

# CityMaking!Wien a toolbox for the conception and design of Parklets in Vienna

A case study focusing on parklets in Vienna

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## ABSTRACT

This paper discusses the role of digital tools in the engagement of citizens through a case study. The research proposes that digital platforms can be re-shaped to create new tools for citizen engagement. For this purpose we use an experimental online toolbox called CityMaking!Wien that allows citizens to see where they can build parklets in the city of Vienna, and also request permits through an online form. The toolbox is based on a potential map that delivers a different perspective of urban spaces: instead of presenting public spaces as parking places, it presents them as potential green areas. The impact of this concept is assessed using three methods: automated data collection, interviews, and an online survey. The discussion questions the impact of online tools and also present a critical view on the limitations of technology to engage citizens.<sup>1</sup>

## CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI)**; *Empirical studies in HCI*; *Interaction design process and methods*; *Empirical studies in interaction design*;

## KEYWORDS

Participatory Architecture & City Planning, Future Trends & Prototypes, Urban Informatics, public space, citizen participation



Figure 1: Parklet in Vienna.

## 1 CASE STUDY: PARKLETS IN VIENNA

### 1.1 Parklets

Parklets were first ideated in San Francisco back in 2005. The idea has been replicated in different cities. Different cities have recognized the benefits and the potential of parklets as tool for urban transformation and some have even institutionalized the construction of parklets. The city of San Francisco promotes the installation of Parklets through the initiative Pavement to parks. Each Pavement to Parks project is an experiment that allows to test new ideas for public spaces. A study [1, 2] carried out to monitor the effects of parklets showed increased pedestrian traffic near to them. Similarly the city of New York allows citizens to create a Street Seat for working, reading, eating, etc. Again, research [3] conducted by the Department of transport of NYC showed a positive reception of the project both by business and communities.

Following the example set by other cities, the government of Vienna has also allowed the installation of parklets in many of the city's parking places (see for example figure 1). Citizens can now decide how to use public spaces, they can choose between parking or building a parklet with sitting places to read, work, eat, etc. With this initiative the city raises an essential question about which use of public space is better for the city. This debate is important in a city where the high accessibility to public transport and also an expanding network of bicycle paths makes the ownership of a private car often unnecessary. Nevertheless a large amount of public space has been allocated to parking places. Due to this situation

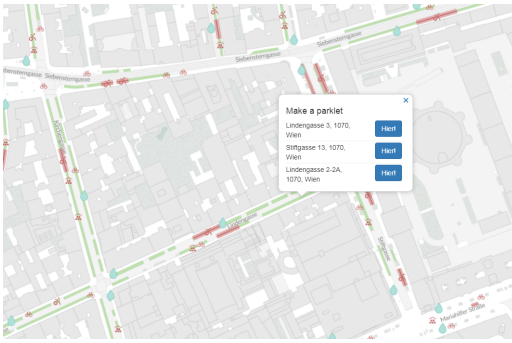
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<sup>1</sup>This is an ongoing research project

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**Figure 2: Parklet potential map. Restrictions are shown in red, potential places in green**

and also to the high population density in the inner districts, some zones show a notable deficiency of green areas. This policy and the opportunity that it offers for the citizens to create new green areas in the city are being used as a case study to research into the impact of digital tools and web technologies in placemaking actions such as parklets.

## 1.2 Concept

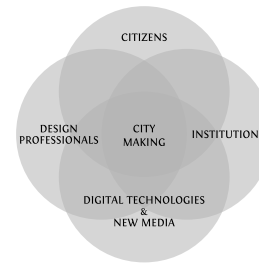
The concept of the experiment is to test, through an experimental website, how digital tools change the engagement of the citizens. Specifically we want to research into the influence of digital tools in the engagement of citizens in the construction of parklets in Vienna. This research question demands to measure the previous engagement of the participants and their level of social engagement, as well as their perception and actual use of the toolbox. Only by measuring the social capital prior to the use of the toolbox is it possible to observe the influence of digital tools in people with a stronger social networks vs. other people weaker ones.

The tools were designed based on the barriers for citizen participation discussed often in the literature related to citizen participation [4, 5, 6]. Some commonly mentioned as obstacles for the engagement of citizens are lack of time, lack of knowledge about the regulations and technical data, motivation but also apathy and manipulation. The leading hypothesis is that by creating technologies that remove barriers, i.e. by facilitating access to basic information, regulations and providing access to the authorities we can increase the motivation of citizens to build parklets in Vienna.

The main goal of the website was to test to which degree citizens would be more engaged by online tools. The toolbox did not provide financial or organizational support to build a parklet. It was also developed independently from the city administration as part the PhD thesis "New methods of citizen participation based on digital technologies".

## 1.3 Research development

Previous to the development of the platform we interviewed authorities in Vienna to understand the procedures and regulations related to the installation of parklets. This allowed us to understand aspects that should be taken into consideration but are not published anywhere as well as internal procedures of the city. Such



**Figure 3: The hackable city - Based on [7]**

information allowed us to conceive and develop a toolbox for the conception, design and submission of parklets in Vienna. The experiment operated at the intersection of the institutions and citizens, providing through online tools a better understanding about the regulations and institutions of the city (see Figure 3).

During the experiment the participants were invited to visit and test the toolbox. After they are familiar with it, they were asked to fill in voluntarily a survey. The toolbox was called CityMaking!Wien and it included four main tools, which are explained below.

- (1) Basic information regarding the construction of parklets. The tool presents the requirements and suggestions of the city of Vienna for the design and construction of parklet. For example, some of the restrictions are: the use of parklets for commercial activities is not allowed; the location of the parklet should be in the immediate surroundings of the permit holder; the maximal dimensions of the parklets are 10 meters or two parking places.
- (2) A parklet potential map that shows where would be possible to build a parklet, by showing in red the different restrictions that apply for the use of parking places. The map has information regarding hydrants, reserved parking places, bicycle parking racks, and other layers of information affecting the installation of parklets. In this way the map simplifies the understanding of the regulations. Once a visitor clicks on a potential area (in green) a pop-up comes out and invites the visitor to make a parklet in the selected location. (figure 2)
- (3) A design tool that facilitates the creation of the required drawings for the submission. The tool is very simple to use, yet it has considered the requirements regarding dimensions and security. For example it does not allow to create drawings that exceed the maximum dimensions allowed. People can also download the drawings and edit them according to their own ideas.
- (4) An online submission tool that facilitates the contact with the authorities and the submission of the required documents to obtain a permit for the use of parking places. The form could be reached from the potential map and some field would be automatically filled for the user.

All together the tools presented a prototype of a government framework that can significantly change the dynamics in public spaces, by allowing citizens to easily reserve or "book" parking places and transform them. We used three data collection methods (Online-survey, automated data collection and interviews) to observe the impact of the toolbox in the engagement of the citizens.

## 2 DISCUSSION

CityMaking!Wien showed a mixed perspective on the influence of digital tools in citizen engagement in the construction of parklets. The results can be summarized as follow: CityMaking!Wien informed and awoke curiosity among citizens but it fell short to transform individual agency into collective action. Hence, the guiding vision that technology could trigger a larger change in citizen engagement was not validated. This, in turn, hints to a larger disjunctive between the perception of the potential of technology and the actual use given to the toolbox by the citizens. These findings emerge at various points in the results.

It is rather clear that the toolbox contributed to inform citizens about the opportunities that they have in public spaces, as many visitors did not know before about the possibilities of building parklets. The results also show that among the visitors of the toolbox there is optimism regarding the impact that parklets can have in the city regarding social interactions and opportunities of engagement in the city. This first step was followed by the curiosity showed by visitors that actually used the map to search for a spot and subsequently reached the form. However these first steps were not transformed into collective action, as no one used the online form to request a permit.

The disconnection between curiosity and lack of action emerges both in the survey and the automated data collection. The participants are more likely to check if installing a parklet in their neighbor is possible, and less likely to actually request a permit using the online form. The automated data collection corroborated this, as it many people visited the map and even the form but no one used the form to request a permit for a parklet. Here it necessary to take into account that the toolbox was not able to provide financial support for building parklets. Nevertheless, this results still shows that more elements are needed in order to engage citizens in the transformation of their cities. Other aspects, such as social capital and soft skills, play a central in citizen engagement and the results show that such elements should be taken into consideration in other tools for engagement.

This first result, that technology can only play a limited role, is also supported by the tendency identified in the survey, namely that people with previous engagement and greater social capitals are more likely to use the toolbox. This last result shows that technology would more likely increase the engagement of persons which already are active in the city. This might not be very surprising, but it also means the contrary, namely that technology would not significantly increase the engagement of people that are apathetic or passive. Technology would continue the existing patterns of engagement rather than changing them. Additionally it means that one key element for engagement are the social connections within the neighborhood. Again, for the success of engagement platforms it is important to articulate other methods of engagement that can connect individual agencies. This raises the question whether technology itself can address this issue or if other measures are better suited to break the apathy, or even the opposition to transformations in the city.

Finally the results suggest a larger disjunctive between perceived potential of technology and the actual problems faced by citizens. This disconnection emerged clearly during the interviews.

People that work together with citizen organizations but are not directly involved in the day to day reality of citizen engagement were much more confident on the potential impact of technologies in the engagement of citizens. People involved in fund raising, organization of volunteers, and completion of projects in the city, welcomed the toolbox and even showed enthusiasm about it but saw a limited potential in it. A much bigger concern for a citizen organization is for example how to deal with opposing citizens which organize and protest against the installation of parklets in Vienna. The toolbox was not conceived with such situations in mind. It was rather based on the assumption that facilitating access to regulations and institutions would significantly contribute to increase the engagement of citizens.

## 3 CONCLUSIONS

With CityMaking.wien we proposed that technology could significantly change the behavior of citizens by creating tools that allow them to transform their cities. The underlying concept proposed the transformation of technologies to support bottom-up initiatives and change the dynamics of the city by allowing and engaging more people to build parklets. The vision was only partially reached. Reality showed that the city administration is not always open to help with the development of such tools, that other neighbors might oppose initiatives such as parklets, that even small interventions demand support from the neighbors and finally that technology itself is only a plays a limited role in urban transformation.

Technology can certainly *a)* provide information to citizens about opportunities to transform public spaces; *b)* encourage citizens to use such opportunities and *c)* guide citizens through the bureaucratic apparatus, yet transformation processes demand collective action rather than individual agency. We observed that groups with higher social capitals are more inclined to use tools for citizen engagement. This shows that local communities and networks are a key element to turn individual ideas into realities. Future applications for engagement should be articulated with activities that create or activate communities and networks in the city.

The results raise questions that can be further explored through research projects. Further experiments can investigate and observe tools that help people connect with each other within cities and how such connections can be transformed into collective action. Also experiments that mix digital tools with other community building activities can further investigate how the digital and person to person interactions can be better articulated to increase engagement in cities.

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