Understanding Cities and Citizens: Developing Novel Participatory Development Methods and Public Service Concepts

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1 ABSTRACT

The European Commission (EC) aims to facilitate bottom-up initiatives to speed up economic growth. For that it is necessary to empower citizens and businesses. Open data is key to this, as easy access to the right data opens the door for them to contribute as active and efficient actors in European cities. The EC-funded project Smarticipate[1], which is driven by the pilot cities of Hamburg, Rome and London, will foster citizen involvement on four levels: to join forces of committed key stakeholders, to gather local knowledge, to enable exploratory planning exercises and to create new public services. This will be realized by innovative tools, designed within Smarticipate, that provide immediate context-tailored feedback to each contribution made by citizens via online participation services.

This paper outlines a novel methodology that is currently being developed within the project to co-design new public services. Our methodology enables close coordination via an iterative process with diverse urban stakeholders and end users. Citizens and businesses can create and plug their own apps for new public services into the Smarticipate platform we are developing. The overall principle is to interact in co-creation with the cities and citizens of Hamburg, Rome and London and adjust our planning and products directly to their needs. An iterative process is being carried out on three levels: participatory urban planning, user-centered design of applications and user interfaces & software engineering. The first results of this process are presented in this paper, along with an outline of the next steps.

2 INTRODUCTION

Local governments today are under big pressure to address challenges posed by an evolving society. Citizens and businesses are demanding more effective and efficient public services, but financial constraints, increased administration effort and restrictive disclosure policies make this difficult. At the same time, availability of open data, along with new digital & mobile technologies, offers opportunities to create new collaborative forms of public services. Our Smarticipate platform takes this opportunity head on.

2.1 Role of open data

One of the big advantages of open data is that citizens and entrepreneurs have equal access to shared data. With this, they can take their ideas further and develop interesting proposals that drive our cities forward. Because they can rely on the data, they can make accurate proposals. That not only means a higher likelihood of great proposals, but it also means more efficent reivew of proposals by government. Translated to the European scale, we think the financial savings of this will be at least as large as the economic impact of new investment. Hence, our project partners from the pilot cities of London, Hamburg and Rome recognize the potential of open data to increase the number and quality of citizen initiatives in order to boost economic growth and reduce the burden of bureaucracy.

2.2 A participatory dialog system

Smarticipate will investigate methods of providing immediate feedback to people engaged in participatory planning discussions, including citizens, city administration and entrepeneurs. This feedback can relate, for example, to the costs for a specific building proposal, the regulatory constraints related to placing a local public transport stop, or any other relevant planning parameter. Additionally, Smarticipate will create an interactive model for impact assessment with the ability to modify the modelled objects to understand the impacts of citizen-centric urban planning. To achieve these functionalities, a user interaction tool, including servers for open data, spatial information, planning rules, etc. and mobile applications available for smartphones and tablets, will be developed and tested in the previously-mentioned pilot cities.
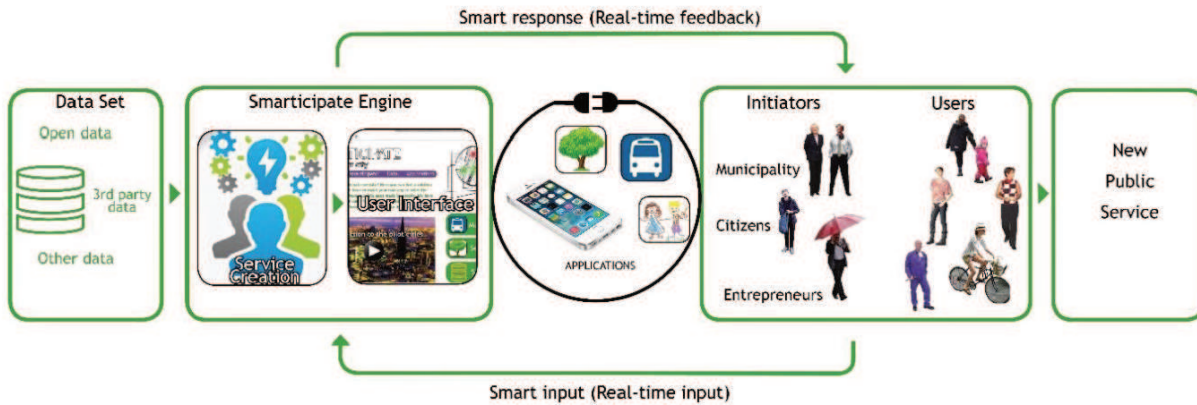
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[1] http://www.smarticipate.eu

Fig. 1: Smarticipate2 tool

On top of this platform, citizens can create services and innovative user interfaces. They can also add information to the interactive applications to create data about a certain topic for other users. Finally, they receive real-time feedback from other users, city officials and the application itself to fulfil their needs.

2.3 Engaging European citizens in an iterative approach

Smarticipate provides citizens and businesses the information they need to shape their city. By presenting open data in an accessible and understandable way, citizens will be empowered to develop new public services and solutions to urban problems. Smarticipate is collaborating with London, Rome and Hamburg in this three-year project in order to build a web platform and applications that tackle their individual contexts.

Smarticipate follows an iterative design and development approach, by which we actually went to work from the beginning with our stakeholders inside and outside the Smarticipate consortium. In this case, the requirements of the cities and citizens create the basis for the development of Smarticipate with its immediate and context-tailored feedback and shared data. This has three main advantages: (1) An iterative approach that puts new public services central in the process, (2) involving active groups of citizens to define what is relevant regarding citizen empowerment, and (3) defining key elements and urgent issues in the beginning of the development process to ensure that the system created by the Smarticipate team suits the needs of civil society.

3   IT'S ALL ABOUT OUR PARTNER CITIES

The three partner cities are the drivers behind Smarticipate. That means we take their needs and expectations as the starting point for the project. Through this collaborative process we are establishing a viable foundation that will also serve the interests of other European cities.

3.1 London, Hamburg and Rome kick it off

London, Hamburg and Rome were specifically chosen because of their interest and commitment to using smart open data to drive their cities forward. They also represent a wide spectrum of needs and orientations towards participatory governance in Europe. Each of them has different expectations regarding Smarticipate:

- London, more specifically the Royal Borough of Kensington and Chelsea (RBKC), wants to enable residents and businesses to participate in the planning, co-design and decision-making around all the things that impact their urban quality of life.

- Hamburg, i.e. Freie und Hansestadt Hamburg, sees the potential of open data to increase the number & quality of citizen initiatives to boost economic growth and reduce the administrative burden.

- Rome (Roma Capitale) depends on bottom-up initiatives and, since the crisis, the government and the development sector have far less elbow room than before.

Hence, Hamburg and London are examples of 'modern and open local government' that rightly make their government communication very accessible; see for example, the website of City Life Living Local from

RBKC[2] and the Partizipation Portal from Hamburg[3]. These cities have clear needs and expecations about how they want to use the urban platform created by the Smarticipate project to develop their cities. Their varying orientations will reveal a beneficial range of fields of interest: new communication technologies, knowledge and experience regarding urban policy planning in a complex city, the drive to operationalize open data for citizens & business and the knowledge that participation can lead to a much better plan.

3.2 Smarticipate makes the difference

These are the topics that come back in each pilot city and where Smarticipate has to contribute by improving existing processes.

- Space: There is constant pressure on limited urban spaces, leading to conflicts between users and uses. That's most visible in housing, as cities struggle to provide affordable housing for its citizens. This issue has a big impact on urban social and economic life.

- Expectations: Citizens are increasingly well informed, particularly via social media and through newly-available open data. This means they are more critical, demanding more attention and fast responses to proposals and requests.

- Efficiency: Cities are under high pressure to deliver services faster and with a higher quality. At the same time, there are fewer financial resources available. That translates into a bigger burden for city administrations.

- Finance: A realistic plan is always supported by a sound financial framework. That means making a close link between planning process & goals and the financial resources needed to make plans happen.

- Trust: Trust is the foundation of good urban governance and is also the basis for Smarticipate. That means open data must be transparent and accessible to everyone. Only then will citizens collaborate.

4 URBAN STORIES AS A BASIS FOR WHAT WE DO

To gather the detailed requirments and expectations of cities regarding the Smarticipate platform, we're taking the so-called "urban stories" design approach. Representatives of the city government, urban planning specialists and experts regarding open data together developed scenarios that describe typical workflows of citizens interacting with the proposed systems. Hence, the goal is to describe realistic use cases, including individual citizens and real problems. Below we provide the urban stories from the city of London - created in a workshop in April - as they are the first results available. The urban stories from the workshops in Hamburg and Rome will follow shortly.

In order to guide the discussions during the workshops with the cities, we set up five criteria for the urban stories which were presented and explained to all participants at the beginning of the workshop.

- Real-time feedback: Smarticipate users will receive direct, instant digital feedback that is customized to his or her own proposal. Use cases should provide the possibility for this kind of interactive relationship.

- Broadening of participation group: Smarticipate opens spatial planning processes to all citizens. This means taking a special effort to reach out beyond usual suspects and broaden the group of participants.

- Continuous useful activity: Smarticipate will provide continuous support and feedback to citizen initiatives. That means use cases should not be one-off or periodic events, but ongoing activities.

- New public services: The selected use cases should illustrate Smarticipate's potential: supporting citizens in taking over services from government, or in developing entirely new public services.

- Data availability: Smarticipate will be fuelled by open data. It is therefore essential that data regarding the use cases are available for use, and can easily be transformed into useable information.

The following subsections 4.1 and 4.2 describe the urban stories created during the workshops in London.

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[2] https://www.rbkc.gov.uk/subsites/citylivinglocallife.aspx
[3] https://gateway.hamburg.de/HamburgGateway/FVP/Application/DienstEinstieg.aspx?fid=59

4.1 Planning Applications 'Co-creation between a developer and the community'

In general, planning applications are the backbone of civic services in the planning department. But they are also a big burden for the administration in terms of time and money. The following is a synopsis of the urban story that takes on the challenge of planning applications:

An ambitious developer makes a 3D proposal to redevelop an abandoned industrial site in the north part of the Royal Borough of Kensington and Chelsea (RBKC). Smarticipate disseminates the proposal to the local community via RBKC's postal code notification system for planning applications. Neighbourhood residents receive the message and come into action, using the design function of Smarticipate to produce alternative proposals. Smarticipate then provides automatic feedback that the citizens use to improve their proposal, including a check to ensure their proposed building shape is affordable to construct. Their ideas are also published via the postal code notification system. Subscribers can now see the new proposals alongside the developer's original proposal. The borough and the developer - who are also on the mailing list - invite residents to a face-to-face workshop during where the developer's architect presents a compromise. The revised design is republished and continues through the borough's planning application process.
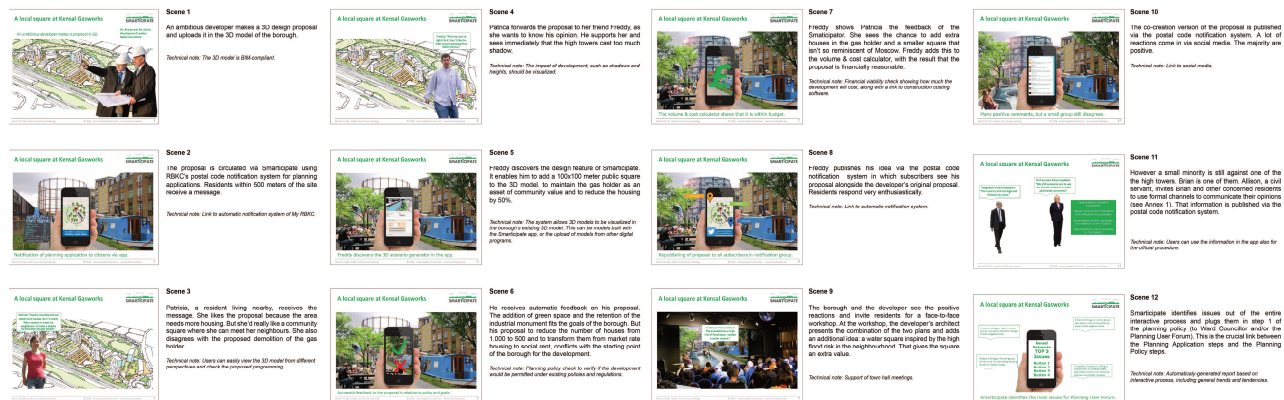

Fig. 2: Scenes from the Urban Story: Planning Applications.

4.2 City Living. Local Life 'Citizen-initiated plan'

Citizen-driven initiatives build stronger connections between residents in local neighbourhoods. Governments often enthusiastically begin such programmes, only to discover later that they require a lot of time from participants - including civil servants. There are two ways to respond to this. The first approach can be called impact-oriented, in which the government measures the positive impact of the programme on society and determines that the time investment of civil servants is less important in light of the positive impact on society. The second approach can be called efficiency-oriented, in which the government prioritizes efficiency of the time investment of civil servants. The consequence is that citizens receive little feedback, often leading to a rejection of their planning proposals. Although professionals always plea for the more 'mature' impact-oriented approach, the efficiency-oriented approach wins in the long term. And because impact-oriented programmes are not legally bound, they're often cancelled after the next elections. The following is a synopsis of the urban story that takes on the challenge of citizen-driven intitiatives:

A group of active citizens have a great idea for their neighbourhood: a football field. Smarticipate provides automatic feedback on their proposal with an outline of the basics: the current owner of the selected site, environmental restrictions, etc. This includes feedback indicating that it's not possible to develop on the selected site, along with two alternative locations where development is possible. Smarticipate then conducts a pre-check of the project proposal, before co-funding begins, via a link with the project verification function of the Spacehive crowdfunding platform. The result includes negative feedback: according to city policy, girls also must be included in the sport proposal. The citizen group therefore attempts to activite more female supporters using RBKC's postal code notification system. The elaborated project is uploaded to the Spacehive crowdfunding platform and fundraising is successful, including co-financing from the Borough. Construction begins. Finally, Smarticipate also identifies key issues from the entire process and links them to the city's Planning Policy.

Fig. 3: Scene 3/12 from the Urban Story: City Living, Local Life

"Luckily, Smarticipate proposes two alternative locations. The group is immediately happy with Tavistock Road because their famous pub, where they always gather to watch Premier League games, is on the opposite side of the street."

5 CONCLUSIONS AND OUTLOOK

The concept described above, including the iterative development processes as well as the two urban stories for London, illustrate Smarticipate's ground-breaking approach towards achieving citizen participation solutions. Although we're currently in the third month of this three-year project, the project is moving very quickly since we began working immediately with the pilot cities and building the project around their needs. The next step in our work programme is to complete the urban stories for Hamburg and Rome. Based on this we will finalise the project requirements, generic used cases and system components while considering technical feasibility and availability of open data.

An exciting activity that we are currently developing is an interactive 'planning exercise'. Through this we will test the Smarticipate concept with a selected group of key stakeholders, citizens and businesses in all three pilot cities. Prototype elements will be shown to participants while they perform a concrete planning exercise. This will take into account different use cases and related open data, such as legal frameworks, policies and financial resources. One of our main objectives is determines if the envisaged real-time feedback feature will provide realistic and effective support for idea development and decision-making. In addition, we will also investigate ways to stimulate and enable citizens to create New Public Services. These planning exercises are therefore an innovative and effective means for contextualizing and narrowing down the system specifications for the subsequent development of Smarticipate technology.

If you want to stay informed or if you think Smarticipate would be interesting in your city, please contact us via the project website: www.smarticipate.eu. We would also be happy to hear your opinion on this exciting project!

The partners in the Smarticipate consortium are: Fraunhofer Institute for Computer Graphics Research; University of the West of England; Austrian Institute of Technology; Geoville Informationssysteme und Datenvereinbarung GmbH; ICLEI - Local Governments for Sustainability; WeLoveTheCity bv; City of Hamburg; City of Rome; and Royal Borough of Kensington and Chelsea.

6 REFERENCES

Rix et al., 2016, Smarticipate: Smart open Data Services and Impact Assessment for Open Governance. Presentation at the Policy and Networking Meeting on ICT-enabled public sector innovation, 18-19 February 2016
Smarticipate project homepage. www.smarticipate.eu