Enabling platforms for citizen participation: *opening design to digital social innovation*

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Abstract

In this study, we examine how grassroots initiatives in Brazil are leveraging from emerging technologies such as open data, open hardware, open networks and open knowledge to address to problems not generally served by traditional businesses or government agencies. These initiatives are more open to cultural diversity and are promoting social inclusion by means of open participation. By analyzing how bottom-up initiatives are fostering digital social innovation, we discuss how design practice could benefit from embracing openness and how open design thinking could empower the development of platforms that enable citizen participation in a more open and inclusive society.

Keywords: digital inclusion, civic engagement, digital social innovation, open design.

Resumen

En este estudio, examinamos cómo las iniciativas de base en Brasil están aprovechando de tecnologías emergentes, tales como datos, hardware, redes y conocimientos abiertos para hacer frente a los problemas no atendidos por las empresas tradicionales o agencias gubernamentales. Estas iniciativas están más sensibles a la diversidad cultural y promueven la inclusión social mediante la participación abierta. Mediante el análisis de cómo las iniciativas de base están fomentando la innovación social digital, hablamos de cómo la práctica del diseño podría beneficiarse de abrazar el pensamiento de diseño abierto para potenciar el desarrollo de plataformas que permiten la participación ciudadana en una sociedad más abierta e inclusiva.

Palabras clave: inclusión digital; participación cívica; innovación social digital, diseño abierto.

Introduction

In April 2015, the Ministry of Culture of Brazil (MinC) used its Facebook fanpage to promote the launch of the Brasiliana Fotográfica portal, a digital repository for the preservation of historical photographic records about Brazil. The communication posted a rare image of a couple of natives from a Botocudo tribe made by Walter Garbe in 1909. Since the Botocudo woman displayed a naked torso, Facebook banned the image because of its nudity.

Despite requests from the Ministry of Culture, the image remained banned because its content was considered offensive. In a press statement, the Ministry of Culture announced taking legal action against Facebook for censorship. The notification claimed that Facebook applied abusive and non-transparent terms of use, arbitrarily attempting to impose its own moral standards on Brazil, as well as on other nations of the world where the company operates, without regards to local culture and legislations. Also claimed that the company's position hurt the Constitution of the Federative Republic of Brazil, Brazilian Civil Rights Framework for the Internet, the Indian Statute and the Unesco Convention on The Protection and Promotion of The Diversity of Cultural Expressions and also disrespected the culture, history and dignity of the Brazilian people (MinC, 2015). As the controversy spread over the network, Facebook backed down and unbanned the image.

A few weeks later, the Minister of Culture of Brazil published an article commenting on the episode and emphasizing the need to rethink our digital culture. In the article, Ferreira points out that we should question "what kind of society we would like to accomplish from the ubiquitous information and communication technologies of our daily lives." (Ferreira, 2015)

This episode exposed two opposing and conflicting views related to our relationship with the Internet and with the increasingly ubiquitous and pervasive information and communication technologies on our society. On the one hand, the understanding that the Internet is a democratic space, favoring a more inclusive society, open to diversity and cultural expressions. And on the other, the understanding that social media services like Facebook are transnational private networks and its terms and conditions will favor global business strategies over local public interests or regulations.

Universal Access and the Information Society in Brazil

The view of the Internet as a democratic space, lived up in this episode, is in line with ideals of citizenship and social participation present on the first Internet initiatives in Brazil.

Alternex, the first Internet Service Provider (ISP) in Brazil, started in 1985 as a civil society initiative focused on social development, collaboration and information sharing (Aguiar, 2008). Prior to commercial ISPs, The National Research Network (RNP) provided TCP/IP network connections to various academic institutions for exchange and knowledge building. (Carvalho, 2006). The Information Society program, a plan for the development and application of computing services and ICTs in Brazil, launched by the Ministry of Science and Technology of Brazil in 2000, supported that network technologies could be used for knowledge building and for overcoming inequalities. The program stressed the importance of ideas such as digital inclusion, computer literacy, universal access and granted that digital content production could empower cultural identity (Takahashi, 2000).

Despite this positive view of the network technologies, also discussed by authors such as Castells (2000) and Levy (1998), other authors such as Quéau (1998), Spitz (1999), Lanier (2013), point to the need of a more critical view and discuss that digital and network technologies can also favor transnational corporations dominance and power concentration.

Digital Culture

The report Promises and Challenges of E-Democracy: Challenges of Online Citizen Engagement, published in 2003 by the Organization for Economic

Co-Operation and Development (OECD), examined online engagement experiences in different countries and recognized that information and communication technologies (ICTs) are powerful tools for enhancing citizen engagement in public policy-making.

However, the report stressed that: technology is an enabler not the solution. Access to information is essential precondition for engagement, but quantity does not mean quality. The main barriers to online citizen engagement are not technological but are cultural, organizational and constitutional.

This approach is in line with the perception of the Ministry of Culture of Brazil when it started to support that the network technologies needed to be understood from a cultural point of view (Ferreira, 2015).

The Pontos de Cultura program, deployed by the Ministry of Culture in Brazil, distributed computers with free software, multimedia tools, and audio visual equipment to groups of the "live web of Brazilian ancestral culture" and encouraged the use of the Internet to distribute digital content related to their cultural practices and identities. The program brought online Brazilian cultural diversity. Initiatives of Intangible Culture Heritage preservation (Bumba-meu-Boi, Umbigada, Coco, Jongo), as well as initiatives promoting contemporary urban expressions (Hip Hop, Street Art) built the identity of Digital Culture in Brazil embracing ideas and practices based on free software, open knowledge, peer to peer collaboration and do-it-yourself (DIY).

While the Ministry of Science and Technology network technologies strategies emphasized digital inclusion from the point of view of infrastructure and universal access, Digital Culture initiatives opened new social inclusion territories, less compensatory and more exploratory.

From the interaction with social movements targeted on social equality and civic participation, digital inclusion initiatives in Brazil gained a more political and cultural bias. Creative social practices such as the "Mutirão" and the "Gambiarra", were brought into the digital world evoking creative appropriation treats of our culture, such as claimed by the Brazilian modernists in the "Manifesto Antropofágico" (Fonseca, 2014).

Digital Social Innovation

We can view Digital Social Innovation Digital as social initiatives using digital technologies to transform their daily lives aiming at their own social development.

For Social Innovation, we understand "innovative activities and services that are motivated by the goal of meeting social needs and that are predominantly developed and diffused through organizations whose primary purposes are social." (Mulgan, 2007). These activities and services are simultaneously creating new relationships and collaborations for our common good and strengthening our capacity for social action.

Social Innovation initiatives are taking unprecedented proportions both due to the increasing complexity of social problems caused by population growth as well to the spread of digital technologies providing new ways to connect and collaborate (Manzini, 2015).

In this sense, we understand Digital Social Innovation as initiatives aimed at the common good that are developing inspiring digital solutions to social challenges. These initiatives are helping civic action by mobilizing large communities, sharing resources and spreading power enabled by emerging technological trends such as Open Data, Open Hardware, Open Networks and Open Knowledge (Bria et al., 2014).

Power to the People

The Internet growth was driven by creative emergence and bottom-up innovation based on net neutrality principles, peer-to-peer architecture, open and distributed infrastructure. These open digital ecosystems are more appropriate for promoting and encouraging innovation targeted on citizens and communities' social needs.

By contrast, the volume of data being produced and processed by open platforms targeted on social innovation is still small when compared to initiatives of large corporations operating in global markets with proprietary data approaches.

Despite the existing network infrastructure that could spread power and give people more 'bottom-up' political and economic control over their lives, the existing commercial services built on this network continues to empower existing 'top-down' centralized and established organizations in the corporate and government sector (Bria et al., 2014).

Recent surveys show a global trend on Big Data investments (Gartner, 2014). The Brazilian Association of Software Entrepreneurs reported investments to the order of R$ 853 million for 2014 in Brazil (ABES, 2014). In this Big Data scenario, our behaviors and consumption patterns are increasingly quantified, analyzed and monetized by private corporations, without much concern to privacy or civil rights issues (Pereira Jr. & Correia, 2014).

On the other hand, it is possible to notice the emergence of organizations envisioning different possible futures by means of development, promotion and support of Digital Social Innovation initiatives looking forward to better meeting citizens and communities' needs.

Digital Social Innovation initiatives are reinventing the way we tackle our society growing problems such as over population and lack of resources. While exploring our most abundant natural resource, ourselves and the power of our connections, these initiatives are shifting the focus from scarcity to abundance (Diamandis & Kotler, 2012). They are transforming information and knowledge in a common good.

Design for the Real World

The idea of Digital Social Innovation freshens the discussion of the social role of design being debated since the second half of the twentieth century by authors such as Papanek (1971); Deforges (1994); Findeli (2001); Manzini and Jegou (2004); Thackara (2005). Common to these authors is a criticism on the materialistic paradigm of industrial production and an urge for social responsibility in design practice.

The opposition between industrial competitiveness and social development is also noticed in two design contemporary theoretical perspectives characterized by the thought of Herbert Simon and Richard Buchanan (DiSalvo, 2009).

Simon focuses on scientific processes of decision-making, putting design on a rational level more useful for the pursuit of industrial production efficiency. Buchanan approaches design as a contemporary form of rhetoric more concerned with the communication of our beliefs and with inciting action through arguments about how we should direct our life, thus opening design practice to ethical, moral and political criticism (DiSalvo, 2012).

Manzini (2015) aligns Simon's rational approach to design with problem-solving targeted to our physical world. On the other hand, the rhetorical approach to design advocated by Buchanan is more aligned with sense-making and the social construction of meaning. Instead of polarizing, Manzini proposes that in Social Innovation these different approaches should converge, specially if we consider that design is increasingly becoming an open and shared activity. Problem-solving in social projects depends on collective sense-making.

Therefore, we look forward to scenarios where people, citizens and communities cease to be a passive audience of consumers and become producers of their own reality using open and distributed tools to collaborate, to construct their own narratives and to build a shared collective intelligence (Levy, 2007).

Platforms for Citizen Participation

New possible worlds are emerging from Digital Social Innovation initiatives promoting Digital Inclusion and Digital Culture. Initiatives relying on emerging technologies such as Open Data, Open Hardware, Open Networks, and Open Knowledge, are deploying civic engagement platforms aimed at strengthening citizen participation in policy making and public governance. Also being characterized as Civic Technologies

Open demo-cracy	Awareness network	Open access	Collaborative economy	New ways of making	Funding, acceleration, incubation
Mudamos	WikiMapa	Rio Apps Open Data	Tem Açucar	OnibusHacker	Benfeitoria
Legislando	Tá no Mapa		Bliive	Fablab Brasil	Awesome Foundation Rio
Panela de Pressão	De Guarda	Data.Rio Open Data	Atados	Garagem FabLab	Rodada Hacker
Colab.re	Onde fui roubado	Open Knowledge Brasil	Conectando Gerações	OHMS	Hackaton 1746
PortoAlegre.cc	Guia de Ruas da Maré	Matéria Brasil	Banco de Remédios	Olabi HackLab	Purpose Brasil
Cidadera	Mapa Cultural Suruí	Software Livre Brasil	Benfeitoria		
Que Onibus Passa Aqui	Imagina na Copa	Transparência Hacker	Compartilhaço		

Table 1. Digital Social Innovation initiatives in Brazil

(Rosa, 2014), these technologies are enabling citizens to collaborate with public administration in order to provide more efficiency, better communication and greater satisfaction in public services.

Based on the framework proposed by Bria et al. (2014) our research mapped a few bottom-up Digital Social Innovation initiatives in Brazil that are exploring the collaborative power of open knowledge networks to promote civic engagement towards social inclusion and social welfare.

Conclusion

A common feature observed on the studied initiatives, is the fact that open technologies are offering greater opportunity for participation, enabling citizens and communities to act towards a common good, and are also helping to build a more democratic and fair society.

In a scenario of Digital Social Innovation, design practice needs to build on a more open, collaborative, participatory and activist culture. We need to move away from the determinism of the industrial efficiency and come closer to design thinking and doing targeted on social transformation.

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