

# The Impact of ICT on Citizens' Well-being and the Right to the City: An Introduction.

Anna Domaradzka  
Robert Zajonc Institute for Social Studies  
University of Warsaw  
[anna.domaradzka@uw.edu.pl](mailto:anna.domaradzka@uw.edu.pl)

Magdalena Roszczyńska-Kurasińska  
Robert Zajonc Institute for Social Studies  
University of Warsaw  
[m.roszczyńska@uw.edu.pl](mailto:m.roszczyńska@uw.edu.pl)

## Abstract

*As ICT has become an indispensable tool for policymakers and urban dwellers, there is a growing need for systematic studies on the consequences of its fast-paced implementation. Although ICT facilitates many positive processes and helps to link policy makers with citizens and vice versa, it may also contribute to quality of life decrease and restriction of democratic freedoms. Our goal is to understand how new technologies can shape the wellbeing of urban citizens and their ability to exercise the “right to the city”, defined by Lefebvre (1968) as freedom to make and remake our cities according to principles of democracy, equality and social justice. The growing popularity of the smart city idea means that we need to explore possible ways of avoiding negative side-effects of ICT implementation in smart cities worldwide.*

## 1. Introduction

The minitrack touches upon two important trends increasingly shaping our modern societies, namely the rise of information and communication technology (ICT) and growing urbanization. We posit that while ICT becomes an everyday tool for both policymakers and citizens of modern cities, we need to better understand the consequences of its fast-paced implementation on citizens' well-being and democratic freedoms.

This endeavor is particularly important in the view of the growing popularity of the idea of a smart city, which incorporates ICT to enhance the quality and performance of urban services in order to reduce resource consumption, wastage and overall management costs.

However, the technological development should not be treated as a goal in itself, but rather a tool to achieve better conditions for everybody, with citizens

needs and preferences as driving values [1] [2]. This way, new technologies can better shape the wellbeing of urban citizens and their ability to exercise their “right to the city”, defined by Lefebvre [3] as freedom to make and remake our cities according to principles of democracy, equality and social justice. More recently, scholars have also proposed a “digital right to the city” [4] [5] focused on growing digital and virtual aspects of exercising citizens' rights.

In this minitrack we discuss the consequences of technological developments in the context of urban policy-making as well as citizens' needs and quality of life. We develop the existing theoretical line of thought to advance the right to the smart city theory grounded in basic research and existing theoretical achievements.

The synergy of sociological and psychological theoretical concepts (like place attachment, social cohesion, digital citizenship, perceived technological threat) is a great platform to discuss the impact of technological innovations on democracy and power relations, as well as citizens' quality of life, ability for mobilization, participation and self-expression. This requires a study of values driving different models of smart city development and an analysis of included trade-offs.

## 2. Right to the city

The focal point of the proposed minitrack is the concept of the right to the city, understood as a basket of rights defining the citizenship status of urban dwellers. In the context of growing criticism of smart city ideology [1] [2] [6] it is vital to ask how the technological development of urban environment influences opportunities to exercise this right in modern cities around the globe.

The political expression of a right to the city can be described in terms of politically and spatially grounded urban citizenship [7] [8], realized through claim-making and participation in creating urban policies and planning of urban space: both physical and digital.

Focusing on the social underpinnings of a right to the city, we invited papers that assess the relations between ICT and the citizens' quality of life as well as employ psychological factors like belonging, place attachment or place identity and perceived technological threat [10] [11] [12].

### 3. The city and ICT

Our main area of interest – the city – is a physical space with certain qualities including high density of population, mobility, and intensive exchange of services, goods and ideas. City infrastructure enables technological development and innovation, creating spaces where digital solutions are implemented often as a response to problems generated by high density typical for urbanized areas. We observe first signs of city virtualization, with more and more services being mediated by ICT and an increasing number of exchanges occurring in digital space. This creates so-called mixed reality [13] or hybrid reality [14], where real and virtual worlds merge to produce new environments and visualizations where physical and digital objects co-exist and interact in real time. What emerges is a new intangible layer of information and processes in the city, often remaining beyond social control and too complex to apprehend by an individual.

However, the growing focus on a virtual city interface should not undermine the importance of physical space quality and accessibility for individual wellbeing and community livability [15]. Therefore, an important link has to be made between the use of new technologies and their effects in terms of life quality, social cohesion and democracy.

Although social scholars and technological visionaries repeatedly bring up the question, we still know very little about the unintended consequences of ICT development for such important areas of life like community cohesion and personal wellbeing. Most research has neglected citizens' perspectives on technological changes in the city, focusing instead on economical and political aspects [16] [17].

Our minitrack adds to the existing body of knowledge through basic research and theoretical efforts focusing on the impact of technological progress on socio-political context of modern cities.

### 4. Minitrack contributions

Our first paper, by Laura Sartori and Davide Arcidiacono is titled "In Search for (the Lost) Smartness in the Evolution of the Smart Cities: Consumers or Citizens?" and addresses the issue of evolution of the smart city concept. Authors

distinguish three phases in the development of smart cities: prodromal, sharing city and post-pandemic smart city. In the analysis authors follow a modified Pardo and Nam approach which helps to structure the results in a convincing manner.

Focusing on the role of smart citizens and the right to the city concept, the authors point out to the important trends in the smart city development. The paper includes an interesting discussion both on the smart city model as well as smart resident as its political subject. The paper develops a systematic reflection about the future of smart cities at the time of COVID-19, analyzing the trends made visible by the worldwide sanitary crisis.

The second paper, by Anna Wnuk and Tomasz Oleksy, titled "Place attachment and acceptance of smart city technologies", examine the role of different types of place attachment (traditional and active emotional bonds with the city) in predicting the acceptance of smart city technologies. The research is sustained by a wide set of hypotheses covering a range of elements that may play a role in the intersection between place attachment and acceptance of technology. The paper is timely, as it also included the COVID-19 surveillance technologies in the analysis.

Findings indicated that active place attachment predicted more favorable attitudes towards enabling technologies, which make peoples' life easier during the pandemic. On the other hand, the traditional place attachment was positively associated with acceptance of surveillance technologies regarding everyday monitoring and anti-COVID-19 measures. Interestingly, the relationship between place attachment and acceptance of future technologies was partially mediated by the use of the existing smart city technologies.

### 5. Acknowledgments

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