalities, but municipalities also need to be participative and responsive to their citizens and organizations (van den Broek, et all, 2016, pp. 7-8). Most municipalities are not used to work like that, which might cause problems. A change of culture is necessary. Van den Broek, et all (2016, p.18), defined some of the conditions and challenges that municipalities need to take into account in order to facilitate the process of participation:

- Quality of communication:
  - 1. Setting clear conditions.
  - 2. Availability of information.
  - 3. Availability of independent and critical information sources.
- Government 'antennas':
  - 1. Citizens need to have the ability to speak up.
  - 2. Citizens need to have the feeling that they are heard.
  - 3. The final decision needs to have support.
- Scope of participation:
  - 1. There are boundaries on what can be asked to citizens.
  - 2. There's a tension on representation.

An extensive elaboration on these conditions and challenges can be found in van den Broek, et all (2016).

Another line of critics come from at least 65 municipalities that posted their concerns about the new environment and planning law via an internet consultation period on the four 'general measures of governance' (Dutch: AMVB's). They claimed that the impact on municipalities is unclear. The general measures of governance are quite complex and sometimes incomplete, so the impact is difficult to predict. Another major point of concern is the integral space for consideration that the law creates for municipalities, the effects on the execution services and the differences in environment values between governing bodies. The possibility for municipalities to create their own values can be a positive thing, however municipalities need to have the right knowledge and capacity to perform this in a good way. And not every municipality has this knowledge and capacity (Buitelaar, 2016). The VNG (Association of Dutch

municipalities), set-up a position paper on the new environment and planning act. In the paper they state that the integral space for consideration is a positive thing, however, they are concerned about the practicability of the regulations. There are no established norms for instance for noise or soil, while these are necessary for the design of a environment plan, which makes it difficult to predict the consequences of the new law. Municipalities need to have clear norms in order to make integral considerations per area (VNG, 2016, p. 2). According to Ruimtevolk (2016), the new environment and planning act can be quite naive. The new law focusses on the fact that governments, citizens and organization work together with more responsibilities for the usage and protection of the living environment. This seems to be that the new law assumes a win-win situation and synergy. However, in reality, this often is not the case. Stakeholders often have conflicting interests. Another naivety comes from the assumption that citizens have the capacity to actively help with the design of plans. Long-term input in the procedures of setting up an environment vision or plan is often is not the main priority of the regular citizen that works and takes care of his or her family. There is a danger that only homogeneous group of citizens participates instead of an inclusive and diverse group of citizens.

A collaboration of municipalities (VNG), provinces (IPO), water boards (UvW) and the Dutch state designed a guide that shows how to deal with participation (Aan de slag met de omgevingswet, n.d., D). It shows and explains four stages, from idea to plan to realization to evaluation. It has multiple tools, like a 'approach compass' (Fig. 10). The compass explains six questions that need to be considered for the approach/ design of a plan:

- What do you want to achieve?
- Why do you want to collaborate?
- With whom do want to collaborate?
- When do you want to collaborate?
- How are you going to collaborate?
- How do you weigh/ measure the collaboration?

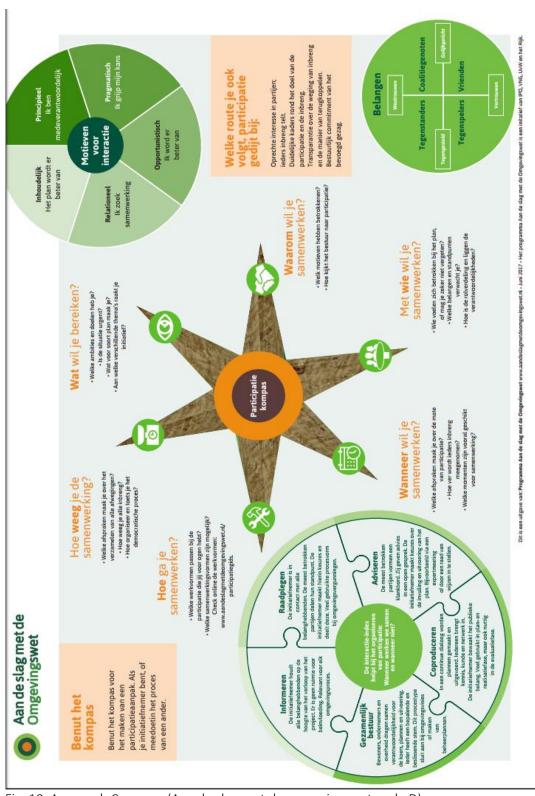


Fig. 10. Approach Compass (Aan de slag met de omgevingswet, n.d., D).

Besides, the guide shows a list of common difficulties that people with initiatives often experience when they try to set-up an initiative: creating support, the unfamiliarity of setting up an initiative, continuity in the process of realizing an initiative, risks and liability, mandate, fear of contact and creating expectations, money, complexity, inequality of civil servants, accountability, quality, laws and regulations. The guide also provides a list with factors that have a positive influence on the process during the realization of the initiative: make decisions, create a network with relevant other parties in order to help each other, 'PARTY-cipation' which means make every meeting a positive experience, create equal partnerships, use talents and expertise, be bold and use your gut, make sure of clear communication and information provision, create urgency, use an independent process accompaniment, make sure of clear preparation. During a knowledge meeting with 32 municipalities, the municipalities looked for improvement possibilities and assembled a list with improvement possibilities (Platform 31, 2017):

- Provision of trust is important
- Take time
- Look at the culture in the internal organization but also at the external collaborating organizations
- Keep short lines
- Streamline information exchange
- Uniform the working processes

However, in practice, this is not as easy as it seems. One of the municipalities investigated their collaboration with stakeholders and noticed the following:

- It is valuable to document the way of communicating, which information is exchanged and which qualities and quantities are necessary for the collaboration
- It is important to have only one contact person, multiple contact persons can be a hindrance for the collaboration process
- It is important to connect with advising parties early as possible

#### Conclusion

The research question 'In what ways do governments engage and participate with citizens' can be answered in the following way:

There are many ways for citizens to participate in policy making and service delivery. Traditionally, this happened in the form of, for instance, town hall meetings and surveys. Almost all of the traditional forms of participation required physical presence which often caused a low turnout. With the developments of ICT, a new wave of participation takes place, making it easier to reach the citizens and enable them to participate by increasing the efficiency and effectiveness of participation. This gained an increased focus from both scholars and governmental organizations, resulting in forms of governance where policies are designed with the participation of citizens, which is one of the key characteristics of smart governance. Cities can benefit notably from citizen participation in policy making and service delivery, since it increases efficiency, effectiveness, customer satisfaction and citizen involvement. Besides, citizens are more willing to interact when governments are open for interaction and when governments actually use the input of the citizens in their decision making. This results in a shift from citizens as consumers to citizens as contributors. Scholars define different levels of citizen participation, from informing to consulting to active participation, and from citizens as co-implementers, to citizens as co-designers to citizens as initiators. ICT, big data, social media and other platforms boost the interaction between governments and the public. With these tools, citizens are used for their knowledge and competence, used as data collectors and used as democratic participants. Again, there are many digital ways in which citizens can participate, from online debating to designing policies. In the Netherlands, the new

environment and planning act enforces participation in decision making as an important element, givin	18
municipalities the opportunity to set up their own rules for participation.	

# SQ3. How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives?

The rise of governance 2.0, open data and social media offers new possibilities for governments to communicate with citizens. However, it did not only offer ways for governments to communicate with citizens, it also fostered citizen to citizen communication, resulting in the creation of content, knowledge and services inside communities, which enabled citizens and companies to create services themselves or together with the government. This change in communication, driven by technology, forces governments to change their traditional ways of working and actively involve citizens in their service delivery and policy making (De Koning & van den Broek, 2011, p. 2).

In the Netherlands, society is changing from a welfare state (verzorgingsstaat), to a participation society. Citizens are ought to take more responsibilities for their living environment and the government pulls back with a more facilitating role. This process is accelerated by the economic crisis in 2008. Cut backs in government spending resulted in more space for social and bottom-up initiatives for service delivery (Kennisland, n.d., p.14). Society changed from a clear structured society where the governments decided the direction of society, to a society where market forces stood central, while currently active citizenship is stimulated. The question however is how public interests are safeguarded now governments are pulling back (van den Berg, 2013, pp.12, 24).

According to van Ginkel & Verhaaren (2015, pp. 11-23 & 43-46), the transformation of society resulted in the creation of many self-organized citizen initiatives, facilitated by the possibilities of internet and the increased attention for sustainability. The initiatives are often established by small-scale local networks. This transformation of society is often referred to as the 'network society', implicating that citizens search for a new balance by orienting more and more on connecting and collaborating on a local scale, facilitated by the world wide web. Even though the role of internet has a world-wide scale, once internet communities are used in a living environment, they support the local scale. Governments have difficulties keeping up with this transformation and often try to force their regulating role. However, more and more municipalities start to realize that servitude is also an important role for governments. Municipalities need to find a new balance between facilitating and regulating in this transforming society of selforganized platforms and networks, sometimes also referred to as co-creative ecosystem. In the cocreative ecosystem, citizens take responsibility for the wellbeing of their local environment, which often has social capital and a vital social network as a result. This creates a switch from citizen participation to government participation, where municipalities need to compete with citizens on what is happening in the living environment. Government control needs to co-exist with citizen control, where municipalities sometimes have a facilitating role, sometimes design the frameworks, sometimes take over, but also where municipalities sometimes have a dependent role. The force field of a vital society is shown in fig 11.



Fig. 11. Force field of a vital society (van Ginkel & Verhaaren, 2015, p. 46).

The involvement of citizens in the creation of public services and policy is often called co-creation, where co-creation is defined as 'the involvement of citizens in the initiation and/or the design process of public services in order to (co)create beneficial outcomes (Voorberg, et all, 2017, p. 179)'. Co-creation is not always government-led, but can also be in the form of citizen initiatives: In Naples, the city center was restored with a citizen initiative. The municipality saw the urgency of the initiative from the local community and therefor decided to participate in the initiative, after which co-creation emerged. As shown in this example, co-creation has the ability to change the traditional responsibilities of public service delivery. The Naples initiative was successful because the citizens and the government were willing to learn from each other. The municipality took the initiative seriously and gave the ownership of the reconstruction to the citizens (Voorberg, et all, 2017, p. 179-180). In other words, new services can be designed if governments make use of the self-organizing capacity of citizens (Nederhand, et all, 2014, p.2).

According to van Delden (2017, p. 4), in the last couple of decades, the awareness that public service delivery asks for an active contribution of citizens, grew at public administrators, policy makers and service providers. The influence of citizens is necessary to keep neighborhoods vital. This awareness is also growing at citizens, who increasingly create initiatives for the improvement of the livability in their neighborhoods. However, research showed that in vulnerable neighborhoods, the 'life world' of citizens and the 'systematic world' of public institutions are diverging. Nonetheless, citizens continue to support each other, especially when their social networks are related, citizen initiatives are designed. In those cases, collective agency emerges, the ability of citizens to collaboratively act for the improvement of the wellbeing. However, this collective agency does not get enough space in public service delivery, since this is often focused on the individual instead of the collective. Hence, in order to increase citizen power, and create space for collective agency, the 'systematic world' needs to be approachable for the public. Initiatives need facilitation from institutional organization, for instance by the provision of advice and knowledge or the provision of physical space.

There are multiple types of citizen initiatives: one-time initiatives, where an idea is presented to the local government, 'formal' initiatives where citizens try to put subjects on the policy agenda and the so called self-organization where citizens design and implement services to the local community. The last type, self-organization, are often a reaction on community needs that are not filled by the local government. They are focused on collaboration between citizens and are locally oriented. The characteristics of citizen initiatives are local orientation, focus on specific task or need, hands-on and pragmatic. For the implementation of the initiative, collaboration with the local government is often necessary. For the initiatives to become sustainable, the model of revenue and incomes, the network structure and the organizational structure are important (Igalla & van Meerkerk, 2015, pp. 28-30). According to Nederhand, et all (2014, p.2), local governments possess the legal, budgetary and knowledge resources that are needed for the existence of self-organization initiatives, which is also pointed out by Edelenbos, et all (2018, p. 54). Hence, local governments co-evolve with the initiatives and they influence each other. Thus, the local government is one of the actors in self-organizations.

However, for a lot of citizen initiatives, the current revenue-models and legal & bureaucratic systems are not always suitable for citizen initiatives. They strive for new systems but are bound by the current (governmental) systems of society, which does not positively influence space of experimentation. So, there is a mismatch between the government and its governance and the pursuit of citizen initiatives (Kennisland, n.d., p. 10)(WRR, 2012, p.69). The bottom-up initiatives often are an alternative to the established traditional society like the national and local government and other companies like housing

corporations or energy companies. Nevertheless, in practice they need each other and both parties are seeking more and more for ways to work together and co-create (Kennisland, n.d., p. 14).

According to Kennisland (n.d., pp. 19-30), social initiatives often face problems in the following areas:

- Legal space. Initiatives often work integral and cross different governmental departments and policies, which can lead to difficulties in legal matters.
- Financial space. Social initiatives are by far not always charity initiatives. They need incomes in order to make the initiative feasible, whereas the social added value does not always manifest in monetary terms.
- Institutional space. Established (governmental) institutions play an important role for social initiatives, but their ways of working, cultures and mechanisms do not always match. Social initiatives feel the urge to work around the bureaucratic mechanisms and sometimes in more 'informal' ways.
- Mental space. Social initiatives often work in an 'organic' way, wanting to realize an idea and taking all possibilities that bring them closer to their goal. What lacks is a clear focus, tactics and strategy. They benefit from professional experience, training and coaching.

These problems were also pointed out by WRR (2012, p. 62 and pp.107-128), beside, they add short-term thinking (from both citizens and government) as a problem and the insecurity of key-figures. The key figures for citizen initiatives are:

- Leaders, that pull the initiative.
- Connectors, that build the bridge between groups of citizens, but also between citizens and policy makers.
- Chains of networks, groups of connectors and leaders that shorten the distance between citizens and policy makers.

In order to help the citizen initiatives, policy makers need to give space to the initiatives to do their work, the need to give ownership to the initiatives, but they also should be a backbone to 'protect' the initiatives and give them help (WRR, 2012, p. 99-103).

Self-organization or citizen initiatives can be linked to meta-governance, which is the engagement of political authorities in promoting and guiding the self-organization of governance systems (Nederhand, et all, 2014, p. 6). Government involvement can be in the form of the development of frameworks and guiding of self-organization, the monitoring and assessment of self-organization processes and output, and to discipline and participate in the process of self-organization. Besides, the government can choose to only indirectly influence the political, financial and organizational context of the self-organization or with the direct involvement in the political, financial and organizational context of the self-organization, in other words, the facilitation of the self-organization process and the participation of the self-organization outcomes. Governments can also decide to design the institutional context of self-organization, without directly influencing the outcomes of self-organization (Nederhand, et all, 2014, pp.6-7).

In a report of the WRR (2012, pp. 12-13), it is shown that, in order to fully benefit from citizen potential and citizen initiatives, citizens and policy-makers/ the government should trust each other and policy-makers should create space for engagement and initiatives. Governments should change their perspectives to the perspectives of the citizens.

In a report of TNO (de Koning & van den Broek, 2011, pp. 4-13), about how governments should deal with co-creation, TNO investigated four 'questions' that governments should ask themselves before starting with co-creation and using the creativity and knowledge of citizens in their service delivery and policy making:

- Maturity: Does co-creation fit within the government organization? Which focusses on the aim, leadership, culture of the organization, the structure and processes of the organization and the infrastructure of ICT.
- Suitability: At which tasks does co-creation fit? Is co-creation the best instrument for the task? It focusses on the policy phase, the connection of the task with the characteristics of the organization, the connection of the task with the characteristics of the involved citizens, the risks of the task and the necessity of community knowledge.
- Implementation: What are the factors for a successful implementation? For a successful implementation, the size of participant group, the scope of the participant group, privacy, trust, the right process, the right resources, and usability of the online environment are necessary.
- Evaluation: How is the co-creation process evaluated? Which evaluates the three questions explained above.

According to van den Berg (2013, pp. 6, 16-17, 23), bottom-up initiatives show, even though they are often small-scaled, what citizens want the city to be. Initiatives for the city are not only local spatial interventions, but also interventions in the bureaucratic decision-making processes where the shaping of the city normally takes place. For instance, where in big cities the municipalities often focus on a 'functional' public space which is safe, clean and manageable, the focus of initiatives is on creating a place of residence and a living environment. There is a mismatch on the focus of governments and on what the citizens actually want or need in their city. Implicitly, the initiatives show a demand for a more democratic way of shaping the city and public space. However, the potential of bottom-up initiatives and their potential to foster social and democratic innovation are hardly recognized by city departments, municipalities, corporations and other institutions. Bottom-up initiatives are small players in the economic focus of the playing field in which they operate. Their significance for the development of the city shows itself more in the innovative ways of intervening in the bureaucratic processes of shaping the city.

The initiatives formulate their ideas outside the institutional frameworks but relate to physical urban space that contains many interests captured in environment acts, complex laws and jurisdictions, controlled by difficult accessible bureaucratic devices. Initiatives are dependent on institutional bodies, which often leads to frustration at the initiatives or sometimes results in initiatives dropping out, instead of leading to a constructive shaping of the plans. Initiatives plead not only for a government that facilitates, but also a government that actively helps the initiatives (van den Berg, 2013, p.20).

The VNG (association for Dutch municipalities), is aware of the fact that citizens take more and more initiative in the design of the public domain (VNG, 2017). However, citizen initiatives don't do this completely by themselves. Organization increasingly takes place with local governments, social institutions and companies, where the ambitions and talents of citizens and their environment define the approach and success of the initiative. Citizen initiatives are not a new phenomenon. In the Netherlands, they can be divided in three waves: the first wave was when craftsmen organized themselves into guilds. Besides, in the same period the Dutch Water Boards (waterschappen) were created, which was the first democratic body organized by citizens. The second wave emerged as a reaction on the industrialization. The working class organized themselves in labor unions, corporations et cetera. Characteristic for the second wave was the price and quality effect. In the third and current wave of citizen initiatives lifespan and often the membership period shorter. However, both young and old are involved. Citizens with different backgrounds collaborate on a common goal to improve the service that is delivered by the municipalities.

For municipalities, it is no longer the question if citizens come up with initiatives, but how municipalities can work together with the citizen initiatives, what the roles and responsibilities are and what this means for the democratic processes at the municipalities. On one hand, municipalities need to let go, but on the other hand, municipalities need to stimulate and facilitate citizen initiatives. Besides, municipalities need to make sure that they are ready for participation, which is not always the case. Municipalities and citizen initiatives need to organize together. A form of this collaboratively organizing is the 'Right to Challenge'. Right to challenge challenges organized groups of citizens to take over services from the municipalities if the citizens think that the services can be better, smarter or cheaper. With right to challenge, the government-citizen relationship changes in a commissioner-contractor relationship (VNG, 2017).

# Platforms for citizen participation

That there is a conflict between the bureaucratic institutional systems and citizens who have their own ideas on what is needed in their cities, and that something needs to change is clear. Not only for citizens and scholars, but also governments become more and more aware of the fact that their organizational structure needs change if they want to involve citizens in their decision-making processes. Digital tools can provide solutions in the engagement with citizens. Waag Society, Netwerkdemocratie and Ministerie van Binnenlandse Zaken en Koningsrelaties collaborated and designed a guide for the digital democracy (de Zeeuw & Pieterse, n.d.). They state that service delivery and communication at municipalities are increasingly digitalized and social media shows an exponential growth of interaction between citizens and municipality. However, the usage of digital tools in the processes of policy- and decision making seems rather limited. The role of citizens is changing, they have multiple channels to show their disagreement and they are increasingly using these channels to show their disagreement. As a result, there's an urge for municipalities to change their communication, but also for the creation of space in the decision-making processes for new forms of input, acknowledging the changing role of citizens (de Zeeuw & Pieterse, n.d., p. 8). The current gap between municipalities and citizens is in contrast with the possibilities for communication and collaboration that the network society has to offer. With the creation of platforms for participation, municipalities can enable citizens to take part in the decision making process and structurally involve citizens in these processes. Not only to react on plans, but also to take part in the design of the plans. Considering van Reybrouck (van Reybrouck, 2013, in de Zeeuw & Pieterse, n.d., p. 10), democracy is not the governance of the best people in society (which is called aristocracy), but the equal right to decide on political decision making. Technological tools enable the adding of participative elements to the decision making process. Digital democracy gives citizens direct and more interactive ways to participate. However, it only works when citizens get a real influence on the decision making. Digital democracy does offer the tools, but these tools need to be a part of the decision making process in order to work. If the digital tools are part of the decision making process it will improve communication and interaction between citizens and municipalities, ensure deliberation and increase participation and the influence of citizens in public decision making. However, for the introduction of digital tools, there needs to be both internal as external support. It needs to be a supportive tool and not an aim in itself (de Zeeuw & Pieterse, n.d., pp. 11-13, 23).

According to Falco & Kleinhans (2018, p. 1), there is an increased attention for collaboration and participation of citizens in governments activities in many disciplinary fields, derived from the potential of new media, digital platforms and other digital tools for the interaction between municipalities and citizens. The demands of citizens and the actions of governments require 'two-way engagement and closer collaboration'. Considering Falco & Kleinhans, there not only is an increased interest in the theme citizen participation, but also in the theme co-production, which is defined as the better use of assets and resources between the public sector and citizens to produce better outcomes and improve efficiency

(Falco & Kleinhans, 2018, p.1). This increased interest in co-production resulted in development and usage of online applications and platforms where governments make their data available for the design of new ideas and solutions. Even though the potential for facilitating interaction between governments and citizens by the usage of online platforms for participation seems to be high, not many of those platforms resulted in interaction, collaboration and co-production of ideas and services (Falco & Kleinhans, 2018, p.2). According to Falco & Kleinhans (2018, p.3), online platforms for citizen participation are specifically developed for participation purposes and differ from social media platforms. Considering many scholars , Falco & Kleinhans identified three levels of citizen engagement with an increasing degree of interaction in the usage of online platforms for citizen participation:

- Information sharing. There is a one-way communication from government to citizens.
- Interaction. There is a two-way communication between governments and citizens.
- Civic engagement, involvement & collaboration. The two-way interaction go further than information exchange and citizens and governments collaboratively design policy measures and service delivery, also referred as the co-production level.

Online platforms for citizen participation often facilitate the creation of networks and communities, which results in the sharing of different fields of knowledge. In the level of co-production, citizens have the possibility to identify and discuss problems, and to collaboratively design solutions. The platforms often have the aim to inform urban planning (Falco & Kleinhans, 2018, p. 4).

According to Linders (2012, p. 446), interactive channels and platforms for citizen participation have the potential to rethink the traditional boundaries between governments and citizens, since the ways in which the public and governments interact and develop services are drastically transformed. Besides, co-production becomes more realistic and relevant with the advanced technologies, since the public is no longer treated as a customer but as a partner. Formerly, coproduction was limited by the government's (in) ability to coordinate to coordinate citizens and their action and limited by the (in)ability of regular citizens to self-organize themselves. Online platforms for citizen participation reduce these limitations by the interactive possibilities of the platforms.

A publication by van Dijck, Poell & de Waal (2016, p. 9), learns us that in the past couple of years, many platforms arose in the Netherlands that aim to improve the life and the interaction between citizens in their neighborhoods, by providing an online meeting place, a platform, where neighbors can communicate and interact to improve the livability of the neighborhood. According to Okere (2016), 'Platforms succeed via participation, where governments fail'. The architecture of certain platforms can be leading in how we collaboratively shape the future of the neighborhood. Online platforms of all kinds of types play an increasingly important role in many domains of society and sometimes people even talk of a revolutionary development. Platforms transformed the way in which citizens, consumers, organizations, companies and governments produce knowledge and information and there often is a notion of co-production of development and services (van Dijck, et al, 2016, p. 10). Van Dijck, et al (2016, p. 11) defined online platforms as 'technological, economic and social-cultural infrastructure for facilitating and organizing online social and economic traffic between users and providers, with user data as fuel'. Different platforms are often connected to each other, resulting in an eco-system for the organization of all kinds of connections between users and providers and increasingly influencing the social and economic traffic in society. Online platforms are supposed to add value for citizens, consumers and entrepreneurs, and enabling them to take matters in own hands. The online platforms blur the distinction between consumers and producers, resulting in quicker innovation possibilities for governments, companies and organizations. According to van Dijck, et al (2016, pp. 17-18), online platforms differ from 'normal' website in the sense that they collect large amounts of data about its users (content data and user data), and often use algorithms to process this data.

The emergence of online platforms has a major impact on society and on the ways in which public interests are preserved. Online platforms created new dynamics in a society in which public interest were preserved in democratic processes by institutions. The promise that online platforms ensure an open and transparent society in which every citizen has access to online communication is often presented as a panacea for the inefficient government. The platform society is supposed to decrease the need for governments, since citizens have the ability to actively contribute to organization of social and economic traffic (van Dijck, et al, 2016, p. 136). However, even though online platforms are sometimes presented in a way that governments become unnecessary or irrelevant, this is not the least the case. Governments have at least three separate rolls to play in the platform society (van Dijck, et al, 201, p.139):

- Governments and public institutions are <u>users</u> of online platforms, to communicate or provide services to citizens by the usage of online platforms.
- Governments have the duty to <u>regulate</u> online platforms, with the overarching responsibility for the public domain, by stimulating or restricting certain platforms.
- Governments can be the developer of online platforms, for the delivery of public services.

According to Priester (2017, p. 4), online platforms are perfectly suitable to organize a network society, and way more capable in doing so than offline institutions. Online platforms become more and more determinative in the way society is organized, by bypassing the traditional institutions that supposed to guarantee public values. Individuals have the possibility to reach a large amount of people through the network possibilities of online platforms. However, governments have the duty to guarantee the public values in society, also the public values in the platform society. Bottom-up networks intensively organize themselves online with the help of platforms, enforcing democratic experiments on a local scale, close and relevant for citizens, where democracy has the ability to renew and prove itself. Local governance has a key role to play in renewing democracy by creating coalitions between citizens, entrepreneurs, designers researchers and civil servants with safe conditions and sustainable co-creation processes (Priester, 2017, pp. 14-17). According to Priester (2017, p. 22), online platforms play a key role in the digital transitions. They often are the place where content is created, where discourse takes place, where goods or services are provided and sold and where new ideas are created and tested. Online platforms are the place where human activity comes together. Besides online platforms for citizen participation offer potentially all functionalities necessary for the support of the informal and formal processes that lead to democratic renewal. In local networks the natural need for democratic renewal emerges when citizens experience themselves that they are dependent on the other people in their neighborhood, supported by the feelings of ownership of the physical and social environment (Priester, 2017, pp. 122-

According to Priester (2017, p. 133), there are five levels of collaboration at online platforms that facilitate the collaboration for a livable neighborhood:

- Sharing of stories about the history and character of the neighborhood.
- Sharing of information about the people involved in the neighborhood network and news and activities of the neighborhood network.
- Sharing of goods and services in the neighborhood network.
- Sharing of projects, to concretely collaborate on a better neighborhood.
- Sharing of priorities. There are different interest in the neighborhood that needs to be weighed and decided upon.

### Conclusion

The research question 'How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives?' can be answered the following way:

In the Netherlands, society is changing from a welfare society to a participation society, giving more responsibilities to citizens and putting governments in a more facilitating role. This resulted (fostered by the economic crisis and cutbacks in governmental spending) in networks of self-organizing citizens. Besides, communication changed from offline to online, giving citizens an increased amount of platforms to share their opinions. This forces governments to change their traditional ways of working and involve citizens more and more in their policy and decision making processes, which appears to be difficult for governments, who are often still trying to force their regulative role. The balance between regulating, participating and self-organization needs to be redefined. As mentioned in the former chapter (research question 2), (local) governments benefit greatly from the involvement of citizens in policy making and service delivery. However, citizens often have difficulties with the traditional and bureaucratic systems in which (local) governments are still working. Hence, there is a mismatch between the government and its governance and the pursuit of participation, co-creation and citizen initiatives. However, (local) governments can facilitate participation, co-creation and/ or citizen initiatives, by creating space, developing frameworks, guiding and assessing the processes and outcomes. Besides, digital tools can offer solutions for engaging with citizens. Municipalities are increasingly digitalizing their communication and social media and other platforms show that the interaction between municipalities and citizens massively increases. Platforms for citizen participation can enable citizens to participate in the policy and decision making processes and the service delivery of municipalities. The platforms can be used for information sharing, interaction and civic engagement and collaboration. Platforms have the potential to transform the ways in which (local) governments and the public interact and collaborate. Due to the network and interactive possibilities of online platforms, both (local) governments as individuals are able to reach a large amount of people. (Local) governments can be users of certain platforms, regulators of the platforms or developers of the platforms.



# **Empirical Research**

# Extensive empirical research

All over the world, a lot of digital platforms for citizen initiatives have been developed to facilitate coproduction between citizens and sometimes also between citizens and governments. Previous studies have tried to give some overview of the platforms and tried to classify them. However, this has been done in a rather fragmented way (Falco & Kleinhans, 2018, p.1) and none of the previous studies have focused exclusively on the Dutch platforms. In their paper, Falco & Kleinhans (2018), analyzed a set of 113 (international) platforms for co-production on their level of citizen government relationship, technological features, pricing patterns etc. In their recommendations for further research they stipulate the fact that is very relevant for other researchers to expand the overview with other platforms and features, to create an up-to-date knowledge base. This extensive empirical research aims to expand the list with an analysis of Dutch platforms and expand the list with extra criteria and objectives. The list of identified platforms and their analysis is in no way fully comprehensive and it is likely that there are more existing platforms for citizen initiatives in the Netherlands. The aim of this extensive empirical research is to provide a general overview of Dutch online platforms for citizen initiatives and their features. In total, 18 platforms have been identified, the descriptions of the platform can be found in Appendix 1 – Extensive research case descriptions. The platforms were found by a random google search on 'platform initiatief' (platform initiative), or 'bewoners initiatief' (citizen initiative) sometimes with names of municipalities included to check of certain municipalities have online platforms for citizen initiatives, after that, a so called snowballeffect was created: some municipalities or platforms referred to other platforms, which were included as well. The main criteria of including the platforms in this list was that there had to be at least an overview of participating initiatives. The analysis uses a cross case analysis to identify the similarities and differences between the platforms ad to give a general overview of the types of platforms available in the Netherlands and their functionalities.

# Cross case analysis

Platform &	Buurbook	Droomstad	Stadslab breda	Kamer van doen	Maex	Stem van West
<b>Factors</b> Owner	Private organization	Private organization, participation of municipality	Private organization	Collaboration of municipality and professionals	Private organization, participation of municipality	Municipality
Timeframe	2013 - >	2015 - >	2016 - >	2015-2016	2013 ->	2017, ->
Location	All over the Netherlands	All over Netherlands, but special focus on Nijmegen & den Bosch	Breda	's Hertogenbosch	All over Netherlands, special focus on Utrecht, Rotterdam and the Hague	Amsterdam, city area west
Amount of initiatives	100+	100 +	10-20	0-10	100+	50-100
Tools	Map with locations, Overview of initiatives, Calendar with activities, News feed, Share initiative on fb twitter and mail. Follow initiative, Like initiative, React on initiative, Option to link with other plans, Photos, videos and description of initiative.	Map with locations, Overview of initiatives, Vote for initiative/ add as favorite, Share initiative on Fb, twitter, linkedin and mail, description, pictures and videos of initiative, Option to link initiative to a bigger organization, Option to ask for specific help or service at the initiative, Option to react on initiative.	Map with locations, Overview of initiatives, Newsfeed, Calendar with activities, Share initiative on fb twitter linkedin googleplus rssfeed mail, Option to react on initiative Description and pictures of initiative	Overview of initiatives, Description of initiatives, pictures, newsblog	Map with locations, Overview of initiatives, Newsfeed, Rate an initiative, React on initiative, Share on fb and twitter, Description, of initiative, pictures, Phase of initiative, People that volunteer in the initiative, Shows worth of the initiative (environment and people), Shows specific help and services that are needed. Shows phase	Map with locations, overview of initiatives, description, pictures or videos of initiatives, option to react on or vote on initiative, newsfeed, calendar with activities, Share initiative on facebook, twitter or mail, status of the initiative at the municipality
Level of website interaction possibilities (scale 1-5)*	4	5	3	1	5	4
Level of citizen- government relationship**	Self- organization, public matters	Self-organization, public matters & co-production	Self- organization, public matters	Co-production	Self-organization, public matters	Co- production
Focus on actively offering help to initiatives in the process to realization	No	No	Yes	Yes	No	No

Platform & Factors	Stichting initiatief op Scheveningen	Verbeter de buurt	Mijnbuurtje.nl	Citylab 010	Zocity	Jij maakt de buurt
Owner	Private organization, collaboration with municipality	Private organization, participation of municipalities	Private organization	Collaboration between municipality and other organization	Private organization, participation of municipality	Municipality
Timeframe	2015 - >	2009 - >	?->	?, ->	?->	?, ->
Location	Scheveningen	All over the Netherlands	All over the Netherlands	Rotterdam	Amsterdam	Enschede
Amount of initiatives	10-20	100+	100+	100+	20-50	100+
Tools	Overview of initiatives, Description and pictures of initiative, Share on fb and twitter, React on initiative, newsfeed	Map with locations, Description and pictures of problems and ideas, support or react on a problem or idea, Share of facebook or twitter, shows phasing	Map with locations, Overview of activities, Agenda and newsfeed of activities, Ask or offer help and products, Descriptions, pictures and video's of activities, Share on fb, twitter,google+, linkedin, mail	Map with location, Overview of initiatives, agenda and newsfeed, description and pictures of the initiatives, option to ask for help or resources, option to join or follow the initiative, share on facebook, twitter and linkedin.	Map with locations, Overview of initiatives, Description and pictures of initiative, Share on twitter fb and google plus, Like initiative, React on initiative, Phase of the initiative, Newsfeed, Calendar with activities.	Map with locations, overview of initiaitves, description and pictures of initiatives, possibility to react on initiatives and to like or dislike reactions, newsfeed and agenda with activities, share on fb, twitter, pinterest, googleplus, mail, status of the initiative at the municipality
Level of website interaction possibilities (scale 1-5)*	2	4	3	4	3	4
Level of citizen- government relationship**	Self- organization, public matters & co-production	Information sharing	Self-organization, public matters	Co-production & self- organization, public matters	Co-production	Co- production and self- organization, public matters
Focus on actively offering help to initiatives in the process to realization	Yes	No	No	Yes	No	No

Platform & Factors	Civocrazy	Platform Duurzaam Dordrecht	Nextdoor	040 goed bezig	Maak je stad	Gouda bruist
Owner	Private organization, participation of municipalities	Private organization	Private organization	Collaboration municipality and professionals	Collaboration of municipality and professionals	Private organization
Timeframe	2015, ->	2010, ->	2011, ->	?->	2017 - 2018	2010, ->
Location	All over the Netherlands, special focus on Losser	Dordrecht	All over the Netherlands	Eindhoven	Amsterdam	Gouda
Amount of initiatives	20-50	0-10	100+	100+	20-50	50-100
Tools	Overview of initiatives, newsfeed of initiatives, agenda with activities, description and pictures of initiatives, possibility to react on initiative, possibility to follow and support the initiative	Overview of initiatives, description and pictures of initiatives, newsfeed and calendar of activities, share on facebook, twitter and mail.	Overview of messages, interactive map with locations, pictures and descriptions of messages, calendar of activities, possibility to react on or like a message	Map with locations, Overview of initiatives, Newsfeed, Share on fb linkedin and twitter, Description, pictures and videos of initiative, Volunteers and organizations that help the initiative, React on the initiative, Linked initiatives in the neighborhood.	Overview of initiatives, Description and pictures of initiatives, Newsfeed, Share on facebook and twitter.	Map with locations, overview of initiatives, Newsfeed, calendar with activities, description and pictures of initiative, option to participate or react on initiative, share on facebook, twitter, googleplus or mail. Option to ask or offer goods or services, verview of active people, organizations and locations, shows phase
Level of website interaction possibilities (scale 1-5)*	3	2	4	4	1	5
Level of citizen- government relationship**	Co-production	Self-organization, public matters	Self-organization, private matters	Co-production & self-organization, public matters	Co-production	Self- organization, public matters
Focus on actively offering help to initiatives in the process to realization	No	Yes	No	No	Yes	Yes, but not main focus.

Table 9. Cross case analysis (own illustration, 2018).

- \*: 1 point for only overview/ location map, 2 for also sharing possibilities, 3 for also reaction possibilities, 4 for also voting/ liking/ rating/ helping the initiative, 5 for also asking and collecting specific help or services.
- \*\*: The level citizen-government relationship can be divided in four levels (Falco & kleinhans, 2018, p.5):
  - Information sharing, one-way communication from government to citizens (informing) or from citizens to governments (consulting).
  - Interaction, two-way communication from citizens and government representations.
  - Co-production, public sector and citizens make use of each other's assets and resources to achieve better outcomes and efficiency.
  - Self-organization, citizens create solutions independently which are recognized or adopted by governments and require some government action (public matters) or citizens share information and self-organize for matters of private interest that may develop into public action that require some government action (private matters).

#### Conclusion

This part of the research gives answer on research question 5: <u>What are the characteristics of online platforms for citizen initiatives</u> and what is the impact of the platforms on the built environment?. From the cross case analysis, the following conclusions can be derived:

- Most of the platforms are located/ focusing on the South West of the Netherlands. This might be because most of the major cities in the Netherlands are located in the South West of the Netherlands, however this link is based on assumptions (fig 12).
- Not many municipalities are owners or builders of the platforms. They are often build/owned by private organizations/ entrepreneurs. Sometimes the municipality collaborated with private organizations and are collaboratively owners of the platforms. Other times the platform is owned/ build by a private organization, but the municipality actively participates on the platform. The division between collaborating and participating is 50/50 (fig. 13).
- Far out the most of the platforms are very big and have more than 100 initiatives posted on their platform (fig. 14).
- Almost all the platforms focus on co-production or self-organization. This division is almost 50/50 (fig. 15).
- There are more platforms that do not focus on offering help than platforms that do. However with a division of 11 vs. 7, the difference is not much (fig 15).
- There are not many platforms that do not focus on website interaction. Most of the platforms go to the level of voting. A few of the platforms also reach the highest level of asking or offering help or services (fig. 16).
- There is a wide array of tools available on the platforms. The tools that are provided least are offering help and showing phasing (fig. 17).
- Most of the platforms have the option to share initiatives on Facebook and Twitter. Some of the platforms offer the sharing option for Google+, LinkedIn and mail (fig. 18).
- The first platform was built in 2009. In 2013 and 2015 many new platforms arose. Only two of them stopped after a period of time (fig 19).
- Since the division between the type of owner and the amount of initiatives is very dispersed, a link between the owner type and the amount of initiatives cannot be made (table 10).
- The platforms that focus on co-production often have a medium amount of initiatives. The platforms that focus on self-organization or a combination of self-organization and co-production often have a high amount of initiatives (table 11). This might mean that the platforms with a self-organization component are visited or actively used more often than co-production platforms.

This can be because of the fact that with self-organization every type of initiative is possible and with co-production, initiatives have to fit into some kind of framework from the municipality, which decreases the amount of possible initiatives.

- Most of the purely self-organization platforms are owned by private organization. The platforms that have a co-production component often have the involvement of municipality in the ownership of the platform (table 12). This might mean that municipalities often have their own objectives/ aspirations with the platform.
- Most of the platforms with a low amount of initiatives focus on offering help whereas the platforms with a high amount of initiatives do not (table 13). A logical explanation can be that it is not possible to offer help to a high amount of initiatives, since it would take too much time or manpower to actively help all the initiatives.
- Most of the platforms that focus on offering help are the platforms where the ownership is a collaboration between private organization and the municipality (table 14).
- The higher the amount of initiatives is on the platform, the more the amount of interaction possibilities is on the platform (table 15). It can be that citizens prefer a lot of interaction possibilities if they actively use the platform and that a high amount of interaction yield more initiatives.
- Since the division between the type of owner and the level of interaction is very dispersed, a link between the owner type and the level of platform interaction cannot be made (table 16).

#### **Locations**



Fig. 12, Locations (own illustration, 2018).



Fig. 13. Owner (own illustration, 2018).

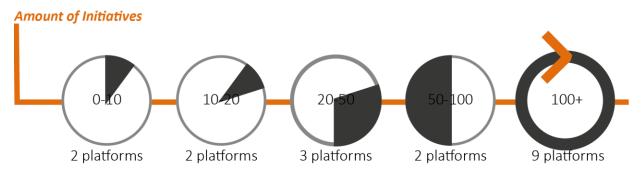


Fig. 14. Amount of initiatives (Own illustration, 2018).



Fig. 15. Citizen government relationship (Own illustration, 2018).



Fig. 16. Level of interaction (Own illustration, 2018).

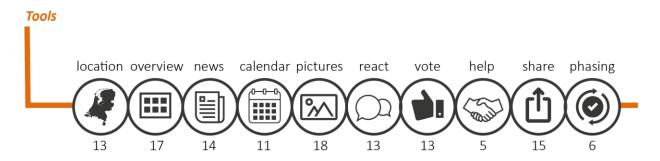


Fig. 17. Tools (Own illustration, 2018).

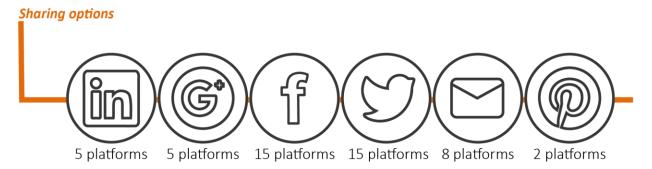


Fig. 18. Sharing options (Own illustration, 2018).

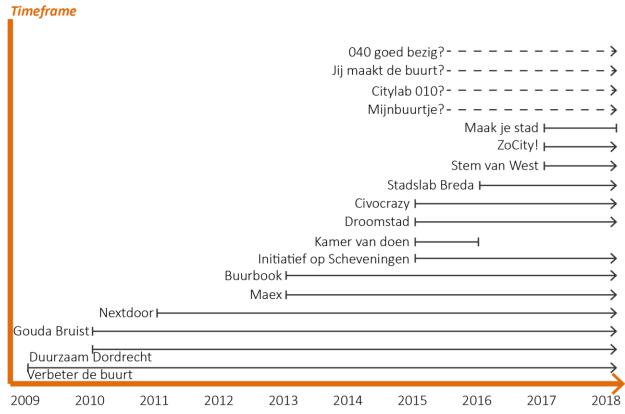


Fig. 19. Timeframe (Own illustration, 2018).

	Owner			
Amount of initiatives	Private org.	Private org. participation of muni.	municipality	Collaboration muni + private org.
0-10	1	0	0	1
10-20	1	0	0	1
20-50	0	2	1	1
50-100	1	0	0	0
>100	3	3	1	2

Table 10. Amount of initiatives versus owner type (Own illustration, 2018).

	Cit-gov relationship			
Amount of initiatives	Information sharing	Co-production	Self-organization	Combination of co-production and self-organization.
0-10	0	1	1	0
10-20	0	0	1	1
20-50	0	4	0	0
50-100	0	0	1	0
>100	1	0	4	4

Table 11. Amount of initiatives versus the level of citizen-government relationship (Own illustration, 2018).

	Cit-gov relationship			
owner	Information sharing	Co-production	Self-organization	Combination of co-production and self-organization.
Private org.	0	1	6	0
Private org. participation of muni.	1	2	1	1
municipality	0	1	0	1
Collaboration muni + private org.	0	2	0	3

Table 12. Owner type versus the level of citizen-government relationship (Own illustration, 2018).

	Focus on offering help	
Amount of initiatives	yes	no
0-10	2	0
10-20	2	0
20-50	1	3
50-100	0	1
>100	1	8

Table 13. Amount of initiatives versus focus on offering help (Own illustration, 2018).

	Focus on offering help		
owner	yes	no	
Private org.	2	4	
Private org. participation of muni.	0	5	
municipality	0	2	
Collaboration muni + private org.	4	1	

Table 14. Owner type versus focus on offering help (Own illustration, 2018).

	Level of website interaction				
Amount of initiatives	Overview/location	+sharing options	+reaction options	+voting/supporting	+asking/offering help

0-10	1	1	0	0	0
10-20	0	1	1	0	0
20-50	1	0	2	1	0
50-100	0	0	0	0	1
>100	0	0	1	6	2

Table 15. Amount of initiatives versus level of website interaction (Own illustration, 2018).

	Level of website interaction						
Owner	Overview/location	+sharing options	+reaction options	+voting/supporting	+asking/offering help		
Private org.	0	1	2	2	1		
Private org. participation of muni.	0	0	2	1	2		
municipality	0	0	0	2	0		
Collaboration muni + private org.	2	1	0	2	0		

Table 16. Owner type versus level of website interaction (Own illustration, 2018).

# Intensive case study research

The interviews and the case study research focus on the STOPE development profile (Bakry, 2004). The STOPE development profile is a framework that can be used for the analysis of egovernment development. It provides a common base for developing and improving (electronic) government services. Thus, it can be applied to government led platforms for citizen initiatives. The STOPE development profile consists of five elements:

- Strategy, elaborates on the vision (target) and the mission (reason) of the strategy.
- **Technology/ data**, focusses on the technology that enables the development, like the IT that is used, the communication infrastructure and the internet services structure.
- **Organizations**, includes all organizations that deliver content to the development (partners), and organizations that use the development.
- **People**, consists of the users of the platform, and the staff and managers of the platform.
- Environment, is associated with three dimensions: knowledge, economy and management.

To give a complete answer to the research questions, an extra element is added to the STOPE framework: Succes and realization. According to Franzen, et all (2011, p.219), all governance activities in the end aim to lead to a successful development. This is the same for the establishment of platforms for citizen initiatives. The platform has no goal if it does not yield successful citizen initiatives. Therefore, it is relevant to investigate the factors that make a citizen initiative successful. Interview questions about the success factors of citizen initiatives will be contributed with a literature study on the success factors of citizen initiatives and what they need to become a success.

The case study research focusses on these six elements and compares the elements across the different case studies via a cross case analysis, as shown in Table 1.

Type	Platform	Platform	Platform	Platform	Municipality	Municipality	municipality
Case	Stadslab Breda	Droomstad	BuurBook	Stichting initiatief op Scheveningen	Municipality of Utrecht	Municipality of Delft	Municipality of Den Bosch
Element				_			
Strategy							
Technology/							
data							
Organizations							
People							
Environment							
Succes/							
realization							

Table 1. Case study analysis (Own illustration, 2017).

#### Discussion

#### Strategy

For Maarten van der Velde, the owner of the platform Buurbook, the starting idea was to make the communication and collaboration between municipalities and citizens easier. Making it easier for citizens to come up with ideas for the living area and to work together with other citizens on these initiatives. Besides the idea was that it would make it easier for municipalities to consult with citizens on their own ideas or ask questions to citizens on what they want in their area. So BuurBook wants to change the ways

of collaboration between municipalities and citizens. More effective, faster, and smarter to create more support and trust between municipalities and citizens. However, according to van der Velde, the municipalities appeared to be rather hesitant to show themselves online. Besides, many neighborhoods are doing quite fine, and don't need to change that much. Also, citizens often forget that not everyone shares their ideas and that they need to communicate with the neighborhood to create an initiative that is shared by the residents of the neighborhood. Therefor the platform was broaden to a platform for social neighborhood interaction and neighborhood economy. This results in mixed networks in the neighborhood which makes the neighborhood a connected neighborhood.

The strategy of Martijn van Osch, founder of the platform Droomstad, was a bit different. He noticed that there were a lot of initiatives in the city, but also saw that they often were repetitions of former initiatives. He realized that there were many more and diverse initiatives possible, only the networks of people were not yet able to find each other. Van Osch wanted to see innovative energy in the city, and noticed that many people were experiencing the same. After talking to a lot of people, and researching how city development takes place, van Osch noticed that there are quite some parties with large budget that are able to develop big projects in the city. On the other hand, there are also many small networks and small entrepreneurs that together develop small projects. They have a lot of creativity and energy, but also small budgets, and are sometimes organizational-wise not very strong. Van Osch wanted to bring those ideas together. Together with a group of students and with input of the municipality the concept of the platform Droomstad was developed. A website developer helped with building the website. Before the platform was put on-line, some events were organized were the ideas of the platform were communicated and were visitors were able to give feedback. Some organizations were already willing to participate, so when the platform was launched, there already was content on the website. The platform was first established in the city Den Bosch, and later a platform for the city Nijmegen and a nation-wide platform were developed, to give organizations that operate in multiple cities the possibility to also get involved in the platform without having to wait for the development of a specific platform in all the cities in which they operate. The platform is called Droomstad (Dreamcity) for a reason: when a lot of dreams of residents are made practical and realized in a city, people tend to recognize themselves and their dreams more and more in their city, they see something of themselves back in the city, which makes them happy, but also makes that they take more responsibility for their city, it makes them enthusiastic about their city.

While BuurBook and Droomstad were realized as an initiative by entrepeneurs, this was not the case for the realization of the platform Stichting Initiatief Op Scheveningen (SIOS, foundation initiative at Scheveningen). The realization of SIOS was commissioned top-down by the European Union. The European Union was researching ways to involve the public with governmental spending. The first stage of the research project focused on rural areas and the involvement of citizens in major projects. In the second stage, the European Union wanted to also focus on port areas. The Netherlands selected Scheveningen as a pilot, as part of the project 'Kansen voor West' (Opportunities for West). In Scheveningen, there was a lot of unemployment. The aim was to involve citizens in the creation of initiatives and activities that decrease the unemployment. The representatives of the residents organizations, culture organizations, sports organizations and business organizations at the coast of the Hague (Scheveningen), where asked to participate in the pilot. The representatives got together, and defined criteria for the pilot. The pilot needed to yield employment, it needed to combine and connect work and education, young and old, citizens and companies, etcetera, to be sustainable and it needed to foster ideas and initiatives for the area. SIOS got a subsidy of 900.000 euro's from the European Union, and decided to spread the subsidy over three years and to organize two rounds each year where initiatives can apply for the subsidy. The first round yielded 11 initiatives, of which 7 met the criteria, the

second round yielded 15 projects of which 8 met the criteria and the third round led to 11 projects of which 6 met the criteria. Only official foundations are able to apply for a subsidy, with an exception when a group of youth has an initiative for the area. The foundations need to be legally documented. The initiatives need to create employment, combine education with work and combine multiple layers of society, and it needs to be sustainable in a way that it is not organized one time but has a continuation in the future.

#### Kansen voor West

Kansen voor West (Changes for West) is a partnership between the provinces North-Holland, South-Holland, Utrecht and Flevoland and the cities Amsterdam, the Hague, Rotterdam and Utrecht. The partnership designed a program to give the regional economy in these areas a positive impulse, by the allocation of subsidies to business life in the region. The program is partly financed by the European Fund for Regional Development (Kansen voor West II, n.d.).

The realization of Stadslab Breda started because of a 'mismatch' between the municipality of the city Breda and the building and real estate sector that was active in the city. The municipality was seen as a body that slowed down project because of their bureaucratic ways of working and the building sector was seen as a body that only focused on making money. After a while both parties realized that constructively collaborating might be beneficial for the city and they set up a project that would accelerate this collaboration. Henk Schol, the coordinator of Stadslab Breda was asked to coordinate the project and decided to put together people from the municipality and people from the building sector into workgroups around different theme's, for instance energy transition and healthcare and living. The third workgroup that was created due to the learning process between the municipality and the building sector was Stadslab Breda, following the thought that if the municipality and the building sector are collaborating, they might as well serve the city and innovation in the city and embrace and support new ideas for the city. Stadslab is a network club that enriches ideas and initiatives of residents in a way to make them realistic. They help to keep the continuation in the process to realization, by making smart networks of people with different fields of expertise that can help an initiative. This is done by three different approaches, ranging from small to large, dependent on the complexity of the initiative. The small approach is used when an initiative needs some connections. The initiative is linked with different networks or people with a specific expertise who can help the initiative further in the process of realization. The medium approach is used when an initiative is more an idea and needs more knowledge and experience. In that case, some parties with various disciplines are connected to the initiative and an atelier/ workshop is organized where the parties involved get together and generate ideas in order to improve the initiative. The large approach is not often used, but it not only connects networks, people and knowledge, but also helps with the formulation of a business model et cetera. At Stadslab Breda, there is not a set of criteria on which the initiatives are selected. Stadslab Breda is open to help every type of initiative, unless they notice from the start that an initiative is completely unrealistic. Another criterion is that the initiative is not commercial.

In den Bosch, the municipality started in 2014 to focus on citizen initiatives enforced by the plans of the newly elected council. A fund was set up (initiatievenfonds) to give subsidies to citizen initiatives, with the aim to help citizens with starting an initiative. Citizens with a good idea were able to get a subsidy for the realization of their ideas (Note: the platform Droomstad is supported by the 'initiatievenfonds'). The existence of the fund was communicated to social societies. The social initiatives fund was not the first fund for citizen initiatives. There was a fund for initiatives active for years already, however, that fund focused on very small scale initiatives, which was working really well and a lot of citizens applied for that fund. The social initiatives fund however focusses on larger initiatives and has a specific set of criteria on

which people have to apply: the initiatives need to have a social purpose, it needs to offer something to the city. Another important element is that the initiative need to be supported by a group of other citizens. If somebody comes up with an initiative, but the rest of the people in the neighborhood do not want the initiative to be realized, the initiative won't get any support from the municipality. Besides, the initiative needs to be something additional or new in the social area. It needs to be bottom-up with a future goal in mind. The partners that are attached to the initiative are also important: other citizens or social organizations that are necessary to keep the initiative going. Besides, the financing and exploitation of the initiative need to be clearly explained. The municipality tries to stimulate that after the support from the municipality, the initiative will be able to continue on its own.

After a while the municipality of den Bosch noticed that the people who came up with initiatives needed more support. Besides, they realized that the municipality was often perceived as a very closed body. The municipality wanted to break this perception by stimulating contact with the citizens. In order to stimulate the contact and to help the initiatives and to create a dialogue between initiators and the civil servants that create the policies, the municipality set up the pilot 'Kamer van doen' (room of doing). To help the initiatives that struggle with the 'wall of the municipality'. Besides, it was the aim to bring civil servants together and to discuss about the difficulties that initiators experience when dealing with the municipality. They especially wanted to confront the internal organization of the municipality, like the legal departments that are very far from the citizens, with what was going on in society. Kamer van Doen organized a couple of discussion meeting between the civil servants and the initiators to learn discuss and learn from the difficulties. Besides, citizens were able to come to Kamer van Doen for advice on questions about making business models et cetera.

The municipality of Utrecht focusses on citizen initiatives and participation already for a very long time. According to Karin Visser, staff advisor at the municipality of Utrecht, it had everything to do with the gap between the municipality and the citizens. But also with the fact that society is changing and the duty of the municipality to do something with the changes in society. The local council and the whole municipality notice that citizens want to exert their influence on their own environment. The municipality is not always perceived in a positive way by citizens. Besides, the municipality spends public money, and has the duty to spend it in such a way that it fits the needs of the citizens. In order to anticipate on the changes in society, the municipality of Utrecht follows global developments. For instance, in Brazil, neighborhood budgets are very normal and residents actively decide on which projects the public money will be spend. Following certain examples and requests from society, the municipality of Utrecht started with a pilot for neighborhood budgets. The city area Lunetten wanted to be involved in the pilot and became the city area where the pilot successfully started. Another example is the initiative fund, where initiatives can apply for a subsidy. Besides, the municipality makes a distinction between participation and initiative. With an initiative, the citizen is the leader and owner of the initiative. Sometimes the municipality is needed for help, a permit or a subsidy, but other times the municipality is not involved at all. Other times, the municipality wants to have the involvement of citizens on specific matters. Those cases are called policy participation. The municipality of Utrecht designs her own 'participation ladder', consisting of four steps: the first step is inform, where the municipality informs the citizens that something is going to happen in their area. The second step is consult, where the municipality for instance with an survey, asks for input on a specific matter to align the policy on the focus group. The third step is advise where citizens get an advising role and the municipality needs to justify how they took the advice of the citizens in consideration is their plans. The final step is co-creation, where municipality and citizens collaborate equally on projects in a specific area. The aim of the municipality of Utrecht is to give citizens an advising or co-creating role as much as possible.

For citizen initiatives, the municipality has an initiative fund. The rules are clear. Initiative need to put in their own effort (services, goods, or money wise). The initiative has to stimulate solidarity, community

and cohesion. Initiatives need to actively collaborate with citizens in the neighborhood. It should be implemented in Utrecht and not somewhere else. The initiative needs to be supported by other citizens in the area and city. Incomes and expenses need to be discussed. Besides, the initiatives need to be carried by volunteers. The fund supports the initiatives that meet the criteria for a period of three years, after which they need to be self-sufficient.

To involve citizens more in their policy making, the municipality of Delft started the project 'Delfts Doen' (delfts doing). The municipality had a participation approach, but it was designed in 2005 and very outdated. Because of the new environment and planning act that obligates participation, the municipality decided to completely renew the participation approach and designed Delfts Doen. What is interesting about the design of the approach is that it is not designed by the municipality of Delft, but in co-creation with the city. The municipality started a discussion with the city about how the citizens want to participate with city developments. As a result of the discussions, Delfts Doen was created, which is a process, set of rules, that is used when the city deals with participation projects in the city. The municipality tries to experiment with a lot of participation tools, all evolving from the idea that the municipality should go where the citizens are. Therefore they use social media, meetings, webinars et cetera. The online community is as important as the offline community for the municipality of Delft, according to Natasha Viering, senior community advisor at the municipality of Delft. The offline and online community are often completely different groups of people and it is important to reach both of them.

#### Delfts Doen

Delfts Doen (Delfts Doing), is the participation approach designed and used by the city of Delft for the development of new plans in the city. It is designed with and for Delft and has a specific set of rules (Gemeente Delft, n.d.):

- 1. The initiator organizes participation by himself, with help of Delfts Doen
- Stakeholders, but also relevant laws like the environment band planning act need to be considered upfront.
- 3. Initiator needs to openly and actively get in contact and have conversations with all the stakeholders.
- 4. Agreements need to be made with stakeholders about the process, involvement and collaboration with the stakeholders.
- Ideas, agreements and bottlenecks need to be shared and discussed.
- 6. Initiative needs to be developed into a concept plan that takes into account the rules explained above.
- 7. The concept plan needs to be tested by the stakeholders, where after the plan needs to be
- The actions that are taken and their results need to be reported and shared with the stakeholders
- **9.** The initiative is ready to be submitted at the municipality.

# Technology and data

Van der Velde first tested if the BuurBook platform would function properly on Facebook. However the conclusion was that a neighborhood network needs functionalities that are not possible on Facebook. Besides, the aim and the needs of the platform are different than the aim of Facebook. For instance, the platform needed to be easily approachable. They wanted it to have the possibility to use the platform without first making an account. It needed to be neutral and independent, to keep discussion about the

neighborhood open. For instance, it is not possible to delete reactions of others on your message. So if you want something in the neighborhood, and someone else doesn't want it, it should be clear. This is believed to be crucial when it comes to neighborhood development and initiatives. Everybody needs to have a voice. Furthermore there is a location map which functions as a neighborhood guide. Besides, it is possible to link initiatives. On the map people can make a square for an area, a line for a street and a dot for a single plan. These can be linked so it is possible to make clear if there are sub-initiatives or plans for a bigger plan in an area. This function makes the platform focused and suitable for neighborhood planning and development. Finally, there are no commercials on the site and no tracked cookies, to keep the platform independent.

Firstly, van der Velde tried to build the BuurBook platform with his team, but after a while it was chosen to hire a web developer to build the platform. They noticed that they were found quite easily on google by neighborhoods that requested the platform for their area. Sometimes they asked for specific features. BuurBook would then develop it for them and municipalities were often willing to pay for it. That's when BuurBook realized they could develop the system over time with the input of the users. And this is still happening. Every time when a neighborhood requests a new function, BuurBook analyses the wishes and then develops the function for every neighborhood. So every neighborhood gets a better platform. BuurBook does not collect or analyze the data that is generated on the platform. This is also mentioned in the privacy statement of the site. Users have the right on privacy and ownership of their data. They even have the possibility to make an anonymous account.

The technology and specific functions of Droomstad are based on some specific values: for instance the concept of 'yes, and' instead of 'yes, but', to keep the platform positive and full with possibilities instead of impossibilities. And instead of naming the part where people can react on ideas 'react', it is called 'give help', so that people do not react negatively, but try to help the initiatives to get better. These are some of the values that try to create a positive attitude in the usage of the platform. Besides, the platform has a voting option, to make the support for an initiative visible and give initiators that are maybe not very good in speaking the language that is needed to get things done at the municipality, a voice. Also, Droomstad specifically left out crowd-funding on the website, to force people to ask for goods and services instead of calculating everything that is needed into monetary terms. The platform does however have an option to ask for help, goods or services, since van Osch believes that, in the end, to realize an initiative, people need to make a 'grocery list' of what is needed. However, a lot of initiators do not make this step. The option to ask for help makes the initiative practical. Another function of the platform is the 'dreamlocation', which gives the professional organizations in the platform the possibility to ask for ideas at specific locations, to create specific and concrete initiatives instead of abstract ideas or visions. At the platform, the data is broadly analyzed, on a scale of how many visitors visit the platform and how many votes the dreams get and if connections are made through the section of 'ask and offering help'. It does not go further than that, but according to van Osch, it might be possible in the future that for instance the municipality will ask for more and deeper analysis. However, right now it is not happening yet.

The platform of SIOS has an online website to showcase the initiatives that partake in a voting round and to community some news about the platform. However the focus of SIOS is not on the online community, or on using digital tools to increase the amount of initiatives or making connections digitally. SIOS is more active off-line, and uses the local newspaper for instance to communicate the initiatives to the public and to communicate about the voting rounds.

At Stadslab Breda, the platform is not yet working in the way that Stadslab would like it to work. According to Henk Schol, coordinator of Stadslab Breda, it is because not many people are visiting the website and hardly anyone is voting on the initiatives that are shown on the website. The Facebook page

of the platform is frequently visited and generates a lot of reactions when something is posted, but this however does not work for the online platform site. They are working on improving the usage of the website but this process goes rather slow. The aim is to transform the site into a knowledge and impuls platform, but therefor they need other channels to lead people to the website, like Facebook or Instagram. The website, in the way it is developed and built up, does have a lot of possibilities to organize discussion and dialogues, but Stadslab Breda has not yet managed to let this take place. The website might need a big lodging project to get visitors on the website and to create some content. Stadslab Breda is looking for the help of higher education institutions to get this done and to improve the continuity and consistency of the website, since it is too big of a job for the volunteers of Stadslab Breda to do it themselves.

A municipality that specifically decided to set up a platform for citizen initiatives is the municipality of Utrecht. According to Visser, the municipality often got questions about how many initiatives were going on in the city, on which they had difficulty giving answers, because they did not really have an oversight. Besides, the municipality is not involved with every initiative that is going on. Therefore, they decided to develop a website, 'jij maakt utrecht' (you make Utrecht) to create an overview of the initiatives in the city, to be transparent and as some sort of accountability, to be able to show what the municipality supported and to be able to help them further. The website had a map with the locations of the initiatives. However, the website did not have a lot of other functions, and was not very interactive. Also, information quickly got old and it was impossible for the municipality to maintain the website and keep it up to date. Therefor it was decided to quit the website and to start with the external and independent website MAEX, which is more a digital platform, a community. Funds are able to find initiatives on the platform. Besides, initiatives are kept up-to-date with news and are invited for trainings in crowd funding, et cetera. Once a year an information meeting is organized for all the initiatives that are on the platform. The MAEX platform is way more a community than the former website 'jij maakt utrecht'. Initiatives are able to put themselves on the website and keep their own information up-to-date. If the initiatives need help, they are still welcome in the city area bureaus. Most of the initiatives that are on the website want to get bigger and want to become a sustainable organization. The MAEX platform is starting a 2.0 version of the site, where initiators and social entrepreneurs are able to sell their products, which can help with the sustainability of the initiative. The Municipality of Utrecht also has their own crowd funding platform for initiatives in the city, called 'voor je stadsie' (for your city), where funds and the initiative fund of the municipality are affiliated with, based on co-financing. If half of the to-be-financed budget is financed with crowd funding the municipality adds the missing amount of money in order to reach the needed

However, the municipality of Utrecht does experience difficulties with the platforms. According to Visser, when the municipality does not actively promote, or actively does something about community maintenance, the involvement on the platform stagnates. The usage of the digital platform needs to be continuously stimulated. Besides, clear communication is also important.

The municipality of Delft does use online tools to reach the online community. They are active on social media and according to Viering, the municipality of Delft has a large group of citizens that actively gives input on the social media channels of the municipality. Besides, the municipality tried out a small scale webinar to get input from citizens. Since it was the first time that they used a webinar, they openly and transparently told the citizens that it was their first time and that input and tips on the usage of the webinar were very welcome, which resulted in a lot of positive reactions. The municipality is currently considering to procure an online discussion platform, where the municipality can ask input from citizens on specific questions, but the municipality still has its doubts. According to Viering, when you start a platform, you need to generate all your traffic to that platform, while the municipality currently has a lot

of active citizens on for instance facebook. So it is important to consider which platforms are used, why they are used and how traffic can be generated and how it can be made approachable. A municipality needs to invest money in the platform, so it should yield benefits. Right now the municipality often puts out short surveys on their social media channels, which generate a lot of input. So the question right now is what the added value of another platform is and what the other possibilities are to organize participation.

Both the municipality of Delft and the platform Stadslab Breda are not yet convinced by the online platforms, since it is difficult to generate all traffic to the platform, and the probability that nobody will visit the website is not an uncommon scenario. In an article of Binnenlands Bestuur (Hartholt, 2018), it is noticed that a lot of municipalities have difficulties with generating traffic on their platform, and often quit with the platforms after a year, because they hardly got any input from citizens on the topics that they put online. According to Visser from the municipality of Utrecht, the online platforms need to continuously be promoted and the online community need to be maintained continuously, otherwise involvement and traffic on the platforms stagnates.

#### Organization

The internal organization of BuurBook consists of 7 employees, not all of them full-time. One person takes care of the big lines/ global structure and external contacts, there is a web developer, a designer, a user experience designer, communication, copywriting, and a community builder that sets up the platform in new neighborhoods. This team delivers the product. This product is delivered to the external organization: In every neighborhood the platform works with a community builder or neighborhood networkers, which is a group of people in the neighborhood that requested/ leads the realization of the platform in the neighborhood. When a platform is requested BuurBook always tries to get the municipality involved, for instance for the payment or help in the realization of the platform, which often is accepted by the municipality. When the platform is realized, the residents of the neighborhood can use the platform, which forms the other group of stakeholders.

At Droomstad, the internal organization consists of van Osch, the owner of the platform, and the webdevelopment bureau. The external organization consists of the users of the platform: the organizations that ask for ideas on certain subjects and/ or locations (like the municipality, Zayaz (a housing corporation) and BPD (an area development company), and the residents of the city. Droomstad organizes a yearly event for all the stakeholders involved in the platform with updates and space for feedback.

At SIOS, the organization is a foundation, consisting of the residents organization of Scheveningen, the business organization of Shceveningen, the culture organization and the sports organization of Scheveningen. The representatives form the board of the foundation. The financing is provided by The Hague and the European Union in the form of a subsidy. The residents of Scheveningen are the 'users', the initiators of the initiatives that apply for a subsidy.

The organization of Stadslab Breda is focused on helping initiators with the realization of their initiative. Stadslab is a network club consisting of people from the business sector, building sector, educational institutions and civil servants. It consists of a group of volunteers that checks how they can help the initiatives. Even though there are some civil servants in the organization of Stadslab Breda, the platform is an independent organization. Besides, they have a database of around 300 people with different expertise, that can be used to connect to relevant initiatives to help them with the realization of their initiative. Stadslab is currently rethinking their strategy in order to get a tighter organization and to

decrease the vulnerability of the organization that runs on volunteers by for instance incorporating students for temporary periods of time into the organization. To, on one hand, get a bit of back support from the students, but on the other hand, to exchange knowledge and give the students the possibility to gain some experience in practice.

The organization of the municipality of den Bosch is built up in the following way: The municipality has 2 types of policy departments, one of them is more about wmo (laws about healthcare and support), the other department focusses at citizen participation in a very broad way. One department within that department is 'informal environments', which focusses on the residents of the city and how they get involved, how they are able to participate and enabling them to set up initiatives. It's about strengthening the power of citizens, according to Paul van Gemert, civil servant at the municipality of Den Bosch. The organization of the pilot 'Kamer van Doen' consisted of a couple of social entrepreneurs, people that were already doing a lot for society, who had a vision, ideas and knowledge about subjects like making a business model for initiatives. These social entrepreneurs were joined by civil servants. Initiatives were able to get advice from this group of people.

The city of Utrecht is built up by ten city areas. Each city area has their own area bureau and every area has its own 'area alderman'. Citizen initiatives can go for help or permits or a subsidy, or when they need to know what networks are active in their neighborhood, to the area bureau in their own city area. The municipality of Utrecht has a set of departments. The department 'Wijken' (city areas), is a department that works across all the other departments. All the city areas fall under the department city areas and have their own area bureaus, area directors (wijk regisseurs) and area advisors.

At the municipality of Delft, participation currently falls under the sub department of the new environment and planning act and communication. However, according to Viering, the approach of Delfts Doen is suitable for many other projects and departments of the municipality, which is a positive side-effect. Right now the municipality is considering what the best place for participation in the organization of the municipality. According to Derk van Rees, jurist at the spatial planning department of the municipality of Delft stipulates the fact that the process of participation needs to be guarded very well. Since it is easy organize a citizen meeting and call it participation. But that will result in resistance from the citizens. That the municipality is in transition and that participation needs to get a place in the municipal organization, where quality assurance can be maintained is clear, but which place that is, is not yet decided upon. The municipality did start to train its civil servants on participation, what it is and why or why not it should be used, to get the organization on board.

Another municipality that tries to get the organization on board of participation and co-creation is the Municipality of Enschede. The municipality tried to get their organization enthusiastic for co-creation in an innovative way by using serious gaming in the form of an escape room. The municipality of Enschede designed 5 service formulas for the provision of services for their citizens. One of these formulas was co-creation. The municipality wanted to make it a fixed item in the organization but was figuring out to get the organization on board. With pilot projects about co-creation, the municipality of Enschede noticed that there was a distance between the citizens and the civil servants. Besides, it was noticed that civil servants were scared to let go of their control, and that they had difficulties with accepting that upfront it is not clear where the direction of the project is headed. Co-creation demands a lot from the civil servants, since it requires a different way of thinking and doing. So the municipality decided that they needed to focus on the internal power and designed an escape room to get the organization known with and used to co-creation. Civil servants can apply for the escape room challenge with a team of colleagues or by themselves. Afterwards there always is a discussion about the experiences with the escape room

and co-creation. Most of the civil servants are quite enthusiastic and open-minded after the game. It is noticed that most of the policy executors recognize a lot from co-creation in their own works and they often explain that if they do not involve the public they can't get any job done. The municipality now likes to focus more on the policy development sector to get them used to working with co-creation too. The creators of the escape room do notice that co-creation is discussed more and more within the municipal organization, it is a movement. For now they are working on the continuation of co-creation and on developing tools that can be used when civil servants want to work with co-creation (Note: this municipality was not interviewed, but information was collected during a presentation of the municipality and a discussion session after the presentation at the congress 'Back to the future', on the 28<sup>th</sup> of March, 2018, organized by VNG Realisatie, the executive department of VNG, the association of Dutch municipalities).

## People

For Buurbook, the people that request the platform in a neighborhood are often a neighborhood council (dorpsraad of ondernemingsraad), a welfare organization in the neighborhood, sometimes an individual resident and sometimes a municipality. The requesters of the platform are often the ones that set-up the platform and consist a group of enthusiastics that try to get the neighborhood enthusiastic for the platform. The people that use the platform are quite diverse. Even though there is no data collected about the users, the organization of BuurBook sees what happens on the platform. The users range from young to old, male or female. It is mostly interesting for people that have their home in the neighborhood, or people that search for an opportunity or work. Though, you need to have a connection with your neighborhood. Be willing to participate in the neighborhood. This lacks for instance often with students and therefor you don't see that many students making use of the platform, according to van der Velde.

Van Osch notices that it is about the attitude of the users of the platform and not necessarily about their age or nationality. The users of the platform are people that are involved in their neighborhood, people that want to do something, that want to get in action and people who are curious.

On the question of SIOS is 'alive' amongst the residents of Scheveningen, Teun van Dijk, coordinator of SIOS, found it difficult to give an answer, since he was too much involved in the platform that people that knew him talked to him about the platform but he couldn't say if this counted for the whole society of Scheveningen. In every voting round, about 5% of the residents of Scheveningen gave a vote, which apparently is a common percentage for certain projects according to van Dijk.

The platform Stadslab Breda started with a focus on initiatives for the spatial planning of the city, or empty and unused buildings or areas and organized a competition where people could post their dream for the city. However, a lot of applications where not about the built environment, but also about social matters, or culture or education. So, inspired by the input of the competition, Stadslab Breda broadened its focus and now helps a broader range of projects, which often do have a spatial component. For instance, one initiative wants to develop a living area for artists, that searches for cheaper ways of living in order to invest more in their art. This broadening of focus does have as a result that Stadslab Breda needs more expertise in other fields of knowledge and networks. Most of the initiative come to the platform instead of that Stadslab Breda needs to actively search for initiatives. However, Stadslab is searching for a way to address societal questions to the city. Stadslab Breda aims to find out how the citizens experience these societal questions and tries to let society yield solutions to the societal questions. Stadslab Breda is starting an pilot project half-way / end of 2018, where they ask starters who have difficulties finding suitable housing to get into discussion with housing corporations, developers, the

municipality et cetera and to collaboratively find out innovative solutions to the housing problems that starters experience nowadays. The pilot is meant as an innovative lab-experiment. Stadslab Breda believes in the power of people. According to Schol 'It seems simple and unoriginal but the mass of people produces a lot of power'. Stadslab Breda aims to facilitate the process of unlocking the power.

At the municipality of den Bosch, people often come to the municipality with initiatives, instead of that the municipality needs to actively ask for ideas from citizens. Sometimes initiatives are told by other people about the possibilities of a subsidy. Sometimes an alderman is active in a specific area and tells about the possibilities. However, the municipality does notice that for the people that ask for a subsidy for their initiative, it is not always clear where they need to go to and which department it involves. The municipality tries to support as much as possible in these cases. Besides, sometimes the initiatives are very well thought out, other times the initiatives need a lot of help to formulate their initiative and to make it an realistic initiative. In those cases the municipality also tries to help the initiatives with the formulation of their plans. The municipality specifically decided to keep the rules of the social initiative fund simple and without too many specifics and difficulties, to keep the possibility of applying for a subsidy approachable. However, the more approachable and easy the condition for the fund are, the more difficult it gets to define the type of subsidy that should be applied. Nonetheless, society perceives the fund and approachability of the fund as pleasant, according to van Gemert. It is difficult to say if due to the social initiates fund, more people came with initiatives. According to van Gemert, if you have a certain fund, people will come with initiatives, if you don't, you often don't hear anything from the initiatives. However, he does think the amount of initiatives increased, since the municipality actively stimulates citizens to come up with initiatives. Van Gemert believes it is a beautiful thing that people have something to say about their living environment. However, one should realize that it does not come naturally to citizens to stand up and actively try to make their neighborhood an active neighborhood, but van Gemert does see the amount of active citizens increasing. He believes it is better that society stands up instead of that the municipality buys goods or services to solve a problem.

According to Visser, the citizens of Utrecht are active citizens. About 34% of the residents of Utrecht tries to force their influence on municipal policies, which is a relatively high number if compared nationwide. The city is an active city with an active participation policy. Politics-wise the city is a left city and the chosen parties are often positive about consulting and collaborating with the citizens.

The municipality of Delft actively tries to connect to a large and broad array of active citizens. The aim is to go where the citizens are and focus on those places instead of trying to create new ones. The municipality went out to the streets, the markets, shopping centers, libraries, et cetera, to meet the people of the city. They also used their social media accounts to reach the people that are active online. Another group of people is the Delft Internet Panel, a panel of online citizens, spread around the city, with ages from 18 to 80 that are questioned about all kinds of subjects.

#### **Environment**

Buurbook starts with adding an area to the platform when they get a request from a certain area. The request either comes from a group of residents/ neighborhood council or from the municipality. This happens 50/50. When an area is requested by a group of residents, BuurBook always goes together with the residents to the municipality to ask if the municipality is willing to help with the platform. Municipalities are often quite open to help and often willing to pay. When the municipality requests a platform for a certain area, BuurBook always goes to the residents of the area to check if they are enthusiastic about the platform and willing to use the platform. BuurBook offers a whitelabel from a certain starting price, where after it can be adjusted and built custom-made for a certain area. Besides,

BuurBook trains the area into how they can set-up the platform, how to get residents on board, how to communicate and have a good mix of messages. The training is about preparing the neighborhood to launch the platform, since there has to be stuff on the platform when it opens, otherwise people drop out quite quickly. In every neighborhood, BuurBook is dependent on the group of people that leads this process which does not always goes smooth in every neighborhood. During the preparation time it is very helpful when the municipality is involved, which however is difficult. But still, the preparation of a new neighborhood is sometimes a weak link in the process of launching the platform.

According to van der Velde, municipalities are often willing to pay and positive about the fact that a BuurBook platform is launched in an area, however getting them actively on board is not very easy. Mostly they are not very active, apart from some individuals at municipalities (often with functions like area ambassador) that are the precursors. They understand how participation and collaboration should work, but they are often unable to get the rest of the organization on board. The rest of the organization often focus on the budget norms and objectives, and see participation as something they don't have time for and something that causes extra work. Participation is not a standard part of their work method while the crux is collaboration, changing communication and using the input of residents in their methods.

However, the active help of municipalities is gradually improving according to van der Velde. What is noticed is that municipalities are in transition to the participation society, and the 'nieuwe omgevingswet' (new environmental law) where participation is a mandatory component. Besides municipalities are getting more and more aware of the fact that it is very useful but also logical that communication to and with residents should happen 24/7 online. However this does not mean that this process goes easy in every municipality. Most municipalities want to have a transition to a more collaborative and online environment but are not yet actively changing their structure. They are mostly occupied with budget cuts and they don't realize that putting participation online can be the key to efficiently building up a neighborhood network. They are still quite frightened to go online because they often get negative remarks on social media which often is because they do things the wrong way: imposing plans on an area and afterwards asking if citizens agree or not. This should be the other way around according to BuurBook. First asking citizens before making complete plans. However, this process is new for municipalities and they have to learn too.

The fact that municipalities are trying to change and trying to involve citizens into their decision-making process is also noticed by Schol in the city of Breda. However, he also notices that it is not perfect yet. It is difficult for initiatives to get things done at the municipality and initiatives often struggled with the bureaucratic system of the municipality. There is a minor part of civil servants that find the involvement of citizens interesting and tries to renew their ways of working to incorporate the citizens. Nonetheless, they have difficulty with getting the whole organization aboard. It is difficult to predict if the municipality is willing to help initiatives. On one hand the municipality is inclined to renew their ways of working and to collaborate with citizens, but on the other hand the municipality if very traditional in their ways of working. The platform does try to keep the municipality involved in Stadslab Breda, since the right help and comments in applying an initiative for a permit or subsidy can be very beneficial. If the municipality really wants to give a voice to citizens and really wants them to actively think about what is good for the city, the municipality needs actively show and offer the space to their residents for the realization of initiatives and challenge their citizens to use this space. Municipalities need to support citizen initiatives without taking over the initiatives.

Asking for input of citizens is something that specifically happens at Droomstad. Droomstad created droomlocaties (dreamlocations), where organizations (for instance the municipality) can ask for initiatives

at a specific location. According to van Osch, these organizations try to show their vulnerability, which is not regular for those organizations to do. They have the guts to ask for help and on the other hand for the initiator to have the guts to say that you have an idea. Because of the function, people can start an initiative for a specific location that asks for ideas, or start an initiative about something that interests themselves. This happens both. Sometimes, it is noticed that a 'random' initiative later on perfectly fits at a specific dreamlocation. In those situations, the platform tries to make a match between the initiative and the location. The municipality of den Bosch was involved from the start of the development of the platform. The municipality was enthusiastic about the idea of the platform and wanted to be involved. This accelerated the involvement of other organizations. According to van Osch, once the municipality acknowledges the potential of the platform, other parties are tending to take you more seriously and listen to your idea and want to be involved too.

However, asking for input of citizens seems to be quite difficult for municipalities and the parties that develop the urban environment. Henk Schol talked with Floris Alkemade (Rijksbouwmeester, Chief government architect), who said that the architects, city designers etcetera, the people that take care of the design of urban space, insufficiently took the public into account and insufficiently considered societal questions. Schol agrees with Alkemade. City designers need to change their ways of working. Instead of focusing on aesthetics, they need to focus on the public and on what they need. They need to become servants of society.

The fact that governmental bodies want to incorporate citizens in their governance is shown by SIOS, where the area of Scheveningen is used as a pilot to foster citizen initiatives to decrease unemployment and to improve the area by providing subsidies. However, Teun van Dijk, coordinator of SIOS, notices that the involvement of the governmental bodies is in a more controlling way instead of a participatory way. The foundation is responsible for the selection of initiatives for the subsidy, but needs to justify the subsidy spending to The Hague, who subsequently needs to justify their spending to the European Union. Besides, van Dijk notices that the Alderman uses the pilot for votes in the city council elections, which van Dijk claims is not necessarily a bad thing, since it makes the Alderman involved in the project. In order to justify the spending, and to maximally involve citizens in the project, initiatives are selected by the residents of Scheveningen and not by the board of SIOS, which was also one of the first aims of SIOS, to let the residents choose. The board firstly checks if an application meets the criteria. Thereafter, the initiatives that meet the requirements are communicated to the residents and an official voting round is organized. Residents get an unique and official (to avoid fraud) voting ticket to vote on their favorite initiative. The initiatives that receive the most votes receive a subsidy. This ensures that the initiatives that are granted a subsidy are always supported by the public.

Besides, van Dijk claims that the European Union is completely unsuitable for the realization of certain projects. The bureaucratic ways in which the European Union operates is not really working for the actual initiators of the initiatives or for the people that organize the program like the foundation of SIOS. A lot of money at the European Union is used for the financing of the controlling bodies, which seems to be an inefficient way of spending money. The foundation needs to justify their spending to the municipality, who needs to employ people to control the justifications and to justify their spending to the state, who subsequently need to control the justifications and justify their spending to the European Union, which results in inefficient and fragmentized ways of working and public money spending. It might be more suitable to initiate certain projects at the municipality instead of at the European Union, to keep short lines, according to van Dijk: There are a lot of initiatives supported by municipalities, but it is not often done in a structural way. On the other hand, it is of course more difficult than it seems, since you give 'unchosen' residents the right to decide about the spending of public money, and how are you going to justify all these spendings and to guarantee quality in a way that everybody understands it and supports

it? And if you have a certain project in one city area, why are other city areas not getting the same opportunities? It should be organized in every city area, but it is unsure if the city council is interested in organizing certain activities. And city areas are not the same in their culture and character. So what works in one area might not work in other areas.

With the pilot 'Kamer van Doen', the municipality of den Bosch tried to confront the internal organization with initiatives coming from society. However, after the pilot period, Kamer van Doen did not continue. The social entrepreneurs obviously wanted to receive money for their involvement. The municipality needed to decide if they were willing to keep supporting them and the platform of Kamer van Doen. The opinions on that were a bit divided, so it was decided not to continue. Besides, after three years of stimulating citizen initiatives, the municipality noticed that within the initiatives, a lot of knowledge was collected by the initiators. The initiators got specialized in specific themes like how to connect society and create social support, or financing et cetera. Van Gemert would like to figure out how to make sure that initiatives can help out each other and share their knowledge. Initiatives often have elements comparable to elements of other initiatives. With the sharing of knowledge a lot of initiatives can be helped without a lot of effort. The municipality organizes meetings with initiators to discuss these matters. Besides, the municipality considers to create a knowledge platform for the exchange of knowledge and organize meeting. The aim is to create a movement and to get sight on what we can offer each other, citizens amongst themselves, and what not. But obviously there are other parties specialized on certain subjects, like setting up crowdfunding. It might be a possibility to ask them to advise initiators. This is something that the municipality tries to work out, for citizens to help out each other instead of standardly spending money. The connection of the people is what matters, according to van Gemert.

However, the pilot Kamer van Doen did slowly gave insight on what was happening in society. But this was happening rather sporadic and the initiatives involved were from a scale that not every department in the municipality was needed. Besides, the civil servants that are needed always differ per initiative. Every initiative only needs a couple of the 1500 civil servants that are working at the municipality of den Bosch. So getting every civil servant on board is difficult. And sometimes initiatives fall under multiple departments. Departments have different types of subsidies, since the budget in the municipality is divided in sectors, so in those cases it is difficult which subsidy should be allocated to an initiative. An official advice has to be given to the executive board of the municipality, so the departments need to decide together on an advice. It is special for the social initiative fund that an advice has to be given to the executive board. Since the initiative fund allocates a relatively large amount of money, it was decided that the allocation of money needed to be approved by the executive board.

The municipality is active in finding ways to stimulate citizen initiatives and in finding ways how they can best deal with the initiatives. The social initiative fund was at the time new and innovative for municipalities in the Netherlands. A lot of municipalities visited the municipality of den Bosch to learn from their ways of working. The results of the fund now gives a lot of insight about the benefits but also about the difficulties of the fund. For instance, when initiatives receive support from the initiative fund, the aim is that initiatives can continue on their own when the support of the municipality stops. This is sometimes not the case, it is not uncommon that initiatives are not able to continue after the subsidy of the municipality stops. How to help and deal with initiatives in those situations is something that the municipality is working on, according to van Gemert. Another thing that the municipality of den Bosch is trying out since this year, is citizen budgets. Every city area gets a specific budget. Citizens can decide themselves which initiative should receive money from the budget. An area manager often gives an advice, and a council of residents decides as representatives of the area about the allocation of budget. According to van Gemert, letting residents decide themselves about the allocation of budget in their living area is a step forward and something that might work and something which municipalities probably will enforce more and more in the future. Trying to let society become more active and give them more trust.

However, this also should be something that should be balanced. Not every citizen likes to take over certain responsibilities and thinks it should stay the job of the municipality.

As already mentioned before, the municipality of Utrecht is already applying neighborhood budgets for the monitoring of budget, to let citizens influence the municipal money that goes to city areas. This was possible because space was created in the organization of the municipality. The city secretary (gemeente secretaris) was a secretary that stimulate his civil servants to do experiments, to try out pilots, in collaboration with the city, to find out what is possible. With the aim to do stuff, learn from it, and subsequently improve. The internal organization needed to change to enable this and more space was created for experiments. The municipal organization is not yet able to apply neighborhood budgets to every neighborhood, since, for instance, financial administration is not built up to work in certain ways. The municipality experimented with ways to connect to a blended and inclusive group of citizens for the neighborhood budgets. Following the ideas of David van Reybrouck (van Reybrouck, 2013), the municipality randomly selected a group of citizens for a 'citizen top' and in the end eighty of the selected people visited the top.

The municipality openly communicates their pilot projects to the citizens through their website. Another new project in Utrecht is the neighborhood council. Every neighborhood in Utrecht has a council of citizens that gives solicited and unsolicited advice about their area to the municipality. Besides, the municipality has area assignments/ tasks (wijkopgaven), that are renewed yearly (and during the year if necessary) with participation in the making of the assignments and the execution of the assignments, where the ambitions and assignments by the municipality for every city area of Utrecht are discussed. The municipality tries to keep improving and renewing its ways of working, and according to Visser, this way of working is very characteristic for the municipality of Utrecht, but most of all made possible by the fact that the municipality has very active citizens. Another thing that the municipality of Utrecht tries to improve is the mandate of area directors (wijk regisseurs). Right now, the area directors are able to signalize a lot, but do not have the mandate to something about it. The head of a department or an alderman is needed to make a decision. In order to improve this, the municipality of Utrecht is visiting the municipality of Eindhoven, who are way further with the mandate of area directors, to learn from their ways of working. Another thing that the municipality tries to improve is the ability to give support to citizen initiatives. Right now, a citizen initiative can apply for the initiative fund, and receives support for a period of three years. Thereafter the initiative should be able to continue on its own. Similar to the experiences in den Bosch, this is often not the case. The municipality is now focusing on the improvement of initiative sustainability. Furthermore the municipality is experimenting to reach as much citizens as possible, from all kinds of backgrounds. This is done by using all kinds pf participation tools, from one-onone talks, to street talks, et cetera. One of the main objectives in those tools is to go to the people, to actively get in contact with the citizens. With the new environment and planning act in mind, the municipality is experimenting with a full range of participation tools and pilots to be well prepared for the new law, creating a new standard for participation.

A thing that is unique for the municipality of Utrecht is the initiative network. The initiative network is an internal network of civil servants from all the department, that meets weekly and has discussions about initiatives that are going on in the city. The network is approachable for citizens and every week, citizens get the opportunity to pith their initiative to the network. The network can easily give an integral advise and specify the help that is needed for the initiative. Besides, the initiative gets a fixed contact person at the municipality after pitching their idea, to keep the initiative stimulated and to help the initiative further.

It is the aim of the municipality of Utrecht to focus more on co-creation. However, co-creation projects are not yet happening very often. According to Visser, this is because co-creation is an intensive type of project. The parties that are involved (municipality and citizens), need to have a certain connection with

each other, they need to like to work together and they need to have the same direction, vision and ambition wise. The parties need to listen to each other and work on their relationship. One time, the municipality followed a training about co-creation together with the involved citizens (the training is called deep democracy, see (Human Dimensions, 201)). According to the hired trainer, it was extremely unique that civil servants followed a training together with the citizens. A good example of a co-creation project in Utrecht is the 'Oosterspoorbaan'. At the project, an old railroad that was no longer in use was transformed to a park with a bike and walking route. Along the bike lane the municipality created space for citizen initiatives to collaboratively take care of the transformation of the area. Citizens are working on a for instance a playground and urban farming.

At the municipality of Delft, the city council officially approved the approach of Delfts Doen as the official participation approach for the city. Thereafter they tried to stimulate the municipality to experiment with the approach, so that if the environment and planning act starts in 2021, the municipality is ready to deal with participation in a proper way. So right now, the municipality is learning on the job, which also means that the municipal organization is learning, and the civil servants themselves, about the impact that participation has on the organization. Participation asks a lot of time and energy from the civil servants. There is a constant loop of communicating information and receiving input.

Currently the municipality discussed when participation should be enforced when not and on which scale. According to Viering, the organization is learning, but participation does demand a different attitude and a different behavior from the civil servants. According to van Rees, participation should fit in the process. It should not be an obligation, but it should be part of the process. For instance with city development where town planners make a design, they need to create space for ideas of citizens, instead of designing with only their own ideas, which is quite a change of culture for town planners, who are educated and used to create their own designs, according to van Rees. According to Viering, it is about how you look to the city and how you look at the fact that others have an opinion about your plans. Open and transparent communication is something that is not yet happening in the whole organization, but there is a group of civil servants that works on participation and the new environment and planning act that tries to show their vulnerability to the public, since showing vulnerability receives vulnerability back, according to Viering. That this is not happening at the whole organization is clear. According to van Rees, it is the opposite way of working for a lot of people. They are often scared for the reaction of others, but the experience is that citizens are very well capable to come up with good ideas.

Especially with the new environment and planning act it is important to let go as municipality and give more responsibilities to the citizens. However, according to Viering, they also notice that citizens are often not used to give reactions and when they are given the possibility to think and talk along, they need to get some grip and support, some framework, before the discussion starts. Participation does not only require a change in attitude from the civil servants but also from the citizens. This is something that should be kept in mind.

What was learned from the project of Delfts Doen, was that citizens complained about the fact that the municipality often started with participation, but then got busy with their own plans and processes and often forgot to give feedback to the citizens about what was done with their input. According to van Rees, management of expectations in these processes are very important. That it is clear on which parts citizens can give their input and on what is done with their input. Citizens often came up with ideas when the plans of the municipality were in a very far stage and when it was no longer possible to use the ideas of the citizens in the plans, which always led to a lot of disappointment from the citizens. So it should be clear from the start of a project where citizens can give their input on. The frameworks for participation are always customized per project and it should not be too abstract for citizens but concrete. Which does however has as a risk that when it is too concrete the plans look already finalized, so it should be in balance.

During the congress Back to the Future on the 28<sup>th</sup> of March 2018, organized by VNG Realisatie (the executive department of VNG, the association of Dutch municipalities), it was noticed that many municipalities are experimenting with participation, co-creation, citizen initiatives and the usage of digital tools for the facilitation of these processes. The fact that a lot of municipalities are experimenting with co-creation does show a movement. However, it was also noticed that there was practically no municipality that was already in an subsequent phase, a municipality that learned from the experimental phase and implemented the themes in a clear way in their organization.

# Success and realization of initiatives

According to van der Velde, successful initiatives need to have a certain urgency for the initiative. If no other residents in the neighborhood care about the initiative, there won't be a lot of support for the initiative which makes it difficult to realize. Besides, an initiative needs to be clear and specific. Success factors are actually mostly about how do you sell an initiative? It's about marketing. It is recommended to have some supporters from the start to make the initiative more convincing. Besides, a good story is important, preferably with pictures and videos. Even though this sounds quite logical, not every initiative realizes this.

The BuurBook platform helps with getting things done at municipalities. Initiatives can show that they have a group of interested people, people that will help in the organization, maybe already discussed the best location and sometimes even volunteers that help with the maintenance of a certain initiative. When this is shown to the municipality, the municipality is often willing to help the initiative to get realized. At BuurBook, it is not checked if an initiative is realized or not. However they do see what happens on the platform and sometimes there are success stories. These are picked out from time to time and communicated as examples. Besides, not every initiative that happens in a municipality is linked to the platform. There are multiple ways to realize an initiative for the neighborhood and it is not necessarily the aim of BuurBook to check this information

According to van Osch, successful initiators need to believe in their own initiative and their own capabilities and they need to commit to their own initiative and get into action, which are also some of the values on which the platform is build. It is sometimes noticed that initiators get busy with other things in life and no longer focus on their initiative. In that case, initiatives often cease to exist. This is also noticed by Schol, from Stadslab Breda. Initiators need to have the power and drive to get their initiative realized, which is not always the case at every initiative. On one hand, they can lean on the support of Stadslab Breda, but on the other hand, Stadslab Breda believes that initiators are responsible for their own initiative, which sometimes leads to some delay at the initiatives. During the crisis, a lot of people lost their job and had more time for initiatives, but now the crisis is over, people get more and more busier and sometimes, initiatives are shoved to the background. According to Schol a lot of energy and time need to be invested to get an initiative realized. Management of expectations about this long and intensive process is therefore necessary. Stadslab Breda is considering ways to help the initiatives to get realized when the initiator has less time or drive, but Stadslab Breda is not sure how to do this yet. The fact that initiatives need a lot of perseverance is also noticed by Visser from the municipality of Utrecht. Starting an initiative is not nothing. The municipality tries to help the initiatives in their process to realization as much as possible.

According to van Osch, for initiatives to become successful, it helps when people support the initiative and when the initiatives have value for multiple parties in the city. It needs to be clearly thought out before the initiative is put online and it needs to appeal to the imagination. Well written text and good pictures can sometimes help a lot. The platform does not necessarily help the initiatives in this process,

but they do sometimes give tips to initiators when they notice that with some minor adjustments an initiative can improve. This need for support in order for an initiative to become successful is also noticed by Stadslab Breda. Social support is mandatory and social media and for instance newspaper can help in the process. Sitting still and doing nothing is not getting an initiative realized.

According to van Osch, it does not matter if initiatives are on a big scale or a large scale, as long as they have value for the city and when they lead to concrete action. One of the involved organizations had an unused piece of land (6000 sqm) in the city and needed ideas to give the land purpose. Some people wanted to make it an area for experimental ways of living, and right now the plan is realized, there are some tiny houses on the location and it is growing a lot so they are moving to a bigger location. Another example is a redevelopment location of the municipality, where they ask for ideas for the redevelopment of the area. A lot of initiatives were proposed and now you see a lot of small plans that are incorporated into this big plan for the redevelopment of the area.

At Droomstad, it is not necessarily checked if an initiative is realized or not. According to van Osch, it is impossible to check every initiative. Which has as a result that it is difficult to see the impact of the platform. A lot of people and networks connect to each other on the platform, but it is not known how these connections evolve. However, they do notice that there are some initiatives realized. Droomstad would like to monitor and check if initiatives are realized and what their impact is, but are not sure how to do it.

According to Schol, for an initiative to be successful, sometimes a window of opportunity is necessary. Other developments that can carry or collaborate with an initiative. An opportunity or coincidence that comes along and results in something positively happening. For instance, one initiative wanted to make a certain street in the city more green. When discussing the plan with the municipality, the municipality told the initiative about the future redevelopment of an old building at the end of the street, which was going into tender. The municipality advised the initiative to wait on the outcome of the tender, and to use the redevelopment of the building as something on which they could attach their plans, and collaborate with the winner of the tender in the redevelopment of the project. Sometimes, initiatives needs something from the municipality or other organizations, for instance a piece of land. This is happening in the project of the art village that was discussed before. In order to be realized, the initiative needs a piece of land. Right now, Stadslab is talking with developers, corporations and the municipality if they are willing to temporarily provide some space. If they don't, the initiative cannot be realized. So sometimes, the success of an initiative does not depend on the drive and capability of the initiator, but is dependent on the willingness of external parties, for instance for the provision of space or money. The provision of money can sometimes be done with a crowd-funding campaign, but in other cases, a subsidy is more relevant. In both cases, the initiative is dependent on others. The involvement of for instance project developers can be very helpful. Sometimes, project developers are willing to become socially responsible and collaborate with an initiative. The new environment and planning act might have a positive influence on the involvement of developers, since the new law makes participation a mandatory part of receiving a permit. This is however dependent on the rules that municipalities will provide on the participation process.

A municipality that actively enforce rules for participation is the municipality of Delft. When the new environment and planning act is legally enforced, the municipality of Delft will enforce the approach of Delfts Doen as a mandatory approach for participation for every development.

At SIOS, selected initiatives receive a subsidy, but are not helped with the implementation of the initiative. SIOS does however help the initiatives with formulation of a good initiative proposal and with the formulation of a business model.

At den Bosch, the municipality always checks at the end of the period of allocating a subsidy to an initiative, if the subsidy was rightly provided. There always needs to be a justification of the allocation of the budget. However, this is done rather flexible. If citizens worked really hard on their initiative but it did not work, it does not matter. Things can go wrong for all kinds of reasons. The citizens working on initiatives are often not professionals so you can't demand a certain end result. It is accepted when things go different than initially expected. When initiatives ask for help when things are not going well, the municipality is always willing to give them the help they need and tries to support the initiatives from the starting point to the end. Initiatives often have difficulties with the formulation of the budget and finding their way to the right subsidy. The municipality tries to give support on these matters.

According to Viering, with the new environment and planning act, every citizen initiative should follow the rules of participation, and organize this process themselves, considering the proponents but also the opponents of their initiative. The municipality of Delft is considering the possibilities of helping citizen initiatives with this process and how to support them. But according to the new environment and planning act it should be their own responsibility.

# **Conclusions**

The fourth sub question, 'How can municipalities facilitate citizen initiatives for urban development?' can be answered by 6 categories: strategy, technology/ data, organization, people, environment & success/realization.

#### Strategy

The platforms are set up for many different reasons. From changing the way of communication and collaboration between the municipality and citizens, to combining the different networks of citizen initiatives, to a top-down EU commissioning that wanted to involve the public in governmental spending to a miss-match between the municipality and the building sector. At the municipalities the reasoning of focusing on the citizens also differs. Sometimes it is done because a newly elected council had a certain vision. Sometimes because the municipality wanted to serve the city and support ideas from citizens, sometimes because of the gap that existed between the municipality and the citizens due to a changing society and sometimes because the municipality wanted to involve the public in their policy making, induced by the new environment and planning act.

One platform noticed that municipalities are not used to consult with citizens about their ideas or ask questions to citizens on what they want in the city. This was also noticed by one municipality, that as a result changed their participation policy, in co-creation with the city, to make the citizen more a part of their policy making. Another municipality noticed the same and created their own participation ladder, consisting of four levels, from informing, to consulting, to advising, to co-creating. The municipality decided that their aim is to use as much the advising and co-creating step as possible, giving an active and involved role to citizens.

What is often seen is that a fund or subsidy is set up for the support of citizen initiatives that meet certain characteristics, like having a social purpose and support from other citizens in the neighborhood. However, it is noticed that municipalities realize that citizens struggle with the realization of their initiatives and often require extra help, either in the form of money, in the form of advice with for

instance the creation of a business model or in the form of allocating contacts/ networks to a certain initiative. In those cases, a focus group/ work group is set up that facilitates this help and works as a body where citizens can go to if they have questions or require help, often supported by an online website. Sometimes, certain focus groups are not only used to help citizens, but also to change or confront the internal organization of the municipality, to show what is going on in society.

# Technology / data

The online platforms are often build on specific values, like openness, transparency, supporting dialogue and creating a community, that activate a specific mind-set. These values are interwoven in the technology behind the platform. The functionalities differ from the functionalities of other online platforms like Facebook and have a different aim. One municipality specifically decided to set up a platform for citizen initiatives, since they got a lot of questions about the citizen initiatives that they supported, but lacked an overview of the initiatives. It was decided to set-up a platform to be accountable and transparent. Sometimes the organizations tried to first develop the site themselves, but realized it was too difficult. For one municipality it appeared to be too much effort to maintain the platform themselves. The platforms are often developed by external parties or website builders and are often work in progress. When clients ask for specific and new futures, the web developers often try to improve the platform.

Not every municipality or organization puts its focus on the online platform for citizen initiatives. Often because the platforms do not have many active visitors, or because visitors or already very active on other platforms of the organization, like Facebook. It takes a lot of time and effort to generate all the traffic to the online platform for citizen initiatives, especially when users are already active on other platforms. The online platforms need to have an active promotion, stimulation and community maintenance, otherwise the usage of the platform stagnates. There often is quite some money invested in the online platforms, so it has to yield success. Otherwise there is no benefit of investing in an online platform for citizen initiatives. It can help to use a big project or external organizations that want to actively participate on the platform as lodging material, to generate content on the online platform for citizen initiatives.

Most of the platforms are not really active yet in analyzing the data for information purposes. However, it is believed that this will take a bigger part in the future and that municipalities will request more and more information about the data that is generated on the platforms.

#### Organization

The organization of the platform is often constructed in the same way. There is an internal organization that owns and develops the platform (often with the help a website developer) and often consisting of a networked group of people with knowledge in different expertise areas. The external organization often consists of organizations and parties that either provide the funding for the platform (often municipalities) or actively ask for ideas on specific subjects or locations. The users of the platforms are the citizens of the city or neighborhood that come up with the initiatives. Residents committees are often used to actively promote the platform in a neighborhood.

The municipal organization often has a department with a specific focus on participation, co-creation and/ or citizen initiatives. However, it is noticed to be difficult to make it a fixed item in the organization and to find the right place or department for participation, co-creation and/ or citizen initiatives. Municipalities are in transition and the fact that these subjects need a fixed place where the quality of participation, co-creation and/ or citizen initiatives can be guarded is clear. Some municipalities train their organization in participation, co-creation and/ or citizen initiatives, since it requires a different mindset that is not traditional for civil servants and since it requires quite some effort from civil servants. One

municipality used serious gaming to get its organization on board with co-creation. Co-creation was already often used by policy executors, but hardly ever by policy developers.

#### **People**

There is wide range of people active on the platforms, from young to old, boy or girl, et cetera. What they all have in mind is that they are enthusiastic people, with a connection to their neighborhood, willing to participate in their neighborhood. The focus is often broad, from social initiatives to initiatives about the built environment. The people that actively put their initiative on the platform and actively use the platform often want their initiative to grow and to become a sustainable organization. People often come to the platform with initiatives, instead of that the platform needs to actively search for initiatives. If political parties, municipalities and platform owners actively promote the platform and the possibilities for citizen initiatives, the amount of initiatives in the city increases. However, people often need extra support in order to realize their initiatives. This requires an active and helping attitude from platform owners and municipalities. It is also important to realize that not for every citizen it is natural to actively participate in their living environment. However, it is believed that citizens recognize themselves more in cities that they actively helped building or designing and that it increases ownership, instead of top-down designed cities. There is a lot of power in the mass of the people.

#### **Environment**

It is noticed that a lot of municipalities are experimenting with participation, co-creation, citizen initiatives and the usage of digital tools for the facilitation of these processes. Often caused by the change of society to a participation society and the need for anticipating on the requirements of the new environment and planning act. The fact that a lot of municipalities are experimenting with co-creation does show a movement. However, this is often a small part of the municipality and they have difficulties getting the rest of the organization on board. Participation, co-creation and/ or citizen initiatives require a different mindset and way of working, which is not similar to the traditional ways of working at municipalities. Sometimes municipalities acknowledge the fact that there needs to become a focus on participation, but are not actively changing their organizational structure. Besides, governmental bodies are often positive about citizen initiatives, but not actively participating and collaborating with citizens.

This is because of the fact that civil servants are used to their traditional ways of working. It is often noticed that for instance city planners or designers are used to their traditional ways of working, which were already educated during their studies and focused more on the aesthetics. They are not used to ask input from citizens and they are often scared to show their vulnerability. Plans are often imposed on citizens instead of asking citizens on what they want in their city.

However, municipalities do acknowledge that a change is necessary and some of them provide training to their civil servants to deal with participation, co-creation and/or citizen initiatives. However, there is quite some impact on the organization, since participation requires a lot of time and energy from the civil servants.

At some municipalities, the need for change is recognized at the higher levels of the municipality and experiments are stimulated. This increases the possibilities at the municipalities since space is created in the organization. For instance municipalities that are active on online platforms for citizen initiatives and actively ask for ideas on specific topics and location and showing their vulnerability, which is not traditional. Sometimes this helps to get other organizations involved in the platform too and do the same. At some municipalities, networks in the internal organization are made to discuss and stimulate citizen initiative and to create a cross-sectional network within the organization. In other cases municipalities experiment with neighborhood budgets, to get society more active and to give citizens more trust. The difficulties with neighborhood budgets are however that every citizen in the city needs to get the same

opportunity to decide on the spending, and spending need to be justified. Besides, the characteristics of neighborhoods differ, so do the citizens. In some areas neighborhood budget might work and in others it won't. Besides, not every citizen is willing to participate and to take on certain responsibilities. Participation not only requires a change of mindset and ways of working from the municipal organization, but also from the citizens, which is something that should be kept in mind. Management of expectations for citizen participation is important. It needs to be clear for citizens on which cases they can participate and on which not. A framework per participation case is necessary otherwise participation won't work. Some of the municipalities are experimenting and designing ways in which they can help citizen initiatives. They notice that initiatives often struggle with the bureaucratic system of the municipality and require extra help or advise to realize their initiative. They also noticed that the last couple of years, within the initiatives, a lot of knowledge was collected by the initiators. Platforms that exchanges knowledge might help a lot of initiatives in the process of realization. Municipalities need to actively show and offer the space to their residents for the realization of initiatives and challenge their citizens to use this space.

#### Success / realization

In order to become a successful initiative, initiators need to focus on multiple objectives. The initiative need to be well thought out, have a clear and specific story, a certain urgency and support by the neighborhood. It is mostly about marketing, selling the initiative. This sounds logical but is not always realized by initiators. The platforms often help to collect and show neighborhood support of an initiative, which helps to get things done at municipalities.

Initiators need to be willing to commit to their initiative. Sometimes it takes long time before an initiative is realized. It often happens that initiators shift their focus and that the initiatives cease to exist. A lot of time and energy has to be invested in an initiative. Initiators need to have the perseverance to do this. Initiatives often require support from advisors for the development of a business model. Municipalities and platform owners often help initiatives with the formulation of their plans if help is asked. However they often do not help with the realization of the initiative.

Sometimes, initiatives are dependent on external parties (for money or services) and a window of opportunity is necessary. The new environment and planning act might help to make external parties more willing to collaborate with citizen initiatives. However this is dependent on the rules that municipalities enforce for the participation process of the new environment and planning act. One municipality designed a participation process that will be mandatory for every project developer once the new environment and planning act is legally enforced.

Not every platform checks if initiatives are realized or not. It often is impossible to check every initiative. This however makes it also difficult to show the impact of initiatives. Platforms are often searching for ways on how to do this. Municipalities often do check if and how citizen initiatives are realized, since they need to justify government spending if initiatives are supported by funding.

# **SWOT** analysis

Strenghts	Weaknesses
<ul> <li>Higher level of municipal organization that allows/ enforces experimentation with participation, co-creation and/ or citizen initiatives</li> <li>Municipalities that aim to use as much participation/ consulting/ co-creation in their ideas as possible</li> </ul>	<ul> <li>Inability to generate traffic to online platforms</li> <li>Not having participation, co-creation and/or citizen initiatives as a fixed item in the municipal organization</li> </ul>

- Funding for citizen initiatives
- Focus group/ network group that help citizens with the realization of their initiative
- Active promotion and stimulation of online platforms for citizen initiatives and participation to keep continuation of content
- Actively showing the possibilities for participation, co-creation and citizen initiatives to citizens
- Train municipal organization in the usage of participation, co-creation and/ or citizen initiatives
- Municipalities that show their vulnerability and ask citizens for help in their policy and decision making
- Initiators that know how to sell their initiatives, that are willing to commit to their initiative and that have support from (many) other citizens

- Staying in the experimentation phase with participation, co-creation and/ or citizen initiatives
- Municipal organization that keeps on the traditional ways of working instead of changing their mindset to participation, co-creation and/ or citizen initiatives
- Not realizing that participation also requires a different mindset from citizens and that not every citizens is willing to participate or to take on certain responsibilities

## Opportunities

- Experimenting with participation, cocreation and/ or citizen initiatives
- New elected council with a focus on participation, co-creation and/ or citizen initiatives
- Changing of society
- Web developers that develop and maintain usable online platforms for citizen initiatives
- Starting the online platform for citizen initiatives and participation with a big project or (multiple) external organizations to inspire and encourage citizens to generate content
- Analyzing the content generated on the platforms to give insight to municipalities
- Wide range of people active on platforms, easy to reach a wide range of people with the platforms
- Serious gaming to make the municipal organization known with participation, cocreation and/ or citizen initiatives
- Active and enthusiastic people that want to participate in their neighborhood

# Threats

- No traffic on online platforms
- Municipalities that do not consult with citizens about their ideas or what is needed in the city
- Not providing extra help to citizens with the realization of their initiatives in the form of advice, networks or money
- Forcing the use of online platforms for citizen initiatives and participation when citizens are already active on other platforms or places
- Not guarding the quality of participation, co-creation and/or citizen initiatives in the municipal organization
- Educational institutions that do not educate future civil servants with a focus on participation, co-creation and/or citizen initiative
- Not managing the expectations of citizens for participation
- Inability to check if an initiative is realized or not

- Use the knowledge that is created by initiators to help other citizen initiatives
- Legally enforce the rules for participation with the new environment and planning act

Table 17. SWOT (Own illustration, 2018).

#### Validation

The discussion, conclusions and SWOT analysis were send to the participants of the interviews to check for feedback, remarks and suggestions in order to validate the results of the intensive case study research. The remarks on the discussion part were edited in text (remarks were often about minor grammar mistakes or some small additions that are not relevant to discuss in depth in this validation part. Note: they are adjusted and added in the discussion text). The participants that gave feedback on the results agreed on the conclusions and SWOT analysis (there were no negative remarks), and sometimes noticed that the results were highly relevant for their organization and used as important feedback to their organization. Some participants gave some extra remarks and information, which is added to the renewed SWOT analysis below (additions are in italic).

# SWOT analysis after validation

#### Weaknesses Strenghts Higher level of municipal organization Inability to generate traffic to online that allows/ enforces experimentation platforms with participation, co-creation and/ or Not having participation, co-creation citizen initiatives and/or citizen initiatives as a fixed item in Municipalities that aim to use as much the municipal organization participation/ consulting/ co-creation in Staying in the experimentation phase with their ideas as possible participation, co-creation and/ or citizen initiatives Funding for citizen initiatives Focus group/ network group that help Municipal organization that keeps on the citizens with the realization of their traditional ways of working instead of initiative changing their mindset to participation, Active promotion and stimulation of co-creation and/ or citizen initiatives online platforms for citizen initiatives and Not realizing that participation also participation to keep continuation of requires a different mindset from citizens content and that not every citizens is willing to Actively showing the possibilities for participate or to take on certain participation, co-creation and citizen responsibilities initiatives to citizens Not learning from pilots and experiments Train municipal organization in the usage *The guarding of the quality of* of participation, co-creation and/or participation, co-creation and citizen citizen initiatives initiatives is currently often a weakness in Municipalities that show their municipal organizations vulnerability and ask citizens for help in their policy and decision making Initiators that know how to sell their

initiatives, that are willing to commit to

- their initiative and that have support from (many) other citizens
- One 'entrance' for initiators, where all the information about (the process) of citizen initiatives is provided and where initiatives are helped

#### Opportunities

- Experimenting with participation, cocreation and/ or citizen initiatives
- New elected council with a focus on participation, co-creation and/ or citizen initiatives
- Changing of society, from a welfare society to a participation society
- Web developers that develop and maintain usable online platforms for citizen initiatives
- Starting the online platform for citizen initiatives and participation with a big project or (multiple) external organizations to inspire and encourage citizens to generate content
- Analyzing the content generated on the platforms to give insight to municipalities
- Wide range of people active on platforms, easy to reach a wide range of people with the platforms
- Serious gaming to make the municipal organization known with participation, cocreation and/ or citizen initiatives
- Active and enthusiastic people that want to participate in their neighborhood
- Use the knowledge that is created by initiators to help other citizen initiatives
- Legally enforce the rules for participation with the new environment and planning
- The development of (online) participation tools
- Conducting in-depth interviews with initiators to evaluate and analyze the process of taking an initiative

# Threats

- No traffic on online platforms
- Municipalities that do not consult with citizens about their ideas or what is needed in the city
- Not providing extra help to citizens with the realization of their initiatives in the form of advice, networks or money
- Forcing the use of online platforms for citizen initiatives and participation when citizens are already active on other platforms or places
- Not guarding the quality of participation, co-creation and/or citizen initiatives in the municipal organization
- Educational institutions that do not educate future civil servants with a focus on participation, co-creation and/or citizen initiative
- Not managing the expectations of citizens for participation
- Inability to check if an initiative is realized or not
- The decrease of trust from citizens and social entrepreneurs in the (local) government
- The 'inactivity' or unwillingness or inability of citizens to actively engage in the policy making process (since they believe taking care of the city is the responsibility of only the municipality instead of a shared responsibility)
- (Local) governments that do not 'weigh' or acknowledge the social worth of citizen initiatives

Table 18. SWOT validation (Own illustration, 2018).

An important note is that the municipality is not always able to influence all the strengths, weaknesses, opportunities and threats, which sometimes makes it difficult for municipalities to improve participation,

co-creation and citizen initiative on all SWOT levels. Municipalities can however indirectly influence participation, co-creation and citizen initiatives by clearly informing their citizens and by bringing together active citizens with ideas and organization power on online platforms and offline meetings.

# **Platform Data Analysis**

Several online platforms from the extensive case-study research are used for the final part of the empirical research: the platform data analysis. All over the world, a lot of digital platforms for citizen initiatives have been developed to facilitate co-production between citizens and sometimes also between citizens and governments. Previous studies have tried to give some overview of the platforms and tried to classify them. However, this has been done in a rather fragmented way (Falco & Kleinhans, 2018, p.1) and none of the previous studies have focused exclusively on the Dutch platforms. Besides, no research is found that investigates the impact of online platforms for citizen initiatives on the built environment. This part of the research aims to fill this gap in scientific research. The Platform data analysis analyses the data that is published on the online websites of the platforms for citizen initiatives. The online platforms provide a lot of information on the type of initiatives that are proposed for the built environment. Besides, some platforms identify if the initiatives are realized or not and if for instance the municipality was involved with the plans. Additionally, since the location of the initiatives is often given, the data of the platforms can be linked to general data on the neighborhood of city. Combined, this data can provide information on the impact that the online platforms and the initiatives have on the built environment. The following data is analyzed (table 2):

Label	Variable
Platform data	
Name of the initiative	х
Platform	х
Year when initiative is posted on the platform	Х
City	х
City area	
Initiative type	Street, park, building, sports location, playground, harbour/dock, river, square, boulevard
Initiative phase	Finished, in realization, idea, quit
Involvement municipality	Yes / no
Amount of reactions	Number
Amount of followers/ voters	Number
Aim of the initiative	Safer, greener, community, art, new location
Linked data	
Amount of residents in neighborhood	Number
Amount of non-western residents in neighborhood	percentage
Amount of residents in neighborhood with age below 19	percentage
Amount of residents in neighborhood with age between 20-64	percentage

Amount of residents in neighborhood with age older then 64	percentage
Amount of houses in neighborhood	number
Amount of houses owner-occupied	Percentage
Amount of houses rental	Percentage
Household income	Number
Amount of households single	Percentage
Amount of households living together, marries, partners, kids etc (non-single)	Percentage

Table 2. Platform data analysis framework (Own Illustration, 2018).

The platforms that are analyzed are:

- https://droomstaddenbosch.nl/
- https://wijzijndroomstadnijmegen.nl/
- https://halloijburg.nl/
- https://stemvanwest.amsterdam.nl/
- http://www.zocity.nl/
- http://www.jijmaaktdebuurt.nl/
- https://goudabruist.nl/

The linked data that is used is derived from the following websites:

- https://www.buurtinzicht.nl/
- https://www.ois.amsterdam.nl/feiten-en-cijfers/buurtmonitor
- https://www.kennispunttwente.nl/cijfers-trends/cijfers-trends-enschede/
- https://gouda.incijfers.nl/
- https://s-hertogenbosch.buurtmonitor.nl/
- <a href="https://nijmegen.buurtmonitor.nl/">https://nijmegen.buurtmonitor.nl/</a>

In total, 429 initiatives that focused on the built environment are analyzed, derived from seven platforms that are based in five different cities (Amsterdam, den Bosch, Nijmegen, Enschede and Gouda), spread over 25 different city areas.

#### Results

City versus amount of platforms versus amount of city areas in which the initiatives are located

City	Amsterdam	Den Bosch	Nijmegen	Enschede	Gouda	
Platforms	3	1	1	1	1	
City area	3	8	4	9	5	

Table 19. City versus platforms versus areas (Own illustration, 2018).

Most of the platforms are located in Amsterdam, but what also is seen is that those platforms focus on 1 specific city instead of on the whole city, like the other platforms do.

#### Platform versus city versus amount of initiatives

Platform	City	Amount of initiatives	Percentage
Droomstad den Bosch	Den Bosch	35	8.2%
Droomstad Nijmegen	Nijmegen	7	1.6%
Stem van West	Amsterdam	27	6.3%
ZoCity	Amsterdam	15	3.5%
Jij maakt de buurt	Enschede	295	68.8%
Gouda bruist	Gouda	19	4.4%
Hallo Ijburg	Amsterdam	31	7.2%

# **AMOUNT OF INITIATIVES PER PLATFORM (%)**

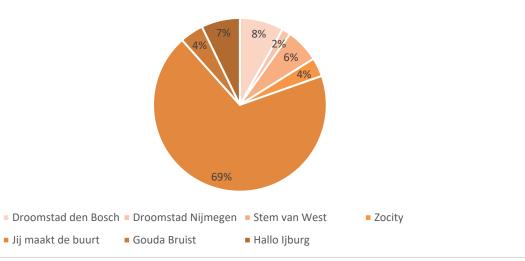


Fig. 20. Platform versus city versus initiatives (Own illustration, 2018).

Jij maakt de buurt

The largest platform is Jij maakt de buurt, which is located in Enschede. It yields far-out the most initiatives. The platform Jij maakt de buurt might therefore bias some of the results. The smallest platform is Droomstad Nijmegen, which has the lowest amount of initiatives posted on the platform.

# Year of the initiatives

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Initiatives (%)	0.5	0.5	21	16	16	8	12	19	7

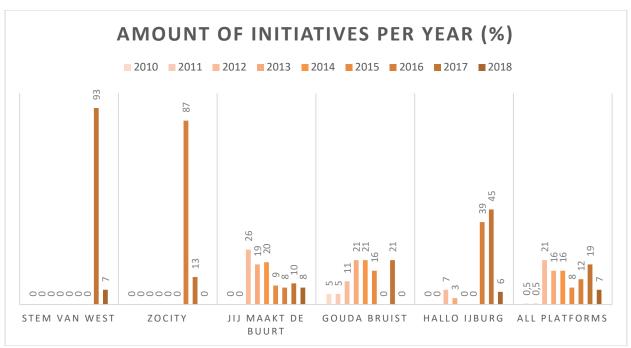


Fig. 21. Amount of initiatives per year (own illustration, 2018).

In general, most of the initiatives are posted in 2012. After 2012 the amount of initiatives posted decreased, with a new peak in 2017. For instance the platform Jij maakt de buurt, had most of the initiatives posted in 2012, after 2012, this amount stagnated. In, 2017, the amount of initiatives increased a bit again. The platform gouda bruist had most initiatives posted in 20133 and 2014, after that there was an decrease, with a new increase in 2017. The data from the year 2018 is not completely reliable, since the year 2018 hasn't finished yet. The fact that platforms sometimes have years with a high amount of initiatives and years with a low amount of initiatives might be because of the (lack) of stimulation and promotion of the website, which is discussed in the intensive case study research paragraph. However, this is not checked in this data analysis and is therefore an assumption.

# Type of initiatives versus platform

Type	Street	Park	Building	Sports location	Playground	Harbour	River	Square	Boulevard
Initiatives (%)	25	18	10	6	28	1	4	6	2

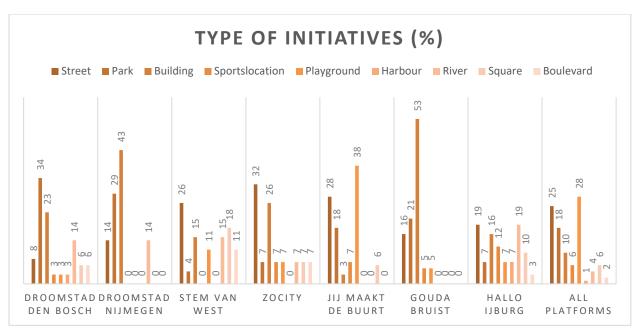


Fig. 22. Type of initiatives (Own illustration, 2018).

In general, most of the initiatives are about streets or playgrounds. Harbours and boulevard yield the fewest amount of initiatives.

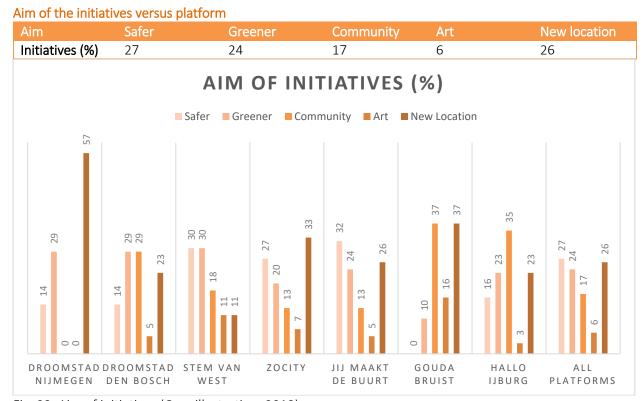


Fig. 23. Aim of initiatives (Own illustration, 2018).

In general, most of the times, the aim of initiatives is about safety, green and the location. The aim that is mentioned fewest is art (this is the case for all the platforms).

# Type of the initiative versus aim of the initiative

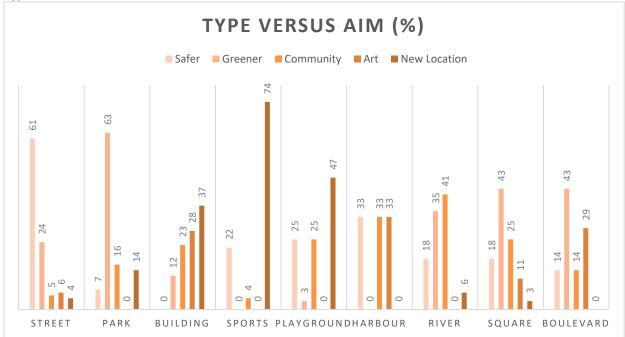
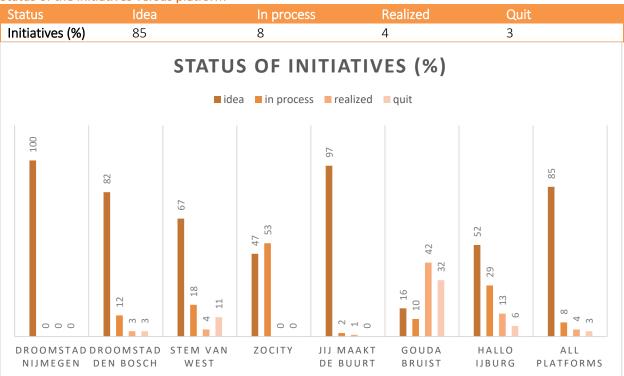


Fig. 24. Type versus aim (Own illustration, 2018).

Initiatives that are about the streets most of the times have safety as the aim. For parks this is often green, for buildings often the location, for sportslocation most of the times the location, which is also the case for playgrounds. For harbor area's this differs, for river it is most often about community, with squares it is most of the times about the amount of green, which is also the case for boulevards.

# Status of the initiatives versus platform



## Fig. 25. Status (Own illustration, 2018).

In general, most of the initiatives are in the first stage, which is the idea stage. This means that often, initiatives are posted on the website, after which nothing is done with the initiatives. People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline). So the status of the initiative might not be a completely realistic (Note: the platforms 'stem van west', 'zocity', 'gouda bruist' and 'hallo ijburg' were very clear about the status of the initiative).

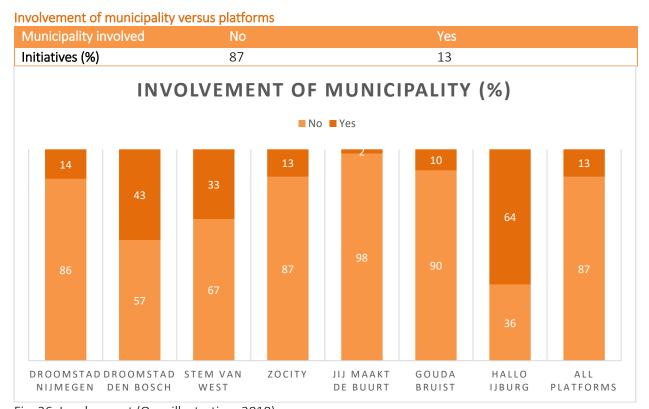


Fig. 26. Involvement (Own illustration, 2018).

In general, most of the times (87%) the municipality is not involved with the initiative. With involvement it is meant that either municipalities help the initiatives in the process, fund the initiatives, discuss the initiatives, that municipalities ask a question on a specific topic on which people can post ideas, etc. So involvement of the municipality does not necessarily mean an active involvement. Also for this variable, not all the platforms stated very clearly if the municipality is involved or not.

# Status of the initiative versus the involvement of the municipality

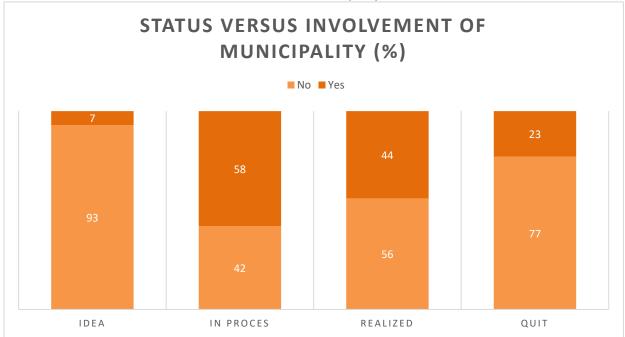


Fig. 27. Status versus involvement (Own illustrations, 2018).

The output of a one-way anova test showed that there is a significant difference between the times that the municipality is involved in the idea phase compared with the times that the municipality is involved in the process and realized phase (see appendix 2, Results SPSS). There is no significant difference between the times that the municipality is involved in the idea phase and the times that the municipality is involved in the quit phase.

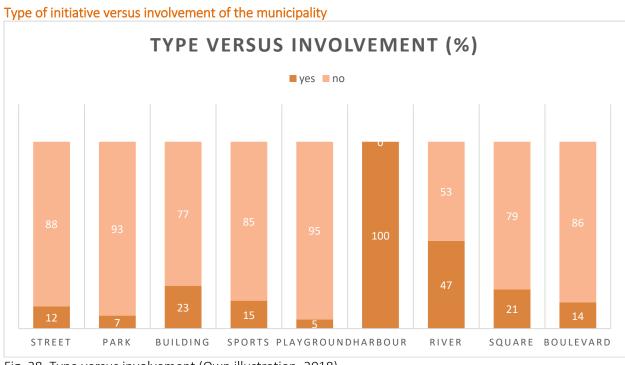


Fig. 28. Type versus involvement (Own illustration, 2018).

With most of the initiatives, the municipality was often not involved. However, with harbor initiatives, the municipality was involved in every initiative. A one-way anova test also shows the significant difference between the times that the municipality is involved in harbor initiatives versus the other types (see appendix 2, results SPSS).



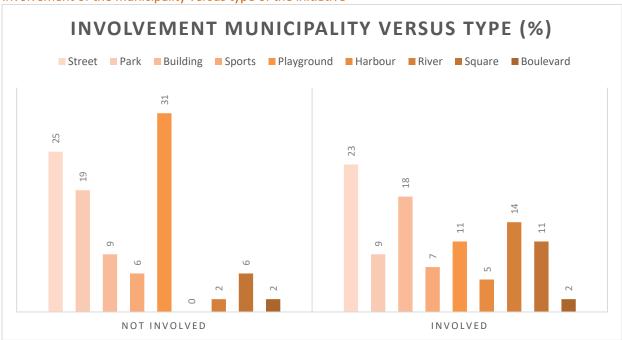
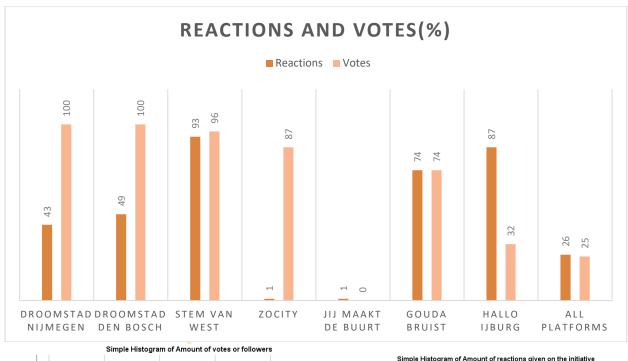


Fig. 29. Involvement versus type (Own illustration, 2018).

From all the times that the municipality was involved, this was most often the case for initiatives that are about streets or buildings. From all the times that the municipality was involved, this was least often the case for initiatives about boulevard.

#### Percentage of initiatives that received a reaction or vote

Interaction	Reaction	Votes
Initiatives (%)	26	25



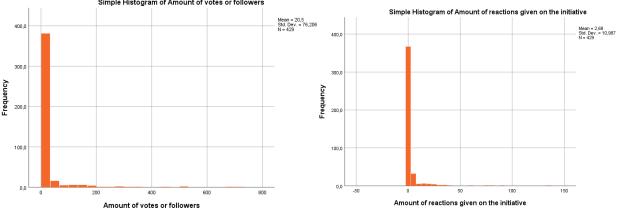


Fig. 30. Reactions and votes (Own illustration 2018).

On average, 26 percent of the initiatives received a reaction, and 25 percent of the initiatives received a vote. With some platforms, there is a high percentage of initiatives that received reactions and votes. Interesting to see is that the platform with the highest amount of initiatives (jij maakt de buurt), had the lowest percentage of reactions (1%) and votes (0%). Even though many people post ideas/ initiatives on the website, the interaction on the platform is really low.

#### Average amount of reaction and votes

	Reactions	Votes
Mean	2,7	21
Minimum	0	0
Maximum	136	722
Standard deviation	10,987	76,206

Table 20. Votes & reactions (Own illustration, 2018).

On average, initiatives received 2,7 reactions and 21 votes.

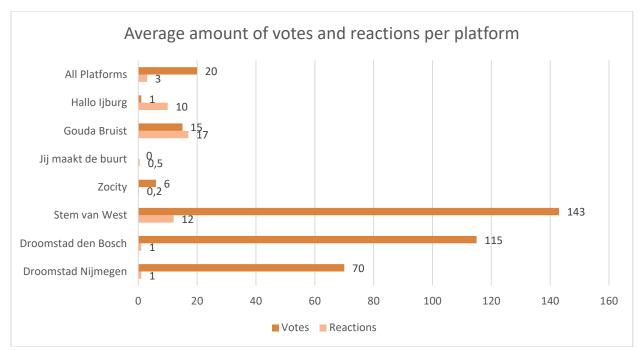


Fig. 31. Average votes and reactions (Own illustration, 2018).

### Percentage of reactions and votes per type of initiative

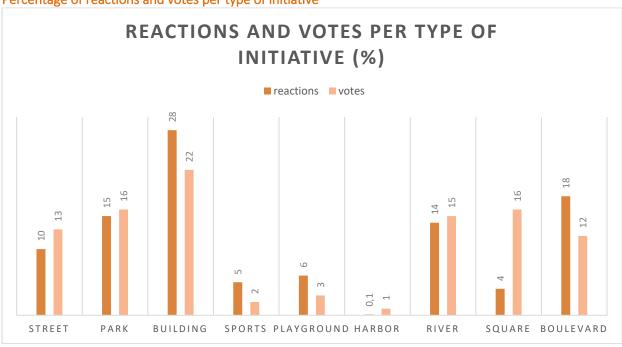


Fig. 32. Reaction and votes versus type (Own illustration, 2018).

The types of initiatives that received most of the reactions were initiatives about buildings. The same counts for votes. The initiatives that received the fewest amount of votes and reactions are the initiatives about harbours.

#### Percentage of reactions and votes per initiative aim

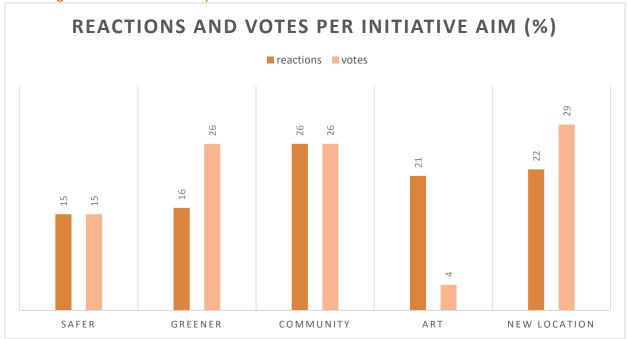


Fig. 33. Reaction and votes versus aim (Own illustration, 2018).

The initiative aim that received most of the reactions are initiatives about community. The initiatives that received the fewest reactions are the initiatives about safety. The initiative aim that received most of the votes are the initiatives about location. The fewest votes go to initiatives about art.

#### The times that the municipality is involved versus amount of reactions and votes

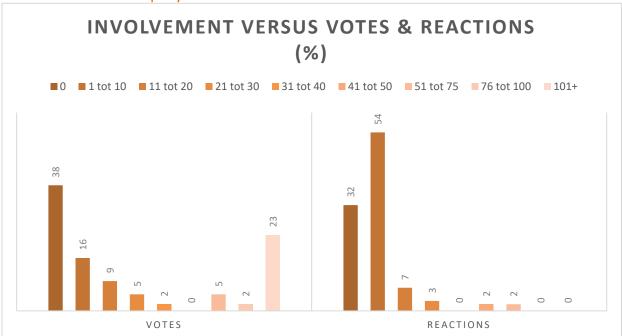


Fig. 34. Involvement versus reactions and votes (Own illustration, 2018).

From the times that the municipality is involved, initiatives often did receive a reaction, however, not a high amount of reactions. However, the diagram also show that municipalities are also involved when there are no votes or reactions on an initiative.

Reactions	N	Mean (av. Amount of reactions)	Std. Deviation
Not involved	373	2,26	11,015
Involved	56	5,46	10,471
Votes	N	Mean (av. Amount of reactions)	Std. Deviation
Not involved	373	11,98	49,588
Involved	56	77,25	157,443

Table 21. Reactions and votes (Own illustration, 2018).

It is shown that the average amount of reactions and votes is higher for initiatives where the municipality is involved. A one-way anova test shows that there indeed is a significant difference between the involvement of the municipality and the amount of reactions and votes (see appendix 2, Results SPSS)

#### Characteristics of the area's - residents

	Residents	Non-western (%)	Age 0-19 (%)	Age 20-64 (%)	Age 65+ (%)
Mean	29100	20	22	62	16
Median	22426	19	24	58	17
Mode	33813	26	24	57	19
Minimum	438	2	7	53	2
Maximum	144210	41	33	84	29
Standard	31495	9,7	5,2	6,9	5,2
deviation					

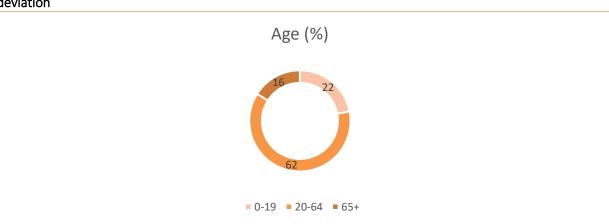
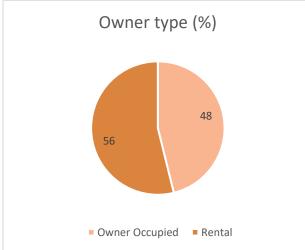


Fig. 35. Characteristics residents (Own illustration, 2018).

#### Characteristics of the area's – houses and households

	Houses	Owner- occupied (%)	Rental (%)	Household income	Households single (%)	Households non-single (%)
Mean	14111	48	56	25621	44	52
Median	8485	43	57	23000	37	52
Mode	14080	43	57	21400	32	68

Deviation	10591,1	10,2	12,3	0210,7		10,7
Maximum Standard	82179 18391,1	88 16.2	71 12,3	47842 6216,7	78 15	73 16,7
Minimum	2221	29	12	20200	27	22



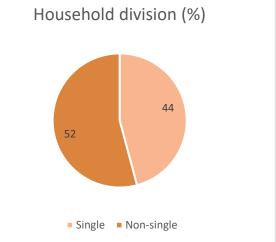


Fig. 36. Characteristics households (Own illustration, 2018).

Amount of initiatives, reactions & votes, per amount of residents in the area

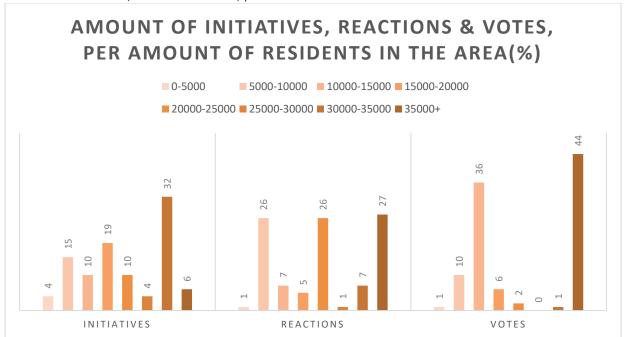


Fig. 37. Residents versus reaction and votes (Own illustration, 2018).

A correlation test shows that there is a significant difference between the amount of residents in the area and the amount of reactions, with the strongest positive correlation of 0,177, and a scatter plot shows a positive slope (however, the strongest correlation is not extremely strong). This does mean that if the amount of residents in an area increases, the amount of reactions on initiatives get higher. Besides there is a significant difference between the amount of residents in an area and the amount of votes, with the strongest positive correlation of 0,355, and a scatter plot shows a positive slope. This also means that the

higher the amount of residents in an area, the higher the amount of reactions on initiatives (See appendix 2, results SPSS).

#### Amount of children in an area versus type of initiative in percentage

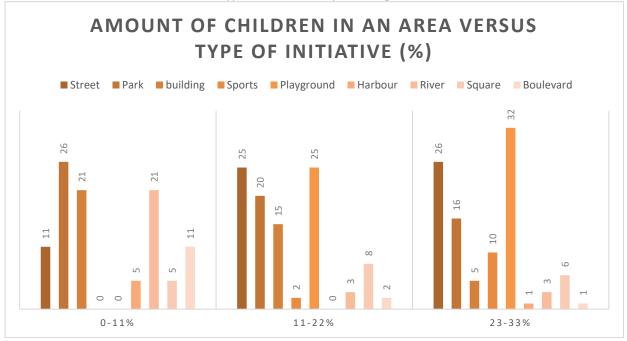
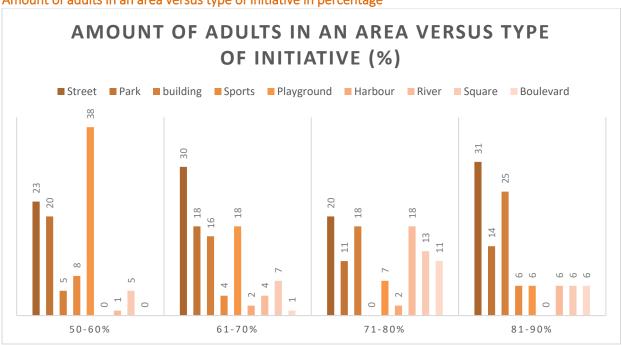


Fig. 38. Children versus type (Own illustration, 2018).

When there is a high amount of children in an area, most of the initiatives are about playgrounds. However when there is a low amount of children in the area none of the initiatives are about playgrounds.

#### Amount of adults in an area versus type of initiative in percentage



#### Fig. 39. Adults versus type (Own illustration, 2018).

When the percentage of adults in an area is relatively low (50-60%, this means that there is more 'place' for a large percentage of children or seniors), the amount of initiatives about playgrounds are high. When a large amount of residents in the area are adults (so a small percentage of children or seniors in an area), most of the initiatives are either about streets or about buildings.

#### Amount of children in an area versus the amount of votes and reactions

Children (age 0-19)	Votes	Reactions
Pearsons correlation	-0,287	-0,021
Sig. (2tailed)	0,000	0,661
n	429	429

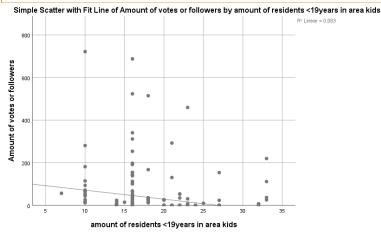


Fig. 40. Children versus votes and reactions (Own illustration, 2018).

A correlation test shows that there is a significant difference between the amount of children in an area and the amount of votes. It has a negative correlation of 0,287. This means that if there is a high amount of children in an area, the amount of votes gets lower, which is shown in the scatterplot. There is no significant difference between the amount of children in an area and the amount of reactions, meaning there is no correlation.

#### Amount of adults in an area versus the amount of votes and reactions

Adults (age 20-64)	Votes	Reactions
Pearsons correlation	-0,283	-0,137
Sig. (2tailed)	0,000	0,004
n	429	429

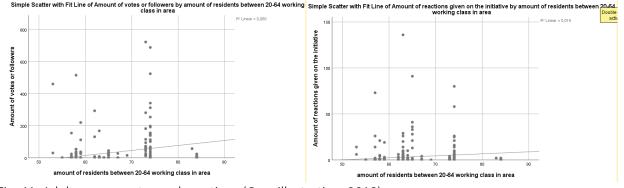


Fig. 41. Adults versus votes and reactions (Own illustration, 2018).

A correlation test shows that there is a significant difference between the amount of adults in an area and the amount of votes. It has a positive correlation of 0,283. This means that if there is a high amount of adults in an area, the amount of votes also is higher, which is shown in the scatterplots. There also is a positive correlation between the amount of adults in an area and the amount of reactions.

Type of housing versus amount of votes and reactions

Owner occupied	Votes	Reactions
Pearsons correlation	0,031	-0,214
Sig. (2-tailed)	0,741	0,019
${f N}$ (not every initiative showed data on type of housing)	119	119
Rental	Votes	Reactions
Pearsons correlation	0,056	0,144
Sig. (2-tailed)	0,544	0,118
${f N}$ (not every initiative showed data on type of housing)	119	119

Table 22. Housing versus votes and reactions (Own illustration, 2018).

There is no significant difference between owner-occupied houses and amount of votes, meaning there is no correlation between the two variables. There is a significant difference between owner-occupied houses and amount of reactions, with a correlation of -0,214, meaning that the more owner-occupied houses in an area, the lower the amount of reactions. However, there are no significant differences between rental houses and amount of votes and rental houses and amount of reactions, which is logical for amount of votes, since there was also no correlation with owner-occupied houses, but weird for amount of reactions, since there was a negative correlation between owner-occupied houses and the amount of reactions. It could be assumed that in that case, the amount of reactions would get higher when there was a high amount of rental houses in an area, but this appears not to be the case.

#### Average household income versus status of the initiative

Туре	N	Mean (average household income)	Standard deviation
Idea	363	24689,08	5556
In process of realization	33	31308,24	7938
Realized	18	29808,17	7256
Quit	13	30480,46	5571

Table 23. Income versus status (Own illustration, 2018).

It is shown that the average household income is lowest for the initiatives that are only in the idea phase. The average household income is highest for the initiatives that are in the process of realization. A one-way anova test also shows that there is a significant difference between the average household income of the initiatives that are in the idea phase and the initiatives that are in the process of realization, realized or quit. They all have a higher average household income (see appendix 2, Results SPSS).

#### Average household income versus type of initiative

Туре	N	Mean (average household income)	Standard deviation
Street	107	24218	5276
Park	77	25095	5280
Building	43	30404	6342
Sports location	27	26084	8286

Playground	120	23111	3310	
Harbour	3	38532	5268	
River	17	36118	6534	
Square	28	26152	6642	
Boulevard	7	31613	5075	

Table 24. Household income versus type (Own illustration, 2018).

It is shown that the average household income is highest for the initiatives that are about harbours, and second highest for initiatives that are about rivers. The average household income is lowest for initiatives that are about playgrounds. However, a one-way anova test shows that there is no significant difference in average household income between harbor initiatives and other initiatives. There is a significant difference between river initiatives and street, park, sports locations, playgrounds and squares, all showing that the average household income is higher for river initiatives (see appendix 2, results SPSS).

#### Average household income versus reactions and votes

	Reactions	Votes	
Pearson Correlation	0,240	0,288	
Sig. (2-tailed)	0,000	0,000	
N	429	429	

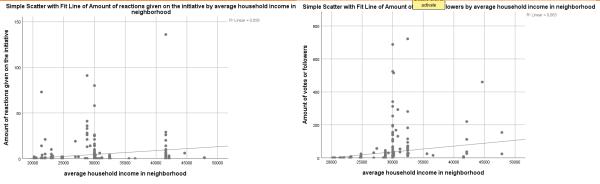


Fig. 42. Income versus reactions and votes (Own illustration, 2018).

It is shown that there is a significant difference between average household income and the amount of reactions with a positive correlation of 0,240. This means that the higher the average amount of household income, the higher the amount of reactions. It also shows that there is a significant difference between the average amount of household income and the amount of votes, with a positive correlation of 0,288. This means that the higher the average amount of household income in an area, the higher the amount of votes. Both is shown in the scatterplots.

#### Which characteristics does an initiative need to have in order to become realized?

For this analysis, the ordinal regression method is used. First the categories for the status were transformed from idea, in process of realization, realized and quit into two categories: realization (in process of realization + realized) and non-realization (idea + quit).

The ordinal regression method checked if the following variables influenced the status of the initiative:

- Amount of reactions
- Amount of votes
- Amount of residents in an area.
- Amount of non-western residents in an area
- Age of the residents in an area (from 0-19, 20-64 and 65+)
- Average household income

- The name of the platform (Droomstad, Stem van West, Hallo Ijburg, ZoCity, jij maakt de buurt, Gouda Bruist)
- The type of initiative (Street, park, building, sportslocation, playground, harbor, river, square boulevard)
- The aim of the initiative (safer, greener, community, art, new location)
- Involvement of the municipality (yes or no)

Almost all the variables showed to be not of influence to the status of the initiative. The status of the initiative is mostly influenced by the fact in the municipality is involved or not. Besides, an influence on the status of the initiative was shown for the platform gouda bruist (see appendix 2, results SPSS).

#### Which characteristics influence the involvement of the municipality?

Since the involvement of the municipality influences if an initiative gets realized or not, it is interesting to check which characteristics influence the involvement of the municipality for an initiative. This is done with the nominal regression analysis method. The nominal regression checked if the following variables influence the status of the initiative:

- Amount of reactions
- Amount of votes
- Amount of residents in an area
- Amount of non-western residents in an area
- Age of residents in an area (0-19, 20-64 and 65+)
- Average household income
- Type of initiative (Street, park, building, sportslocation, playground, harbor, river, square, boulevard)
- Aim of the initiative

The analysis showed that the amount of votes influences the involvement of the municipality and the average household income. The other variables do not influence the involvement of the municipality (see appendix 2, results SPSS).

#### **Conclusions**

This part of the research gives answer on research question 5: What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment?.

#### Characteristics

- First of all, most of the platforms focus on the whole city with multiple city areas, except the platforms that are located in Amsterdam, which focus on specific city areas instead of the whole city. The average amount of initiatives that focus on the built environment at the platforms that are analyzed is 61. However, one platform has a very large amount of initiatives compared to the other platforms (jij maakt de buurt), which effect these results. If that platform is excluded, the average amount of initiatives, focused on the built environment, per platform is 22.
- None of the platforms have a steady amount of initiatives per year. At all the platforms, you see the amount of initiatives per year increasing and decreasing, often with a high peak in one year. This might be because of the (lack) of stimulation and promotion of the website, which is discussed in the intensive case study research paragraph. However, this is not checked in this data analysis and is therefore an assumption
- Most of the platforms focus on streets that need to become safer and playgrounds that need to get a new location, followed by parks that need to get greener (new types of plants,

- maintenance, etc). Besides, initiatives also often want new locations for sports facilities. This often probably means that there are not enough play and sports facilities in the city areas and that the streets are not safe enough. Also, parks often lack maintenance or enough plants/ green.
- Most of the initiatives that are posted on the website stay in the 'idea phase', meaning that they are put online on the platforms, after which nothing is done with the initiatives (yet). People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline). Besides, most of the times, the municipality is not involved with the initiatives that are posted on the platforms.
- On average, 26 percent of the initiatives received a reaction, and 25 percent of the initiatives received a vote, with an average of 2,7 reactions and 21 votes per initiative. The type of initiatives that received the highest percentage of both reactions and votes are initiatives about buildings. The lowest percentage of reactions and votes are initiatives about harbours.

#### Effects of the platforms

- As mentioned before, most of the initiatives stay in the idea phase (87%). So it seems like the effect of the platforms on the built environment is rather low, since not that many initiatives are realized or in the process of realization. However, it might be that a lot of the platforms do not update the initiatives that change from the status of idea to the status of in process of realization or realized. It can be the case that people post their initiatives on the platform and then work on their initiative without updating their initiative data on the platform. So the real effect on the built environment is difficult to monitor. However, it is clear that the direct effect of the platforms on the built environment is rather low. The platforms do not have a big effect on the built environment if they are the only 'thing' that is used to realize an initiative. Apparently, a series of online and offline ways are necessary to realize an initiative. However, it should be noted that this (the need for online and offline ways) is not thoroughly researched and it therefore stays an assumption.
- The research shows that the only variable that is of influence on the phase of the initiative (if an initiative gets realized or not), is the involvement of the municipality. So when the municipality is involved in an initiative, there is a higher change that the initiative gets into the process of realization and/ or gets realized.
- After that, it was researched which variables influence the involvement of the municipality. The research showed that the amount of votes and the average household income influence the involvement of the municipality. The higher the amount of votes on an initiative, the higher the likelihood that the municipality is involved with an initiative. Also, the higher the average household income in an area, the higher the amount of initiatives where the municipality is involved. It also showed that the higher the average amount of household income in an area, the higher the amount of votes on an initiative. Besides, the research showed that if there is a high percentage of children in an area, the amount of votes decreases, and the higher the percentage of adults in an area, the higher the amount of votes. This is shown in figure 1. When there is a high percentage of adults in an area, most of the initiatives are about streets and buildings.

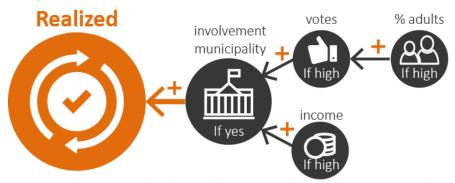
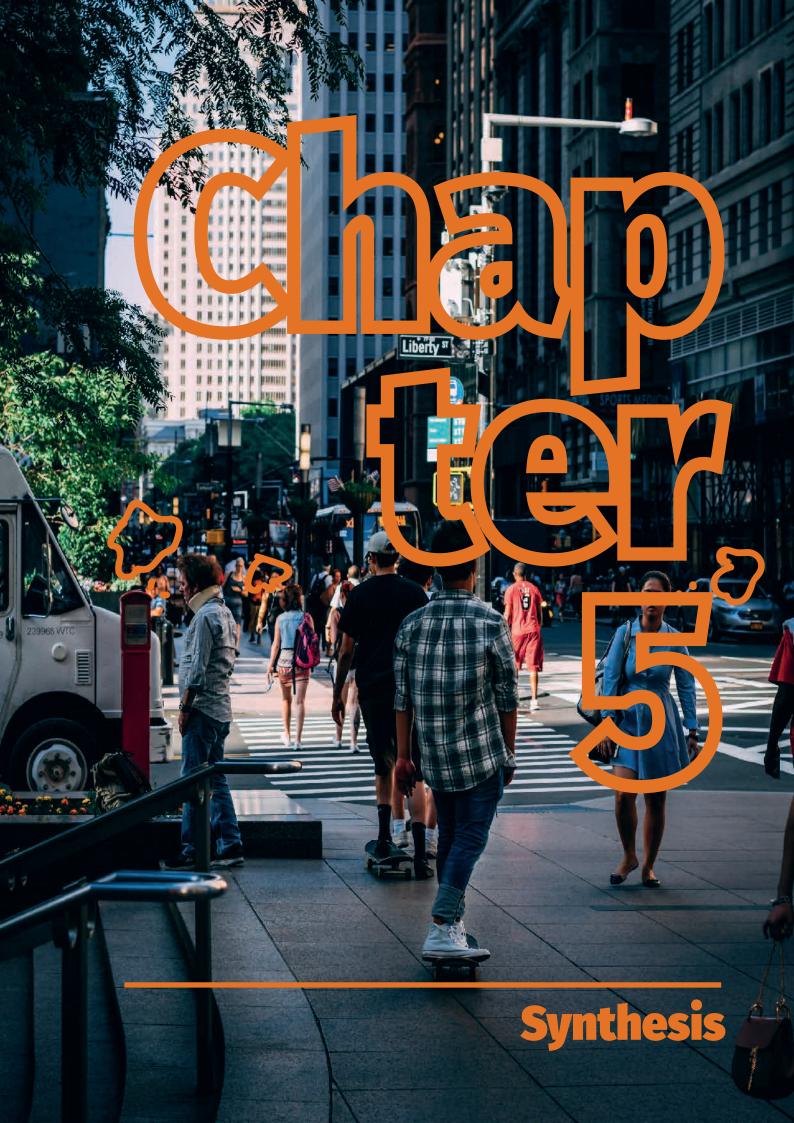


Figure 1. Influence on the phase of the initiative (Own illustration, 2018).

- The real effect on the built environment of the platforms was difficult to measure, since first of all, by far, most of the initiatives stay in the idea phase. Besides, the effect on the built environment was difficult to measure due to lack of data from municipalities. There was some general data available about amount of citizens and average household income, et cetera. But information about the level of participation in an area, or grades about livability, or amount of citizen initiatives projects, ranging from different years, was most often not available. Therefore, it was not really possible to measure if, in the years that platforms were available in an area, the numbers of certain datasets changed. This resulted in the fact that the effect of the platforms in certain city areas became impossible to measure. However, the research did result in valuable information about the things that have an influence on the fact if an initiative gets realized or not (as shown in figure 1).



# **Synthesis**

Input from the theoretical framework and the empirical research is used to establish conclusions and recommendations that explain how citizen initiatives for urban development, facilitated by Dutch municipalities, can be stimulated by using online platforms. It gives the answer to main question: *How can citizen initiatives for urban development, facilitated by Dutch municipalities, be stimulated by using online platforms.* The main question is answered by the five separate sub questions. The input from the sub questions (the empirical research and theoretical framework) form the answer on main question and form the content of the conclusions and recommendations.

# Theoretical framework

#### SQ1. What is smart governance?

Literature defines smart governance as a new form of governance where governments no longer work in their traditional ways, but where governments actively involve and collaborate with external parties and the public in their decision making and service delivery processes. Responsibilities are shared with multiple stakeholders. ICT is used to make this collaboration and governance processes efficient and effective. Due to the development of ICT and its possibilities for the facilitation of smart governance, governance processes are increasingly digitalized, resulting in online governance, also called Egovernance, in order to achieve a better government. Smart governance and Egovernance are supported by open governance. Smart governance is summarized in the illustration below (fig. 7).

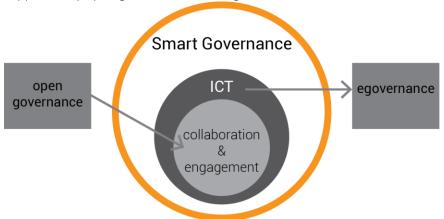


Fig. 7. Smart Governance (Own illustration, 2017).

#### SQ 2. In what ways do governments engage and participate with citizens?

There are many ways for citizens to participate in policy making and service delivery. Traditionally, participation required physical presence which often caused a low turnout. With the developments of ICT, a new wave of participation takes place, making it easier to reach the citizens and enable them to participate by increasing the efficiency and effectiveness of participation, resulting in forms of governance where policies are designed with the participation of citizens, which is one of the key characteristics of smart governance. This results in a shift from citizens as consumers to citizens as contributors. Scholars define different levels of citizen participation, from informing to consulting to active participation, and from citizens as co-implementers, to citizens as co-designers to citizens as initiators. ICT, big data, social media and other platforms boost the interaction between governments and the public. There are many digital ways in which citizens can participate, from online debating to

designing policies. In the Netherlands, the new environment and planning act enforces participation in decision making as an important element, giving municipalities the opportunity to set up their own rules for participation.

# SQ 3. How do local governments deal with citizen initiatives and what is the role of online platforms when dealing with citizen initiatives?

In the Netherlands, society is changing from a welfare society to a participation society, giving more responsibilities to citizens and putting governments in a more facilitating role. Besides, communication changed from offline to online, giving citizens an increased amount of platforms to share their opinions. This forces governments to change their traditional ways of working and involve citizens more and more in their policy and decision making processes. However, citizens often have difficulties with the traditional and bureaucratic systems in which (local) governments are still working. Hence, there is a mismatch between the government and its governance and the pursuit of participation, co-creation and citizen initiatives. (Local) governments can facilitate participation, co-creation and/ or citizen initiatives, by creating space, developing frameworks, guiding and assessing the processes and outcomes. Municipalities are increasingly digitalizing their communication and social media and other platforms show that the interaction between municipalities and citizens massively increases. Platforms for citizen participation can enable citizens to participate in the policy and decision making processes and the service delivery of municipalities. Due to the network and interactive possibilities of online platforms, both (local) governments as individuals are able to reach a large amount of people.

## Empirical research

#### SQ 4. How can municipalities facilitate citizen initiatives for urban development?

Strenghts	Weaknesses	
<ul> <li>Higher level of municipal organization that allows/ enforces experimentation with participation, co-creation and/ or citizen initiatives</li> <li>Municipalities that aim to use as much participation/ consulting/ co-creation in their ideas as possible</li> <li>Funding for citizen initiatives</li> <li>Focus group/ network group that help citizens with the realization of their initiative</li> <li>Active promotion and stimulation of online platforms for citizen initiatives and participation to keep continuation of content</li> <li>Actively showing the possibilities for participation, co-creation and citizen initiatives to citizens</li> <li>Train municipal organization in the usage of participation, co-creation and/ or citizen initiatives</li> </ul>	<ul> <li>Inability to generate traffic to online platforms</li> <li>Not having participation, co-creation and/or citizen initiatives as a fixed item in the municipal organization</li> <li>Staying in the experimentation phase with participation, co-creation and/ or citizen initiatives</li> <li>Municipal organization that keeps on the traditional ways of working instead of changing their mindset to participation, co-creation and/ or citizen initiatives</li> <li>Not realizing that participation also requires a different mindset from citizens and that not every citizens is willing to participate or to take on certain responsibilities</li> <li>Not learning from pilots and experiments</li> <li>The guarding of the quality of participation, co-creation and citizen initiatives is currently often a weakness in municipal organizations</li> </ul>	

- Municipalities that show their vulnerability and ask citizens for help in their policy and decision making
- Initiators that know how to sell their initiatives, that are willing to commit to their initiative and that have support from (many) other citizens
- One 'entrance' for initiators, where all the information about (the process) of citizen initiatives is provided and where initiatives are helped

#### Opportunities

- Experimenting with participation, cocreation and/ or citizen initiatives
- New elected council with a focus on participation, co-creation and/ or citizen initiatives
- Changing of society, from a welfare society to a participation society
- Web developers that develop and maintain usable online platforms for citizen initiatives
- Starting the online platform for citizen initiatives and participation with a big project or (multiple) external organizations to inspire and encourage citizens to generate content
- Analyzing the content generated on the platforms to give insight to municipalities
- Wide range of people active on platforms, easy to reach a wide range of people with the platforms
- Serious gaming to make the municipal organization known with participation, cocreation and/ or citizen initiatives
- Active and enthusiastic people that want to participate in their neighborhood
- Use the knowledge that is created by initiators to help other citizen initiatives
- Legally enforce the rules for participation with the new environment and planning act
- The development of (online) participation tools
- Conducting in-depth interviews with initiators to evaluate and analyze the process of taking an initiative

#### Threats

- No traffic on online platforms
- Municipalities that do not consult with citizens about their ideas or what is needed in the city
- Not providing extra help to citizens with the realization of their initiatives in the form of advice, networks or money
- Forcing the use of online platforms for citizen initiatives and participation when citizens are already active on other platforms or places
- Not guarding the quality of participation, co-creation and/or citizen initiatives in the municipal organization
- Educational institutions that do not educate future civil servants with a focus on participation, co-creation and/or citizen initiative
- Not managing the expectations of citizens for participation
- Inability to check if an initiative is realized or not
- The decrease of trust from citizens and social entrepreneurs in the (local) government
- The 'inactivity' or unwillingness or inability of citizens to actively engage in the policy making process (since they believe taking care of the city is the responsibility of only the municipality instead of a shared responsibility)
- (Local) governments that do not 'weigh' or acknowledge the social worth of citizen initiatives

Table 18. SWOT validation (Own iullstration, 2018).

An important note is that the municipality is not always able to influence all the strengths, weaknesses, opportunities and threats, which sometimes makes it difficult for municipalities to improve participation, co-creation and citizen initiative on all SWOT levels. Municipalities can however indirectly influence participation, co-creation and citizen initiatives by clearly informing their citizens and by bringing together active citizens with ideas and organization power on online platforms and offline meetings.

**SQ5.** What are the characteristics of online platforms for citizen initiatives and what is the impact of the platforms on the built environment?

#### Characteristics:

- Not many municipalities are owners or builders of the platforms. They are often build/owned by private organizations/ entrepreneurs. Sometimes the municipality collaborated with private organizations and are collaboratively owners of the platforms. Other times the platform is owned/ build by a private organization, but the municipality actively participates on the platform. The division between collaborating and participating is 50/50.
- Almost all the platforms focus on co-creation or self-organization. This division is almost 50/50.
- There are not many platforms that do not focus on website interaction. Most of the platforms go to the level of voting. A few of the platforms also reach the highest level of asking or offering help or services. Besides, there is a wide array of tools available on the platforms. The tools that are provided least are offering help and showing phasing.
- The platforms that focus on co-production often have a medium amount of initiatives. The platforms that focus on self-organization or a combination of self-organization and co-production often have a high amount of initiatives. This might mean that the platforms with a self-organization component are visited or actively used more often than co-production platforms. This can be because of the fact that with self-organization every type of initiative is possible and with co-production, initiatives have to fit into some kind of framework from the municipality, which decreases the amount of possible initiatives.
- Most of the purely self-organization platforms are owned by private organization. The platforms that have a co-production component often have the involvement of municipality in the ownership of the platform. This might mean that municipalities often have their own objectives/aspirations with the platform.
- Most of the platforms with a low amount of initiatives focus on offering help whereas the platforms with a high amount of initiatives do not. A logical explanation can be that it is not possible to offer help to a high amount of initiatives, since it would take too much time or manpower to actively help all the initiatives. Also, most of the platforms that focus on offering help are the platforms where the ownership is a collaboration between private organization and the municipality.
- The higher the level of platform interaction possibilities is, the higher the amount of initiatives that are posted on the platforms. It can be that citizens prefer a lot of interaction possibilities if they actively use the platform and that a high amount of interaction yields more initiatives.

Some of the platforms are analyzed on the data that is posted on the online website, specified to initiatives that focus on the built environment.

- The average amount of initiatives that focus on the built environment at the platforms that are analyzed is 61. However, one platform has a very large amount of initiatives compared to the other platforms, which had an effect on these results. If that platform is excluded, the average amount of initiatives, focused on the built environment, per platform is 22.

- None of the platforms have a steady amount of initiatives per year. At all the platforms, you see the amount of initiatives per year increasing and decreasing, often with a high peak in one year. This might be because of the (lack) of stimulation and promotion of the website, which is discussed in SQ 4. However, this is not checked in the data analysis and is therefore an assumption
- Most of the platforms focus on streets that need to become safer and playgrounds that need to get a new location, followed by parks that need to get greener (new types of plants, maintenance, etc). Besides, initiatives also often want new locations for sports facilities. This often probably means that there are not enough play and sports facilities in the city areas and that the streets are not safe enough. Also, parks often lack maintenance or enough plants/ green.
- Most of the initiatives that are posted on the website stay in the 'idea phase', meaning that they are put online on the platforms, after which nothing is done with the initiatives (yet). People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea, or have difficulties with getting their initiative realized. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline). Besides, most of the times, the municipality is not involved with the initiatives that are posted on the platforms.
- On average, 26 percent of the initiatives received a reaction, and 25 percent of the initiatives received a vote, with an average of 2,7 reactions and 21 votes per initiative. The type of initiatives that received the highest percentage of both reactions and votes are initiatives about buildings. The lowest percentage of reactions and votes are initiatives about harbours.

#### Effects:

- Most of the initiatives stay in the idea phase (87%). So it seems like the effect of the platforms on the built environment is rather low, since not that many initiatives are realized or in the process of realization. However, it might be that a lot of the platforms do not update the initiatives that change from the status of idea to the status of in process of realization or realized. It can be the case that people post their initiatives on the platform and then work on their initiative without updating their initiative data on the platform. So the real effect on the built environment is difficult to monitor. However, it is clear that the direct effect of the platforms on the built environment is rather low. The platforms do not have a big effect on the built environment if they are the only 'thing' that is used to realize an initiative. Apparently, a series of online and offline ways are necessary to realize an initiative. However, it should be noted that this (the need for online and offline ways) is not thoroughly researched and it therefore stays an assumption.
- The research shows that the only variable that is of influence on the phase of the initiative (if an initiative gets realized or not), is the involvement of the municipality. So when the municipality is involved in an initiative, there is a higher change that the initiative gets into the process of realization and/ or gets realized.
- After that, it was researched which variables influence the involvement of the municipality. The research showed that the amount of votes and the average household income influence the involvement of the municipality. The higher the amount of votes on an initiative, the higher the likelihood that the municipality is involved with an initiative. Also, the higher the average household income in an area, the higher the amount of initiatives where the municipality is involved. It also showed that the higher the average amount of household income in an area, the higher the amount of votes on an initiative. Besides, the research showed that if there is a high percentage of children in an area, the amount of votes decreases, and the higher the percentage

of adults in an area, the higher the amount of votes. This is shown in figure 1. When there is a high percentage of adults in an area, most of the initiatives are about streets and buildings.

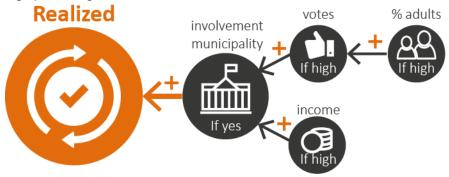


Figure 1. Influence on the phase of the initiative (Own illustration, 2018).

- The real effect on the built environment of the platforms is difficult to measure, since first of all, by far, most of the initiatives stay in the idea phase. Besides, the effect on the built environment is difficult to measure due to lack of data from municipalities. There is some general data available about the amount of citizens and average household income, et cetera. But information about the level of participation in an area, or grades about livability, or amount of citizen initiative projects, ranging from different years, was most often not available. Therefore, it is not really possible to measure if, in the years that platforms were available in an area, the numbers of certain datasets changed. However, the research does provide valuable information about the things that have an influence on the fact if an initiative gets realized or not (as shown in figure 1).

### Conclusions on the main question

# How can citizen initiatives for urban development, facilitated by Dutch municipalities, be stimulated by using online platforms?

Online platforms for citizen initiatives can be used as a form of smart governance, if municipalities decide to play a role in the online platforms for citizen initiatives. According to Giffinger et al (2007, p.4), the four elements of smart governance are participation in decision-making, public & social services, transparent governance, political strategies and perspectives, some of them also mentioned by Meijer (2016, p.74) & Viale Pereira, et all (2017, p. 4 & 21). Besides, it's a managerial way to organize collaborations between governments and other stakeholders (Meijer, 2016, p.74), facilitated by technology (Garcia Alonso & Lippez-de Castro, 2016, pp. 336-337). Online platforms can facilitate these elements, if they are built in the right way and if municipalities are actively engaged in the platforms, by giving reactions/ feedback to the initiatives, openly show which initiatives are supported and why and by actively asking citizens for help/ ideas in certain projects. Essential for citizen participation is the fact that citizens opinions are actually heard and evaluated (Bertnzen & Johannessen, 2016, p. 303). Considering de Zeeuw & Pieterse (n.d., pp. 11-13, 23), platforms only work when citizens get a real influence on the decision making. Digital democracy does offer the tools, but these tools need to be a part of the decision making process in order to work. The online platforms for citizen initiatives provide online tools for engagement and collaboration, for instance tools that facilitate voting and giving reactions, tools that show the involvement of the municipality with certain initiatives, tools that show the location of initiatives and tools where municipalities or other parties can ask for specific ideas on specific locations. It can be decided to let the platforms focus on self-organization, co-production or only information sharing.

ICT, big data, social media and other platforms boost the interaction between governments and the public. Besides, (local) governments can facilitate participation, co-creation and/ or citizen initiatives, by

creating space, developing frameworks and guiding and assessing the processes and outcomes. Online platforms for citizen initiatives have the ability to provide this space, these frameworks and the guiding and assessing of the processes and outcomes. Actively showing the possibilities for participation, cocreation and citizen initiatives to citizens is seen as a strength. However, this does not mean that all municipalities in the Netherlands are using online platforms for citizen initiatives. From the 18 platforms that were assessed, on 1/3 of the platforms there was no involvement of municipalities on the platform.

This does not mean that those municipalities do not focus on citizen participation, co-creation and/ or initiatives at all. Municipalities often doubt if online platforms for citizen initiatives are the best 'form' or 'model' to facilitate citizen participation, co-creation and/ or initiatives. Municipalities often experience difficulties in generating traffic to the online platforms for citizen initiatives. The platforms often need a continuous stimulation and promotion, otherwise the amount of initiatives and interaction on the platform stagnates or decreases. Besides, there are often difficulties in checking if initiatives are realized or not and keeping this information up-to-date. Also, there are quite some platform where the municipality does not react or actually does something with the initiatives (the municipality is not involved). When looking to the ladder of participation from Arnstein (1969, p. 217), many platforms stay at the level of tokenism, citizens 'hear and are heard', but they do not have the power to make sure that their views become powerful/ are used by the ones with power. There are some exceptions where the platforms go a level further to the levels of 'citizen power', which are levels where the citizens actually take part in decision making (for instance the platform Stem van West).

Municipalities do not need to develop online platforms for citizen initiatives on their own. Involving web developers in the development and maintenance of the platforms can be of great benefit. Municipalities sometimes already use other channels (both online as offline) for participation, co-creation or initiative purposes. Forcing the usage of online platforms for citizen initiatives can be a threat if the other channels are already very well used and if they already generate a lot of content.

However, it is a strength when municipalities facilitate citizen participation, co-creation and/ or initiatives, especially when the higher level of the municipal organization allows for experimentation on these matters. It is a weakness when municipalities do not have citizen participation, co-creation and/or citizen initiatives as a fixed item in the municipal organization. According to VNG (2017), for municipalities, it is no longer the question if citizens come up with initiatives, but how municipalities can work together with the citizen initiatives, what the roles and responsibilities are and what this means for the democratic processes at the municipalities. Following Scholl & Scholl (2014, pp. 166-168) participation & collaboration need to be applied in many elements of the municipal organization: norms, policies, practices, information, technologies and skills. This also means that it needs to be applied in multiple and various departments of the municipal organization, which is not yet happening. According to Scholl & Scholl (2014, p. 165), a smart government manages the city by using ICT's and actively involves and collaborates with stakeholders. Also, smart governance uses 'nonhierarchical and nonmarket forms of organization in the public sector', with networking environments that are necessary for public management due to the complex networks of organizations (Rodriguez Bolivar, 2016, pp. 53-54). What is seen is that quite some municipalities are experimenting with using ICT's and collaboration with stakeholders, but that it is often in the starting phase and not used or done by the whole municipal organization. One can argue that the municipalities in the Netherlands are starting to become smart governments, with an emphasis on starting.

This does require a change of mindset from civil servants, from the traditional ways of working into participatory ways, which is also mentioned by Scholl & Scholl (2016, pp. 166-168). Serious gaming can be

used to change this mindset of civil servants and to get them known with citizen participation, co-creation and/ or initiatives. It is seen as a strength when municipalities show their vulnerability and ask citizens for help in the design of policies and in decision making. Though, municipalities need to be aware that they do learn from their experiments and pilots on citizen participation, co-creation and/ or citizen initiatives, and that they implement their lessons into the municipal organization. Besides, municipalities should be aware of the fact that citizen participation, co-creation and/ or citizen initiatives not only require a different mindset from the municipal organization, but also from the citizens. Therefore, expectations of citizens for citizen participation, co-creation and/ or initiatives need to be managed, and the frameworks in which this happens need to be clear.

The influence of municipalities that use online platforms for citizen initiatives and the influence of municipalities that are active on those platforms is not to be underestimated. The research shows that the only variable that is of influence on the phase of the initiative (if an initiative gets realized or not), is the involvement of the municipality. So when the municipality is involved in an initiative, there is a higher change that the initiative gets into the process of realization and/ or gets realized. Besides, the amount of votes and the average household income in an area influence the involvement of the municipality. The higher the amount of votes on an initiative, the higher the likelihood that the municipality is involved with an initiative. Also, the higher the average household income in an area, the higher the amount of initiatives where the municipality is involved. It also shows that the higher the average amount of household income in an area, the higher the amount of votes on an initiative. Besides, the research shows that if there is a high percentage of children in an area, the amount of votes decreases, and the higher the percentage of adults in an area, the higher the amount of votes. This is shown in figure 1.



Figure 1. Influence on the phase of the initiative (Own illustration, 2018).

It is interesting to see that the chance that the municipality is involved in an initiative is high in areas where the average income is high. In general, the areas with a high income are often the better areas in the city, where the involvement of the municipality in making an area better is not as much 'needed' as it is in the low income areas. Meijer (2016, p.75) calls this the 'nature of the problem domain'. Situational characteristics such as culture, democratic institutions, local economy and the physical environment matter for the effectiveness. One might expect that the involvement of the municipality should be higher in the low income areas. However, municipalities tend to be more involved with initiatives & projects that are well-thought-out. In the interviews, it became clear that one of the success factors for initiatives is a clearly thought out initiative, well-written text, it's about selling an initiative. In high-income areas, residents/initiators often have more possibilities and capabilities to make this happen, they are often better educated, or often have more people in their neighborhood/ network with certain knowledge or expertise that might help with a certain initiative (please note that this has not been scientifically tested in this research, so it stays an assumption). This is sometimes called the 'Matthew-effect', first noticed by Merton (1968, pp. 56-63). In the Bible in Matthew 13:12, the apostle Matthew teaches: 'Whoever has will be given more, and they will have an abundance. Whoever does not have, even what they have will be

taken from them'. This can be roughly translated to 'the rich will get richer and the poor will get poorer'. Uitermark (2012), states that self-organization (initiatives) is inventive if initiators have a strong network and a better capacity for self-organization. People with strong networks that are often close to the (local) government, have more chance to develop plans together with the (local) government. Engbersen & Snel (2015), point out that citizen participation only works in the rich and white neighborhoods, where privileged social and economic positions yield extra benefits. Their research shows that in neighborhoods with the lowest incomes and a high level of ethnic diversity, citizen participation is happening significantly less often compared to the richer neighborhoods in the city.

So far, the conclusion from this research sound the same as the conclusions from the research of Engbersen & Snel (2015). However, according to literature, ICT should provide and facilitate new possibilities for participation, with the combination of different networks and the collaboration between different networks, where the innovativeness of different parties is combined in these collaborations with active involvement from every sector of the community, enabled by ICT, big data and social media (f.i. McKenna, 2016, pp. 90-94). Due to ICT usage, a network of stakeholders (government and the public) can cooperate more efficiently. The ICT platforms can facilitate the sharing of information and create a collaborative environment because of increased interoperability (Lee, et all, 2014, pp. 83-85). Individuals have the possibility to reach a large amount of people through the network possibilities of online platforms (Priester, 2017, p.4). According to van der Graaf & Veeckman (2014, p. 76 & 78), with the right types of ICT, every citizen should be able to have an active role in the development of their urban space. Besides, governance 2.0 & ICT improved citizen-to-citizen communication & collaboration. Online platforms for citizen participation often facilitate the creation of networks and communities, which results in the sharing of different fields of knowledge (Falco & Kleinhans, 2018, p. 4). Also, formerly, coproduction was limited by the government's (in)ability to coordinate citizens and their actions and limited by the (in)ability of regular citizens to self-organize themselves. Online platforms for citizen participation reduce these limitations by the interactive possibilities of the platforms (Linders, 2012, p. 446). So, according to theory, with the help of ICT and online platforms, citizens should have a more equal possibilities for participation, since networks are combined online. So, citizens in the poor city areas should be able to reach the knowledge or help from citizens in the rich area, due to the online connection of networks. If one believes the theory, the average area income should not have an influence on the involvement of the municipality with certain initiatives, since citizens should be able to reach the same networks online. Apparently, the theory has a more 'utopian' and inclusive view on online citizen participation, co-creation and/or initiatives facilitated by ICT than what is actually the case in real-life.

Besides, initiators often experience difficulties in getting their initiative realized, which is shown in both the interview research as the platform data research. Most of the initiatives that are posted on the platforms stay in the 'idea phase', meaning that they are put online on the platforms, after which nothing is done with the initiatives (yet). People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea, or have difficulties with getting their initiative realized. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline). Though, it is noticed that initiatives often require extra help from municipalities or other parties in the form of advice, networks or money, which is also mentioned by for instance WRR (2012, p. 62 and pp.107-128). Municipalities can set up focus and network groups that help citizens with the realization of their initiative. Initiators benefit from clear contact with municipalities. This can be in the form of 'one entrance' for initiators, where all the information about (the process) of citizen participation, co-creation and/ or initiatives is provided and where the initiatives are helped. Online platforms for citizen initiatives can be the medium that facilitates/ provides this information. Besides, analyzing the content that is

generated on the platforms provides insight to the municipalities and helps municipalities to better facilitate their citizens with participation, co-creation and/ or citizen initiatives. Besides, initiators that are active on online platforms and active in getting their initiatives realized create a lot of knowledge, valuable for other initiators and for municipalities. Municipalities can (indirectly) influence participation, co-creation and citizen initiatives by clearly informing their citizens and by bringing together active citizens with ideas and organization power on online platforms and offline meetings. Often, the (social) worth of citizen participation, co-creation and/ or initiatives is not acknowledged by other parties. The new environment and planning act brings the possibility to legally enforce the rules for participation, forcing the external parties to acknowledging the worth of citizen participation, co-creation and/ or initiatives.

#### Final answer main question / recommendations for municipalities

How can citizen initiatives for urban development, <u>facilitated by Dutch municipalities</u>, be stimulated by using online platforms?

**Recommendation 1**: Do not see online platforms for citizen initiatives as the (main) key to success for the facilitation of citizen participation, co-creation and/or citizen initiatives.

Citizens are often actively participating, co-creating or making initiatives on multiple channels, both online as offline. Berntzen & Johannessen (2016, p.303) argue that effective participation requires a combination of software and social media and a combination of both online and offline communication channels. Forcing citizens to solely use online platforms for citizen initiatives can have a detrimental effect on the level of participation, co-creation and citizen initiatives in a city. Besides, the research shows that many platforms have difficulties generating traffic and content to the platforms. From the platforms that are able to generate content on the platform, many ideas stay in the initiative phase. More is needed than only the usage/ deployment or availability of online platforms for citizen initiatives to stimulate citizen participation, co-creation and/ or citizen initiatives.

That does not mean that online platforms for citizen initiatives have no use. Some of the analyzed platform work really well, generate a lot of content and are able to generate initiatives that are realized, with a lot of interaction from citizens in the form of votes, reactions and offering help. This can be because of the 'local cooperative knowledge potential'. The success is dependent on the match between new technologies and the knowledge of relevant actors. Every city is different and so are the stakeholders that are capable and willing to cooperate with the local government. 'The local cooperative knowledge potential refers to the availability of relevant knowledge among citizens and stakeholders, and the willingness to contribute this knowledge to collective problem-solving (Meijer, 2016, p.75). The online platforms for citizen initiatives can provide the online tools necessary for engagement and collaboration and boost the interaction between governments and the public, if they are reflecting the local cooperative knowledge potential. Online platforms for citizen initiatives have the ability to provide the space, frameworks and the guiding and assessing of the processes and outcomes, which are necessary to facilitate citizen initiatives, co-creations and/ or participation. Actively showing the possibilities for participation, co-creation and citizen initiatives to citizens is seen as a strength.

Besides, citizen participation, co-creation and initiatives work best if the municipality has this as a fixed item in the municipal organization, enforced by the higher levels of the municipal organization.

Additionally, the right mind-set of civil servants is crucial: they need to be willing to use participation co-creation and/ or initiatives in their ways of working. Likewise, it is crucial to realize that citizen participation, co-creation and/ or citizen initiatives do not only require a certain mind-set from civil-servants, but also from the citizens themselves. Not every citizens want to participate/ be active in their city or wants to have the responsibility of co-designing policies and decision-making processes.

**Recommendation 2**: Be actively involved with citizen participation, co-creation and/or citizen initiatives and keep a continuous stimulation of citizen participation, co-creation and/or citizen initiatives and the online platforms.

The research shows that the online platforms need continuous stimulation and promotion of the platform and its possibilities, otherwise the content and the traffic on stagnates or decreases. It is believed that citizens are more willing to interact with the government when governments are open to interaction and integrate the viewpoint of citizens in their decision making (Viale Pereira, et all, 2017, pp. 6-7) (Kleinhans, et al, 2015, p.238). Essential for citizen participation is the fact that citizens opinions are actually heard and evaluated (Bertnzen & Johannessen, 2016, p. 303). Additionally, the research shows that the only variable that is of influence on the phase of the initiative (if an initiative gets realized or not), is the involvement of the municipality. So when the municipality is involved in an initiative, there is a higher change that the initiative gets into the process of realization and/ or gets realized. Besides, the amount of votes and the average household income in an area influence the involvement of the municipality. The higher the amount of votes on an initiative, the higher the likelihood that the municipality is involved with an initiative. Also, the higher the average household income in an area, the higher the amount of initiatives where the municipality is involved. It also shows that the higher the average amount of household income in an area, the higher the amount of votes on an initiative. Besides, the research shows that if there is a high percentage of children in an area, the amount of votes decreases, and the higher the percentage of adults in an area, the higher the amount of votes. So, if municipalities want active participation, co-creation and or citizen initiatives, they need to be actively involved with these participation processes, co-creation processes and initiative processes. Likewise, the research shows that actively showing the possibilities for participation, co-creation and citizen initiatives to citizens is seen as a strength.

The involvement of the municipality with citizen initiatives goes further than only generating votes in order to get realized. The research shows that many initiatives experience difficulties with getting their initiatives realized, which was also mentioned by Kennisland (n.d., pp. 19-30) and explains the high percentage of initiatives that stay in the idea phase. Initiatives often require extra help from municipalities or other parties in the form of advice, networks or money. For the implementation of the initiative, collaboration with and help from the local government is often necessary. For the initiatives to become sustainable, the model of revenue and incomes, the network structure and the organizational structure are important (Igalla & van Meerkerk, 2015, pp. 28-30). Actively offering this help has a positive effect on citizen participation, co-creation and/ or initiatives, which is also mentioned by van Delden (2017, p. 4). Initiatives plead not only for a government that facilitates, but also a government that actively helps the initiatives (van den Berg, 2013, p.20). According to Meijer (2016, p. 74), governments need to take a leading role in the efficient management of the city and therefor also in the management of participation processes, which is not yet happening in an optimal way. Municipalities can set up focus and network groups that help citizens with the realization of their initiative. Initiators benefit from clear contact with municipalities. This can be in the form of 'one entrance' for initiators, where all the

information about (the process) of citizen participation, co-creation and/ or initiatives is provided and where the initiatives are helped. Also, the expectations of citizens for citizen participation, co-creation and/ or initiatives need to be managed, and the frameworks in which this happens need to be clear. Scholl & Scholl (2014, p.166) argue that some of the key factors of smart governance are stakeholder contributability, continued engagement & coordination. So, when municipalities abide to this recommendation, in theory, they become a smart government.

**Recommendation 3**: Keep track of the online data generated by the platforms, the data provided by the municipality itself and keep the data up-to-date.

The research shows that municipalities and platforms often have difficulties in checking if initiatives are realized or not and keeping this information up-to-date. However, municipalities do not need to develop online platforms for citizen initiatives on their own. Involving web developers in the development and maintenance of the platforms can be of great benefit. Most of the initiatives that are posted on the platforms stay in the 'idea phase', meaning that they are put online on the platforms, after which nothing is done with the initiatives (yet). People seem to forget about their idea after they post it online, or do not feel the need to actually do something with their idea, or have difficulties with getting their initiative realized. However, it can also be the case that the information about the initiative is not updated. This does not necessarily mean that nothing is done with the initiative, stuff can happen outside the platform (offline).

Analyzing the content that is generated on the platforms provides insight to the municipalities and helps municipalities to better facilitate their citizens with participation, co-creation and/ or citizen initiatives. Besides, initiators that are active on online platforms and active in getting their initiatives realized create a lot of knowledge, valuable for other initiators and for municipalities. Keeping the information on the platforms up-to-date, an keeping track of the information that is generated on the platform/ analyzing this information, increases the amount of knowledge that is generated by the platforms and by the processes of citizen participation, co-creation and/ or initiatives. Hence, resulting in a positive influence on and an added value to the citizen participation, co-creation and/ or citizen initiatives.

Additionally, linking the information that is generated by the online platforms to general information provided by the municipality can result in valuable information about how online platforms for citizen initiatives are used and the effects of the platforms on the built environment and vice versa. For instance, this research shows that the higher the average income in an area, the higher the involvement of the municipality in an area, which has a positive influence on the realization of the initiatives. Also, the higher the percentage of adults in an area, the higher the amount of votes on initiatives, which has a positive effect on the involvement of the municipality, resulting in a positive effect on the realization of an initiative. Certain information provides valuable information to municipalities and in which areas they for instance need to be more involved, or which areas require more stimulation for citizen participation, cocreation and/ or citizen initiatives. The more information is available, the more information municipalities have for the stimulation and facilitation of their citizen participation, co-creation and/ or initiative processes. Meijer (2016, pp. 77-78 calls this 'concentrated intelligence'. New technologies and data help governments to 'strengthen their intelligence, provide more integrated services, develop better policies, and steer other actors in the city more effectively'.

# References

### Literature

Aan de slag met de omgevingswet (n.d., A). Algemene maatregelen van bestuur. Retrieved online from: <a href="https://aandeslagmetdeomgevingswet.nl/omgevingswet/omgevingswet/omgevingswetportaal/algemene-maatregelen/">https://aandeslagmetdeomgevingswet.nl/omgevingswet/omgevingswet/omgevingswetportaal/algemene-maatregelen/</a> on 21-02-2018.

Aan de slag met de omgevingswet (n.d., B). Procedures. Retrieved online from:

https://aandeslagmetdeomgevingswet.nl/omgevingswet/omgevingswet/begrippen/procedures/ on 22-02-2018

Aan de slag met de omgevingswet (n.d., C). Uitgangspunten en doel van de wet. Retrieved online from: <a href="https://aandeslagmetdeomgevingswet.nl/omgevingswet/omgevingswet/begrippen/uitgangspunten-doel/">https://aandeslagmetdeomgevingswet.nl/omgevingswet/omgevingswet/begrippen/uitgangspunten-doel/</a> on 21-02-2018.

Aan de slag met de omgevingswet (n.d., D). Inspiratiegids participatie. Retrieved online from: <a href="https://aandeslagmetdeomgevingswet.nl/thema/thema/participatie/inspiratiegids/routekaart/">https://aandeslagmetdeomgevingswet.nl/thema/thema/participatie/inspiratiegids/routekaart/</a> on 26-02-2018

Accenture (2016). Technology vision. Accenture.

Amado, M. Poggi, F. Amado, A.R. (2016). Energy efficient city: A model for urban planning. Sustainable City and Society, vol. 26, pp. 476-485.

Arnstein, S. R. (1969). A Ladder Of Citizen Participation. Journal of the American Planning Association, vol. 35, pp. 216-224.

Bakry, S.H. (2004). Development of e-government: a STOPE view. International journal of network management, vol. 14, pp. 339-350.

Barns, S. (2016). Mine your data: open data, digital strategies and entrepreneurial governance by code. Urban Geography, vol. 37, pp. 554-571.

Bekkers, H. (2017). Digitalisering veel serieuzer nemen. Retrieved online from:

https://www.binnenlandsbestuur.nl/digitaal/nieuws/digitalisering-veel-serieuzer-nemen.9576492.lynkx on 04-04-2018.

Bertnzen, L. & Johannessen, M.R. (2016). The Role of Citizen Participation in Municipal Smart City Projects: Lessons Learned from Norway. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 87-107). Springer International.

Bloom, B.S. (Ed.). Engelhart, M.D., Furst, E.J., Hill, W.H., Krathwohl, D.R. (1956). Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain. New York: David McKay Co Inc.

Bryman, A. (2012). Social Research Methods. Oxford: Oxford University Press.

Buitelaar, S. (2016). Omgevingswet onder vuur. Retrieved online from:

http://www.binnenlandsbestuur.nl/ruimte-en-milieu/nieuws/omgevingswet-onder-vuur.9549661.lynkx on 28-02-2018.

Cahoy, E. (2017). Empirical Research in Education and the Behavioral/Social Sciences. Pennsylvania: Penn State University Libraries.

Caragliu, A., del Bo, C., Nijkamp, P. (2011). Smart cities in Europe. Journal of Urban Technology, vol, 18, pp. 65-82.

CMS Wire (2017). 9 Big Community and Collaboration Platform Trends for 2018. Retrieved online from: <a href="https://www.cmswire.com/digital-workplace/9-big-community-and-collaboration-platform-trends-for-2018/">https://www.cmswire.com/digital-workplace/9-big-community-and-collaboration-platform-trends-for-2018/</a> on 04-04-2018.

Economic and Social Research Council (2015). ESRC Framework for research ethics. Retrieved online from: <a href="http://www.esrc.ac.uk/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/">http://www.esrc.ac.uk/files/funding/guidance-for-applicants/esrc-framework-for-research-ethics-2015/</a> on 11-12-2017.

Edelenbos, J., van Meerkerk, I., & Schenk, T. (2018). American Review of Public Administration, vol, 48, pp. 52-66.

Engbersen, G. & Snel, E. (2015). Als de burger het zelf moet doen, blijven arme buurten achter. Retrieved from: <a href="https://www.nrc.nl/nieuws/2015/06/11/als-de-burger-het-zelf-moet-doen-blijven-arme-buu-1507151-a369760">https://www.nrc.nl/nieuws/2015/06/11/als-de-burger-het-zelf-moet-doen-blijven-arme-buu-1507151-a369760</a> on 09-06-2018.

European Commission (2016). Analysis of the Value of New Generation of eGovernment Services and how Can the Public Sector Become an Agent of Innovation through ICT (executive summary). European Union. Falco, E. & Kleinhans, R. (2018) Digital Participatory Platforms for Co-Production in Urban Development. A Systematic Review. International Journal of E-Planning Research. Vol 7.

Franzen, A., F. Hobma, H. de Jonge and G. Wigmans (eds.) (2011). Management of Urban Development Processes: governance, design, feasibility, Amsterdam: Techne Press.

G2 Crowd (2018). Digital Platforms Trends 2018. Retrieved online from:

https://blog.g2crowd.com/blog/trends/digital-platforms/2018-dp/ on 04-04-2018.

Garcia Alonso, R. & Lippez-De Castro, S. (2016). Technology Helps, People Make: A Smart City Governance Framework Grounded in Deliberative Democracy. In In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 333-347). Springer International.

Gardner, N., Hespanhol, L. (2017). SMLXL: Scaling the smart city, from metropolis to individual. City, Culture and Society.

Gemeente Delft (n.d.). Delfts Doen. Retrieved online from:

https://www.delft.nl/wonen/bouwen/omgevingswet/delfts-doen on 30-03-2018.

Giffinger, R., Kramar, H., & Haindl, G. (2007). The role of rankings in growing city competition.

Proceedings of the 11th European Urban Research Association (EURA) Conference, Milan,

Italy, October 9–11. Retrieved online from: <a href="http://publik.tuwien.ac.at/files/PubDat\_167218.pdf">http://publik.tuwien.ac.at/files/PubDat\_167218.pdf</a> on 20-11-2017.

Gooch, D., Barker, M., Hudson, L. & Kelly, R. (2018). Amplifying Quiet Voices: Challenges and Opportunities for Participatory Design at an Urban Scale. ACM Transactions on Computer-Human Interaction, Vol. 25.

Hartholt, S. (2018). Amper bezoek digitale platforms. Retrieved online from:

https://www.binnenlandsbestuur.nl/digitaal/nieuws/amper-bezoek-digitale-platforms.9580710.lynkx on 30-03-2018.

Hollands, R.G. (2015). Critical interventions into the corporate smart city. Cambridge Journal of Regions, Economy and Society, vol 8, pp. 61-77

Human Dimensions (2018). Wat is deep democracy? Retrieved online from:

https://deepdemocracy.nl/over-deep-democracy/achtergrond on 30-04-2018.

Igalla, M., & van Meerkerk, I. (2015). De duurzaamheid van burgerinitiatieven. Een empirische verkenning. Bestuurswetenschappen, vol. 69, pp. 25-53.

Jacobs, J. (1961). The death and life of great American cities. New York: Random House.

Janssen, M. & Helbig, N. (2015). Innovating and changing the policy-cycle: Policy-makers be prepared! Government information quarterly. Retrieved online from:

http://www.sciencedirect.com/science/article/pii/S0740624X15300265 on 14-11-2017

Kansen voor West II (n.d.). Welkom bij Kansen voor West. Retrieved online from:

http://www.kansenvoorwest2.nl/nl/ on 30-03-2018

Kennisland (n.d.). Stadmakers in Nederland: Welke kennisinfrastuctuur helpt bottom-up initiatieven bij het realiseren van maatschappelijke vernieuwing? Amsterdam: Kennisland.

Khan, S. & VanWynsberghe, R. (2008). Cultivating the Under-Mined: Cross-Case Analysis as Knowledge Mobilization. Forum: Qualitative Social Research, vol. 9.

Khan, Z., Dambruch, J., Peters-Anders, J., Sackl, A., Strasser, A., Frohlich, P., Templer, S. & Soomro, K. (2017). Developping knowledge-based citizen participation platform to support smart city decision making: the smarticipate case study. Information, vol. 8, No. 2, pp. 47-75.

Khasawneh, R.T. & Abu-Shanab, E.A. (2013). E-Government and Social Media Sites: The Role and Impact. World Journal of Computer Application and Technology, vol.1, pp. 10-17.

Kleinhans, R., Van Ham. M., and Evans-Cowley, J. (2015). Using Social Media and Mobile Technologies to Foster Engagement and Self-organisation in Participatory Urban Planning and Neighbourhood Governance. Planning Practice & Research, vol. 30, pp. 237-247.

Koning, de, N., & van den Broek, T. (2011). Co-creatie bij overheid: experimenteer met beleid. Delft: TNO Kourtit, K. Nijkamp, P. Steenbruggen, J. (2017). The significance of digital data systems for smart city policy. Socio-Economic Planning Sciences. vol. 58. Pp. 13-21.

Leach, J.M., Lee, S.E., Hunt, D.V.L., Rogers, C.D.F. (2017). Improving city-scale measures of livable sustainability: A study of urban measurement and assessment through application to the city of Birmingham, UK. Cities, vol 71, pp. 80-87.

Lee, J. H., Hancock, M.G. & Hu, M. (2014). Towards an effective framework for building smart cities: Lessons from Seoul and San Francisco. Technological Forecasting and Social Change, vol 89, pp. 80-99. Linders, D. (2012). From e-government to we-government: Defining a typology for citizen coproduction in the age of social media. Government information quarterly, vol. 29, pp. 446-454.

Liu, J. & Han, J. (2017). Does a Certain Rule Exist in the Long-Term Change of a City's Livability? Evidence from New York, Tokyo, and Shanghai. Sustainability, vol. 9, pp. 1681-1696.

McKenna, P.H. (2016). Rethinking Learning in the Smart City: Innovating Through Involvement, Inclusivity, and Interactivities with Emerging Technologies. In In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 87-107). Springer International.

Meijer, A. & Bekkers, V. (2015). A metatheory of e-government: Creating some order in a fragmented research field. Government information quarterly, vol. 32, pp. 237-245.

Meijer, A., Burger, N. and Ebbers, W. (2009). Citizens4Citizens: Mapping Participatory Practices on the Internet. Electronic Journal of e-Government, vol. 7, pp. 99 - 112.

Meijer, A., Koops, B., Pieterson, W., Overman, S., and ten Tije, S. (2012). Government 2.0: Key Challenges to Its Realization. Electronic Journal of e-Government, vol.10, pp. 59-69.

Meijer, A. & Thaens, M. (2010). Alignment 2.0: Strategic use of new internet technologies in government. Government Information Quarterly, vol 27, pp.-113-121.

Meijer, A. & Zouridis, S. (2004). E-government as Institutional Transformation. In: Khosrow-Pour, M.(Eds.),. Innovations through Information Technology (pp.565-58). Idea Group, Hershey PA.

Meijer, A. (2012). Co-production in an Information Age: Individual and Community Engagement Supported by New Media. Voluntas. Retrieved online from:

https://link.springer.com/article/10.1007/s11266-012-9311-z on 12-11-2017

Meijer, A. (2015). E-governance innovation: Barriers and strategies. Government Information Quarterly, vol. 32, pp. 198-206.

Meijer, A. (2016). Smart City Governance: A Local Emergent Perspective. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 49-71). Springer International.

Mello Miranda, de, P.R., Cortez da Cunha, M.A.V. and Pugas Filho, J. M. (2016). eParticipation in Smart Cities of Developing Countries: Research-Based Practical Recommendations. In J. R. Gil-Garcia, T. A.

Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 315-332). Springer International.

Merton, R.K. (1968). The Matthew-effect in science. Science, vol. 159, pp. 56-63.

Ministerie van Infrastructuur en Milieu (2014). Omgevingswet. Ruime voor ontwikkeling, waarborgen voor kwaliteit. The Hague: Ministerie van Infrastructuur en Milieu.

Ministerie van Infrastructuur en Milieu (2016). Omgevingswet in het kort. The Hague: Ministerie van Infrastructuur en Milieu.

Nederhand, M.J., Bekkers, V.J.J.M. & Voorberg, W.H. (2014). Self-organization and the role of government: how and why does self-organization evolves in the shadow of hierarchy? Rotterdam: Erasmus University Rotterdam.

Okere, A. (2016). The power of platforms for society. Retrieved online from:

https://www.weforum.org/agenda/2016/11/the-power-of-platforms-for-society/ on 04-04-2018.

Oni, A.A., Oni, S., Mbarika, V., Ayo, C.K. (2017). Empirical study of user acceptance of online political participation: Integrating civic voluntarism model and theory of reasoned action. Government information quarterly, vol. 34, pp. 317-328.

Platform 31 (n.d.). Waarom een nieuwe omgevingswet? Retrieved online from:

http://www.platform31.nl/wat-we-doen/kennisdossiers/kennisdossier-omgevingswet/waarom-eennieuwe-omgevingswet on 21-02-2018.

Platform 31 (2016). De communicatieve kant van participatie met de omgevingswet. Retrieved online from: <a href="http://www.platform31.nl/nieuws/de-communicatieve-kant-van-participatie-met-de-omgevingswet">http://www.platform31.nl/nieuws/de-communicatieve-kant-van-participatie-met-de-omgevingswet on 26-02-2018</a>.

Platform 31 (2017). Eén steiger; drie vergunningen – het belang van samenwerken in de keten. Retrieved online from: <a href="http://www.platform31.nl/nieuws/een-steiger-drie-vergunningen-het-belang-van-samenwerken-in-de-keten">http://www.platform31.nl/nieuws/een-steiger-drie-vergunningen-het-belang-van-samenwerken-in-de-keten</a> on 22-02-2018.

Priester, R. (2017). Onze online platformen. Amsterdam: citizen data lab, Hogeschool van Amsterdam. Rijksoverheid (n.d.). Omgevingswet. Retrieved online from:

https://www.rijksoverheid.nl/onderwerpen/omgevingswet on 15-02-2018.

Rodriguez Bolivar, M. P. (2016). Characterizing the Role of Governments in Smart Cities: A Literature Review. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 49-71). Springer International.

Ruimtevolk (2016). De inrichting van onze ruimte is geen pretpong. Retrieved online from: <a href="https://ruimtevolk.nl/2016/04/13/de-inrichting-van-onze-ruimte-is-geen-pretpong/">https://ruimtevolk.nl/2016/04/13/de-inrichting-van-onze-ruimte-is-geen-pretpong/</a> on 28-02-2018.

Schmidthuber, L., Hilgers, D., Gegenhuber, T., Etzelstorfer, S. (2017). The emergence of local open government: Determinants of citizen participation in online service reporting. Government Information Quarterly, vol. 34, pp. 457–469.

Scholl, H. J., & Scholl, M. C. (2014). Smart Governance: A Roadmap for Research and Practice. In iConference 2014 Proceedings (p. 163–176).

Thomas, V., Wang, D., Mullagh, L., Dunn, N. (2016). Where's Wally? In search of citizens perspectives on the smart city. Sustainability, vol. 8, pp. 207-220.

Townsend, A. (2015). Cities of data: Examining the new urban science. Public culture, vol. 27, pp. 201-212.

Uitermark, J. (2012). De zelforganiserende stad. In: Raad voor de Leefomgeving en Infrastructuur (Eds.), De toekomst van de stad. (pp. 5-9). Den Haag: Raad voor de Leefomgeving en Infrastructuur.

Van Delden, P. (2017). Burgerdynamiek. Een pleidooi voor agency. Andersson Elffers Felix.

Van den Berg, M. (2013). Stedelingen veranderen de stad. Amsterdam: Trancity\*Valiz.

Van den Broek, A., Steenbekkers, A., van Houwelingen, P. & Putters, K. (2016). Niet buiten de burger rekenen! The Hague: Sociaal en Cultureel Planbureau.

Van der Graaf, S. and Veeckman, C. (2014). Designing for participatory governance: assessing capabilities and toolkits in public service delivery. Info, vol. 16, pp.74-88

Van Dijck, J., Poell, T. & de Waal, M. (2016). De platformsamenleving. Amsterdam: Amsterdam University Press.

Van Ginkel, J. & Verhaaren, F. (2015). Werken aan de wakkere stad. Vakmedianet Management B.V. Van Reybrouck (2013). Tegen Verkiezingen. Amsterdam: de bezige bij.

Viale Pereire, G., Cunha, M.A., Lampoltshammer, T.J., Parycek, P. & Testa, M.G. (2017). Increasing collaboration and participation in smart city governance: a cross case analysis of smart city initiatives. Information technology for development (published online:

http://www.tandfonline.com/doi/full/10.1080/02681102.2017.1353946 on 19-06-17.

VNG (2016). Positionpaper AMvB's omgevingswet. Retrieved online from:

http://www.binnenlandsbestuur.nl/Uploads/2016/10/-paper-VNG-t.b.v.-hoorzitting-rondetafelgesprek-AMVB-s-voor-de-Omgevingswet-d.d.-10-oktober-2016.pdf on 28-02-2018.

VNG (2017). De cooperatieve samenleving. Retrieved online from: <a href="https://vng.nl/themas/bestuur/lokale-democratie/de-cooperatieve-samenleving">https://vng.nl/themas/bestuur/lokale-democratie/de-cooperatieve-samenleving</a> on 02-04-2018.

VNG (n.d.). Platforms. Retrieved online from: <a href="https://vng.nl/onderwerpenindex/dienstverlening-en-informatiebeleid/platforms">https://vng.nl/onderwerpenindex/dienstverlening-en-informatiebeleid/platforms</a> on 04-04-2018.

Voorberg, W.H., Bekkers, V.J.J.M., and Tummers, L.G. (2014). A Systematic Review of Co-Creation and Co-Production: Embarking on the social innovation journey. Public Management Review, vol. 17, pp. 1333-1357

Wang, K.Y., and Wu, C.M. (2016). Building an Intelligent Government, Intelligent City, and Intelligent Citizenry Through ICTs: Smart City Innovations in New Taipei City, Taiwan. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 259-278). Springer International.

Wilkinson, M. D. et al. (2016) The FAIR Guiding Principles for scientific data management and stewardship. Scientific Data, vol. 3, pp. 1-9.

WRR (2012). Vertrouwen in burgers. Den Haag/ Amsterdam: WRR/ Amsterdam University Press.

Yin, R.K. (1994). Case Study Research. London: Sage Publications.

Yin, Y. Misokami, S. Aikawa, K. (2015). Compact development and energy consumption: Scenario analysis of urban structures based on behavior simulation. Applied Energy. vol. 159, pp. 449-457.

Zeeuw, de, A. & Pieterse, J. (n.d.). Handreiking digitale democratie. Netwerk Democratie

#### Illustrations

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- Fig. 1. Influence on the phase of the initiative: Own illustration (2018). Influence on phase of the initiative.
- Fig. 2. Research method phases: Own illustration (2017). Research method phases.
- **Fig. 3.** Characteristics and factors of a smart city: Giffinger, R., Kramar, H., & Haindl, G. (2007). The role of rankings in growing city competition. Proceedings of the 11th European Urban Research Association (EURA) Conference, Milan, Italy, October 9–11. Retrieved online from:

http://publik.tuwien.ac.at/files/PubDat 167218.pdf on 20-11-2017

- **Fig. 4**, Factors of smart governance, own illustration, based on: Scholl, H. J., & Scholl, M. C. (2014). Smart Governance: A Roadmap for Research and Practice. In iConference 2014 Proceedings (p. 163–176).
- **Fig. 5**. Framework of results on the use of ICT to enable collaborative governance: Viale Pereira, G., Cunha, M.A., Lampoltshammer, T.J., Parycek, P. & Testa, M.G. (2017). Increasing collaboration and participation in smart city governance: a cross case analysis of smart city initiatives. Information technology for development (published online:

http://www.tandfonline.com/doi/full/10.1080/02681102.2017.1353946 on 19-06-17.

- **Fig. 6**. Contextual model for smart city governance: Meijer, A. (2016). Smart City Governance: A Local Emergent Perspective. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 49-71). Springer International.
- Fig. 7. Smart Governance: Own illustration (2017). Smart Governance.
- **Fig. 8**. Ladder of participation: Arnstein, S. R. (1969). A Ladder Of Citizen Participation. Journal of the American Planning Association, vol. 35, pp. 216-224.

- **Fig. 9**. Model for user-centered design of smart city initiatives: Gardner, N., Hespanhol, L. (2017). SMLXL: Scaling the smart city, from metropolis to individual. City, Culture and Society.
- **Fig. 10**. Approach Compass: Aan de slag met de omgevingswet (n.d., D). Inspiratiegids participatie. Retrieved online via:

https://aandeslagmetdeomgevingswet.nl/thema/thema/participatie/inspiratiegids/routekaart/ on 26-02-2018.

- **Fig 11** Force field of a vital society: Van Ginkel, J. & Verhaaren, F. (2015). Werken aan de wakkere stad. Vakmedianet Management B.V.
- Fig. 12, Locations: Own illustration (2018). Locations.
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# **Chapter Pages**

Front page. Own illustration (2018).

Front page backside. Ryoji Iwata (2017). Retrieved online from:

https://unsplash.com/photos/X53e51WfjlE (creative commons). Own edit.

Chapter 1 introduction. Ryan Lange (2018). Retrieved online from:

https://unsplash.com/photos/3SHdrNMwt1E (creative commons). Own edit.

Chapter 2 research method. Brevite (2017). Retrieved online from:

https://unsplash.com/photos/gOHBall5WRc (creative commons). Own edit.

Chapter 3 theoretical framework. Nathan Ziemanski (2018). Retrieved online from:

https://unsplash.com/photos/nC9And41i2I (creative commons). Own edit.

Chapter 4 empirical research. Samuel Zeller (2016). Retrieved online from:

https://unsplash.com/photos/LHXrmesp7l8 (creative commons). Own edit.

Chapter 5 synthesis. Arthur Osipyan (2017). Retrieved online from:

https://unsplash.com/photos/A8odL84U15w (creative commons). Own edit.

Chapter 6 reflection. Ryoji Iwata (2018). Retrieved online from:

https://unsplash.com/photos/-HGy4pFoIQw (creative commons). Own edit.

## **Tables**

**Table 1**. Case study analysis: Own illustration (2017). Case study analysis.

Table 2. Platform data analysis framework: Own Illustration (2018). Platform data analysis framework.

**Table 3.** Dimensions of governance and their definition: Rodriguez Bolivar, M. P. (2016). Characterizing the Role of Governments in Smart Cities: A Literature Review. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 49-71). Springer International.

**Table 4**. Summary of technology opportunities: Bertnzen, L. & Johannessen, M.R. (2016). The Role of Citizen Participation in Municipal Smart City Projects: Lessons Learned from Norway. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 87-107). Springer International.

**Table 5**. Mapping policy stages to developments and impact on governance: Janssen, M. & Helbig, N. (2015). Innovating and changing the policy-cycle: Policy-makers be prepared! Government information quarterly. Retrieved online from: <a href="http://www.sciencedirect.com/science/article/pii/S0740624X15300265">http://www.sciencedirect.com/science/article/pii/S0740624X15300265</a> on 14-11-2017

**Table 6**. Facilitating elements: Mello Miranda, de, P.R., Cortez da Cunha, M.A.V. and Pugas Filho, J. M. (2016). eParticipation in Smart Cities of Developing Countries: Research-Based Practical Recommendations. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 315-332). Springer International.

**Table 7**. Inhibiting elements: Mello Miranda, de, P.R., Cortez da Cunha, M.A.V. and Pugas Filho, J. M. (2016). eParticipation in Smart Cities of Developing Countries: Research-Based Practical Recommendations. In J. R. Gil-Garcia, T. A. Pardo, & T. Nam (Eds.), Smarter as the new Urban Agenda (pp. 315-332). Springer International.

**Table 8**. Legal differences between the current and new law. Based on: Ministerie van Infrastructuur en Milieu (2014). Omgevingswet. Ruime voor ontwikkeling, waarborgen voor kwaliteit. The Hague: Ministerie van Infrastructuur en Milieu.

**Table 9**. Cross case analysis: Own illustration (2018). Cross case analysis.

**Table 10**. Amount of initiatives versus owner type: Own illustration (2018). Amount of initiatives versus owner type.

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# **Appendix**

# Appendix 1- Extensive research case descriptions

#### **BUURbook**

#### Who?

Private organization

#### What?

BUURbook is an independent social platform for neighborhoods. It enables neighborhoods to inform on what is going on in the neighborhood on social, spatial and economic levels. People in the neighborhoods can inform each other from spontaneous idea to serious plan. It brings together the neighborhood knowledge of the residents and entrepreneurs with the knowledge of professionals and civil servants. It gives an oversight of the neighborhood and helps to combine the small networks in the neighborhood into one neighborhood community. It also gives municipalities the ability to provide open data about the neighborhood.

#### How?

Neighborhoods can apply for an own neighborhood channel. After that, residents can register for the neighborhood channel. They get their own page, which shows the neighbors and the things that are going on in the neighborhood. They can post questions and ideas or plans for the neighborhood. Besides, there is an alert option, which gives an notification every time something new is posted on the channel.

#### Droomstad

#### Who?

Private organization, with participation of municipality.

#### What?

Droomstad (dream city) is an online space where dreams and idea for the city are visible for everyone. It gives an oversight of the city dreams at specific locations in the city. Droomstad helps to accelerate the dreams into reality and gives the possibility to help with the realization of the dreams of other residents. It is an independent platform consisting of a collaboration between an entrepreneur and a web development bureau. Droomstad collaborates closely with several organizations, amongst others the municipality for the realization of the dreams.

#### How?

People can register for the platform. This gives them the possibility to add dreams, working together with other dreams, vote for other dreams and to give reactions. The platform consists of four 'tabs':

- 'Dreams', people can add their dream for the city. This makes the dream visible to others, where after people can vote to support the dream. After ten votes, the dream will be published on the 'dream page', which provides an overview of dreams on a map
- 'Dream locations', is a location where there is a specific question for ideas. It can be published by organizations or the municipality. It can be used to generate ideas, to measure the threshold for an idea or multiple concepts on a specific location, to ask for feedback on a specific idea.
- 'Dream channels', dream locations can only be added by dream channels. Dream channels offer a way for organizations to promote themselves on their own channel. They can add their dream locations.

- 'Help others', gives the possibility to help others with the realization of their dreams. The tab shows specific questions on specific ideas, which shows what and how much of it is needed.

#### Stadslab Breda

#### Who?

Private organization.

#### What?

Stadslab is an online platform where residents or groups of residents can post ideas for the city. Stadslab consist of a network of socially involved professionals, educators and civil servants that give consultation to ideas for the city in the process of realization.

#### How?

Citizens can post an idea at Stadslab. A new initiative is presented at the coregroup of Stadslab, consisting of a team of professionals form different departments. An initiative is then giving the option for 3 scales of help: small, medium or large. The small approach is used when an idea is rather straightforward but misses some practical factors. The stadslab team helps to make the plan more complete and giving advice or connect the idea to similar ideas in the neighborhood. The idea is published online and others have the ability to give tips and reaction to the plan. The medium approach is used with complex initiatives where stadslab helps with organizing the realization process. The large approach is used for ideas on a larger city-scale with multiple consequences for the city. Stadslab helps with the organizational process and the business side of the initiative.

#### Kamer van doen

#### Who?

Collaboration of municipality and professionals.

#### What?

Collaboration platform where civil servants and professionals help to realize initiatives of (social) entrepreneurs. It helps with the development of business models and partnerships at which the platform can support the initiatives. It is for active residents and organizations with ambitions to develop an initiative that improves the wellbeing, employment opportunities or healthcare in the neighborhood.

#### How?

Initiatives can apply to the site. Kamer van doen then redirects the initiative to relevant information and checklistst, connects the initiatives to other relevant or similar initiative and their experiences. Besides, they provide a custom-made advise trajectory, and knowledge through education, meetings and publications, support of the municipality and a connection with a social entrepreneur or specialist.

#### Maex

#### Who?

Private organization, with participation of municipalities

#### What?

Maex is an online platform for grassroots initiatives with the aim to make the social strength of these bottom-up initiatives visible and to foster the interplay between the 'living world' of the initiatives with the 'systematic world' of municipalities and businesses. It is an online transaction platform that gives an overview of the worth of the initiatives and added value to the community and environment.

### How?

De online platform shows a map of the initiatives with their location and distinguishes the phase of the initiative: planning phase, starting phase, growing phase, steady phase and stopped. It divides the initiatives into city area's and shows organizations that support the initiative. Per initiative it shows a description of the initiative, the contact person, how many people it reaches and the amount of volunteers working for the initiative. It shows the needs of the initiative, for instance the needs for partners, volunteers or financial support. It shows the effects on the environment and the effects on people (divided into livelihood, social safety, social cohesion, participation, sustainability, leisure, development, self-sufficiency). It shows news messages of the initiative, has the possibility to give reactions and to rate the initiative on a scale of one to five stars. Besides people can share the initiative on facebook and twitter.

# Stichting initiatief op Scheveningen

# Who?

Private foundation, collaboration with Municipality of the Hague and European Union.

### What?

The platform/ foundation has the aim to improve and strengthen the local economy and livability of Scheveningen in an innovative and sustainable way. The foundation helps initiatives financially and with their organization. It wants to improve collaboration and local synergy, create space for work activity, wants to increase the amenities for tourism, create a strong area identity, and connect amenities with the landscape in a logical way.

### How?

People can apply their initiative (when they are a non-for profit foundation, citizen initiative or a group of youth younger than 24). The initiative needs to be in the area of Scheveningen and needs to have the purpose to increase the livability or economy in Scheveningen in a sustainable and innovative way. The foundation selects every year a number of initiatives to help with the organizational structure and to provide them with a financial donation. Citizens of Scheveningen are asked to vote for the best initiative, which will get an extra donation. Selected initiatives are showcased on the website with a description and pictures.

# **ZoCity**

### Who?

Private foundation. Involvement of municipality and other stakeholders.

### What?

ZoCity is an online platform that brings together a community of real estate owners, developers, companies, residents, organizations and the municipality, for the transformation of an area in Amsterdam. The platform wants to create a complete and coherent sustainable city area with an own identity and living quality. It wants to make sure of an inclusive transformation, with collaboration of big and small players. It focusses on area development, area management and area communication.

### How?

People or organizations can become a member of the platform, after which they become a member of the community. Members can actively make use of the network and activities and post ideas for the area. Ideas are placed on an interactive map which shows the initiatives in the area and their location. It shows in which year the initiative is taking place and how for the initiative is in the process to completion. Each initiative has a description, pictures of the project, the project owner, starting date and stage in the

process to completion, the category it applies to and a link to their own website. There is a possibility to like the project or react on the project and to share the project.

# 040 goed bezig

### Who?

Initiative of the municipality of Eindhoven and multiple local partners

### What?

040 goed bezig tries to let sustainable and social initiatives for the city grow and connects residents in the city. It gives an online network and communication place for initiatives and provides information about sustainability in the city, inspiration, ideas and tips.

### How?

People can register for the site and then add an initiative. The site shows an overview of the projects and their location on an interactive map. Each initiative shows a description, it location and pictures and or videos of the initiative. It shows the team and contact person. It shows the amount of people and organizations that help the project. People can help the project to participate or become an ambassador of the initiative. There is a sharing option for mail, facebook, twitter and linkedin. The website in general shows the amount of people that are a member of the platform and the amount of initiatives on the platform. Besides it has a newsfeed of the platform.

# Maak je stad

### Who?

Initiative of the municipality of Amsterdam and multiple other stakeholders

### What?

Amsterdam was in 2016 and 2017 the most innovative city of Europe. Because of that, the city received a price (money). The city decided to give the money to the city and its citizens. Maak je stad is development trajectory which helps citizens with an initiative for the city focused on the themes 'healthy city' and 'talented city'.

# How?

The city asked its citizens to come up with initiatives for a healthy city or a talented city. From all the applicants they chose the 37 best initiatives to help them with a development trajectory. Besides the prie money (600.000 euro's) was divided amongst those initiatives to help them. The development trajectory started in September 217 and ended in February 2018. During the trajectory, monthly workshops are organized, and contact with the municipality and other relevant parties is established. The trajectory helps to strengthen the initiatives and its organizational structure. The site gives an overview of the selected initiatives, with pictures and a description of the initiative and what they want to achieve. Besides it has an option to share the initiative on twitter and facebook. The site also has a news feed and update of the development trajectory.

## Verbeter de buurt

### Who?

Private organization, participation of municipality.

### What?

Verbeter de buurt (improve the neighborhood) is an online platform where people can make a notification for a problem or idea in the public space in their neighborhood. The platform mediates between neighborhood improvers and the municipality. It functions as an open data platform for municipalities.

### How?

People can make an online notification for a problem in the public space in their neighborhood. They are asked to describe the problem, attach a picture and an exact location and put it in the right category (like full garbage container or hindrance in traffic etc). The notification is then send to the municipality, who can integrate the notifications in the process of resolving the problems. People can react or support the problem, to give an extra message to the municipality. When the problem is resolved, people can give 0 to 5 stars to 'judge' how the municipality resolved the issue. The same works for posting an idea. All the problems and ideas or shown on an interactive map of the city.

# Mijnbuurtje.nl

## Who?

Private organization, participation of municipalities

### What?

Mijnbuurtje.nl (My neighborhood . nl) is an online platform for neighborhood communities. The platform uses neighborhood connectors, trains them in community building en helps them to set-up the online platform in the neighborhood. The platform has an interactive social map that shows the initiatives, activities and discussions that are going on in the neighborhood.

### How?

The site is an online 'bulletin-board' where people can post activities, ask for specific help/ products or offer help/products. It has an online social map that shows what is going on in the neighborhood.

# Citylab010

## Who?

Collaboration of municipality of Rotterdam and Rotterdam make it happen

### What?

Citylab 010 is an online platform for initiatives in Rotterdam and where people can share their expertise, resources and networks. Besides, it helps to get into contact with financing bodies to receive subsidies. For instance, the municipality of Rotterdam made 3.000.000 euros available in 2018 to help initiatives with their realization.

### How?

People with an initiative can post their initiative on the online platform. They can strengthen their idea by connecting with networks, institutional bodies or partners of the platform and apply for subsidies. When the initiative is eligible for subsidies, the citylab 010 team helps the initiative in the process of receiving the subsidy and improving the initiative. The initiatives need to be socially relevant and innovative. Residents of Rotterdam can support and join and follow the initiative. The platform gives an overview of the initiatives and shows their location with a description and pictures.

# Civocrazy

# Who?

Private organization, participation of municipalities

### What?

Civocrazy is an online platform, originally founded in France, where people and municipalities can address discussion topics for their city or neighborhood. The platform collects input and stimulates co-creation. It stimulates active involvement of citizens on political and social matters.

### How?

Municipalies can post a discussion topic to ask for input of their residents on the topic. Residents can then give input on the discussion topic and other people an support the input. Also residents can post their own discussion topic or idea for the city. Other people can decide to support the idea. If there is enough support, the discussion topic will be opened and people have to possibility to give input on the topic. Besides, the platform shows an agenda with activities, a newsfeed, the amount of people that give input and support the topic and parties involved with the topic.

# Platform Duurzaam Dordrecht

### Who?

Private organization

### What?

Platform duurzaam Dordrecht (platform sustainable Dordrecht) is an online platform partnership of citizens in Dordrecht that like to improve world, starting in their own environment. The platform supports initiatives of individuals, entrepreneurs, organizations, local governments and other institutions to stimulate sustainable developments in the city of Dordrecht.

### How?

The platform has multiple workgroups that are connected to each other and also collaborate with other organizations. The platform collects sustainable initiatives, showcases them on the website and gives advice to the initiatives.

## Nextdoor

### Who?

Private organization

# What?

Nextdoor is an enclosed neighborhood app/platform to stay in touch with what is happening in the neighborhood. It stimulates neighborhood communication and community engagement. It's about investing in the neighborhood, open communication and taking responsibility for the neighborhood. Municipalities can also apply for nextdoor and send targeted messages to the members, and use it for participation purposes.

# How?

People can become a member of their neighborhood. The neighborhood is shown on a map with the households that joined the platform. It has an overview of the people that joined the platform in the neighborhood, it shows events in the neighborhood. Messages are linked to the households, people can post messages and others can react on it.

# Stem van west

## Who?

Municipality of Amsterdam

### What?

Stem van West (Voice of West) is an online platform where for the submission of initiatives and proposals for the neighborhood.

### How?

People can submit their initiative on the platform with a description. Thereafter, they can 'campaign' their initiative on the website. People can vote for the initiatives. People have 3 months for their campaign and need at least 100 positive votes. Every month the initiatives are checked and the one with the most votes is invited to pitch their initiative at the municipality. The municipality thereafter decides if and how they are going to help the initiative.

# Jij maakt de buurt

## Who?

Municipality of Enschede

### What?

Jij maakt de buurt (you make the neighborhood) is an online platform where citizens post initiatives for the neighborhood. It is used as a tool to reach, connect, inform and inspire citizens.

## How?

The platforms showcases the initiatives, it has information on how the municipality deals with the initiatives, information about the possibility of subsidies. People can post their initiative on the site. Initiatives are categorized by neighborhood area and theme.

# Gouda Bruist

## Who?

Private organization

### What?

Gouda Bruist is a 'gathering place' for active citizens of the city and their initiatives for the city. The platform connects citizens and initiatives to increase fun, creativity and connection in the city.

# How?

Residents can post ideas for the city or their neighborhood on the social platform, and connect it to a location. Other residents can decide to participate on the idea and react on it. Besides, people can list activities or use the platform as a pin board for questions for services or goods or offer services or good. Also, the platforms has a database of people, organizations and locations that are active on the platform. Besides, the platform organizes meeting to help ideas and activities with their realization.

# Appendix 2 – Results SPSS

# the name of the city in which the platform is located

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Amsterdam	73	17,0	17,0	17,0
	den bosch	35	8,2	8,2	25,2
	nijmegen	7	1,6	1,6	26,8
	enschede	295	68,8	68,8	95,6
	gouda	19	4,4	4,4	100,0
	Total	429	100,0	100,0	

# the name of the city area in which the initiative is located \* the name of the city in which the platform is located Crosstabulation

Count

		the name of the city in which the platform is located						
		Amsterdam	den bosch	nijmegen	enschede	gouda	Total	
the name of the city area	amstel3	15	0	0	0	0	15	
in which the initiative is	binnensingelgebied	0	0	0	17	0	17	
located	binnenstad	0	18	0	0	12	30	
	bloemendaal	0	0	0	0	1	1	
	boswinkelstadsveld	0	0	0	12	0	12	
	centrum	0	0	1	0	0	1	
	engelen	0	2	0	0	0	2	
	glanerbrug	0	0	0	45	0	45	
	goverwelle	0	0	0	0	1	1	
	graafsepoort	0	2	0	0	0	2	
	hogelandvelve	0	0	0	13	0	13	
	ijburg	1	0	0	0	0	1	
	ljburg	30	0	0	0	0	30	
	korteakkeren	0	0	0	0	3	3	
	landelijk	0	0	0	11	0	11	
	midden	0	0	1	0	0	1	
	muntelvliert	0	1	0	0	0	1	
	noord	0	3	4	29	2	38	
	oost	0	0	1	0	0	1	
	ribbeltstokhorst	0	0	0	30	0	30	
	rosmalenzuid	0	1	0	0	0	1	
	twekkelerveld	0	0	0	4	0	4	

		r					
	west	27	1	0	0	0	28
	zuid	0	0	0	134	0	134
	zuidoost	0	7	0	0	0	7
Total		73	35	7	295	19	429

the name of the platform

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Droomstad	42	9,8	9,8	9,8
	stem van west	27	6,3	6,3	16,1
	zocity	15	3,5	3,5	19,6
	jijmaaktdebuurt	295	68,8	68,8	88,3
	goudabruist	19	4,4	4,4	92,8
	halloijburg	31	7,2	7,2	100,0
	Total	429	100,0	100,0	

## Crosstabs

Case Processing Summary									
	Cases								
	Va	lid	Miss	sing	To	tal			
	N	Percent	N	Percent	N	Percent			
the name of the platform * The year in which the initiative is posted on the website	387	90,2%	42	9,8%	429	100,0%			

	the name of t	he platform * The year i	n which th	ne initiativ	e is poste	ed on the	website C	rosstabul	ation			
			The year in which the initiative is posted on the website									
			2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
the name of the platform	stem van west	Count	0	0	0	0	0	0	0	25	2	27
		% within the name of the platform	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	92,6%	7,4%	100,0%
	zocity	Count	0	0	0	0	0	0	13	2	0	15
		% within the name of the platform	0,0%	0,0%	0,0%	0,0%	0,0%	0,0%	86,7%	13,3%	0,0%	100,0%
	jijmaaktdebuurt	Count	0	0	77	56	58	28	23	30	23	295
		% within the name of the platform	0,0%	0,0%	26,1%	19,0%	19,7%	9,5%	7,8%	10,2%	7,8%	100,0%
	goudabruist	Count	1	1	2	4	4	3	0	4	0	19
		% within the name of the platform	5,3%	5,3%	10,5%	21,1%	21,1%	15,8%	0,0%	21,1%	0,0%	100,0%
	halloijburg	Count	0	0	2	1	0	0	12	14	2	31
		% within the name of the platform	0,0%	0,0%	6,5%	3,2%	0,0%	0,0%	38,7%	45,2%	6,5%	100,0%
Total		Count	1	1	81	61	62	31	48	75	27	387
		% within the name of the platform	0,3%	0,3%	20,9%	15,8%	16,0%	8,0%	12,4%	19,4%	7,0%	100,0%

# the name of the platform $^{\star}$ the type of initiative Crosstabulation

						the	type of initiative					
			Street	park	building	sportslocatio n	playground	harbour	river	square	boulevard	Total
the name of the platform	Droomstad	Count	4	14	11	1	1	1	6	2	2	42
		% within the name of the platform	9,5%	33,3%	26,2%	2,4%	2,4%	2,4%	14,3%	4,8%	4,8%	100,0%
	stem van west	Count	7	1	4	0	3	0	4	5	3	27
		% within the name of the platform	25,9%	3,7%	14,8%	0,0%	11,1%	0,0%	14,8%	18,5%	11,1%	100,0%
	zocity	Count	5	1	4	1	1	0	1	1	1	15
		% within the name of the platform	33,3%	6,7%	26,7%	6,7%	6,7%	0,0%	6,7%	6,7%	6,7%	100,0%
	jijmaaktdebuurt	Count	82	55	9	20	112	0	0	17	0	295
		% within the name of the platform	27,8%	18,6%	3,1%	6,8%	38,0%	0,0%	0,0%	5,8%	0,0%	100,0%
	goudabruist	Count	3	4	10	1	1	0	0	0	0	19
		% within the name of the platform	15,8%	21,1%	52,6%	5,3%	5,3%	0,0%	0,0%	0,0%	0,0%	100,0%
	halloijburg	Count	6	2	5	4	2	2	6	3	1	31
		% within the name of the platform	19,4%	6,5%	16,1%	12,9%	6,5%	6,5%	19,4%	9,7%	3,2%	100,0%
Total		Count	107	77	43	27	120	3	17	28	7	429
		% within the name of the platform	24,9%	17,9%	10,0%	6,3%	28,0%	0,7%	4,0%	6,5%	1,6%	100,0%

# the name of the platform \* Aim of the initiative Crosstabulation

					Aim of the initia	tive		
			safer	greener	community	art	new location	Total
the name of the platform	Droomstad	Count	6	12	10	2	12	42
		% within the name of the platform	14,3%	28,6%	23,8%	4,8%	28,6%	100,0%
	stem van west	Count	8	8	5	3	3	27
		% within the name of the platform	29,6%	29,6%	18,5%	11,1%	11,1%	100,0%
	zocity	Count	4	3	2	1	5	15
		% within the name of the platform	26,7%	20,0%	13,3%	6,7%	33,3%	100,0%
	jijmaaktdebuurt	Count	93	72	39	15	76	295
		% within the name of the platform	31,5%	24,4%	13,2%	5,1%	25,8%	100,0%
	goudabruist	Count	0	2	7	3	7	19
		% within the name of the platform	0,0%	10,5%	36,8%	15,8%	36,8%	100,0%
	halloijburg	Count	5	7	11	1	7	31
		% within the name of the platform	16,1%	22,6%	35,5%	3,2%	22,6%	100,0%
Total		Count	116	104	74	25	110	429
		% within the name of the platform	27,0%	24,2%	17,2%	5,8%	25,6%	100,0%

# the type of initiative \* Aim of the initiative Crosstabulation

					Aim of the initia	tive		
			safer	greener	community	art	new location	Total
the type of initiative	Street	Count	65	26	5	7	4	107
		% within the type of initiative	60,7%	24,3%	4,7%	6,5%	3,7%	100,0%
	park	Count	5	49	12	0	11	77
		% within the type of initiative	6,5%	63,6%	15,6%	0,0%	14,3%	100,0%
	building	Count	0	5	10	12	16	43
		% within the type of initiative	0,0%	11,6%	23,3%	27,9%	37,2%	100,0%
	sportslocation	Count	6	0	1	0	20	27
		% within the type of initiative	22,2%	0,0%	3,7%	0,0%	74,1%	100,0%
	playground	Count	30	3	30	0	57	120
		% within the type of initiative	25,0%	2,5%	25,0%	0,0%	47,5%	100,0%
	harbour	Count	1	0	1	1	0	3
		% within the type of initiative	33,3%	0,0%	33,3%	33,3%	0,0%	100,0%
	river	Count	3	6	7	0	1	17
		% within the type of initiative	17,6%	35,3%	41,2%	0,0%	5,9%	100,0%
	square	Count	5	12	7	3	1	28
		% within the type of initiative	17,9%	42,9%	25,0%	10,7%	3,6%	100,0%
	boulevard	Count	1	3	1	2	0	7
		% within the type of initiative	14,3%	42,9%	14,3%	28,6%	0,0%	100,0%
Total		Count	116	104	74	25	110	429
		% within the type of initiative	27,0%	24,2%	17,2%	5,8%	25,6%	100,0%

# the name of the platform $^{\star}$ The status of the initiative Crosstabulation

				The status of th	e initiative		
			idea	in process of realization	realized	quit	Total
the name of the platform	Droomstad	Count	34	4	1	1	40
		% within the name of the platform	85,0%	10,0%	2,5%	2,5%	100,0%
	stem van west	Count	18	5	1	3	27
		% within the name of the platform	66,7%	18,5%	3,7%	11,1%	100,0%
	zocity	Count	7	8	0	0	15
		% within the name of the platform	46,7%	53,3%	0,0%	0,0%	100,0%
	jijmaaktdebuurt	Count	285	5	4	1	295
		% within the name of the platform	96,6%	1,7%	1,4%	0,3%	100,0%
	goudabruist	Count	3	2	8	6	19
		% within the name of the platform	15,8%	10,5%	42,1%	31,6%	100,0%
	halloijburg	Count	16	9	4	2	31
		% within the name of the platform	51,6%	29,0%	12,9%	6,5%	100,0%
Total		Count	363	33	18	13	427
		% within the name of the	85,0%	7,7%	4,2%	3,0%	100,0%

# the name of the platform $^{\star}$ Is the municipality involved Crosstabulation

Is the municipality involved

			no	yes	Total
the name of the platform	Droomstad	Count	26	16	42
		% within the name of the platform	61,9%	38,1%	100,0%
	stem van west	Count	18	9	27
		% within the name of the platform	66,7%	33,3%	100,0%
	zocity	Count	13	2	15
		% within the name of the platform	86,7%	13,3%	100,0%
	jijmaaktdebuurt	Count	288	7	295
		% within the name of the platform	97,6%	2,4%	100,0%
	goudabruist	Count	17	2	19
		% within the name of the platform	89,5%	10,5%	100,0%
	halloijburg	Count	11	20	31
		% within the name of the platform	35,5%	64,5%	100,0%
Total		Count	373	56	429
		% within the name of the platform	86,9%	13,1%	100,0%

# The status of the initiative \* Is the municipality involved Crosstabulation

			Is the municipa	ality involved	
			no	yes	Total
The status of the initiative	idea	Count	337	26	363
		% within The status of the initiative	92,8%	7,2%	100,0%
	in process of realization	Count	14	19	33
		% within The status of the initiative	42,4%	57,6%	100,0%
	realized	Count	10	8	18
		% within The status of the initiative	55,6%	44,4%	100,0%
	quit	Count	10	3	13
		% within The status of the initiative	76,9%	23,1%	100,0%
Total		Count	371	56	427
		% within The status of the initiative	86,9%	13,1%	100,0%

# the type of initiative \* Is the municipality involved Crosstabulation

Is the municipality involved

			no	yes	Total
the type of initiative	Street	Count	94	13	107
		% within the type of initiative	87,9%	12,1%	100,0%
	park	Count	72	5	77
		% within the type of initiative	93,5%	6,5%	100,0%
	building	Count	33	10	43
		% within the type of initiative	76,7%	23,3%	100,0%
	sportslocation	Count	23	4	27
		% within the type of initiative	85,2%	14,8%	100,0%
	playground	Count	114	6	120
		% within the type of initiative	95,0%	5,0%	100,0%
	harbour	Count	0	3	3
		% within the type of initiative	0,0%	100,0%	100,0%
	river	Count	9	8	17
		% within the type of initiative	52,9%	47,1%	100,0%
	square	Count	22	6	28
		% within the type of initiative	78,6%	21,4%	100,0%
	boulevard	Count	6	1	7
		% within the type of initiative	85,7%	14,3%	100,0%
Total		Count	373	56	429
		% within the type of initiative	86,9%	13,1%	100,0%

# Is the municipality involved ${}^\star$ the type of initiative Crosstabulation

						the t	type of initiative					
						sportslocatio						
			Street	park	building	n	playground	harbour	river	square	boulevard	Total
Is the municipality	no	Count	94	72	33	23	114	0	9	22	6	373
involved		% within Is the municipality involved	25,2%	19,3%	8,8%	6,2%	30,6%	0,0%	2,4%	5,9%	1,6%	100,0%
	yes	Count	13	5	10	4	6	3	8	6	1	56
		% within Is the municipality involved	23,2%	8,9%	17,9%	7,1%	10,7%	5,4%	14,3%	10,7%	1,8%	100,0%
Total		Count	107	77	43	27	120	3	17	28	7	429
		% within Is the municipality involved	24,9%	17,9%	10,0%	6,3%	28,0%	0,7%	4,0%	6,5%	1,6%	100,0%

## Statistics

### Statistics

Amount of reactions given on the initiative

Ν	Valid	429
	Missing	0
Mean		2,68
Media	in	,00
Mode		0
Minim	num	0
Maxin	num	136

Amou	Amount of votes or followers								
N	Valid	429							
	Missing	0							
Mean		20,50							
Media	in	,00							
Mode		0							
Minim	num	0							
Maxin	num	722							

		Statistics	
		Amount of reactions given on the initiative	Amount of votes or followers
N	Valid	429	429
	Missing	0	0
Std. De	eviation	10,987	76,206

Statistics Statistics Statistics Statistics	Statistics	Statistics	Statistics	Statistics
---	------------	------------	------------	------------

amoun	t of residen	ts in area	amo	unt non-weste	rn residents in area	amour	nt of residen	ts <19years	amour	nt of residen	ts between 20-64	amoui	nt of rsidents f	from >64 :
N	Valid	429	N	Valid	429	N	Valid	429	N	Valid	429	N	Valid	429
	Missing	0		Missing	0		Missing	0		Missing	0		Missing	0
Mean		29100,15	Mear	1	20,23	Mean		22,11	Mean		61,83	Mean		16,06
Median	ı	22426,00	Medi	an	19,00	Mediar	n	24,00	Media	n	58,00	Media	n	17,00
Mode		33813	Mode	)	26	Mode		24	Mode		57	Mode		19
Minimu	ım	438	Minin	num	2	Minimu	ım	7	Minim	um	53	Minim	um	2
Maximu	ım	144210	Maxir	mum	41	Maxim	um	33	Maxim	ium	84	Maxim	um	29

Statistics	Statistics	Statistics	

	Statistic	, ,		Otations	-									
amour	nt of houses	in area	amou	ınt of owner o	ccupied houses	amour	it of rental p	operties	amour	nt of people I	iving as a single	amou	nt of people I	iving in a family
N	Valid	414	N	Valid	119	N	Valid	119	N	Valid	414	N	Valid	414
	Missing	15		Missing	310		Missing	310		Missing	15		Missing	15
Mean		14110,86	Mean		48,29	Mean		55,94	Mean		43,56	Mean		51,77
Mediar	1	8454,00	Media	an	43,00	Mediar	1	57,00	Mediar	า	37,00	Media	n	52,00
Mode		14080	Mode		43	Mode		57	Mode		32	Mode		68
Minimu	ım	2221	Minim	num	29	Minimu	ım	12	Minimu	um	27	Minim	um	22
Maxim	um	82179	Maxin	num	88	Maxim	um	71	Maxim	um	78	Maxin	num	73

### Statistics

		amount of residents in area	amount non- western residents in area	amount of residents <19years in area kids	amount of residents between 20- 64 working class in area	amount of rsidents from >64 senior in area	amount of houses in area	amount of owner occupied houses in area	amount of rental properties	average household income in neighborhood	amount of people living as a single	amount of people living in a family
N	Valid	429	429	429	429	429	414	119	119	429	414	414
	Missing	0	0	0	0	0	15	310	310	0	15	15
Std. D	eviation	31495,149	9,763	5,190	6,926	5,242	18391,088	16,153	12,303	6216,700	15,020	16,678

# Oneway

# Descriptives

Is the municipality involve	d							
	95% Confidence Interval for Mean							
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
idea	363	1,07	,258	,014	1,04	1,10	1	2
in process of realization	33	1,58	,502	,087	1,40	1,75	1	2
realized	18	1,44	,511	,121	1,19	1,70	1	2
quit	13	1,23	,439	,122	,97	1,50	1	2
Total	427	1,13	,338	,016	1,10	1,16	1	2

# Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Is the municipality	Based on Mean	46,265	3	423	,000
involved	Based on Median	21,569	3	423	,000
	Based on Median and with adjusted df	21,569	3	289,220	,000
	Based on trimmed mean	46,265	3	423	,000

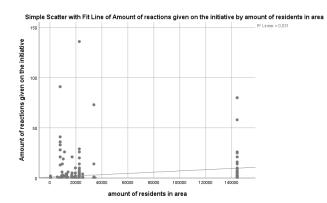
# **Multiple Comparisons**

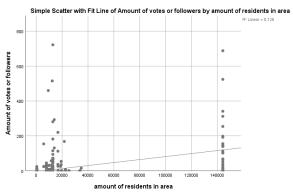
Dependent Variable: Is the municipality involved

	(I) The status of the	(I) The status of the	Mean Difference (I-			95% Confid	ence Interval
	(I) The status of the initiative	(J) The status of the initiative	J)	Std. Error	Sig.	Lower Bound	Upper Bound
Bonferroni	idea	in process of realization	-,504*	,055	,000	-,65	-,36
		realized	-,373	,073	,000	-,57	-,18
		quit	-,159	,086	,383	-,39	,07
	in process of realization	idea	,504*	,055	,000	,36	,65
		realized	,131	,089	,843	-,10	,37
		quit	,345*	,099	,003	,08	,61
	realized	idea	,373	,073	,000	,18	,57
		in process of realization	-,131	,089	,843	-,37	,10
		quit	,214	,110	,322	-,08	,51
	quit	idea	,159	,086	,383	-,07	,39
		in process of realization	-,345*	,099	,003	-,61	-,08
		realized	-,214	,110	,322	-,51	,08
Hochberg	idea	in process of realization	-,504*	,055	,000	-,65	-,36
		realized	-,373*	,073	,000	-,57	-,18
		quit	-,159	,086	,326	-,39	,07
	in process of realization	idea	,504*	,055	,000	,36	,65
		realized	,131	,089	,595	-,10	,37
		quit	,345*	,099	,003	,08	,61
	realized	idea	,373*	,073	,000	,18	,57
		in process of realization	-,131	,089	,595	-,37	,10
		quit	,214	,110	,281	-,08	,51
	quit	idea	,159	,086	,326	-,07	,39
		in process of realization	-,345	,099	,003	-,61	-,08
		realized	-,214	,110	,281	-,51	,08
Games-Howell	idea	in process of realization	-,504	,088	,000	-,74	-,27
		realized	-,373*	,121	,031	-,72	-,03
		quit	-,159	,122	,579	-,52	,20
	in process of realization	idea	,504	,088	,000	,27	,74
		realized	,131	,149	,814	-,27	,53
		quit	,345	,150	,124	-,07	,76
	realized	idea	,373*	,121	,031	,03	,72
		in process of realization	-,131	,149	,814	-,53	,27
		quit	,214	,171	,603	-,25	,68
	quit	idea	,159	,122	,579	-,20	,52
		in process of realization	-,345	,150	,124	-,76	,07
		realized	-,214	,171	,603	-,68	,25

	Correl	ations		
		Ar Double-clic giv activate initiative	mount of	amount of residents in area
Amount of reactions given	Pearson Correlation	1	,278**	,177**
on the initiative	Sig. (2-tailed)		,000	,000
	N	429	429	429
Amount of votes or	Pearson Correlation	,278**	1	,355**
followers	Sig. (2-tailed)	,000		,000
	N	429	429	429
amount of residents in	Pearson Correlation	,177**	,355**	1
area	Sig. (2-tailed)	,000	,000	
	N	429	429	429

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).





# Oneway

# Descriptives

Is the municipality involved

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Street	107	1,12	,328	,032	1,06	1,18	1	2
park	77	1,06	,248	,028	1,01	1,12	1	2
building	43	1,23	,427	,065	1,10	1,36	1	2
sportslocation	27	1,15	,362	,070	1,00	1,29	1	2
playground	120	1,05	,219	,020	1,01	1,09	1	2
harbour	3	2,00	,000	,000	2,00	2,00	2	2
river	17	1,47	,514	,125	1,21	1,74	1	2
square	28	1,21	,418	,079	1,05	1,38	1	2
boulevard	7	1,14	,378	,143	,79	1,49	1	2
Total	429	1,13	,337	,016	1,10	1,16	1	2

# Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Is the municipality involved	Based on Mean	13,065	8	420	,000
	Based on Median	4,634	8	420	,000
	Based on Median and with adjusted df	4,634	8	319,270	,000
	Based on trimmed mean	12,932	8	420	,000

Games-Howell	Street	park	,057	,042	,921	-,08	,19
		building	-,111	,073	,836	-,34	,12
		sportslocation	-,027	,077	1,000	-,28	,23
		playground	,071	,037	,610	-,05	,19
		harbour	-,879*	,032	,000	-,98	-,78
		river	-,349	,129	,211	-,80	,10
		square	-,093	,085	,972	-,37	,19
		boulevard	-,021	,146	1,000	-,65	,61
	park	Street	-,057	,042	,921	-,19	,08
		building	-,168	,071	,326	-,40	,06
		sportslocation	-,083	,075	,969	-,33	,17
		playground	,015	,035	1,000	-,09	,12
		harbour	-,935*	,028	,000	-1,03	-,84
		river	-,406	,128	,095	-,85	,04
		square	-,149	,084	,694	-,43	,13
		boulevard	-,078	,146	,999	-,71	,56
	building	Street	,111	,073	,836	-,12	,34
		park	,168	,071	,326	-,06	,40
		sportslocation	,084	,095	,993	-,22	,39
		playground	,183	,068	,182	-,04	,40
		harbour	-,767*	,065	,000	-,98	-,55
		river	-,238	,141	,746	-,71	,24
		square	,018	,102	1,000	-,31	,35
		boulevard	,090	,157	,999	-,54	,72
	sportslocation	Street	,027	,077	1,000	-,23	,28
		park	,083	,075	,969	-,17	,33
		building	-,084	,095	,993	-,39	,22
		playground	,098	,072	,906	-,14	,34
		harbour	-,852*	,070	,000	-1,09	-,62
		river	-,322	,143	,402	-,80	,16
		square	-,066	,105	,999	-,41	,27
		boulevard	,071	,163	1,000	-,56	,70
	boulevard	Street	,021	,146	1,000	-,61	,65
		park	,078	,146	,999	-,56	,71
		building	-,090	,157	,999	-,72	,54
		sportslocation	-,005	,159	1,000	-,63	,62
		playground	,093	,144	,998	-,54	,73
		harbour	-,857*	,143	,012	-1,50	-,22
		river	-,328	,190	,723	-1,01	,35
		square	-,071	.163	1,000	-,70	,56

# Correlations

Correlations

	Correl	ations							amount of
		amount of residents <19years in area kids	Amount of votes or followers	Amount of reactions given on the initiative			Amount of votes or followers	Amount of reactions given on the initiative	residents between 20- 64 working class in area
amount of residents	Pearson Correlation	1	-,287**	-,021	Amount of votes or	Pearson Correlation	1	,278**	,283**
<19years in area kids	Sig. (2-tailed)		,000	,661	followers	Sig. (2-tailed)		,000	,000
	N	429	429	429		N	429	429	429
Amount of votes or	Pearson Correlation	-,287**	1	,278**	Amount of reactions given	Pearson Correlation	,278**	1	,137**
followers	Sig. (2-tailed)	,000		,000	on the initiative	Sig. (2-tailed)	,000		,004
	N	429	429	429		N	429	429	429
Amount of reactions given	Pearson Correlation	-,021	,278"	1	amount of residents	Pearson Correlation	,283**	,137**	1
on the initiative	Sig. (2-tailed)	,661	,000		between 20-64 working class in area	Sig. (2-tailed)	,000	,004	
	N	429	429	429		N	429	429	429

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

### Correlations

Amount of votes or followers

Amount of reactions given on the initiative

amount of owner occupied houses in area

### Correlations amount of owner occupied houses in area Amount of reactions given on the initiative votes or followers Pearson Correlation ,278 ,031 Sig. (2-tailed) ,000 ,741 429 429 119 ,278 -,214 Pearson Correlation Sig. (2-tailed) ,000

429

-,214

,019

119

429

,031

,741

119

# Amount of votes or followers Amount of reactions given on the initiative ,019 119

119

amount of rental properties

### Ν \*\*. Correlation is significant at the 0.01 level (2-tailed).

Correlations

Pearson Correlation

Pearson Correlation

Pearson Correlation

Sig. (2-tailed)

Sig. (2-tailed)

Sig. (2-tailed)

N

N

Amount of votes or followers

429

,278

,000

429

,056

,544

119

Amount of reactions given on the initiative

,278

,000

429

429

,144

,118

119

amount of rental properties

,056

,544

119

,144

,118

119

1

119

Pearson Correlation

Sig. (2-tailed)

### Descriptives

### average household income in neighborhood

					95% Confidence Interval for Mean			
	N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
idea	363	24689,08	5555,890	291,609	24115,62	25262,54	20200	47842
in process of realization	33	31308,24	7938,143	1381,853	28493,50	34122,99	21400	47842
realized	18	29808,17	7256,012	1710,258	26199,84	33416,50	20500	41574
quit	13	30480,46	5571,200	1545,173	27113,82	33847,10	20500	41574
Total	427	25592,74	6216,555	300,840	25001,42	26184,06	20200	47842

## Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
average household income in neighborhood	Based on Mean	5,782	3	423	,001
	Based on Median	4,417	3	423	,005
	Based on Median and with adjusted df	4,417	3	421,222	,005
	Based on trimmed mean	5,809	3	423	,001

# ANOVA

## average household income in neighborhood

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2004862609	3	668287536,2	19,552	,000
Within Groups	1,446E+10	423	34180003,91		
Total	1,646E+10	426			

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed) \*. Correlation is significant at the 0.05 level (2-tailed).

## **Multiple Comparisons**

Dependent Variable: average household income in neighborhood

	(I) The status of the	(J) The status of the	Mean Difference (I-			95% Confid	ence Interval
	initiative	initiative	J)	Std. Error	Sig.	Lower Bound	Upper Boun
Bonferroni	idea	in process of realization	-6619,165 <sup>*</sup>	1062,976	,000	-9436,82	-3801,5
		realized	-5119,090 <sup>*</sup>	1411,754	,002	-8861,26	-1376,9
		quit	-5791,384	1650,270	,003	-10165,80	-1416,9
	in process of realization	idea	6619,165	1062,976	,000	3801,51	9436,8
		realized	1500,076	1713,081	1,000	-3040,83	6040,9
		quit	827,781	1914,416	1,000	-4246,81	5902,3
	realized	idea	5119,090*	1411,754	,002	1376,92	8861,2
		in process of realization	-1500,076	1713,081	1,000	-6040,98	3040,8
		quit	-672,295	2127,938	1,000	-6312,87	4968,2
	quit	idea	5791,384	1650,270	,003	1416,97	10165,8
		in process of realization	-827,781	1914,416	1,000	-5902,37	4246,8
		realized	672,295	2127,938	1,000	-4968,28	6312,8
Hochberg	idea	in process of realization	-6619,165	1062,976	,000	-9428,48	-3809,8
		realized	-5119,090 <sup>*</sup>	1411,754	,002	-8850,18	-1388,0
		quit	-5791,384	1650,270	,003	-10152,85	-1429,9
	in process of realization	idea	6619,165	1062,976	,000	3809,85	9428,
		realized	1500,076	1713,081	,944	-3027,39	6027,
		quit	827,781	1914,416	,999	-4231,79	5887,
	realized	idea	5119,090*	1411,754	,002	1388,00	8850,1
		in process of realization	-1500,076	1713,081	,944	-6027,54	3027,3
		quit	-672,295	2127,938	1,000	-6296,17	4951,5
	quit	idea	5791,384	1650,270	,003	1429,92	10152,8
		in process of realization	-827,781	1914,416	,999	-5887,35	4231,7
		realized	672,295	2127,938	1,000	-4951,58	6296,1
Games-Howell	idea	in process of realization	-6619,165 <sup>*</sup>	1412,287	,000	-10428,46	-2809,8
		realized	-5119,090 <sup>*</sup>	1734,941	,039	-10022,48	-215,7
		quit	-5791,384*	1572,449	,013	-10413,11	-1169,6
	in process of realization	idea	6619,165 <sup>*</sup>	1412,287	,000	2809,87	10428,4
		realized	1500,076	2198,750	,903	-4407,74	7407,9
		quit	827,781	2072,939	,978	-4794,83	6450,3
	realized	idea	5119,090*	1734,941	,039	215,70	10022,
		in process of realization	-1500,076	2198,750	,903	-7407,90	4407,7
		quit	-672,295	2304,895	,991	-6953,96	5609,3
	quit	idea	5791,384	1572,449	,013	1169,66	10413,
		in process of realization	-827,781	2072,939	,978	-6450,39	4794,8
		realized	672,295	2304,895	,991	-5609,37	6953,9

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

# Descriptives

### average household income in neighborhood

					95% Confiden Me			
	Ν	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Street	107	24217,77	5276,132	510,063	23206,52	25229,02	20200	41574
park	77	25094,78	5280,129	601,727	23896,34	26293,22	20200	44637
building	43	30404,26	6341,598	967,085	28452,60	32355,91	20500	42100
sportslocation	27	26083,67	8285,720	1594,587	22805,95	29361,39	21400	47842
playground	120	23111,39	3309,524	302,117	22513,17	23709,61	20200	41574
harbour	3	38532,33	5268,321	3041,667	25445,10	51619,57	32449	41574
river	17	36117,82	6533,721	1584,660	32758,49	39477,15	24821	47842
square	28	26151,64	6641,703	1255,164	23576,26	28727,03	20500	41574
boulevard	7	31613,29	5075,363	1918,307	26919,36	36307,21	24821	41574
Total	429	25621,79	6216,700	300,145	25031,85	26211,73	20200	47842

# Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
average household income in neighborhood	Based on Mean	7,415	8	420	,000
	Based on Median	3,294	8	420	,001
	Based on Median and with adjusted df	3,294	8	310,251	,001
	Based on trimmed mean	6,109	8	420	,000

## ANOVA

## average household income in neighborhood

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4609847824	8	576230977,9	20,284	,000
Within Groups	1,193E+10	420	28407670,71		
Total	1,654E+10	428			

Games-Howell	Street	park	-877,013	788,821	,972	-3356,85	1602,83
		building	-6186,489	1093,351	,000	-9691,78	-2681,20
		sportslocation	-1865,900	1674,178	,968	-7433,92	3702,12
		playground	1106,375	592,823	,638	-755,79	2968,54
		harbour	-14314,567	3084,137	,181	-42008,59	13379,46
		river	-11900,057	1664,726	,000	-17680,25	-6119,87
		square	-1933,877	1354,843	,880	-6397,92	2530,17
		boulevard	-7395,519	1984,960	,092	-15860,73	1069,69
	park	Street	877,013	788,821	,972	-1602,83	3356,85
		building	-5309,477	1139,003	,000	-8948,13	-1670,82
		sportslocation	-988,887	1704,343	1,000	-6631,69	4653,92
		playground harbour	1983,388 -13437,554	673,312 3100,615	,089	-145,61 -40631,36	4112,39
		river	-11023,044	1695,058	,000	-16864,30	13756,25 -5181,79
		square	-1056,864	1391,945	,997	-5617,82	3504,09
		boulevard	-6518,506	2010,467	,153	-14958,70	1921,69
	building	Street	6186,489	1093,351	,000	2681,20	9691,78
	bulluning	park	5309,477	1139,003	,000	1670,82	8948,13
		· ·	4320,589		,354	-1754,50	
		sportslocation	7292,864	1864,929		4010,10	10395,68
		playground	-8128,078	3191,706	,000	-32995,37	16739,21
		river	-5713,568	1856,448	,480	-11931,25	504,11
		square	4252,613	1584,515	,177	-859,46	9364,69
		boulevard	-1209,030	2148,291	,999	-9630,65	7212,59
	sportslocation	Street	1865,900	1674,178	,968	-3702,12	7433,92
		park	988,887	1704,343	1,000	-4653,92	6631,69
		building	-4320,589	1864,929	,354	-10395,68	1754,50
		playground	2972,275	1622,955	,662	-2474,32	8418,87
		harbour	-12448,667	3434,304	,204	-33553,57	8656,24
		river	-10034,157	2248,079	,002	-17403,93	-2664,39
		square	-67,976	2029,321	1,000	-6646,78	6510,82
		boulevard	-5529,619	2494,516	,441	-14446,72	3387,48
	playground	Street	-1106,375	592,823	,638	-2968,54	755,79
		park	-1983,388	673,312	,089	-4112,39	145,61
		building	-7292,864	1013,177	,000	-10575,63	-4010,10
		sportslocation	-2972,275	1622,955	,662	-8418,87	2474,32
		harbour	-15420,942	3056,634	,162	-44014,40	13172,51
		river	-13006,432	1613,203	,000	-18691,69	-7321,18
		square	-3040,251	1291,012	,343	-7346,96	1266,46
		boulevard	-8501,894	1941,952	,051	-17028,60	24,82
	harbour	Street	14314,567	3084,137	,181	-13379,46	42008,59
		park	13437,554	3100,615	,201	-13756,25	40631,36
		building	8128,078	3191,706	,460	-16739,21	32995,37
		sportslocation	12448,667	3434,304	,204	-8656,24	33553,57
		playground	15420,942	3056,634	,162	-13172,51	44014,40
		river	2414,510	3429,706	,994	-18792,41	23621,43
		square boulevard	12380,690 6919,048	3290,467 3596,059	,215 ,638	-10624,42 -13270,19	35385,80 27108,28
	river	Street	11900,057	1664,726	,000		17680,25
	livei	park	11023,044	1695,058	,000	6119,87 5181,79	
							16864,30
		building sportslocation	5713,568 10034,157	1856,448	,091	-504,11 2664,39	11931,25
				2248,079	,002		17403,93
		playground	13006,432	1613,203	,000	7321,18	18691,69
		harbour	-2414,510	3429,706	,994	-23621,43	18792,41
		square	9966,181	2021,530	,001	3281,60	16650,77
		boulevard	4504,538	2488,182	,676	-4476,94	13486,02
	square	Street	1933,877	1354,843	,880	-2530,17	6397,92
		park	1056,864	1391,945	,997	-3504,09	5617,82
		building	-4252,613	1584,515	,177	-9364,69	859,46
		sportslocation	67,976	2029,321	1,000	-6510,82 -1266.46	6646,78
		playground	3040,251	1291,012	,343	-1266,46 25295 90	7346,96
		harbour	-12380,690	3290,467	,215	-35385,80	10624,42
		river	-0066404	2021 520	004	-16650 77	2204 60
		river boulevard	-9966,181 <sup>*</sup> -5461,643	2021,530 2292,452	,001	-16650,77 -14028,71	-3281,60 3105,42

# Correlations

		Amount of votes or followers	Amount of reactions given on the initiative	average household income in neighborhood
Amount of votes or	Pearson Correlation	1	,278**	,288**
followers	Sig. (2-tailed)		,000	,000
	N	429	429	429
Amount of reactions given	Pearson Correlation	,278**	1	,240**
on the initiative	Sig. (2-tailed)	,000		,000
	N	429	429	429
average household	Pearson Correlation	,288**	,240**	1
income in neighborhood	Sig. (2-tailed)	,000	,000	
	N	429	429	429

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

# Descriptives

						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Amount of reactions given	no	373	2,26	11,015	,570	1,14	3,38	0	136
on the initiative	yes	56	5,46	10,471	1,399	2,66	8,27	0	58
	Total	429	2,68	10,987	,530	1,64	3,72	0	136
Amount of votes or	no	373	11,98	49,588	2,568	6,93	17,02	0	515
followers	yes	56	77,25	157,443	21,039	35,09	119,41	0	722
	Total	429	20,50	76,206	3,679	13,26	27,73	0	722

# Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Amount of reactions given	Based on Mean	3,122	1	427	,078
on the initiative	Based on Median	3,332	1	427	,069
	Based on Median and with adjusted df	3,332	1	425,316	,069
	Based on trimmed mean	3,989	1	427	,046
Amount of votes or	Based on Mean	87,833	1	427	,000
followers	Based on Median	39,127	1	427	,000
	Based on Median and with adjusted df	39,127	1	146,840	,000
	Based on trimmed mean	63,872	1	427	,000

# ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Amount of reactions given	Between Groups	499,905	1	499,905	4,172	,042
on the initiative	Within Groups	51165,703	427	119,826		
	Total	51665,608	428			
Amount of votes or followers	Between Groups	207453,962	1	207453,962	38,885	,000
	Within Groups	2278081,283	427	5335,085		

# Case Processing Summary

		N	Marginal Percentage
status2	1,00	51	11,9%
	2,00	376	88,1%
the name of the platform	Droomstad	40	9,4%
	stem van west	27	6,3%
	zocity	15	3,5%
	jijmaaktdebuurt	295	69,1%
	goudabruist	19	4,4%
	halloijburg	31	7,3%
the type of initiative	Street	107	25,1%
	park	77	18,0%
	building	42	9,8%
	sportslocation	27	6,3%
	playground	119	27,9%
	harbour	3	0,7%
	river	17	4,0%
	square	28	6,6%
	boulevard	7	1,6%
Is the municipality	no	371	86,9%
involved	yes	56	13,1%
Aim of the initiative	safer	115	26,9%
	greener	104	24,4%
	community	73	17,1%
	art	25	5,9%
	new location	110	25,8%
Valid		427	100,0%
Missing		2	
Total		429	

# Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	300,345			
Final	158,710	141,634	25	,000

Link function: Logit.

# Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	335,221	209	,000
Deviance	153,309	209	,999

Link function: Logit.

			Parame	ter Estima	ites			
							95% Confid	ence Interval
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[status2 = 1,00]	-23,954	12,628	3,598	1	,058	-48,704	,797
_ocation	Reaction	,040	,029	1,957	1	,162	-,016	,096
	Vote_Follow	-,002	,003	,468	1	,494	-,007	,004
	bewonersaantal	,000	7,988E-5	2,459	1	,117	-3,131E-5	,000
	nietwesters	-,161	,104	2,402	1	,121	-,365	,043
	agebelow19	-,142	,110	1,664	1	,197	-,357	,074
	age19till64	-,204	,120	2,888	1	,089	-,439	,031
	agoplus64	0ª			0			
	householdincome	,000	,000	1,167	1	,280	,000	,000
	[Platfrom=1]	-2,956	2,591	1,301	1	,254	-8,035	2,123
	[Platfrom=4]	-16,506	10,443	2,498	1	,114	-36,975	3,963
	[Platfrom=7]	1,705	2,637	,418	1	,518	-3,463	6,872
	[Platfrom=8]	-5,449	3,687	2,184	1	,139	-12,675	1,778
	[Platfrom=10]	-7,262	3,029	5,747	1	,017	-13,200	-1,325
	[Platfrom=11]	0 a			0			
	[Type_ini=1]	-,374	1,507	,062	1	,804	-3,328	2,580
	[Type_ini=2]	,557	1,566	,127	1	,722	-2,512	3,626
	[Type_ini=3]	-,466	1,501	,097	1	,756	-3,408	2,475
	[Type_ini=4]	,684	1,815	,142	1	,706	-2,873	4,240
	[Type_ini=5]	,344	1,612	,046	1	,831	-2,814	3,503
	[Type_ini=6]	1,000	2,045	,239	1	,625	-3,009	5,009
	[Type_ini=7]	2,641	1,862	2,011	1	,156	-1,009	6,291
	[Type_ini=8]	-,130	1,575	,007	1	,934	-3,216	2,956
	[Type_ini=9]	0ª			0			
	[Muni=1]	2,887	,598	23,333	1	,000	1,716	4,059
	[Muni=2]	0ª			0			
	[aim=1]	1,470	,812	3,280	1	,070	-,121	3,06
	[aim=2]	,551	,685	,646	1	,421	-,792	1,894
	[aim=3]	,659	,679	,942	1	,332	-,672	1,989
	[aim=4]	,631	,852	,549	1	,459	-1,038	2,30
	[aim=5]	0ª			0			

Link function: Logit.

a. This parameter is set to zero because it is redundant.

# Case Processing Summary

		N	Marginal Percentage
Is the municipality	no	371	86,9%
involved	yes	56	13,1%
the type of initiative	Street	107	25,1%
	park	77	18,0%
	building	42	9,8%
	sportslocation	27	6,3%
	playground	119	27,9%
	harbour	3	0,7%
	river	17	4,0%
	square	28	6,6%
	boulevard	7	1,6%
The status of the initiative	idea	363	85,0%
	in process of realization	33	7,7%
	realized	18	4,2%
	quit	13	3,0%
Aim of the initiative	safer	115	26,9%
	greener	104	24,4%
	community	73	17,1%
	art	25	5,9%
	new location	110	25,8%
Valid		427	100,0%
Missing		2	
Total		429	
Subpopulation		236ª	

a. The dependent variable has only one value observed in 234 (99,2%) subpopulations.

# **Model Fitting Information**

	Model Fitting Criteria	Likelihood	d Ratio Te	ests
Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	327,673			
Final	162,708	164,965	22	,000

# Likelihood Ratio Tests

	Model Fitting Criteria -2 Log Likelihood of Reduced	Likelihood Ratio Tests		
Effect	Model	Chi-Square	df	Sig.
Intercept	162,708ª	,000	0	
Amount of reactions given on the initiative	162,801	,092	1	,762
Amount of votes or followers	167,588	4,880	1	,027
amount of residents in area	162,766	,058	1	,810
amount non-western residents in area	164,389	1,681	1	,195
amount of residents <19years in area kids	162,708ª	,000	0	
amount of residents between 20-64 working class in area	162,708 <sup>a</sup>	,000	0	
amount of rsidents from >64 senior in area	162,708ª	,000	0	
average household income in neighborhood	192,387	29,678	1	,000
the type of initiative	177,312	14,604	8	,067
The status of the initiative	188,701	25,992	3	,000
Aim of the initiative	171,622	8,913	4	,063

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.