# Quantifying the Second-Level Digital Divide on Sub-National Level with a Composite Index

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**Abstract :** The paper studies the second-level digital divide (the one defined by the way how digital technology is used in everyday life) between regions of the Russian Federation. The paper offers a systemic review of literature on the measurement of the digital divide; based upon this it suggests a composite Digital Life Index, that captures the complex multi-dimensional character of the phenomenon. The model of the index studies separately the digital supply and demand across seven independent dimensions providing for 14 subindices. The Index is based on Internet-borne data, a distinction from traditional research approaches that rely on official statistics or surveys. Regression analysis is used to determine the relative importance of factors like income, human capital, and policy in determining the digital divide. The result of the analysis suggests that the digital divide is driven more by the differences in demand (defined by consumer competencies) than in supply; the role of income is insignificant, and the quality of human capital is the key determinant of the divide. The paper advances the existing methodological literature on the issue and can also inform practical decision-making regarding the strategies of national and regional digital development.

**Keywords :** digital transformation, second-level digital divide, composite index, digital policy, regional development, Russia
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