

## Determinants of the digital divide inside the region: assessment of settlement websites (case of the Republic of Karelia)

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### Abstract

**Subject/Topic.** In our study, we shed some light on the issues of assessment the intraregional digital divide in Russia. Due to the lack of required statistical data at the municipal level, we propose to use the assessment of the information content of the websites of municipal authorities as an indicator of the level of digitalization of the territory. **Goals/Objectives.** This study aims to answer the following research question: what factors influence the intraregional digital divide. **Methodology.** The study covers 106 out of 109 municipalities of the Republic of Karelia. We determined a website content rating for each municipality, collected social and economic data and information about the heads of settlements. We used linear and logistic regression to assess the impact of the collected indicators on the rating value. **Results.** Our findings outline existing limitations of official statistics for assessing the digital divide within the region. We have created a methodology for assessing the level of website content, based on the principles of relevance and continuity of the information presented. We have proved the influence of population size on the level of intraregional digitalization. The results of our econometric exercise did not confirm the influence of factors of average wages, the type of settlement, the distance to the regional center by road and the number of employees of local self-government bodies. We found that the presence of work experience in the local administration and the presence of higher education at the head of the settlement increases the probability of obtaining higher rating grades by the municipal website. **Conclusions/Significance.** The study showed the presence of territorial disparities in the assessment of the content of websites in the Republic of Karelia. The municipalities that received the highest ranking are located along the western border of the Republic, and are not concentrated near the regional center. The proposed approach can be used for rapid identification of the territories that are lagging behind in terms of digitalization in order to conduct field studies to identify in detail the causes of this lag and develop measures to reduce the digital gap. **Application.** The developed methodology allows us to identify the best examples of maintaining both entire municipal websites and their individual sections, on the basis of which it is possible to form a catalog of best practices, taking into account the possibilities of implementation by local authorities.

**Keywords:** *digital divide gap, digital divide, websites of municipalities, Republic of Karelia.*

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