

Engaging the Mobile Citizens – How Mobile Devices Offer new Ways of Civil Engagement

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1 ABSTRACT

In the analysis of new ways of interaction, the paper focuses on mobile participation (mPartizipation) and possibilities for civil engagement through smartphones. In the first part it outlines the changes in communication, based on mobile devices and social media tools. After a short overview about the merging of relevant technologies (GeoWeb, Social Media and Mobile Technologies) it defines the new mobile citizen and discusses the “surplus of mobility” in participation. In its second part, the paper presents two real-world projects, dealing with this mParticipation approach. It closes with a analysis of chances and limits created through mParticipation.

The Paper is connected to the author’s Phd-thesis about mParticipation and sums up the first results. The intention of the paper is to present the changes for urban planning, which are already happening. Out of that the paper gives an overview of new ways of participation, and questions the (negative and positives) consequences for urban planners and the administration.

2 INTRODUCTION

Living in hybrid cities will fundamentally change the way people communicate with each other and exchange information. “Technological developments have multiplied our communication patterns over the last decades. Now mobile and wireless devices enable real-time-communication, connected to the place we are at. This amplifies participation in a spatial and temporal dimension and will widen the range of possible uses for urban planning and design” (Höffken Haller, 2010, S.) – new forms of mobile urban communication are evolving. Never before people had the ability to collaboratively collect, analyze, and publish information on such a mass scale and participate in urban design processes.

The mobile market will be one of the fastest growing markets in communication with estimated 80% from 2010 to 2012 (Google et al. 2010). Society will change into a mobile society and especially in urban areas the mobile citizens will be a more dominant group in the future. At this point the relevance and potential of mobile technology in urban planning and urban culture have to be researched and developed, as the technology and the tools are going to be ubiquitous and therefore change social behavior, as Shirky points out: “The invention of a tool doesn't create change; it has to have been around long enough that most of society is using it. It’s when a technology becomes normal, than ubiquitous, and finally so pervasive as to be invisible, that the really profound changes happen, and so for young people today, our social tools have passed normal and are heading to ubiquitous, and invisible is coming” (Shirky 2008, p. 105). Consequently the high penetration of mobile phones offers the chance for a higher involvement of citizens.

3 MERGING TECHNOLOGIES

The Internet is a truly interactive medium and causes a “shift from top-down, one-way communication to a vastly more participatory medium.” (Höffken, Haller 2010, 494). Users increasingly take part in the production of online content, publish their thoughts on blogs, share videos and photos, and connect with each other by using social networks. A many-to-many communication is established, which will have long-term consequences.

Looking at the development of important technologies and tools, that were created over the last years, three main trends can be mentioned, which have enhanced communication like never before (Streich 2011):

3.1 Mobile technologies

The rise of mobile technologies is directly linked to the development of mobile phones. With smartphones – so to say small computers – a progress to the second level was made, because the Internet and mobile phones merged together. As smartphones are now for more and more citizens a constant companion in their everyday life a new generation is developing, using the internet on-the-go. Besides “traditional” phonecalls

and SMS, status-updates on Twitter¹, checking and sending emails or checkins on Foursquare² are getting common. Via GPS, locations of smartphones and their owner can be detected and photos can be taken on-the-go via integrated cameras. Furthermore video- and voice-recorder allow multimodal conversations and posts on the internet. Online activity and communication is getting mobile.

3.2 GeoWeb

With tools like Google Maps and Openstreetmap (OSM), the field of webmapping developed during the last years. These easy-to-use webmaps fundamentally changed the importance of georeferenced data and offered a wide range of so-called mashups, by using google maps or OSM for data-visualisation. From address-search to mapping locational data, webmaps are now standard applications on mobile phones. From a professional tool, mapping got a common tool for nearly everybody. One of greatest benefits are location-based-services, which create information about the vicinity, e.g. the nearest restaurant. But also the tagging of the environment by a crowd of users generates new datasets. This so called crowdsourcing principle improves and amplifies existing datasets and visualizes them on webmaps.

3.3 Social Media

Social networks allow a two-way-flow of information and are now a “quasi” standard in the internet. Facebook³ for example is one of the mostly used communication channels in the world and an important communication tool in our society. From status-updates to tweets – social media tools created new form of communication. Social plugins like the “like-button” from Facebook and daily tweets created a stream of information, which enhance many2many communications and is therefore an interesting tool for planers. As most people are already using social media, it provides the possibility for civic interaction (Haller, 2011).

These trends are now merging together on smartphones (see Fig. 1) and therefore allow new applications and consequently new ways of communicational interaction.



Fig. 1: The Merging of different technologies on the mobile phone [own source]

The mobile version of social media widens the range from desktop-based interaction (mainly at home) to a communication on-the-go (also in the public space). Information can be spread easily and faster than ever before – from everywhere (Birkholz, Höffken, 2010). Examples for this combination of hard- and software innovations are services like Foursquare and Gowalla – location-aware social networks. People can use their mobile devices to interact with their environment, by “checking-in” at locations that they visit. By sharing their information, friends get informed about the current location and favourite locations are suggested to the community or the friends. This social interaction is the start of what will become the widespread adoption of location-aware services.

¹ <http://twitter.com/>

² <http://de.foursquare.com/> (Website for Germany)

³ <http://www.facebook.com/>



4 ENGAGING THE MOBILE CITIZENS

4.1 The mobile citizen

In 2010 more than 11% of all Germans owned a smartphone (Google et al, 2010, 11). The core group of these smartphone users is called “smart natives”. They are young professionals, well-educated and using smartphones for their daily conversations, e.g. read newsmedia, communicate via social media. They are always online and the mobile device defines a great part of their online activities. Interesting in this case is the increasing importance of locality and prompt events (Google et al, 2010, 11). The globalised internet leads to a new “local awareness”.

Some “Smart Natives” also belong to the group of “citoyen” or in English “citizen”. These citizens are highly integrated in their city, but also internationally. They are politically interested citizens, take care for the development of their neighbourhood and take up their responsibility to actively participate in the formulation of political opinion.

This group – the mobile citizen as a Smart Native as well as Citoyen – is a relevant player in future urban planning processes. Using the internet, Twitter, Social Media, etc. for organizing and promoting their interests and actively taking part in their environment. Local and contemporary events take get their attention.

4.2 Mobile Urban Communication

The rise of public involvement in the last decades as an integral component of urban decision making is an important change and challenge for urban planning. This democratic ambition opens the process to more stakeholders and consequently widens the basis of available information. E.g. every individual citizen has its personal knowledge and experiences about the city or town they live in. As local experts, citizens know the qualities of the area they reside in. And this local knowledge is an important source of information for urban planners.

The exchange of this information is directly linked to citizens’ and town hall meetings and other kinds of events. They are useful and important for democratic planning, but the organisation is complicated, long-termed and cost-intensive. And for participants the investment of participation is high (duration of event, travelling time) – the event is limited to certain time. In contrary, the mobile citizens are most of their time online and therefore potential contributors. Technology-based Participation (eParticipation) opens the process in a temporal and spatial way and the technological innovations enable a faster, more interactive and a low threshold communication. New location-aware social media services are paving the way for being online on-the-go and offers two interesting angles for our planning professions: (Höffken, Haller, 2010):

- “By aggregating user locations that will soon be widely available, planners will be able to analyze mobility and usage patterns of neighborhoods, identifying clusters and areas of decline
- By working with services like Foursquare, Twitter, and others, planners will be able to create their own games and provide engaging channels for citizens to get engaged. The oft-hyped crowd-sourcing only works if there's a fun, entertaining side to collecting data or mapping neighborhoods. Location-aware games could provide a venue to get citizens involved early in the planning process.”

These developments are “blurring the lines between virtual and reality” (Rasa, 2010), as the internet and all related communicational channels are getting ubiquitous. A new form of communication is developing, the mobile urban communication – leading to opportunities in participation processes by integrating the mobile sector. This so-called mParticipation is an additional channel for engagement and nowadays linked to the mobile internet.

4.3 Surplus of mobility

What we see is a set of technologies and tools emerging: a communicational infrastructure – that will give us the scaffolding to interact and take part in the public sphere in our cities. The advantages of mobile communication are (Castells et al. 2006):

- in-sitio communication („components of spontaneity“),
- person-to person-contact,

- multimodality (voice, text, images, video),
- realtime-interaction and
- ubiquitous connectivity.

Therefore the mobile technologies open the ways for myriad ways of collaborative action, which can be stored and visualized via maps. Users can communicate via all kinds of channels and all these channels can be used in real-time, offering short-time reactions. The social tools enhance exchange and spread of information and lead to new ways of engaging the citizens.

5 EXAMPLE - NEXTHAMBURG MOBILE

The organization “Nexthamburg” offers an app for the iPhone. The so-called “Nexthamburg mobile” allows the user to virtually tag and categorize his environment. On the ride, the user can directly write a comment about his environment, e.g. a favorite building or something that bothers him, and in addition upload a photo. This small report (location, picture and text), will be uploaded to a public webpage and presented on the interactive map, showing all reports made by the citizens. This “participation on demand” (Fey, Landau, 2010) is a new way of integrating the mobile citizens.

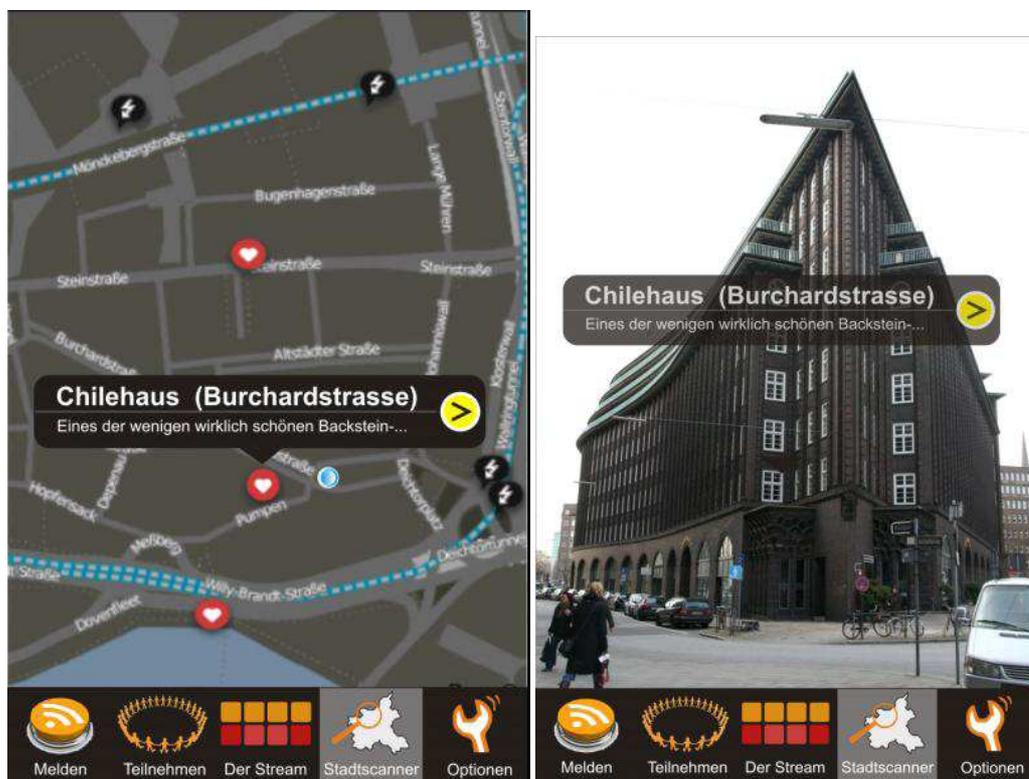


Fig. 2: Screenshot of the Nexthamburg mobile Application (Source: Fey, Landau 2010).

Actually there is a small community using „Nexthamburg mobile“. It will be interesting how the app will be integrated in current planning processes and how the datasets will be analysed and managed. It’s a flexible participation tool, which can respond to the complex and often changing urban planning discussion.

6 DISCUSSION

6.1 Privacy concerns

More and more people are pleased to use new forms of data, like status-updates on Twitter and facebook or sending their current location via foursquare. Even if these updates are mainly personal (for friends and acquaintances) they have a large public range. Harmless decisions of sharing privat information may have unexpected consequences in the long term – especially if these informations will be used for public participation processes and available for everybody. Herefore it is important to sensitize users of location-aware social media tools to reflect upon whether they are giving away information in a public or a private way.



Using services like gowalla requires the clear information for participants, what to share and what to keep personal. This tension between the participation's need for personal information and the individual's right to privacy has to be defined in every single project. Awareness-raising is necessary to all participants, so they control and have ownership of their locational and personal data. They should be able to determine how and when the data will be used.

6.2 Limits

As mentioned above the diffusion of smartphones is – compared to mobile devices in general – low (even if it's growing fast). This digital divide probably will change in the next years, but at the actual moment only the mobile citizens are potential participants in mParticipation-based projects. This kind of interaction only focuses actually a small group of citizens and consequently has to be completed by traditional ways of participation (meetings, brochures) and needs always to be related to internet, offering a participation from the laptop.

Furthermore creating new channels for participation always leads to new responsibilities, as the given comments and posts need to be analysed and taken in account. Therefore a well-organised process – integrating the ideas and suggestion needs to be defined. The organizing institution will be responsible for the concerns of the citizens.

6.3 Engaging Effectiveness

It is easy to capture and aggregate comments and user's activity and to store it in a database. And the mentioned surplus of mobility creates a variety interaction, participation and collaboration. Yet the useful process depends on the activity and the involvement of the users. The technological framework is one side, but it's a different story to actually get people engaged. To avoid non-participation, every project needs a strategy that outlines a project's strategy for getting an audience to participate. Therefore social media strategies must have a defined goal, like educating citizens about the tradeoffs and alternatives of a planning project.

6.4 New challenges for administrations and planners

The new networked communication leads to instant communities, becoming a player in the planning processes and redefining the balance of power. An example of new players, suddenly playing a central role, is the case Stuttgart 21 in Germany. From a small group the movement grew to a political change and still questions the development of the main station in Stuttgart. Collective action and organization lead to the challenge for the authority, to involve these new groups.

Furthermore as news will be spread fast and more and more information will be "leaked" via webplatforms, administrations have the task to organize transparent and open processes.

7 CONCLUSION

mParticipation is a valuable method to engage many unconnected individuals while minimizing time and opportunity costs to personal involvement. The surplus of mobility offers new possibilities for urban planners and urban artists. The reduction of spatial and temporal limits also allows the gaining of information anytime and everywhere. That means, that citizens are – potentially – more independent to choose when and where they participate.

But it's always important to remember, that mobile technology does not replace older forms of participation – rather it offers the opportunity to extend and complete existing strategies. As Castells et al. pointed out: participation is inherent to mobile phones (Castells et al. 2006).

8 REFERENCES

- Birkholz, T. Höffken, S., 2010. Reblog, RT@, FWD: Urbane Phänomene, soziale Netzwerke und vernetzte Kommunikation, Spacemag #3, Spacedepartment, Hamburg.
- Castells, M. Fernandez-Ardevol, M. Linchuan Qiu, J. Sey, A., 2006, Mobile Communication and Society: A Global Perspective, Cambridge: MIT Press.
- Castells, M., 2001. The Internet Galaxy. Reflections on the Internet, Business, and Society. Oxford: Oxford University Press.
- Fey, P., Landau, S., 2010. Beteiligung on demand: Entwicklung eines innovativen Konzepts für eine ubiquitäre Beteiligungsmöglichkeit, praktisch umgesetzt und hinterfragt am Beispiel „Nexthamburg mobile“, Diploma-thesis at the HCUUniversity, Hamburg; available online: http://issuu.com/sjulsenste/docs/beteiligung_on_demand_fey_landau_issue

- Google Inc, Otto Group, TNS Infratest, Trendbüro, 2010. Go Smart 2012: Always in Touch: Studie zur Smartphonennutzung 2012, available online: http://www.ottogroup.com/fileadmin/pdf/go_smart.pdf, 31.03.2011
- Haller, C.; Höffken, S.: New Communication Tools and eParticipation: Social Media in Urban Planning. In: Schrenk, M. Popovich, V. Zeile, P., RealCORP 2010 15th International Conference, Vienna, Austria 18-20 May 2010. Vienna: CORP – Competence Center of Urban and Regional Planning.
- Rasa, G., 2010. Blurring the lines between virtual and reality, available online: <http://flipthemedia.com/index.php/2010/12/blurring-the-lines-between-virtual-and-reality/>, 25.02.2011
- Shirky, C., 2008. Here Comes Everybody: The Power of Organizing Without Organizations, New York: Penguin Press.
- Streich, B., 2011. Stadtplanung in der Wissensgesellschaft: Ein Handbuch, 2. überarbeitete Auflage, Wiesbaden: VS Verlag.

