Title

An analysis of Slovenian urban municipality service and social connectivity digital maturity.

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Abstract

Rapid technological progress and its concomitant need for new skills, ways of working and collaborating, and dynamic socio-economic change have highlighted the main challenge facing Europe's urban municipalities, the part of the public sector closest to a nation's citizens and their needs, which is how to digitally transform to optimally support and promote broader development in the digital domain to realise digital transformation's benefits, including user-friendly and citizen-centred services, increased quality of life and better business environments. Slovenia's urban municipalities are relatively small in terms of employees, financial resources and infrastructure. Other than Ljubljana and Maribor, Slovenia's urban municipalities have populations of less than 50,000 inhabitants, and pursuant to this, their proximity and population migration, both permanent and daily for work and education, it is necessary to develop digital solutions and services for citizens in a coordinated fashion, as evidenced by the rapid introduction and implementation of digital solutions, urban municipalities cooperation, and knowledge and experience exchange in the fight against COVID-19.

A comprehensive self-assessment of digital maturity is the first step towards successful digital transformation, and this first step was taken by Slovenia's urban municipalities within the framework of the European Commission's Intelligent Cities Challenge (ICC), the EU's bespoke support programme for coaching, facilitation and inspiration, and successor to its Digital Cities Challenge.

Our research examines the digital maturity self-assessment undertaken by eleven Slovenian municipalities within the ICC's framework for government services and social connectivity, which includes digitizing public services, digital connectivity, open data and initial result analysis. Further to research evidencing that municipality size is one of the major potential explanatory factors for why municipalities differ in terms of digital transformation implementation and adaptation, we investigated the potential impact of urban municipality population size on digital maturity, utilising the ICC's fixed assessment methodology.

One would a priori expect larger municipalities to be digitally more mature than smaller ones because they have more resources at their disposal, but our results prove that this is not the complete picture. There is a relationship between municipality size and digital maturity, including open data sharing and security, but not entirely in the manner expected.

Points for Practitioners

Urban municipalities must identify local strengths, priorities and needs, including performance and digital maturity assessment, and define strategic goals and implementation roadmaps to optimally implement digital transformation, and increase city administration, decision-maker and citizen awareness of the opportunities and benefits digitally-enabled solutions offer, such as better parking management.

This paper focuses on this challenge in the hope that our analysis and findings pertaining to urban municipality digital maturity self-assessment will better enable others to compare development and determine the next steps to be taken on the path to optimal local government digital transformation.

Our analysis of the results has shown that municipality size does not influence overall digital maturity but does influence individual digital maturity indicators, highlighting the need to develop more detailed and accurate individual digital maturity indicators. Although the influence of municipality size on overall digital maturity could not be demonstrated, its partial influence on individual sets is important when endeavouring to achieve efficient digital transformation.

Key words

Digital maturity, digital transformation, Intelligent Cities Challenge, urban municipalities, size