

## Accepted Manuscript

Virtual interactive innovations applied for digital urban transformations.  
Mixed approach

Mónica Sanchez-Sepulveda, David Fonseca, Jordi Franquesa,  
Ernesto Redondo



PII: S0167-739X(18)31337-2  
DOI: <https://doi.org/10.1016/j.future.2018.08.016>  
Reference: FUTURE 4400

To appear in: *Future Generation Computer Systems*

Received date: 31 May 2018  
Revised date: 13 July 2018  
Accepted date: 7 August 2018

Please cite this article as: M. Sanchez-Sepulveda, et al., Virtual interactive innovations applied for digital urban transformations. Mixed approach, *Future Generation Computer Systems* (2018), <https://doi.org/10.1016/j.future.2018.08.016>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Mónica Sanchez-Sepulveda †  
Technology Enhanced Learning Research Group  
La Salle, Ramon Llull University  
08022 Barcelona, Spain  
monica.sanchez@salleurl.edu

David Fonseca  
Technology Enhanced Learning Research Group  
La Salle, Ramon Llull University  
08022 Barcelona, Spain  
fonsi@salleurl.edu

Jordi Franquesa  
Barcelona School of Architecture,  
Polytechnic University of Catalonia  
08028 Barcelona, Spain  
jordi.franquesa@upc.edu

Ernesto Redondo  
Barcelona School of Architecture,  
Polytechnic University of Catalonia  
08028 Barcelona, Spain  
ernesto.redondo@upc.edu

## **Virtual interactive innovations applied for digital urban transformations. Mixed Approach.**

### **Abstract**

The cities in which we live are changing rapidly, presenting the scenery to debate future visions of transformative designs and its impact on the city. In order to take advantage of the changes and opportunities offered by the inclusion of digital technologies, an accommodation of the digital transformation into the visualization of Urbanism is required. It is a challenge for organizations and society to question the *status quo* and experiment often. The discussion about the increasing integration of digital technologies in urban spaces involves a number of questions relating to the complex processes of transformation that impact cities, like economic, social, political, and environmental. The main goal of the paper is to present the use of Digital Transformation in processes of urban design through technological innovation in which the diverse forms of active citizenship operate from below as agents of innovation, inclusion and social development. The results showed that it is possible to empower Digital Transformation – as for example the use Augmented and Virtual Reality (AR/VR) systems in collaborative urban design – to improve public motivation, implication, and satisfaction in urban decision-making processes.

**Keywords: digital transformation; virtual reality; urbanism; participatory design; mixed method assessment**

### **1 Introduction**

In Urbanism there are four significant themes: (1) is for and about people; (2) the value and significance of 'place'; (3) operates in the 'real' world, with its field of opportunity constrained and bounded by economic (market) and political (regulatory) forces; and (4) the importance of design as a process [1]. It

Download English Version:

<https://daneshyari.com/en/article/11030127>

Download Persian Version:

<https://daneshyari.com/article/11030127>

[Daneshyari.com](https://daneshyari.com)