

Concept of Smart City Readiness Assessment Framework: Smart Implementation Readiness Model for Integrated City Environments (SIRMICE)

Jacek Jakubczak

Faculty of Economics University of Maria Curie-Skłodowska in Lublin, Poland
jacek.jakubczak@mail.umcs.pl

Kamila Piskorz

Faculty of Economics University of Maria Curie-Skłodowska in Lublin, Poland
kamila.piskorz@mail.umcs.pl

Justyna Litwinek

Faculty of Economics University of Maria Curie-Skłodowska in Lublin, Poland
justyna.litwinek@mail.umcs.pl

Grzegorz Grela

Faculty of Economics University of Maria Curie-Skłodowska in Lublin, Poland
grzegorz.grela@mail.umcs.pl

Abstract

This article aims to propose a conceptual framework for assessing Smart City (SC) implementation readiness - Smart Implementation Readiness Model for Integrated City Environments (SIRMICE), based on criteria assigned to the dimensions of Infrastructure, Public Services (including administration and policy), and Socio-economic. Unlike other tools, in addition to the SCIC layer (Smart City Implementation Capabilities), it includes a SCIE (Smart City Implementation Eagerness) layer.

This paper presents the ideas and assumptions and reviews the available tools for assessing SC implementation readiness. Based on the results of a systematic review of the scientific literature, a proposal for a research model conception is developed, which assumes the influence of external and internal factors on the readiness and ability to implement the SC concept.

The proposed research tool concept aims to create a model of cities' readiness to implement SC solutions, taking into account various aspects related to technology, society, economics, environment, ethics, law, and society and will enable the identification of the gap between SC implementation eagerness and capabilities.

Keywords: smart city, conceptual framework, readiness assessment, mayors and municipal leaders, measurement tools, urban innovation, SIRMICE