

**Cyberenvironments in Planning:
open data and civic technology community of Chicago**

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Technologies and the Internet have greatly enhanced the production and communication of information, increasingly impacting on our lives and cities. They have also fostered open access to information and the sharing of it via open data platforms. As a result, many cities are now embracing new modes of open data management. However, the impacts of open data extend beyond data management, transparency, and accountability to influencing governance and community participation. This research examines the open data in Chicago as a case study. This includes analyzing, through a theoretical approach the efficient governance, community participation and potentialities of open data in planning practices. This research seeks to further assess open data by considering the new civic technology and changes introduced by e-governance. This represents an evolution in terms of the level of community participation based on a collaborative and purposeful participation, highly interested in seeking solutions to urban concerns. This work provides a characterization—including the strengths and weaknesses—of this type of knowledge-based community. The research seeks linkages with community participation in planning practices and the role of planners in this new Cyberenvironment based on a collaborative, knowledge-based, and open approach.

Chicago has a dynamic open data movement supported by the local government, non-government organizations, universities, and citizens interested in sharing and providing urban solutions. The Chicago open data portal was launched in 2010 and relaunched in 2011. It was then supported by the Chicago Technology Plan in 2013, which provided a framework, vision, and strategies turning Chicago into a technology-based city. The plan incorporated a “civic innovation” strategy to empower citizens to use open data. However, since 2010 citizens have been using requesting and transforming data. The data

transformation, occurring in collaborative environments, is helping the City of Chicago to spur better decision-making and efficiency. The role of citizen as “civic innovators” is crucial in accelerating this dynamic civic ecosystem.

In this research, I identified the Chicago civic technology community goes beyond a temporal open data movement or simple network to become an engine of innovation building knowledge-based collaborative environments. The civic technology community’s human capital shows how highly skilled citizens can take advantage of open data, add value to raw data, and transform data into knowledge; the Chicago civic technology community has developed an active environment for interaction and the sharing of knowledge. However, this dynamic may actually increase the gap between highly skilled citizens and less skilled citizens, reinforcing existing patterns of exclusion. Thus, the issue is not only access to the information alone, because people require the capacity to transform data into knowledge.

Thus, this research presents a shift of paradigm from the “information age” to the “knowledge age,” and the implications of this in a planning context. The main implication involves the evolution from “e-planning,” based on networks and information, to “knowledge planning” (k-planning), based on Cyberenvironments and knowledge. This research’s main finding is that k-planning represent a new venue in planning, offering a comprehensive and contextualized understanding of “planning in Cyberenvironments,” where “urban space” and “time” work together simultaneously to build such Cyberenvironments. K-planning addresses the real-time dimension by utilizing the “acceleration” of space and time simultaneously as “the acceleration of territorial development.”

In term of policy implications, open data means more than simply the availability of online datasets—it requires the development of a dynamic civic innovation space, crucial for both countries and cities. Thus, cities need policies directed at strengthening human capital and reducing the gap between highly and low skilled citizens.

This research presents “k-planning” as an alternative to the development of smart cities beyond mere technology operation. I define K-planning for generation of urban development and for re-generation of existing cities; both cases taking into account “genius loci” (origin) and “milieu innovator” as an outcome. K-planning can be applied to the urban generation of smart cities and regeneration for smarter existing cities.

K-planning is about synergies, innovation, and integration; it is about partnership based on ownership (specific achievements) and the contribution made by stakeholders for better policy making and promoting a culture of available, open, and relevant data. The aim is to nurture collective knowledge to meet the needs of the civil society via better governance, consensus building and policy making.