

Online platforms for the co-Design of alternative urban scenarios

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The citizenship construction is a challenge that municipalities have to face. Design can contribute in this task serving its collaborative methods and techniques, such as scenarios, which are strongly empowered by the use of ICT. The paper studies an online platform that our University is developing in collaboration with the Porto Alegre municipality, whose goal is to develop a conversation among the citizens and the different stakeholders of the city.

1. Opening complex systems interpretation

According to Güell (2006), cities are complex systems characterized by non-linear dynamics and great internal variety. Thus, there is not a way to understand the whole system from an individual analysis of one of the components. Moreover, it implies their capability of adapting and transforming in response to the changes that occurred around them. The systems transform themselves in a way that is not always predictable.

This way, we observe that cities are characterized by the uncertainty in relation to future events. In this context of complexity and uncertainty, the challenge is to find ways to reduce the risk towards the future. To this end, the use of scenarios built from plausible relations of cause and effect represent different future possibilities, supporting the decision-making in uncertainty environments (Van Der Heijden 2009).

In this direction, Schwartz (1996) stresses that unexpected changes happen and they demand fast decision-making, so as scenarios construction has to consider their plausibility, but also promote surprising combinations. This way, scenarios are not only useful to forecast the future, but also to react to unexpected events in the future.

The strategic dimension of using scenarios becomes rather clear: offering a comprehensive vision that combines the most relevant elements of the actual situation, their predicted evolution and the principal uncertainties, they help the interpretation of the future and allow a strategic conversation between all the actors involved in the decisional process (Van Der Heijden 2009). As stated by Schwartz (1996), this conversation could be effectively opened to outsiders. The author highlights that

scenario-based in-depth talks with external actors can aggregate original points of view and innovative thinking.

Manzini (2003) corroborate that, to reconfigure their own activities, productive and social organizations have to operate in a systemic way, involving multiple actors who are internal and external to organizations. They called "Design Orienting Scenarios" (DOS) those scenarios that support decision-making specifically during participative design experiences.

Besides serving as an instrument in the decision-making, scenarios technique is very important to open to a large range of actors of a complex system, the strategic conversation about it and its future, i.e., to promote participation.

2. Co-design and online platforms

It becomes evident the importance of external actor's participation during scenario thinking, both in planning or design. It implies aspects such as co-creation, collaboration and interactivity, which constitute the basis for a co-design process.

As Rizzo (2009) highlights, the co-design process goes beyond the involvement of the final client, which traditionally happened by focus group, observations and interviews, characterized by the client's proactive collaboration through the whole creative process. In a co-design process, the "non-designer", using an expression by Rizzo, puts him or herself besides the designer and becomes the leading figure of development and research practices of new product-service systems (see also Sanders & Stappers 2008).

In the co-design approach, Iacucci and Kuutti (2002) observe that scenarios elaborated together with potential users aim at testing ideas, collecting new suggestions and, above all, creating a realistic image of the future situation of use. In other words, designing with non-designers facilitates the projecting dimension of design. After the emergence of web 2.0, the Internet is not just a source of content to be passively absorbed by the receiver. As stated by Romani & Kuklinski (2007), this network becomes an open platform whose construction is given by user collaboration in content generation, promoting a new architecture of participation.

Online platforms capable of inserting users in innovation pro-

cesses and tools that facilitate the storage and the intelligent use of this information are introduced in the productive and social organizations. Also approaching new genders of cultural products, especially the new kinds of media, Rizzo (2009) highlights blogs and social networks as open platforms where this interaction between the organization and the external actors can occur. This way, they are set up as potential co-design online platforms.

The use of these platforms is fundamental for the existence of the user's creative collaboration. As Rizzo states, the organizations that decide to include non-designers in the design process shall substantially create a structured model, the online platforms in this case, promoting interaction and generating innovation.

This structure of collaboration over the Internet has on the user the central point of its own maintenance. Through the architecture of participation provided by web 2.0, each time a user creates some content, or performs some sort of social interaction, the network grows and enriches. This way, analysing the co-design process and participation from the online platforms of web 2.0, we observe that this entire context can be applied to scenario co-design. As O'Reilly (2005) highlights the organizations, which are able to use all the potentiality of the new tools of the web 2.0, creating platforms that learn with their users, will have a powerful competitive differential, given the wealth of the shared data.

This data can contribute to the construction of scenarios. In an environment marked by critical uncertainties related to the future, the information that comes directly from the final user can decrease the unpredictability also acting as a relevant support for decision-making. Moreover, the external view can bring information that is totally different from the information the organization is used to catching. This is a fundamental point in relation to scenarios, especially because this different view that originates externally can lead to the breaking of organizational paradigms and the change of mental models. In this context, the sequence of this work will be completed through the analysis of a scenario co-design case applied to urban reality.

3. Research Method

In order to foster a deeper comprehension about how we can innovate the way people interact with each other and with the city, using a co-design approach and web 2.0 tools, such as online platforms, we studied the case of PortoAlegre.cc project.

As presented in the next section, this project really fits to our purpose, because of its general goal, approach, methods and techniques.

The case is successively discussed by using the following criteria:

- Scenario construction: building scenarios as a strategy to deal with complex systems with a certain degree of risks and unpredictability and to develop participatory processes;

- Co-creation and co-design: designing with the user to create shared values and to facilitating the projecting dimension of design;
- Web 2.0: open and online platforms that promote interaction and to facilitate the storage and the intelligent use of this information.

4. The PortoAlegre.cc case

UNISINOS is a university situated in São Leopoldo, a city near Porto Alegre, in the south of Brazil. UNISINOS has recently opened a branch in Porto Alegre to host institutional activities and special courses. In this process, UNISINOS developed together with a company called Lung an action called "Redencao.cc", focused on the appreciation of Redenção Park, the largest in Porto Alegre. The extension "cc" present in the domain Redencao.cc refers to the use of Creative Commons. This action mobilized Porto Alegre citizens generating spontaneous media and stimulating the interest of many public and private agents.

From this experience, UNISINOS, Porto Alegre City Hall and Lung got together to create the PortoAlegre.cc project, that would bring impact to the scale of the city and not only to a specific sight, in which industry, university and government are articulated to reach a common goal.

The main interface of PortoAlegre.cc is an online platform that implements the concept of "Wikicity". The term refers to a digital platform that allows discussion about the history, reality and the future of specific territories.

The platform presents the map of the city of Porto Alegre (figure 1 and 2) in which any user can post a "cause", geolocated in the map by pins. The causes can be critical comments, suggestions or ideas about specific aspects of Porto Alegre, registered and promoted through photos, interviews, films and others.

With the function "My Neighbor", for example, users can identify an influent resident from the neighborhood where the cause was registered so that he or she can try to get some support to the cause and make it visible.



Figure 2. PortoAlegre.cc Platform. A post of a cause

The ways of contact and exchange offered by the project are fundamentally based on the online interface of the platform, connected to a deepening cause blog and amplified through two social networks: Facebook and Twitter. To engage users and stimulate continuous interaction within the community, the causes and even pictures that work as teasers are shared daily in the social networks. In this case, it is a way of contributing with the project called "What place is this?": the user posts a photo of a certain sight of the city so the other users can recognize it and comment about it.

As the initial goal of this project is the collective construction of improvement and new ideas for Porto Alegre, it would not be enough just the existence of a map with indication of the causes connected to the city. The intention of PortoAlegre.cc is also to think about the causes in the best way possible to solve urban problems and generating visibility for the suggestion and the most interesting ideas.

Face-to-face meetings are scheduled and they count with the presence of Lung and volunteers, who have enrolled in the site to join PortoAlegre.cc, participating more actively in the project and getting in direct touch with the organization.

PortoAlegre.cc is a project that keeps growing and is still being updated to obtain even more significant results than the ones already obtained. However, the logic of listening to the city, generating ideas and co-creating an even better city, is still the core of the project.

5. Case discussion

Contemporary cities are no longer made only for stable configurations, but are dynamic fields accommodating processes that refuse crystallization. In the case of PortoAlegre.cc, unpredictability is a constant feature since the project is built by different actors and is only able to happen when citizens, who cannot be controlled, are an effective part of it.

The urban environment that is born from such experiences - processes that consider user involvement - stimulates individual and social well-being (Manzini 2003). When the actors actively interact by negotiating rights and benefits, a sense of responsibility for the urban dynamics they helped to build is acquired (Santos 1988).

This is a self-determined society where government-leading actions are in line with what the community itself projects as a destination. On the other hand, it becomes difficult to determine a collective desire in which the decisions taken should be welcomed as the highest and best expression of each individual's willingness to change.

For Manzini (2003), scenarios could represent this shared future that companies, government and society should seek - if

properly built and promoted. By its own nature, scenario-building processes include a plurality of views as they can be considered an exercise of freedom (Moutinho 2006).

Nowadays, almost six thousand people are active users of PortoAlegre.cc, posting hundreds of cases and debating them through thousands of comments in social networks, all focused on improving the city. In this space, users are able to reflect on the city by challenging existing mental models. The cases posted on the website are a clear demonstration of how concerned citizens are about the city and its future.

Such set of organizers' stimuli and users' posts and replies constitutes an organic vision of the different instances that the project is suggesting in order to change the city and help it reach a better future. Therefore, we are able to notice that PortoAlegre.cc is a scenario that all active organizations in the city could employ to practice scenario thinking and design.

However, when increasing context turbulence and number of actors involved, it becomes harder to build a multidimensional idea of how the city might be (Manzini, 2003). It is necessary to have in mind that Brazil and its cities are growing in a fast and continuous pace, making it difficult to follow such growth dynamic.

Online platform usage - such as the one chosen by PortoAlegre.cc - is appropriate to the context in which the project aims at working, as it generates agility in the process and makes it easier for the participants to engage.

Co-creation is part of the soul of PortoAlegre.cc. It is not directly connected to all decisions related to the project whereas leadership is taken into consideration. Yet, this is a leadership that listens, learns, adapts itself and does not lead the creative process, but encourages it.

When we talk about co-design, the principle of collaboration and talent sharing is the same: designers and non-designers working as a team, counterbalancing each others' ideas, working together even in the creative stages. It is interesting to notice that the organizers get more and more into co-design, considering that the promotion of a series of collaborative workshops with the physical presence of a large number of citizens is set as the goal of the project phase.

6. Final considerations

In a country that suffers from social inclusion problems, the proposal of a platform that guarantees access and stimulates the effective participation of citizens is definitely the main result of this initiative. According to Güell (2006), this open collaborative process through online platforms makes certification and informative transparency possible in decision-making phases on the future of the cities.

PortoAlegre.cc is a kind of scenario that is in constant movement just like the dynamics of cities as it is feeding by posts and replies of an increasing number of users. If properly exploited, this scenario arena can become a network of strategic collective interactions. There is a design technology able to deal with such contemporary complex systems.

Besides that, the participation of local actors in this co-design process creates a social capital, generating a discussion channel that reveals values and the true identity of the city (Güell 2006). The processes and tools for co-design, especially if connected to new information and communication technology, grants to PortoAlegre.cc a broad space freedom to express new ideas and to virally foster knowledge sharing and creativity. From online platforms, it is created a direct channel with the community, facilitating the process of data collection that will be important for the decision-making.

Finally, our study of PortoAlegre.cc shows that the knowledge and competences that design is developing on more collaborative and interactive processes, such as scenario building and co-design, can stimulate advanced interactions between stakeholders and citizens.

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