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Civic Technology

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ABSTRACT: The concept of digital social innovation (ISN- new social innovation) is mobilized in various contexts and its retention is possible through several complementary levels. First, at the social level, ISN covers perimeters of collective use, involving a multitude of actors in order to co-create social value (Cajaiba-Santana, 2014, 42-51). Second, at the technological level, they generate an open operating process based on an innovative hardware and software architecture, as well as on specific functional mechanisms. Finally, at the ecological level, ISNs focus on responsible innovation (Van Der Yeught and Bon, 2016, 27-40) and the desire to respond to social and environmental issues. This study falls more precisely in the field of Information and Communication Sciences (ICS). Indeed, this is not a purely technological reflection, but an understanding of the wider integration of information and communication technologies (ICT) and their use in an environment, the context that covers the area of citizen participation in government and the level of involvement of the latter.

KEYWORDS: technology, digital social innovation, public authority, civic involvement, electronic participation

This article is specifically in the field of Information and Communication Sciences (ICS). Indeed, this is not a purely technological reflection, but an understanding of the wider integration of information and communication technologies (ICT - Information and Communication Technology) and their use in an environment, a context that covers the area of citizen participation in government and the level of involvement of the latter. The appearance of ISNs (new social innovations) aimed at involving citizens has become more democratic, with the possibility of accessing public services via the Internet. Therefore, we are talking about e-government with reference to all dematerialization systems of public service procedures. We have gradually moved to e-participation practices that are meant to be interactive and inclusive and that take into account the social context of the citizen. The latter's intervention in the public and, more broadly, political debate extends to proposing changes to legal texts and putting online social and environmental issues that could not have been subjected to designers without resorting to these practices.

We can characterize this evolution as the emergence of innovative forms of participatory democracy (Rotaru 2005, 163, 172-174) and the immediate involvement of the citizen in the control of socio-economic activity at local, regional, national or even international level. Thus, the citizen is now involved in political elections with the help of technologies for democracy and / or technologies for civic involvement. The use of these technologies revolves around the dynamics of CivicTech (Civic Technology).

From technologies to e-government...

E-government technologies make possible the accessibility of information in the context of services provided to citizens, for example, for online procedures related to social security, retirement or even education. In the other two levels of ISNs, represented by CivicTech, the citizen plays a proactive role, both at the democratic, civic, social and solidarity level. The period 1960-1970 was marked by the introduction of ICT in administrative services, essentially covering support functions such as accounting and financial management and human resources management. The processing of citizens' requests was done mainly by mail and at the administrative counters (Dagiral 2011, 9-17). The digitalization movement of

administrative procedures since the 1990s has been characterized by the expansion of functional procedures both in terms of accessibility to information and in terms of archiving public administrative documents. We then witnessed the efficiency of the functional processes and the improvement of the quality of the services. Since the 1990s, the advent of web technologies has placed the citizen at the center of administrative information systems (SIA) design approaches. In addition to accessing the information he needs, the user remains able to download documents and forms. From a technological point of view, several phases must be considered: the information phase refers to online information procedures, the interaction phase is based on communication interfaces, the transaction phase is materialized by the completion of remote procedures, and the integration provides access to multiple services from a single portal (Saint-Amant 2005).

... to technologies for democracy and civic engagement

Nowadays, many governments exploit ICT in e-citizen participation projects. We find in the literature a lot of definitions and fields of application around e-participation. Among the international benchmark reports, the 2016 UN e-Government in Support of Sustainable Development devoted an entire chapter to exploring the concept of e-participation and its role in creating a society qualified as inclusive. It is specified that e-participation technologies provide a framework conducive to civic engagement by involving different actors in the decision-making process (ONU 2016). According to the Digital Agenda for Europe 2020, e-participation is based on ICT for the involvement of citizens in political decision-making. The multiplication and diversification of communication channels between leaders and citizens considerably influences e-participation approaches. CivicTech is associated with technologies to renovate democracy and improve its functioning (RANF 2016).

Collaborative projects, such as crowdfunding, prosaically have a factor that marks the desire to provide a data community that can be exploited and enriched simultaneously in a collegial manner. The classic role of actors is modified because we are in the presence of new models of social relations, based on the participation of different actors and the optimization of the knowledge generated (Howe 2006, 1-4). Citizen participation technologies encompass a social dimension that, in addition to social networks or collaboration platforms, mobilizes a whole collective approach. Electronic participation, beyond the major administrative functions, strengthens CivicTech in opening public and political debates.

We can deduce that the problem posed by CivicTech is at the level of covering an active dimension of the citizen in the democratic process, with his real and continuous participation in identifying the axes of innovation and solving the problems facing society. This concept extends the functional perimeter of what is commonly called e-government. Indeed, the concept of e-government tends to transfer public activity in its administrative dimension to the citizen. CivicTech complements this concept with its dimension of citizen participation in areas other than administrative functions. Therefore, it extends the functional perimeter to its participatory dimension of the citizen in social and community life.

Social cohesion practices

CivicTech brings together interconnected actors: civil society citizens, community groups, local communities, state authorities, technological innovators, in short, all the actors responsible for its production. Some of them are united around the same social or political commitment and manage to come together and make themselves heard through digital means. Stakeholders generally mobilize to address social, economic and environmental issues that cannot be managed through traditional communication channels. The aim is to make public debate more fluid and to strengthen democracy (Logrippo 2017, 67-76). Social mediation

practices are favorable to the establishment of places of expression of citizens for asserting positions, judging the management of public administrations, debating on current issues and general interest, developing projects with various actors, whether elected or representatives. The aim is to make governments aware of the needs of their citizens, while supporting open democracy through spaces for public consultation and social cohesion. As such, the implementation of e-participation technologies creates an immediate connection between citizens and elected officials (Macintosh 2006). The government-citizen relationship is no longer shaped by the mediations of representatives and elected officials. The dynamics of CivicTech are embodied internationally by various groups, such as the Code for America group started in the United States in 2009 or the Code4HK (Code for Hong Kong) movement developed in Asia. In France, the Open Democracy team supports missions designed to make citizens' views heard and to make visible the means and ISNs of electronic participation (Douay 2018, 117). The team focuses on OpenGov and upholds the principles of transparency by opening up public data, engaging in citizen consultation and collaboration.

Digital communication approaches have shifted from passive reception paradigm to more open and innovative features. At a time of this paradigm shift, ISNs have set themselves the task of making digital technology a facilitator of public and political debate, with the compulsion to reach as many actors as possible. These approaches are reinforced by the diversification of ISNs which, at the technical level, are based on a set of devices: mobile Internet, smartphones and tablets, cloud computing, open data, social media and big data (UNDESA 2015) and contribute significantly to the development of the administrative function and to the creation of value.

Electronic participation of citizens at international level

Globally, in recent years, we have seen an improvement in e-participation practices due to the increasing number of countries providing public information through digital technology, especially open data, and the awareness of the importance of e-consultation due to the abundance of social networks and digital platforms (ONU 2016).

According to the 2016 UN ranking of the best performing e-participation countries, the United Kingdom ranks first in the world, followed by Japan and Australia, which ranks second. According to the same classification, France ranks twelfth. The level of performance was measured on the basis of three indicators, taken from the participation model. First of all, electronic information qualifies online information procedures and the means of accessing the correct information. However, this phase is crucial, because without the production, structuring and exchange of information, on a regular and continuous basis, the e-participation movement may not last over time. Secondly, e-consultation takes the form of organizing online consultations dedicated to the contribution of citizens to the political debate. In general, financial decision-making documents in the field of finance, followed by health and education, are the most archived and consulted sources of information worldwide (ONU 2016).

Electronic decision-making makes it possible to take opinions into account in draft laws or governance activities through the immediate involvement and direct contribution of citizens. In this regard, two representative examples are often cited, namely electronic voting projects through secure interfaces and the ranking of opinions according to their popularity on social networks. This level largely depends on the e-consultation phase, because as the process brings together active participants and generates opinions and positions, the e-participation project can be described as effective and efficient. E-decision makes it possible to take opinions into account in draft laws or governance activities through the immediate involvement and direct contribution of citizens.

The United Kingdom, the world leader in e-participation, is the leading example in terms of strategies for openness and public transparency. Indeed, all online political

documents are available on the Gov.uk platform. It provides several documents based on citizen participation, while ensuring the security of the process. The practices in this portal are structured because from the home page, users can access a publication on a political topic, formulate their opinions, follow the conclusions, as well as the government's decisions on public proposals. Finally, the portal covers all three levels of e-participation: electronic information through the publication of information and the provision of administrative documents, electronic consultation by citizens, the publication of opinions and, in particular, electronic decision-making. On this last point, it should be noted that the government informs about the changes adopted or not, while providing the necessary justifications (ONU 2016). In several countries, government platforms have been developed to provide personalized services to citizens with the ultimate goal of involving them in government. The countries in Europe are the best placed, as many of them are in the top 50 of the best performing countries globally. We can cite the example of Estonia, which ranks twenty-second in the world rankings. The country relies on an open data policy through the national portal (Osale.ee) to manage information on political debates.

CivicTech and the government / citizen relationship

The digital revolution brought by ISN is accompanied by a change in technological, human and social practices. Citizens-actors are increasingly connected to the internet, mobile technologies and social networks and express their desire to be heard through the use of innovative and sometimes complex tools, even inaccessible to some. However, e-participation projects have some limitations, especially in terms of social connections.

Building indicators to qualify CivicTech, and in particular the government / citizen relationship, is a real challenge. When it comes to mapping the digital ecosystem, it is enough to refer to the instrument panel implemented by both state bodies and digital enterprises. However, many tools and projects certainly coexist, but they often remain in the experimental stage. However, assessing the real social and environmental impact is hardly a methodologically easy axis to understand. We are witnessing the formation of new dynamics that are revolutionizing traditional civic practices. It is essential to analyze three fundamental principles which are openness, accessibility and dependence when dealing with the issue of dynamics and interactions. Through the principle of openness, the exchange of knowledge is encouraged by creating common spaces for digital information. At this level, we need to question the principle of digital openness and its degree of emphasis on more strategic and tactical issues. We note that the UK has an information hub that integrates all phases of e-participation. This puts it at the top of the list of the best performing countries in the world in 2016. Although France has a diverse infrastructure, organized around websites, platforms, social networks, digital tools and mobile applications, it is in the position twelfth in the ranking. We can postulate, from an exclusively digital point of view, that this is correlated with the implementation of disparate devices, with a lack of active e-participation project.

The principle of digital accessibility must be seen with a double variation: a digital dimension related to adapted socio-technical devices and a human dimension that falls under the competence of the actors. It is clear that the use of ICT in general, and CivicTech in particular, promotes the inclusion of certain active actors, but instead generates situations of exclusion, because we fail to reach the entire population, ie the normal citizen. The phenomenon of digital exclusion is associated with a lack of knowledge of the digital world and with limited or non-existent knowledge and know-how in the use and acquisition of ISNs. Likewise, difficulties in having adequate and advanced tools or accessing the Internet, specialized platforms and the principle of trust designate the logging action, as well as its results. CivicTech provides a framework conducive to social networking, in which users have the status of actors or contributors to the functioning of the democratic system. We can

deduce that only the principle of openness remains partially satisfactory through CivicTech. This coverage is limited to certain countries.

What is the role of the state and public authorities?

The success of e-participation procedures is not intrinsically linked to digital innovations. The whole question of the role of the state remains open. How is it informed about the measures and their relevance? How best to involve citizens in political decisions? We will agree here that the success of e-participation projects depends on the commitment of the state and its ability to create a favorable and adequate framework to ensure the proper functioning and this, at all levels, from the e-information and e-consultation phase until, ideally, the electronic decision-making phase. E-participation policies emerge at the local level, from which the needs of citizens derive, and emanate the choice of tools and their mode of administration. Therefore, we must focus, above all, on the level of local power which is by definition the axis closest to the citizen. Likewise, partnerships with private sector actors should be encouraged through social programs and crowdfunding actions. At the level of the strategic axis and governance, the success of e-participation projects does not require raising more challenges (ONU 2016). Among them, we mention the definition of a clear and realistic vision of the role of citizens, their participation and the added value created, as well as the place of e-participation tools, their characteristics and limitations. The inclusion of e-participation activities in a methodological and legal framework must also be clearly identified. The actions also result in the development of training programs for users, whether they are civil society actors, citizens' representatives or administrative agents. It goes without saying that for the latter, it is necessary to instil a mentality based on the one hand, on a public service-oriented state of mind and, on the other hand, on a digital culture. In addition, in order to make progress in e-participation, efforts must certainly be made in the areas of e-information and e-consultation, but the e-decision component remains the most difficult to achieve. In addition, this is the most sensitive and strategic stage and therefore the most difficult to assess, especially with regard to the issue of citizen feedback and its use by public authorities.

Conclusions

Much more appropriate seems to be the direct and clear correlation between the quality of work of an administration, which means the expectations of the people administered, with the level of civilization. Such an understanding of social phenomena requires a shift from an arbitrary approach to a scientific, conscious approach. This presupposes the existence of a rigorous assessment of the state and evolution of a local community. If local development expresses the purpose of such an approach, a true equation of state of the local community and, at the same time, the general framework of analysis, then the areas of local development are key perspectives for measurement and strategic action.

We believe that more attention should be paid to those who design, implement, run, troubleshoot and expand government online services, both centrally and locally. From the small number of relevant studies on this topic, we can say that the main problems of IT specialists in local public institutions are quite similar in different countries and at different administrative levels.

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