

# ANALYSIS OF THE DIGITAL DIVIDE OF THE LITHUANIAN REGIONS POPULATION IN THE CONTEXT OF THE EUROPEAN UNION

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**Introduction.** There are significant differences between individuals, groups, regions, and countries in terms of accessing and sharing information. Differences in the dissemination of information and information and communication technologies (ICT) are a major cause of unequal development of countries and their regions and social exclusion, especially digital divide. Only by identifying differences in the use of ICT between individuals, regions or countries successful policymaking can be possible.

There are social and economic differences between the regions in Lithuania. That is why it is relevant to identify the digital divide in the regions when formulating and implementing regional policy.

**The problem** of this research is a digital divide between Lithuanian regions; therefore, it is important to identify it by creating an index and determine the position of Lithuanian regions among the regions of the European Union (EU) countries.

**The aim of research** – to study the digital divide in Lithuanian regions in the context of EU regions.

**Objectives** – digital divide in the regions of Lithuania and other EU countries.

**The methods of the research** - comparative and logical analysis of scientific literature and factor analysis. The survey uses Eurostat 2021 data on household use of ICT by EU region.

## Theoretical background

Mr Martin indicates that the concept of the "digital divide" has been introduced to describe the phenomenon when some people are already using ICT and others still do not have access to them and at the same time cannot take advantage of the potential facilities which they offer.

According to the scientific literature, it can be stated that the 'digital divide' is generally defined as the distinction between those who are included in the 'digital age' and those who are not, that means, between those who have access to information, ICT, and their devices, and those who do not, leaving plenty of room for interpretations.

H. Ono and M. Zavodny distinguish two levels of digital divide:

a) The international digital divide which is the gap between countries, regions, or continents.

b) Internal digital divide which is the digital divide in a certain country or its regions. At this level, the digital divide means huge differences in access to ICT achievements between subjects of the same political community and at regional level.

One of the research directions about the digital divide focuses on quantitative measurements of digital divide and its development. This type of research aims to establish relative positions (mostly national) in the field of ICT uptake, and composite indices are developed.

M. R. Vicente ir A. J. López note that research focuses mainly on the analysis of the digital divide between countries, but research at regional level is limited, mainly due to a lack of data. However, there are scientists who argue that not only the individual characteristics of individuals but also the characteristics of the region in which a person lives are important in explaining the digital divide.

## MAIN RESULTS AND CONCLUSIONS

- The results of this study showed the extent of the phenomenon of digital divide in the regions of Lithuania. The digital divide is smaller in the capital region than in the region of Central and Western Lithuania. However, the index for both regions is negative. The capital region shows all the higher indicators than the region of Central and Western Lithuania. The largest differences are in the AUPI and AINV areas and the smallest difference is in the AIND.
- The regions of Lithuania are distinguished by a sufficiently high level of digital divide among the regions of the 209 EU member states. Both regions of Lithuania are in the second half of the ranking.
- The study revealed the need to reduce the digital divide in the regions of Lithuania. This must be taken into account in regional policymaking in the field of ICT development.

## Main findings

Table 1. Variable codes and their description, (%)

Code	Variable
HAIH	Households with access to the internet at home
HBRA	Households with broadband access
IUIA	Individuals who used the internet, frequency of use and activities (including every day)
IAHW	Individuals who accessed the internet away from home or work
ISPU	Individuals who ordered goods or services over the internet for private use
IUPA	Individuals who used the internet for interaction with public authorities

Table 2. The digital divide of Lithuanian regions in 2021 in the context of EU regions

Rank	Region	Score	Rank	Region	Score
1	UKI London	1.56	177	LT02 Vidurio ir vakaru Lietuvos regionas	-0.66
2	NL23 Flevoland	1.54	200	ITF2 Molise	-2.02
3	SE11 Stockholm	1.50	201	ITF5 Basilicata	-2.05
4	DK01 Hovedstaden	1.45	202	ITF4 Puglia	-2.08
5	NL31 Utrecht	1.44	203	ITG1 Isole	-2.16
6	NL32 Noord-Holland	1.44	204	BG42 Yuzhen tsentralen	-2.17
7	DK03 Syddanmark	1.41	205	EL6 Kentriki Ellada	-2.19
8	NL21 Overijssel	1.41	206	BG34 Yugoiztochen	-2.31
9	FI1B Helsinki-Uusimaa	1.40	207	BG32 Severen tsentralen	-2.4
10	DK04 Midtjylland	1.39	208	ITF6 Calabria	-2.48
133	LT01 Sostinės regionas	-0.37	209	BG31 Severozapaden	-3.11

Table 3. Comparison of digital divide index between Lithuanian regions in 2021

Rank	Region	HAIH	HBRA	IUIA	IAHW	ISPU	IUPA
1	UKI London	99	98	100	96	96	60
133	LT01 Sostinės regionas	87	86	86	71	62	66
177	LT02 Vidurio ir vakaru Lietuvos regionas	80	80	80	69	50	54
209	BG31 Severozapaden	66	66	60	58	27	17

Fig. 1. Comparison of digital divide index between Lithuanian regions in 2021

