

ABSTRACT

The subject of this dissertation concerns the use of urban foresight research to integrate all dimensions of the smart city concept (*smart economy, smart mobility, smart environment, smart people, smart living, smart governance*) in the process of fostering smart city development with the involvement of key stakeholder groups.

The approach adopted to develop a methodology of supporting smart city development based on the urban foresight concept was motivated by four main premises: (i) the identified barriers to the implementation of the smart city concept in the existing initiatives; (ii) the deficiency in multidimensional and holistic perception of the smart city; (iii) the lack of examples of methodical inclusion of urban foresight in the process of integration of different dimensions of the smart city in creating its development; (iv) the weak identification of stakeholders in relation to the different dimensions of the smart city. This reflection led to the identification of the following research gaps: (i) the lack of methodology of the development of the smart city concept to integrate all its dimensions and to include a wide range of urban stakeholders in this process; (ii) insufficient identification of stakeholders and the needs of different groups in relation to the different dimensions of the smart city concept. The attempt to fill the knowledge gaps was reflected in the research problem posed for solution in the dissertation: How to use the idea of urban foresight to integrate all dimensions of the smart city concept in the process of fostering smart city development?

An implicit answer to the above question is the research hypothesis validated in the dissertation: Integration of all dimensions of the smart city concept in the process of creating smart city development may be achieved by simultaneously involving key stakeholder groups and including them in the urban foresight research process.

Therefore, the main objective of the thesis was to develop a methodology of creating smart city development using urban foresight that enables integration of all dimensions of smart city with the involvement of key stakeholder groups. Reaching the main goal of the thesis was connected with achieving specific cognitive and methodological goals which include: (i) development of the assumptions for the integration of smart city dimensions in the socialized process of supporting city development; (ii) identification of stakeholder groups necessary for the accomplishment of the objectives defined within the framework of particular smart city dimensions; (iii) development of the assumptions for the selection of urban foresight research methods in the process of fostering city development in accordance with the smart city concept;

(iv) development of urban foresight research methodology in the process of fostering city development in accordance with the smart city concept; (v) *ex ante* evaluation of the methodology of supporting smart city development based on foresight studies.

The following qualitative and quantitative methods were used in the research process: literature review, bibliometric analysis, document study, expert panels, survey– CAWI, logical analysis and construction, statistical methods.

The research conducted in the dissertation allowed to: (i) describe the current state of knowledge on the smart city concept; (ii) identify and determine the importance of stakeholders in supporting smart city development and its individual dimensions; (iii) define the assumptions and the scope of foresight research in the process of smart city formation; (iv) develop the author's concept of a methodology of supporting smart city development; (v) operationalize the methodology and (vi) develop the concept of a basic smart city development roadmap.

The results presented in the dissertation are summarized by an expert *ex ante* evaluation of the developed methodology. Positive evaluations of the methodology in the aspects of methodological grounding, participation, feasibility, usability, anticipation, and communicativeness enabled the affirmative validation of the research hypothesis and thus the solution to the research problem.