

# The relation between digitalization and regional development in Romania

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**Abstract:** Digitalization is an essential element for the development of today's society, in the context of actual geo-political challenges. Moreover, the COVID-19 pandemic has accelerated the process of digitalization, offering new perspectives on sustainable and inclusive development. From the point of view of the regional approach, digitalization can have an important impact on the level of territorial development and on the reduction of economic and social inequalities. This paper proposes to identify the relationship between a series of indicators specific to digitization and regional GDP, with the help of panel models. The objective of the research is to estimate the relationship between GDP and two indicators specific to digitalization: online commerce and broadband internet infrastructure, the level of the eight development regions in Romania. Dependency modelling, based on econometric equations, offers the possibility of highlighting the way in which the two indicators of the digital economy contribute to the growth of GDP per capita. This analysis aims to illustrate the fact that broadband technologies and the increase in the number of people using the Internet for commercial purposes can have a positive impact on the growth of the regional economy. The results of the analysis highlighted the direct relationship of the indicators between the three variables related to the digitalization process at the level of Romania's regions and the strong influence of broadband internet and online trade on GDP per capita, proving that any growth among independent variables will lead to an increase amongst the dependent variables.

**Keywords:** Digitalization, GDP, regional inequalities, Panel model, OLS model.

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