Research 4

Urban Digital Transformation

Entrance to deal with future urbanization

Technological advances for the 21st century imposed a series of global and regional digital transformations on urban planning in what is known as the digital revolution, which in turn reflected on all urban features of cities from the distribution of land uses to the urban composition of buildings.

In rapid digital transformations of international and Arab cities, smart cities have become one of the countries' goals for the development of sustainable urban communities. The research is concerned with the problem of digital transformation of urbanization and the countries are moving towards the creation of smart cities in line with the requirements of the age to achieve the goals of integrated and sustainable development The paper aims to study and analyze the principles and concepts of dealing with the digital transformation of urban features to propose an entrance to a mechanism for the expression of the architecture of smart cities. It deals with the digital transformations of urban and the impact of these transformations on activities and uses in cities and their reflection on the emergence and disappearance of functional elements at the urban level. And how to take advantage of the potential of the information revolution in the face of current and emerging reality problems.

The paper addresses this problem through three axes: Axis I. Its implications for jobs and utilization of the second axis aim to identify the mechanisms and principles of dealing with urbanization through the comparative analysis of two global and local urban models of digital urbanization. The third axis is applied to evaluate the mechanisms and principles of digital transformation of urbanization by applying them to a local model of urbanization to reach an entry point to deal with smart cities that contribute to smart strategies for future urbanization. The proposed approach deals with smart cities through three levels: the first at the level of components and elements of the city, the second at the level of activities and uses of the city, and the third at the level of technology used. The proposed entrance should be built to deal with smart cities using urban models and multidimensional models: using spatial analysis systems for city elements.