Love your city! An interactive platform empowering citizens to turn the public domain into a participatory domain

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In the past years, governments have recognized the potential of interactive technology to bridge the gap with citizens. The right tools and guidance could enhance citizenship and enable co-creation between citizens and (local) governments. However, this opportunity does not automatically lead to a participatory practice. In the current article, we introduce six participation parameters, i.e., certainty, communication, freedom, responsibility, sympathy and support, to guide the design of a means that facilitates people to participate and co-create with other citizens and local government. We describe and reflect upon these parameters and the resulting 'Love your city' concept. An interactive platform that allows and empowers citizens to personally tackle issues they encounter in their direct environment, with the aim to contribute to a participatory domain.

Keywords: Citizenship, co-creation, empowerment, participatory design, public domain

1. Introduction

Authority increasingly realizes the importance of citizen involvement and is looking for ways to involve citizens and facilitate participatory procedures (Reddel & Woolcock, 2004). At the same time, citizens are increasingly convinced that authority will discard their input and lose motivation to invest their time. To engage citizens in policy and decision-making, authority could learn from successful methods of collaboration platforms used by commercial partners. The desired process of more active participation of citizens can be seen as a form of mass-collaboration, i.e., crowdsourcing. Tools such as smart phones (or new media in general), offer the opportunity to facilitate co-creation between citizens and authority. New digital means have the potential to organize and stimulate communication between citizens and authority, and allow citizens to participate in the public domain (Amichai-Hamburger, 2008). One such example is FixMyStreet, a platform that enables citizens to report broken streetlights (King and Brown, 2007). These opportunities, however, will not develop automatically into a good solution just because they are promising. It is crucial that social standards like trust, openness, and consideration of mutual interests are guaranteed, making citizen engagement in the public domain challenging, since it requires a mutual initiative and results should be visible for both parties (Johannessen et al., 2012). In the current work, we aim to address this challenge from a participatory design perspective. Could we design a means that facilitate people to participate and cocreate with other citizens and authority in the Dutch public domain? The current work, therefore, not only aims to leverage interaction between authority and citizens, but also aims to improve the interaction between citizens themselves by means of technology.

The current article, starts with an elaboration on current participation models in the public domain as well as existing participatory design practices. In Section 3, we describe our research approach, leading to six participation parameters that informed the design of the 'Love your City' concept (Section 4). Section 5 explains and motivates the participatory aspects of 'Love your City', after which, we conclude with a discussion in Section 6.

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2. Related work

In various fields the value of the user (also referred to as participant, customer or citizen) is becoming recognized leading to guidelines and good practices to set-up participation networks. New digital means make it possible to stimulate communication and tap into collective intelligence. Input can be gathered from a large number of people, a crowd, without much effort. According to Malone et al. (2009) this relatively new phenomenon, called crowdsourcing, has to be a guided process in order to generate valuable information. When looking at participation guidelines applied in several fields, e.g., the Internet sector (Fullerton, 2009), business sector (Leadbeater, 2006), design sector (Sanders & Stappers, 2008) and the public domain (Smith, 1984) similar steps can be identified. These guidelines generally start with *identifying* the participants that are needed for a specific issue. After this stage it is important to *communicate* and *understand* the participant. *Create an open environment, remove barriers* and *create value* to make people want to participate. Make sure your participants are supported with the right *tools* and *techniques*, which enable them to express themselves, and address them in *their language*. Let them co-decide about the outcome or give them *feedback* of the result and evaluate the result with the participants. Although, there can be seen a clear overlap in (crowdsourcing) guidelines in the fields of Internet, business, design, and public policy participation, we should not forget that the public domain remains a highly complex system.

Dalsgaard (2010) examined the challenges of participation in large-scale public projects and presents an overview of its challenges. Dalsgaard (2010), among others, states, that the increasing involvement of stakeholders in public policy-making adds further complexity to these processes, since the number of public issues raised by a crowd can be huge. White and Bourne (2007) therefore suggest engaging facilitators and interest groups in the process who can manage the initial lists of issues. Their experiments indicate that user participation in the public domain can lead to innovative solutions and greater citizens satisfaction. Smith (1984) states that it cannot be expected to interest an entire society to participate in political crowdsourcing activities and emphasises that it remains important to address the right target group, i.e., representative citizens matching the issue raised and involve these citizens as early as possible in the process to increase the likeliness they want and continue to participate actively. According to Malone et al. (2009) the level of motivation of a person to participate largely depends on the goal they pursue, i.e., money, love, or glory. In public issues it might be difficult to rely on the motivator of money. Most public financial funds are generated from taxes, paid by citizens and companies. Rewarding participants with money generated by taxes, basically means that they are paying themselves. A better option would be to trigger people with the motivator of love or glory in the form of creativity (Leadbeater, 2006). In keeping with Gillian and Bill Hollins as formulated in Fullerton (2009), "Everybody can be creative. It is simply a case of teaching people how to be open to experiences beyond their own.... Allow them the opportunity to use their creative skills and give them the environment in which they can be creative". The main objective of Dutch authority however, is not to stimulate creativity, but to ensure that all voices are heard and the full range of values is explored. Yet, time and capacity for this democratic approach are not always at hand, moreover citizens have different power bases and the concern can be raised that the view of passive citizens may not be considered. White and Bourne (2007) therefore state that a balance between collective and individual needs is required, while at the same time taking the balance between democracy and efficiency into account. According to Loyens and Van der Walle (2006), people can be stimulated or hindered in their motivation and possibilities to be creative and participate, influencing their power bases. The motives or the barriers people experience can be of great influence on the decision to participate or not. Understanding these motives and barriers is therefore key to increase the level of citizen participation in the public domain. Loyens and Van der Walle (2006) cluster citizens in groups of active, willing, and passive people. They take this partition further by classifying the subgroups, satisfied or unsatisfied activists and satisfied or unsatisfied passivists. In general, they state that most citizens are willing to participate, but that they often do not see the ability to do so in a for them satisfying manner.

Sourcing the crowd could make policy processes more efficient and citizens could be involved early in the process. They could even become designers of the public domain. In keeping with the on-going debate that users are designers, and designers increasingly become toolmakers, Parker and Heapy (2006) express, that experts in public services will not fulfil the same role as they did previously. Currently, experts have the power to create, decide on and execute policies in a way they think is right. They envision that experts start to innovate through multidisciplinary teams. Teams that exist out of experts as well as practitioners and frontline professionals. In these teams professional expertise continues to exist, but is deployed differently. On one hand this means that instead of solving problems or telling people what to do, their expertise is used to uncover needs and help and support people to navigate through a complex network. Involving citizens as frontline professionals makes it possible to make use of local knowledge and experience embedded in communities (Coleman and Gøtze, 2001, Corburn 2007). Parker and Heapy (2006) describe an important movement that can form an example for a new interaction between authority and citizens. In keeping with the principle that users can be seen as the experts of their own experience (Sanders and Stappers, 2008), citizens can be seen as frontline professionals of the public domain, and consequently inform authorities' experts about the desires and wishes of Dutch society.

The support of authorities' experts and local knowledge to identify the desires and wishes of Dutch society could provide people with the information to collaboratively envision their ideas for their environment. However empowering people to design the public space still requires the right tools and techniques to do so. The next Sections of the current work therefore describe the design of a digital interactive participation platform that aims to enable communication among stakeholders, idea formation, decision making and ideally supports people to envision the results of their participation efforts and its long term effects. While simultaneously providing people with constant feedback to enable, motivate and satisfy a diverse range of citizens during the participation process.

3. Approach

In the current work, the research question was formulated as: "How can people be facilitated by a digital means to participate and co-create with other citizens and authority in the Dutch public domain on a local societal level?". There was decided to focus on a local societal level, since citizens assumingly are more likely to participate when it concerns their familiar surrounding. To answer our research question we started to investigate people participation needs by focussing on three factors: ability, motivation and satisfaction. The first factor, ability, was chosen since Fullerton (2009), Parker and Heapy (2006) and Sanders and Stappers (2008) state, that everybody can be creative if they are provided with the right tools. The second factor, motivation, was based on Malone's (2009) findings that offering people an incentive could motivate them to participate, while the third factor, satisfaction, could be considered as motivational feedback to enter the participation process again next time. Figure 1a shows a matrix aiming to understand how ability and motivation correlate and how this correlation affects the level of satisfaction people retrieve from the participation process.



Figure 1a (left): Matrix positioning the factors motivation, ability, and satisfaction for understanding the movement towards a participatory domain. Figure 1b (right): Six personas: Joris, Kees, Gijs, Aleyna, Jannie, and Albin.

The level of ability, motivation and satisfaction, however will not be equal for all people. To gain deeper understanding about the current motivations and barriers of each subgroup, we created personas based on the profiles from Loyens and Van der Walle (2006). The personas of *Gijs, Joris, Kees, Aleyna, Jannie,* and *Albin*, differ in gender, age, nationality, educational level, matrimonial state, religion and living area, aspects that influence their power bases and with that their level of motivation and ability to participate (figure 1b). The personas indicate how a variety of people are currently involved in the public domain. To create empathy for the different users of the to be designed means, the personas were used throughout the entire design and evaluation process. When we position the personas across the axes of the matrix displayed in figure 1a (see circles), it can be concluded that the personas indeed score differently in their ability and motivation to participate. In terms of active citizenship, the personas would ideally be mapped in the upper right corner of the matrix.

We assumed ability and the level of satisfaction people can reach with their participation efforts correlate. Meaning that increasing people their ability to participate, could influence their level of satisfaction, which would posibily motivate them to enter the participation process again. This finding led to a more specific research focus, i.e., to gain insight in how people can be enabled to participate. Therefore two studies were held: a generative session with citizens, and a literature survey on existing initiatives. The first study was executed with a focus group of six participants, who first were sensitized and in a session were asked to collectively brainstorm about their neighbourhood, and consequently collectively choose a situation to work out in a 3D Lego play collage. The steps of the generative process resembled the steps of a traditional policy process. After the generative session twenty-eight, mostly online, existing participatory initiatives were examined. Some of these initiatives had potential, while the majority of the initiatives were more suitable to find out what should be avoided in the future. From the insights gained in these studies, we could reveal six participation parameters enabling citizens to participate, i.e.: certainty, communication, sympathy, freedom, responsibility, and support.

The participation parameters were used as a starting point and foundation for the design phase. A brainstorm session led to over fifty ideas, from which four ideas were selected. The four ideas were conceptualized, from which one concept was chosen. This concept was wire-framed and a first iteration of the design was prototyped in the form of an interactive application on the Ipad. A specific poorly maintained location in the city centre of The Hague was selected and a scenario was made. The scenarios were used as guideline to be able to compare the results among the participants. Ten random participants were asked to use the prototype according to the scenario for urban planning and interaction with other citizens on that specific location. The results were transcribed and clustered, after which a second improved iteration was designed. In the current article we solely describe the enabling participation parameters that formed the base for the designed interactive participation platform and we explain the participatory aspects of the second iteration of the 'Love your City' concept.

4. Results

The parameters certainty, communication, sympathy, freedom, responsibility, and support, found in the two previously described studies, were used to understand the context in which people would be stimulated to participate actively. They were used as a list of requirements for the to be designed means, with the objective to enable people to co-create and participate in the public domain.

To fulfil the first parameter, *certainty*, a participation system should consist of clear rules and boundaries. In order to participate it is important that people can rely on consistency and certainty. Clear rules and boundaries make people feel comfortable and safe. People feel more tempted to participate when they are provided with a transparent, simple and intuitive procedure. After enduring the first participation process the procedure will get familiar and in time can become an every day habit.

The second parameter, *communication*, requires a clear participation process, with clear tasks and goals. When entering a participatory procedure, citizens should feel welcomed. It is important that they are well

informed and are provided with constant feedback. From the start people should know how a procedure works, what is expected from them, how much time it will cost them and what will happen with their contribution.

Sympathy is the third parameter, providing people with the possibility to relate to other citizens and authority. Since, in order to work together, people have to understand each other, as well as accept and respect each other. People find a smaller community easier to oversee and trust, because they are more familiar with the reactions and behaviour of others. In order to form a community people need insight in other people their character and they need a face and a name to direct their input to.

Freedom, the fourth parameter provides people with the possibility to act, choose and decide, since people are fond of their liberty and become more and more individual. It is evident that people have the opportunity to decide for themselves which topics they find important and that they can participate in a for them comfortable manner. This means that different types of people have to be able to participate in different ways. During a process they should be free to 'walk in and out', without having to spend much time or fulfilling the whole procedure.

The fifth parameter is *responsibility*. People themselves want to be responsible for their own affairs and interactions with others, without interference of authority. A smaller more transparent community leads to more personal responsibility, since expectations are lower and they are more willing to 'fight', in order to get what they need, want or deserve. The care function of authority will be levelled down to a signal-, a supportand a do not obstruct function. Nevertheless it is evident to make people aware that they are responsible for their own contributions.

The last parameter is *support*, since co-creation does not happen automatically and demands an interactive facilitator. It is evident that people feel self-confident enough to express themselves and take initiative, which can be done by guiding and supporting them in a positive and un-obstructive way. It can be difficult for people to express themselves or to imagine a proposed solution. Supporting people with visuals will give them the opportunity to communicate in a common language. Simulating the impact of people their ideas and wishes will give them more insight and confidence in an end result. Citizens should not be confronted with aspects that are too difficult to understand or give meaning to, complicated issues should be left to experts.

5. An interactive platform for participation

The enabling participation parameters, described above, formed the foundation for the design phase of the 'Love your City' concept. The name and visual design of the concept ideally triggers positive feelings and stimulates people to think about their relation with their city (figure 2).



Figure 2: 'Love your City' branding and the three participation paths: addressing, co-creation and organization.

The 'Love your City' platform enables citizens to address others, co-create and organize activities in their own neighbourhood. Citizens are supported with a general step-by-step roadmap that contains the different touchpoints necessary to complete the participation processes (figure 3). The touchpoints are linked to the

previous described phases found in crowdsourcing- and policy processes. Every touchpoint can be fulfilled by authority, citizens, or both; depending on the complexity of the task. The example below illustrates that the allocation of responsibility among actors depends on the situation.

A citizen is triggered by a situation, for example a dangerous crossing. This citizen, decides to set out a co-creation process to improve the current situation together with other citizens. The final decision is too complicated to be taken by citizens alone and therefore authority supports them. In this, citizens are invited to monitor the decision process and are informed about the solution. The solution to place more traffic lights is executed by a team of experts contracted by authority. Citizens are then informed about the execution date and authority reveals the end result officially.

The route taken through the roadmap depends on the choices made in a certain situation. Depending on the participation factors motivation, ability, and (dis-)satisfaction, people will participate more or less actively, positively or negatively, and problem or solution driven.

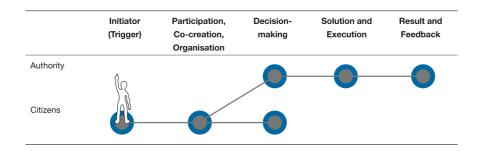


Figure 3: Roadmap illustrating the participation steps.

5.1. An interface for participation

People can associate participation with uncertainty, the participation process was therefore designed carefully attempting to offer people certainty by giving them access to three participation paths in which they are guided through a manageable amount of participation steps. These steps are integrated in the main interface menu of the 'Love your City' platform, which is visualized as if it is a control panel in front of you (figure 4). The platform can be displayed on mobile devices and uses augmented reality to layer the input and output of your participation activities over your current location.

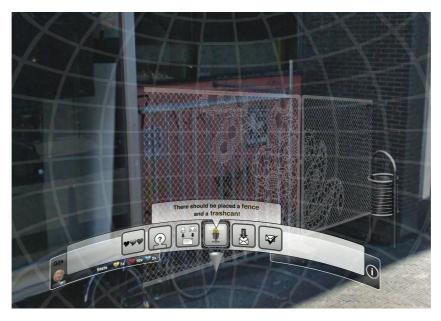


Figure 4: 'Love your City' platform control panel, layered over the environment.

At the left side of the menu your profile and participation statistics are displayed, while at the right side there can be found an information icon and the due date of a process. In the middle, under the menu bar, the location pointer is shown and indicates the location where you are submitting an entry. Inside the menu bar, squared icons are displayed and resemble the process steps. The icon in the middle resembles the step you are currently in and is highlighted in colour. The icons will move to the left, until all process steps are gone through. Above these icons a text balloon is shown. When this balloon is pointing from you, a question is asked and when the balloon is pointing to you, it concerns your input. The squared icons hovering above the menu bar are the input choices that are offered to you. These icons can be selected by a swipe movement after which there is preceded with the next process step. The interface menu plus an explanation of the different functions is displayed underneath in figure 5.

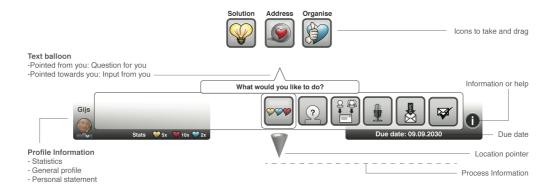


Figure 5: 'Love your City' interface menu.

When citizens encounter a situation or an existing participation path that triggers them, they can decide to enter a participation process. The interface menu will become visible and is layered over the environment by means of augmented reality. In the first process step, after making the 'add' gesture, there is asked "what would you like to do?" and the different path icons are displayed. When a path icon is selected by the swipe movement, the process bar will slide one step to the left and the next process step will open. The three participation paths, addressing, co-creation, and organization, can be related back to the participation roadmap. Figure 6 shows how the paths are positioned in the roadmap.

	Act (new)	React/Add	Decide & Execute		Final
	Initiator (Trigger)	Participation, Co-creation, Organisation	Decision- making	Solution and Execution	Result and Feedback
Authority			Q		~
Citizens		Q _{asy} Q _{asy}			

Figure 6: Roadmap with 'Love your City' participation paths.

5.2. Three participation paths

After triggered by a certain situation, citizens can utilize the 'Love your City' platform to address, co-create or organize.

The *addressing process* gives citizens the possibility to directly address fellow citizens or authority. Fellow citizens can react on the message by adding or subtracting one day from the 'fading date' of the message, which is a manner to safely address issues and collectively set norms and values in a neighbourhood.

A co-creation process can be initiated either by citizens or by authority. In the co-creation process, the agenda is formed and solutions can be generated, right there and then in public space. Ideas can be added, adopted or supplemented by other citizens. After the creation phase a team of experts of authority will review and select the solutions. This is a decision-making phase that is totally transparent and can still be influenced by citizens themselves.

Citizens that are enthusiastic about their city, have the option to start an *organizational process*. This path allows citizens to recommend places in the city to others or to organize events in their neighbourhood. The process consists of two parts, a creation phase and a decision phase. Both phases are the responsibility of citizens themselves.

5.2.1. Communication (Addressing)

A heart shape insight a text balloon resembles the icon of an addressing path. In the case of an addressing path, people are asked after the first step, "How do you feel about the current situation?" and emotions will become visible. If the desired emotion is not among the standard options, another personal emotion can be formulated by choosing 'other'. The purpose of this step is to release initial emotions and to formulate an entry short and to the point. Furthermore, the emotions will be displayed and helpful for other citizens to take the perspective and sympathize with the person who posted the message. After a choice is made, the next step comprehends, "Who do you want to address, authority, the community or both?" This step as well is deliberately placed before the formulation step, since the message formulated can be directed at a specific audience. Then there can be proceeded with the next step, in which is asked, "Can you formulate your entry?" The citizen is guided by an example and can formulate his entry verbally, the microphone icon lights up to indicate that it is recording. In every stage there can be returned to a previous process step by making the 'scroll' gesture. In the last step people are asked, "Is your message ready to be posted?" If 'post' is selected, feedback is given about the posted message, due date, and 'heart points' earned. The process is now finished successfully.

After moderation the message becomes visible for other citizens, they receive a notification when they pass by the location of the message and the icon will get more detailed when approached. The message gets visible, just as the name and profile of the citizen who posted the message, with the idea that the level of responsibility increases by displaying the profile of the person who posted the message. Citizens now are entitled to limitedly react on a posted message, since excessive posting in the public domain can be experienced as annoying. Therefore, citizens can react on a message by adding or removing one day of the due date of a message. When the due date is reached, the message fades away. Established collective messages are visible for a longer time, while controversial messages fade faster. Furthermore, it can function as a petition addressing authority. In which the decision to add or remove a day, represent the signatures of people who (dis-)agree with the petition. It is a manner to directly communicate problems to authority and to establish norms and values between citizens in a neighbourhood.

5.2.2. Co-creation

The path of co-creation is visualized with two light bulbs that symbolize an idea and together form a heart shaped icon. When the left bulb with the letter C is 'on', the process is open for the community. The right bulb symbolizes the process of authority, indicated with the letter A and offers the public support to decide

on and execute the proposed ideas. The due date is placed above the icon and is accompanied by a time indication (date, one week left, three days left, et cetera). When a co-creation path is finalized the light bulbs will be filled with a 'check' mark.

In the case of a co-creation path, people are asked, just like in the addressing path, "How do you feel about the current situation?", whereupon there is questioned, "Who do you want to address, authority, the community or both?". Now people are asked, 'Can you formulate your solution?", again an example is provided to give people an indication of what is asked from them. When the solution is formulated, the key words of the formulation will be filtered, high lighted and converted into images. The desired image can be dragged and moulded over the base layer of the environment. Repeating this action, results in a collage that is layered over the current situation and represents a new solution. When the entry is composed, people can enter the next step and are asked "Is your solution ready to be posted?". The option send can be chosen, and the new co-creation process and the persons' solution will be posted. Again the person receives a credit point and is notified about the due date of the co-creation process.

After moderation, the co-creation process becomes visible for other citizens. They receive a notification when they pass by the participation location and the co-creation icon will get more detailed when approached. The icon communicates how many people participated and how much time is left. When the icon is opened, entries become visible, just as the names and profiles of the citizen who posted the entries. There can be scrolled through the entries and when the entries are opened more information will be displayed. If a person agrees with the entry from another citizen, he is able to adopt it and submit the same entry.

When a co-creation path is closed for entries of the community, it will evolve into a co-creation path led by authority. There cannot be expected that citizens will make a final decision and are responsible for the consequences. Therefore there has been decided to give citizens insight in the process of authorities' team of experts. The second part of the path represents the procedure of authority, in which the entries of citizens are revised, action points are generated, experts are consulted and a solution is decided upon. Citizens are introduced to the team of experts in charge and have the possibility to react in all stages of the process, in the form of a reminder or a compliment, stimulating communication between both parties. During the whole process citizens are informed and provided with feedback about the progression of the process. Before a final solution is chosen there will be a 'go or no go' procedure, after which the co-creation path is completed and closed with the 'check mark'. Now all the steps taken can be reviewed and information about the execution progress is provided.

5.2.3. Organisation

The third path has a positive intake and serves recommendation and organizational purposes. An icon consisting out of a blue heart and a 'thumbs up' mark resembles this path. When it is desired to add a recommendation, the process followed will be similar to the addressing path. This process is indicated with the 'thumbs up' mark.

The process for organization is similar to the process of co-creation and exists out of two parts. The parts of a 'broken' heart resemble the two process parts. When the left heart part is filled, the organizational path is open for ideas. While the right heart part resembles the registration, organization and execution steps. When the phases are completed, the heart parts unite and the process is finalized. The finalized organization icon shows the execution date and citizens can indicate if they will attend the event or not.

The steps in all three participation paths were designed carefully and based on the participation parameters. The end users, citizens, were always taken into account, with the main focus to enable them to help experts in finding options to shape the public domain according to their dreams and wishes. Figure 7 on the next page presents an overview of the participation steps to take in each of the three participation paths.

Phase 1 Solution Address Organise **Authority Community** Legend Choices offered in a process step Addressing process Process & steps Current process step in colour Next or previous process step in black & white Phase 1: Making a new message Steps: path, emotion, address, formulate, send, feedback Phase 2 **Emotions** (× Co-creation process GO NO GO GQ Phase 1: Making new co-creation entries (community) Phase 2: Decision process (authority) Steps: revision, action points, experts, go/no go Steps: path, emotion, address, formulate, send, feedback Organise Recommend Organisation process Thanks! W See you 09/09! \mathbf{M} 8 See you 09/09! Help? Phase 1: Making new events (recommendation is similar to a MSG) Phase 2: Organisation of the event (community) Steps: path, formulate, help from who, date, send, feedback Steps: want to attend, or help, ideas, tasks, feedback Process feedback

Figure 7: Participation steps for the three participation paths.

Do or don't

attend an event

React on a

recommendation

Review co-creation

process

React on a message

6. Discussion and conclusions

Participation is an age-old phenomenon and many participatory procedures have been designed, created and implemented. In the current work there was made an attempt to enable citizens, by means of mobile technology, to establish norms and values in their neighbourhood, shape their ideas and help authority to plan the public domain, and organize communal activities with other habitants. While simultaneously there was aimed to design a more direct communication channel between citizens and authority, with which authority is enabled to source the crowd and can be informed by citizens, making use of the local knowledge embedded in communities. Elements raised for participation were motivation, ability, and satisfaction, in which the introduced participation parameters certainty, communication, sympathy, freedom, responsibility, and support enable citizens to participate actively. 'Love your City' is based on established participatory procedures, crowdsourcing values of different domains and the parameters found in this work.

The concept differs from other (online) platforms, since it invites and welcomes citizens to participate, right there and then, with their mobile devices in the public domain. Citizens are free to decide if they participate or not and are offered a choice between three participation paths. The process of every path is communicated in participation steps, in which citizens, can decide whom they want to approach, which makes them less dependent on authority. Enabling technology helps citizens to visualize and envision their entries. Furthermore, they are provided with emotions and profiles of other citizens, which enables them to sympathize with others in creating a cohesive environment. Their profile allows them to establish their own preferences and will help them to find the situations that are relevant for them. The co-creation process enables citizens to provide initial input for a policy procedure of authority. After a co-creation process, citizens are provided with the possibility to follow up their input and comment on the progress made by authority.

The designed participation paths ideally enable the entire society to participate and co-create in the public domain. Yet, not every citizen has access to mobile technology or a person might just not desire to use digital methods like crowdsourcing to participate. Therefore there has to be made a difference between broad base contact and special interest contact according to the situation concerned. Face to face participatory procedures remain important to reach passive citizens as well as to establish trust between citizens and authority. Moreover the success of crowdsourcing methods in a corporate setting might differ from a governmental setting. It is unlikely to assume that the 'Love your City' platform will be successful in all social, planning and organizational situations. However depending on the complexity of the situation and on the goals pursued, it could be applicable to source ideas and make use of local knowledge embedded in communities to find insight information that was before overlooked. With the creation of personas we aimed to understand the different power bases of citizens in Dutch society. It would be irrational to expect citizens to come up with a before undiscovered brilliant solution or to make validated and reliable decisions. We realise that even with the proper support not everybody can be a frontline professional, since they simply might not have the talent or creativity to co-create, making not all comments and entries useful or even worthy to consider. Moderating the platform will remain an important issue, an issue that partially can be managed technically, but will probably always need the intervention of humans.

The 'Love your City' concept aims to facilitate people to participate and co-create with other citizens and authority in the Dutch public domain by means of mobile technology. The results of the user test of the first iteration of the concept, as described in Section 3, were interesting and feedback was mostly positive. Yet, we realize that the concept was based on participation parameters found in solely one focus group session with six participants. Which might form a sufficient foundation for this conceptual participation platform, yet does not make it possible to make validated statements about the implementation of the platform. To confirm the list of parameters, other studies have to be done, in the form of more focus group sessions or a literature study on best practises in the fields of participatory urbanism. In future work there will be elaborated on the presented research and design, for now we hope that the 'Love your City' concept forms a small step forward in enhancing citizenship.

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