



Information and Communication Technologies as Drivers of Economic Development and Public Economic Perceptions: The Case of Kosovo

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<http://dx.doi.org/10.47814/ijssrr.v9i7.3510>

Abstract

Digital transformation is emerging as a key factor of contemporary economic development, particularly in transition economies, where information and communication technologies (ICTs) influence both economic performance and public perceptions of economic development and stability. This study aims to analyze the role of ICTs as drivers of economic development and as shaping factors of public economic perceptions, focusing on the case of Kosovo. The methodology is based on a quantitative empirical approach, using a structured Likert-scale survey, while the data are analyzed through descriptive and interpretative methods. The findings indicate the existence of a positive relationship between ICT usage, increased economic efficiency, and the strengthening of positive perceptions of economic development. However, the full impact of ICTs remains conditioned by institutional factors and public economic communication. The study offers theoretical contributions and practical implications for digital development policies in Kosovo.

Keywords: *Information and Communication Technologies; Economic Development; Economic Perceptions; Transition Economies; Kosovo*

1. Introduction

Digital transformation has assumed a central role in contemporary processes of economic development, influencing not only productivity growth and economic efficiency but also the way societies perceive development, institutional performance, and long-term economic prospects. In this context, information and communication technologies (ICTs) have become structural factors of development, particularly in transition economies, where digitalization is viewed as a means of overcoming structural and institutional constraints.

In transition economies, the role of ICTs is not limited solely to the technical modernization of economic processes but also extends into the social and perceptual sphere, influencing how citizens and economic actors assess economic development, market functioning, and the effectiveness of public policies. Public economic perceptions constitute an important dimension of development, as they directly affect economic confidence, consumer behavior, investment readiness, and civic participation in economic processes.

Kosovo, as a transition economy with pronounced structural and institutional challenges, represents an appropriate case study for analyzing the interaction between ICTs, economic development, and public economic perceptions. Digitalization processes in Kosovo have advanced primarily in specific sectors; however, their impact on economic development and public perceptions remains uneven and influenced by institutional, political, and social factors.

Within this framework, this paper aims to analyze the role of information and communication technologies as drivers of economic development and as shaping factors of public economic perceptions, focusing on the case of Kosovo. The study seeks to contribute to the existing literature by linking the economic dimension of digitalization with the perceptual and communicative dimension, as well as by providing empirical evidence that may serve as a basis for the formulation of digital and economic development policies in the context of transition economies.

2. Theoretical Framework and Literature Review

Digital transformation and economic development have become inseparable concepts in contemporary analyses of economic growth, particularly in the context of transition economies. Information and communication technologies (ICTs), beyond serving as supportive technical tools, represent structural factors that directly affect productivity, institutional efficiency, innovation, and economic competitiveness (Castells, 2010). Within this framework, economic and social literature treats ICTs as catalysts of development, emphasizing their role in reconfiguring traditional models of production, distribution, and economic communication.

2.1 The Theoretical Link between ICTs and Economic Development

Theoretical approaches to economic development have increasingly integrated the technological dimension as a key component of long-term growth. Endogenous growth theory argues that investments in technology, knowledge, and human capital generate sustainable growth through increased productivity and innovation (Romer, 1990). In this context, ICTs function as mechanisms that accelerate knowledge accumulation and improve market efficiency.

Empirical studies have demonstrated that the diffusion of ICTs has a positive impact on gross domestic product growth, market expansion, and the improvement of the business climate, particularly in developing and transition countries (Qiang, Rossotto, & Kimura, 2009). However, the literature emphasizes that the effect of ICTs on economic development is not automatic; rather, it depends on the quality of institutions, the level of human capital, and the capacity of the state to design and implement effective digital transformation policies (Acemoglu & Robinson, 2012). From the perspective of the network society, Castells (2010) argues that ICTs create new economic structures based on information networks, in which access to technology and the ability to use it determine the economic position of individuals, organizations, and states. This approach places ICTs at the center of contemporary economic development analysis.

2.2 Economic Perceptions as an Accompanying Variable of Development

In addition to objective economic indicators, contemporary literature increasingly emphasizes the importance of public economic perceptions as an essential component of economic development. Citizens' perceptions of economic conditions, growth prospects, and trust in economic institutions directly influence economic behavior, consumption, investment, and social stability (Stiglitz, Sen, & Fitoussi, 2009).

Within this framework, ICTs play a dual role: on the one hand, they contribute to tangible improvements in economic efficiency and public services; on the other hand, they shape public perceptions of economic development through digital communication, institutional transparency, and access to economic information (Brynjolfsson & McAfee, 2014). The digitalization of services and the expansion of online institutional communication contribute to creating a sense of economic progress, even in cases where structural changes are still at early stages.

Various studies indicate that in transition economies, economic perceptions often evolve in parallel with digital developments rather than strictly following traditional macroeconomic indicators, making this variable particularly important for empirical analysis (OECD, 2019).

2.3 The Context of Transition Economies and the Case of Kosovo

Transition economies are characterized by structural, institutional, and social transformations, where the legacy of previous systems intersects with efforts toward integration into the global economy. In such contexts, ICTs are viewed as opportunities to overcome structural delays and accelerate economic development through the digitalization of public administration, markets, and the private sector (World Bank, 2020).

The case of Kosovo presents a particularly interesting context for analysis due to its character as a young transition economy with a young population, a relatively high level of digital technology usage, but significant structural challenges in economic and institutional development. In this regard, studying the role of ICTs in economic development and in shaping public economic perceptions provides an important perspective for understanding the mechanisms through which digital transformation affects the country's socio-economic reality. Existing literature suggests that ICTs represent a key factor of economic development in transition economies; however, their impact is realized through interaction with public perceptions, institutions, and development policies. This theoretical framework serves as an analytical foundation for constructing the conceptual model and empirically testing the relationships between ICTs, economic development, and public economic perceptions in the case of Kosovo.

3. Conceptual Framework and Research Hypotheses

The conceptual framework of this study is built on the premise that information and communication technologies (ICTs) constitute a structural factor of contemporary economic development, particularly in transition economies, where digital transformation simultaneously affects economic performance and the way citizens perceive the country's economic conditions and prospects. In this sense, ICTs are not treated merely as technical infrastructure, but as a socio-economic mediating mechanism that links objective economic development with the public's subjective economic perceptions.

In economic and socio-institutional literature, economic development is conceptualized as a multidimensional process encompassing productivity growth, improved market efficiency, enhanced institutional transparency, and expanded opportunities for economic participation (Stiglitz, Sen, &

Fitoussi, 2009). Within this context, ICTs contribute to economic development by reducing transaction costs, improving access to information, increasing competition, and strengthening the innovative capacity of the economy (World Bank, 2016; OECD, 2020).

An essential dimension of this process is related to public economic perceptions, which represent citizens' subjective assessments of economic conditions, economic security, employment opportunities, and future development prospects. Numerous studies show that economic perceptions directly influence individual economic behavior, trust in institutions, and socio-economic stability (Akerlof & Shiller, 2009; Eurostat, 2021). In transition economies, where structural uncertainty is more pronounced, economic perceptions are often shaped not only by macroeconomic indicators, but also by the level of public communication, transparency, and digital access to economic information.

Within this framework, the study conceptualizes ICTs as the independent variable, economic development as the dependent variable, and public economic perceptions as a mediating variable through which the impact of ICTs on economic development becomes more comprehensive and intelligible. This conceptualization is grounded in institutional economics and digital economy approaches, according to which technology influences the economy not only through material indicators, but also through the way information is transmitted, interpreted, and perceived by the public (Castells, 2010; Brynjolfsson & McAfee, 2014).

Based on this theoretical and conceptual framework, the study formulates the following research hypotheses:

H1: The use and development of information and communication technologies have a positive and significant impact on economic development in Kosovo.

H2: Information and communication technologies positively influence public economic perceptions among citizens in Kosovo.

H3: Public economic perceptions positively influence the assessment of economic development and economic prospects in Kosovo.

H4: Public economic perceptions play a mediating role in the relationship between information and communication technologies and economic development in Kosovo.

These hypotheses aim to empirically test not only the direct impact of ICTs on economic development, but also the mechanisms through which this impact is mediated by public economic perceptions, thereby offering a more comprehensive approach to analyzing the role of technology in transition economies.

4. Research Methodology

4.1 Methodological Approach

This study is based on a quantitative (empirical) research approach, with the aim of analyzing the role of information and communication technologies (ICTs) in economic development and in shaping public economic perceptions in the Republic of Kosovo. The quantitative approach was selected due to its ability to measure respondents' attitudes, perceptions, and evaluations in a structured and comparable manner, as well as to identify general patterns at the societal level (Creswell, 2014). In terms of research design, the study adopts a descriptive-analytical character, as it seeks, first, to describe the level of digital

technology usage across different sectors in Kosovo and, second, to analyze the relationship between ICT usage, public economic perceptions, and economic development. This combination enables a balanced understanding between empirical reality and theoretical interpretation of the data, without aiming to establish direct cause–effect relationships.

Part I: Basic Information

1. Which sector do you currently work in?

- ☐ Public administration — 39%
- ☐ Private sector — 41%
- ☐ Civil society / NGO — 9%
- ☐ Financial / banking sector — 3%
- ☐ Information Technology (IT) industry — 8%

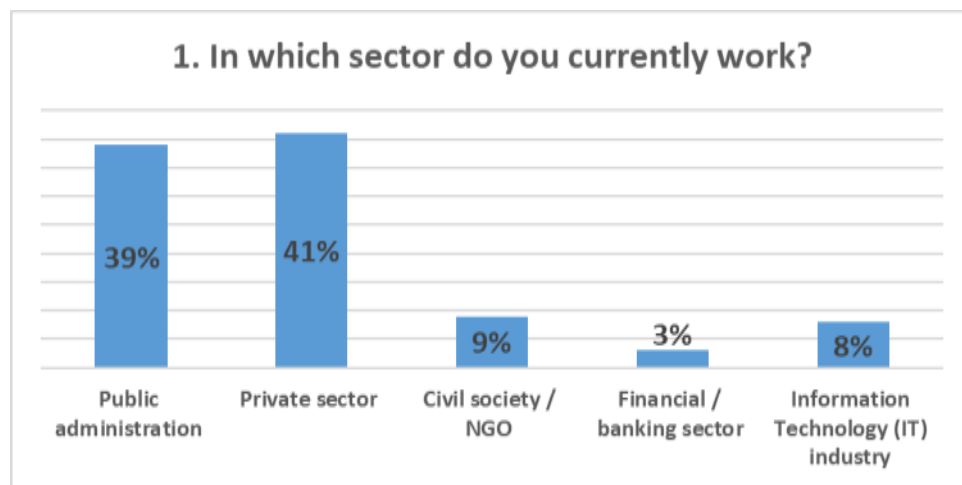


Figure 1. Analysis of respondents' employment sector

Demographic data from 122 respondents show a relatively balanced distribution across Kosovo's main economic and institutional sectors, thereby strengthening the analytical validity of the findings. The private sector accounts for the largest share of the sample (41%), reflecting its growing role in digitalization processes, ICT adoption, and their influence on economic efficiency and competitiveness. A similarly high proportion of respondents comes from public administration (39), a key sector for the design and implementation of digital and development policies, as well as for increasing transparency and economic trust.

Civil society is represented at 9%, providing perspectives on the social dimension of economic development and the impact of ICT on public information and perceptions. Representation from the financial and banking sector (3%) and the Information Technology industry (8%), although more limited, remains important for the analysis, given that these sectors are intensive users and carriers of the transformative potential of digital technologies in Kosovo's economy.

2. Your position in the organization is:

- ☐ Administrative employee — 62%
- ☐ Specialist / professional — 18%
- ☐ Middle manager — 14%
- ☐ Senior manager / executive — 8%
- ☐ IT specialist — 8%



Figure 2. Analysis of demographic data

Interpretation of these findings indicates that the study sample is clearly dominated by administrative employees (62%), suggesting that the results primarily reflect the perspective of actors directly involved in the operational implementation of organizational processes and in the daily use of digital technologies. The presence of specialists/professionals (18%) and middle managers (14%) ensures analytical and coordinating perspectives on the role of information technologies, linking the operational use of ICT to planning, organizing, and supervising economic activities. These categories contribute to understanding how technology influences not only individual work but also organizational efficiency at a structural level.

Meanwhile, senior managers/executives (8%), together with IT specialists (8%), represent the strategic and technical levels of decision-making and digital implementation. Although numerically less represented, these groups are essential for interpreting the findings, as they offer perspectives on the role of ICT in long-term development, innovation, and the strategic orientation of organizations.

3. Your professional experience (in years) is:

- ☐ Less than 2 years — 13%
- ☐ 2–5 years — 27%
- ☐ 6–10 years — 44%
- ☐ More than 10 years — 16%

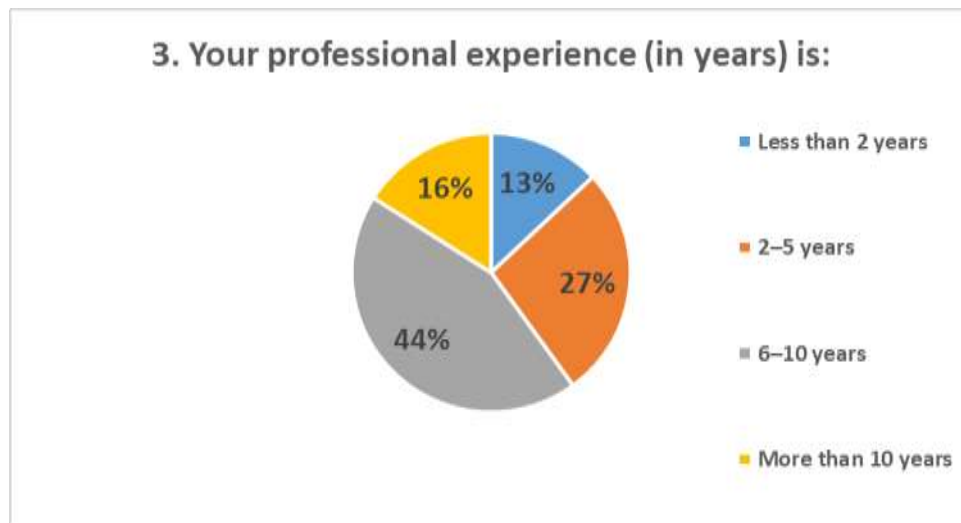


Figure 3. Basic information

Analysis of professional experience indicates that the sample is characterized by a relatively high level of work experience, which increases the credibility of the empirical findings. The largest group of respondents (44%) reports 6 to 10 years of professional experience, representing individuals who have moved beyond the initial career stage and possess consolidated knowledge of economic, institutional, and digital processes. A considerable proportion (27%) reports 2 to 5 years of experience, reflecting a relatively new but already integrated category within the digital work environment. Meanwhile, 16% of respondents have more than 10 years of professional experience, contributing a long-term perspective on economic and technological transformations in Kosovo. Only 13% report less than 2 years of experience, indicating that the sample is not dominated by individuals in early career stages. Overall, this experience structure suggests that the reported perceptions regarding ICT's role in economic development and public economic perceptions are grounded in real and stable professional experiences, thereby strengthening the analytical validity of the study.

4. How often do you use digital technologies in your work?

- ☐ Every day — 85%
- ☐ Several times a week — 12%
- ☐ Rarely — 3%
- ☐ Almost never — 0%

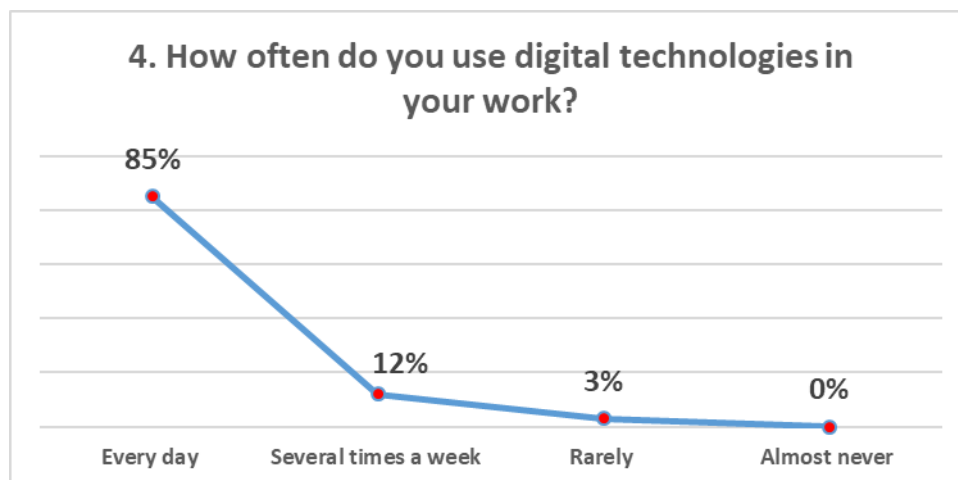


Figure 4. Use of digital technology at work

The data indicate a very high level of integration of digital technologies into respondents' everyday work. The vast majority (85%) report using digital technologies daily, demonstrating that ICT has become an important component of professional and institutional functioning within Kosovo's economic and organizational context. This high level of usage suggests that work processes, communication, information management, and service delivery have already become closely dependent on digital platforms and tools.

A smaller proportion (12%) reports using digital technologies several times per week, indicating that even when not continuously engaged, digital technologies remain important for performing professional tasks. Only 3% use digital technologies rarely, and no respondent reported using them almost never. These findings confirm an advanced level of functional digitalization, providing a solid empirical basis for analyzing ICT's impact on economic efficiency, organizational productivity, and the shaping of public economic perceptions. The high frequency of use also suggests that respondents' perceptions of ICT's role are not merely theoretical but built on direct practical experience.

Part II: ICT Use (4 Likert-scale questions)

(Scale: 1 = Strongly disagree, 5 = Strongly agree)

5. My organization regularly uses digital platforms for work and communication.

1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
2%	6%	18%	35%	39%

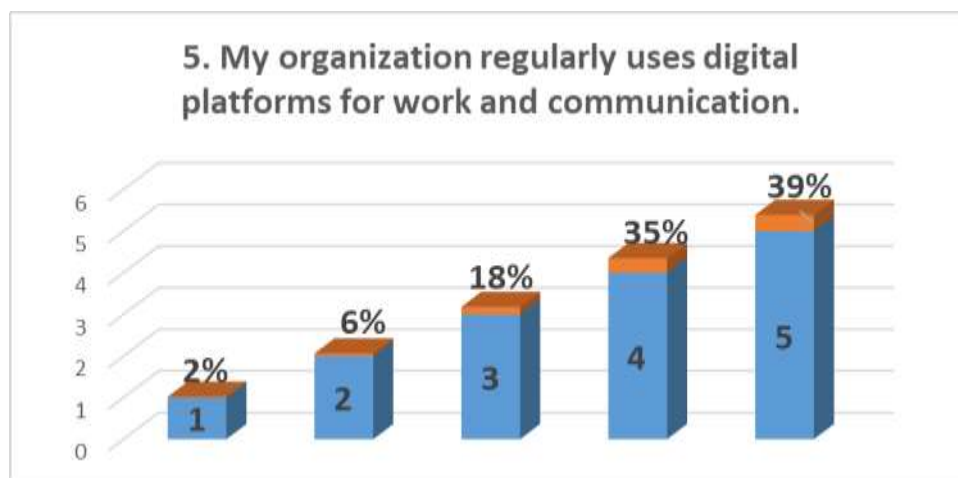


Figure 5. Regular use of digital platforms for work and communication

The results indicate a high level of institutionalization of digital platforms within respondents' organizations. In total, 74% of respondents selected "agree" or "strongly agree" (35% and 39%), suggesting that the use of digital platforms for communication and work has become standard practice in most organizations. Only 8% expressed disagreement, while 18% remained neutral. These findings suggest that digital infrastructure is widely present and functional, thereby creating the technological basis for a broader ICT impact on economic and organizational development.

6. Digital technologies have improved the efficiency of my work.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
4% 2% 16% 29% 49%

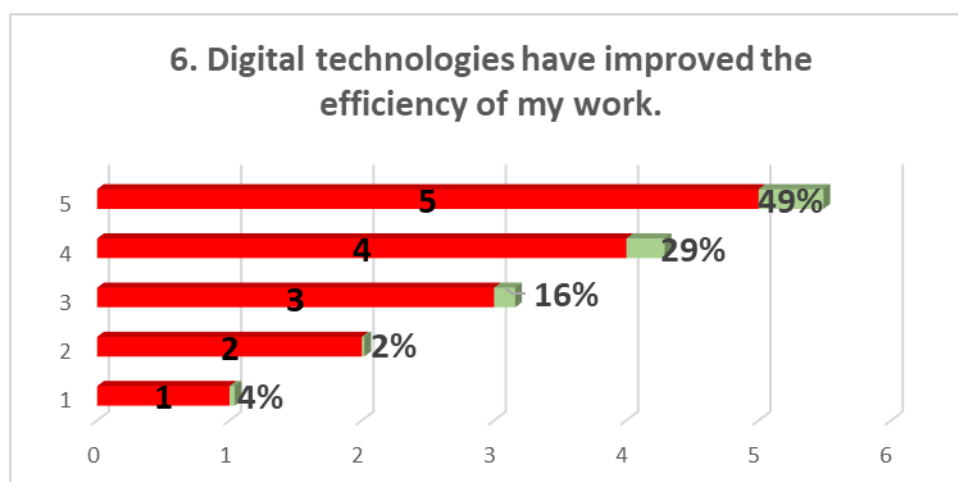


Figure 6. Perceived impact of digitalization on work efficiency

Interpretation of these findings indicates a predominantly positive perception regarding the impact of digitalization on work efficiency, while also highlighting nuances that should be considered in scientific analysis. The results show that a very large share of respondents evaluates digitalization as a factor that has positively affected their work efficiency. Specifically, 29% agree and 49% strongly agree with the statement, yielding a combined 78% with a clearly positive stance. This suggests that digital

technologies are perceived as functional instruments contributing to greater efficiency, process optimization, and improved work outcomes.

At the same time, 16% of respondents selected a neutral position, which may indicate partial or uneven use of digital technologies across different organizations, or reflect the absence of clear performance measures directly linked to digitalization. This category suggests that the positive impact of technology is not always immediate or uniform across organizational contexts. Conversely, a relatively small minority (6% in total: 4% strongly disagree and 2% disagree) expressed a negative view.

This may be related to factors such as resistance to change, insufficient training, technical difficulties, or the perception that digitalization increases administrative workload rather than reducing it.

7. ICT use has improved access to economic information and services.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
0.5% 1.5% 24% 34% 40%

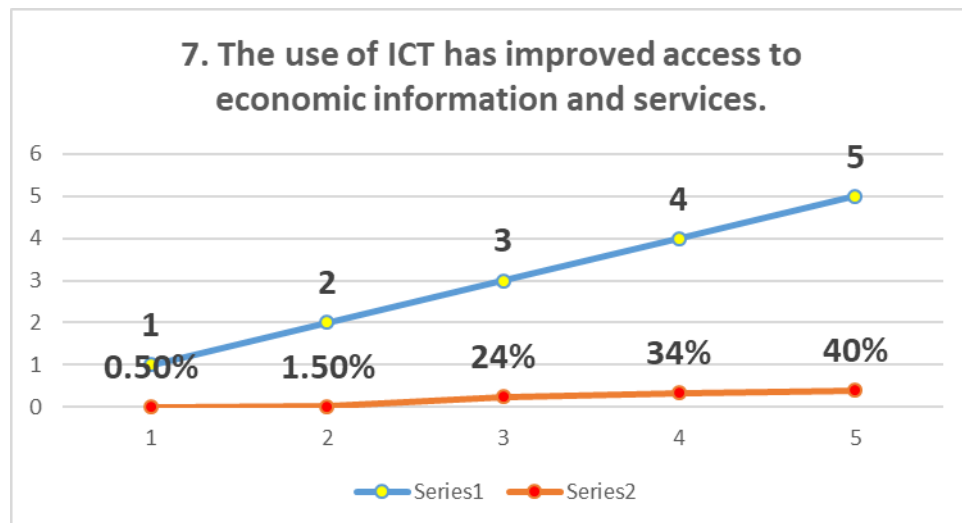


Figure 7. The impact of ICT on improving access to economic services

These findings indicate a highly positive assessment of ICT's role in improving access to economic information and services in Kosovo. A clear majority expresses strong agreement with this statement: 40% "strongly agree" and 34% "agree," totaling 74% of the sample. This suggests that ICT is widely perceived as a key instrument for facilitating access to economic information, public and private services, and market opportunities.

The 24% neutral responses may reflect differences in experience depending on sector, the organization's level of digitalization, or individual digital skills. Only 2% expressed disagreement (0.5% strongly disagree and 1.5% disagree), indicating minimal negative perceptions. Overall, these findings confirm that digitalization has played an important role in improving economic access by reducing informational barriers, increasing transparency, and facilitating interaction among citizens, institutions, and the market.

This positive perception supports the thesis that ICT acts not only as a driver of economic efficiency but also as a factor shaping more optimistic public perceptions about how the economy functions.

8. Digitalization has positively influenced the productivity of the organization where I work.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
1% 9% 21% 46% 23%

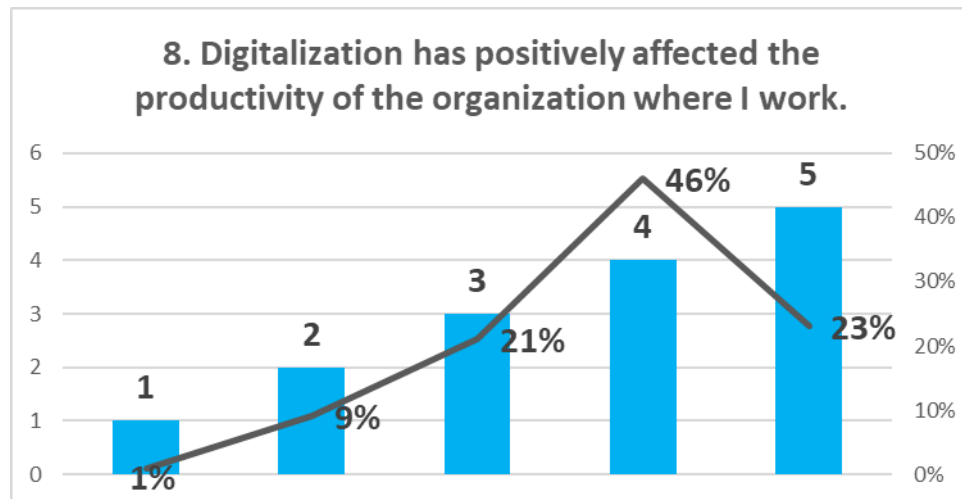


Figure 8. The impact of digitalization on organizational productivity

The results show that digitalization is widely perceived as having a positive effect on organizational productivity. A clear majority of respondents, 69% (46% agree and 23% strongly agree), state that digitalization has positively influenced the productivity of the organization where they work. This high level of agreement indicates that digital technologies have been functionally integrated into work processes and have contributed to improvements in efficiency, speed, and the organization of economic and administrative activities.

Meanwhile, 21% of respondents remain neutral, suggesting that the impact of digitalization on productivity has not been experienced in the same way across all organizations. This may relate to differences in the level of digitalization, organizational capacities, or the practical ways technologies are used. Only a small share (10% total: 1% strongly disagree and 9% disagree) expressed a negative stance, indicating that resistance or skepticism toward digitalization's productivity impact is relatively limited.

Part III: Economic Perceptions and Development (4 Likert-scale questions)

(Scale: 1 = Strongly disagree, 5 = Strongly agree)

9. Digital technologies contribute to Kosovo's economic development.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
5% 8% 21% 35% 31%

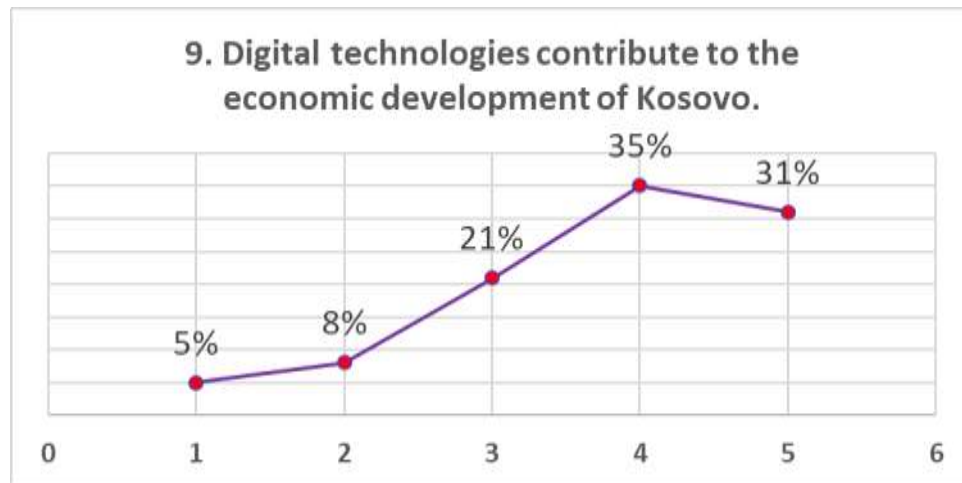


Figure 9. Contribution of digital technologies to Kosovo's economic development

Responses indicate a generally positive perception regarding the role of digital technologies in Kosovo's economic development. As reflected in the data, 66% of respondents agree or strongly agree that digital technologies contribute to economic development (35% agree; 31% strongly agree). This relatively high level of agreement suggests that most respondents perceive digitalization as a driver of economic growth, market modernization, and improved economic efficiency.

A share of 21% remained neutral, indicating that some respondents have not yet formed a clear position on the direct impact of digital technologies on economic development. This may be related to limited practical experience, sectoral inequalities in digitalization, or the absence of visible short-term economic outcomes.

On the other hand, 13% expressed disagreement or strong disagreement (8% and 5%), reflecting a certain level of skepticism about the transformative role of digital technologies. Such skepticism may stem from Kosovo's structural economic challenges, including limited advanced digital infrastructure, constrained human capacities, or public policies that are not yet fully consolidated in the field of economic digitalization.

10. Digitalization increases transparency and trust in economic institutions.

1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
3%	14%	27%	27%	29%

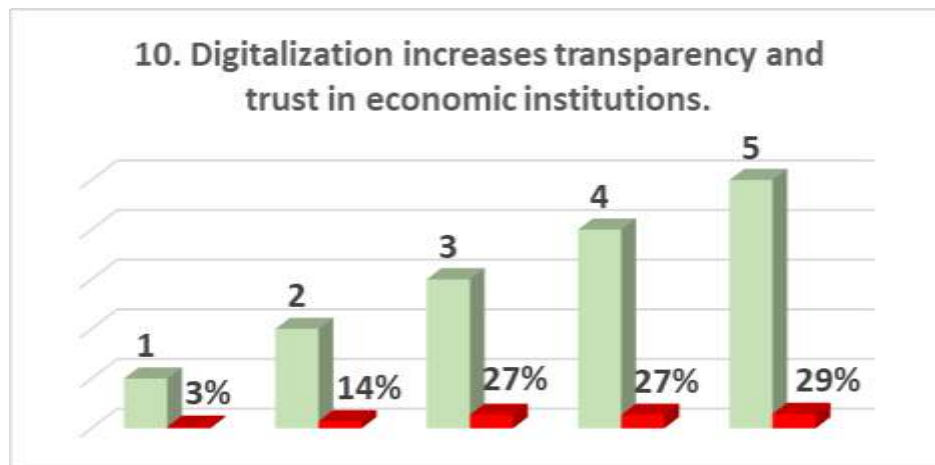


Figure 10. The role of digitalization in increasing transparency among economic actors

Responses regarding the impact of digitalization on transparency and trust in economic institutions show a generally positive, but not fully consolidated, perception. As the data indicate, 56% of respondents (27% agree; 29% strongly agree) believe that digitalization has increased transparency and institutional trust, meaning that more than half perceive technology as an important factor in improving relations between economic institutions and the public.

However, 27% remain neutral, while 17% express partial or full disagreement (14% and 3%). This distribution suggests that although digitalization can create enabling conditions for transparency, institutional trust does not automatically arise from technology alone. Trust also depends on other structural factors such as good governance, rule of law, institutional communication, and citizens' concrete experiences with economic institutions.

11. ICT use improves citizens' perceptions of the economic situation.

1 ☐ 4% 2 ☐ 21% 3 ☐ 39% 4 ☐ 19% 5 ☐ 17%

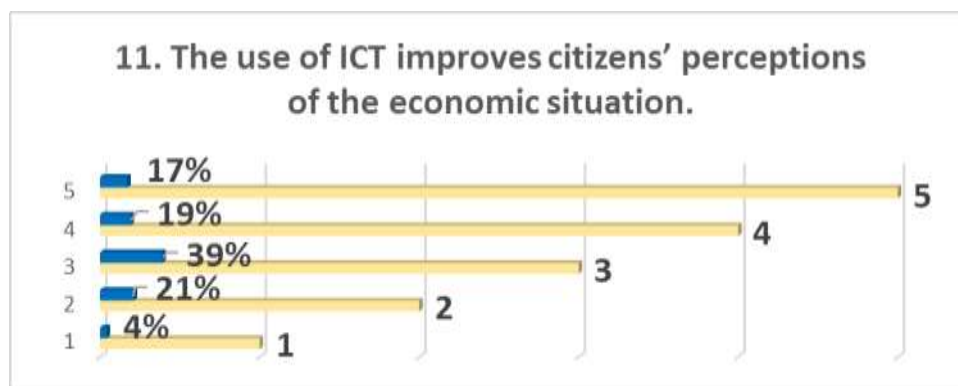


Figure 11. The impact of ICT on improving citizens' perceptions

Results indicate a predominantly neutral-to-positive stance regarding ICT's influence on improving citizens' perceptions of the economic situation. A substantial share of respondents (39%)

selected the neutral option (3), suggesting that ICT's impact on public economic perceptions is not always direct or immediate, but depends on other accompanying factors such as the economic context, public policies, and the level of institutional trust.

On the other hand, 36% (19% + 17%) agree or strongly agree that ICT use improves citizens' perceptions of the economic situation, reflecting a positive assessment of technology's role in enhancing information, transparency, and access to economic data. This supports the idea that ICT can contribute to shaping more informed and more rational public perceptions. In contrast, 25% (4% + 21%) expressed disagreement or low agreement, indicating that for some citizens, technology alone is insufficient to improve economic perceptions unless accompanied by concrete economic outcomes and improvements in real welfare.

12. Investments in technology are the basis for Kosovo's long-term economic growth.

1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
2.5% 12% 55.5% 18% 12%

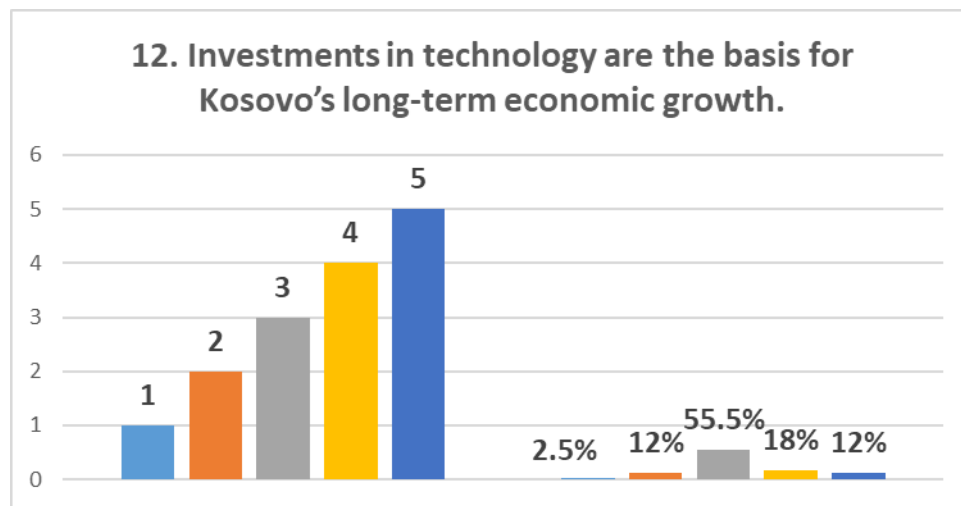


Figure 12. Investments in technology and long-term economic growth

Responses to the statement that investments in technology constitute the basis for Kosovo's long-term economic growth show a generally positive orientation, but with a pronounced level of neutrality. As the data indicate, 55.5% of respondents selected the neutral position (3), suggesting that a large portion acknowledges the importance of technology but is not fully convinced about its direct and long-term effect on the country's economic growth. By contrast, 30% (18% agree; 12% strongly agree) expressed a clearly positive stance, viewing technology as a fundamental factor for long-term economic development. This group reflects a strategic perception of technological investments, particularly in transition economies where innovation, digitalization, and technological capital are seen as instruments for raising productivity and competitiveness.

Conversely, 14.5% of respondents (12% strongly disagree; 2.5% disagree) expressed skepticism, signaling that investments in technology, in the absence of integrated development policies, structural reforms, and adequate human capital, may not automatically translate into sustainable economic growth.

Overall, these findings suggest that while there is general recognition of technology's role in economic development, confidence in its long-term effect remains conditioned by institutional, political, and social factors. This underscores the need for technological investments in Kosovo to be accompanied by clear development strategies, coherent public policies, and strengthened human capacities, so that their economic impact becomes tangible and sustainable.

4. Analysis of Empirical Results

This section presents the analysis and interpretation of the empirical results collected through an online questionnaire completed by 122 respondents from diverse economic and institutional sectors in Kosovo. The analysis focuses on ICT usage, its impact on efficiency and economic activity, and public economic perceptions regarding digital development and economic trust.

4.1 ICT Use in Kosovo's Economic Context

Empirical results show a very high level of digital technology use in respondents' professional activities. The vast majority report using digital technologies daily at work (85%), indicating that ICT has already become an indispensable component of economic and institutional functioning in Kosovo.

Regular use of digital platforms for work and communication is evaluated positively, with more than two-thirds expressing strong or complete agreement that their organizations routinely use digital technologies. This suggests that digitalization is no longer peripheral, but integrated into everyday practices across the public sector, private sector, and civil society.

4.2 The Impact of ICT on Efficiency and Economic Activity

The results indicate that digital technologies are widely perceived as factors that increase work efficiency and organizational productivity. A high percentage of respondents agree that ICT use has improved the efficiency of their individual work and has positively affected the productivity of their organizations.

These findings suggest that ICT serves not merely as a supportive technical tool, but as an economic instrument that directly influences process rationalization, reduces time costs, and increases the intensity of economic activity. In Kosovo's context, this highlights digitalization as a driver of economic modernization, particularly in a transition economy.

4.3 Public Economic Perceptions of Digital Development

Results related to economic perceptions show that most respondents hold a positive stance toward the role of digital technologies in Kosovo's economic development. More than half agree or strongly agree that digital technologies contribute to the country's economic development, while a smaller share remains neutral or skeptical.

Nevertheless, the data also reveal caution in public perceptions. For example, regarding ICT's impact on improving citizens' perceptions of the economic situation, the distribution of responses is more balanced, with a considerable share selecting a neutral position. This suggests that technology's influence on economic perceptions is not direct or automatic but mediated by other social, institutional, and political factors.

4.4 The Relationship between ICT and Economic Trust

An important dimension of the analysis concerns economic and institutional trust. Results show that a substantial share of respondents agree that digitalization increases transparency and trust in economic institutions; however, the level of agreement is not uniform.

This indicates that while digital technologies create conditions for transparency and accountability, economic trust depends not only on the presence of technology but also on how it is used, the quality of institutions, and citizens' real experiences with digital services. In this sense, ICT appears as an important prerequisite, but not a sufficient condition, for building long-term economic trust.

4.5 Statistical Interpretation of Results

From a descriptive statistical perspective, the results indicate a clear positive tendency in evaluating ICT's role in economic development and public economic perceptions, with a dominance of responses at levels 4 and 5 of the Likert scale for most key questions.

Response distributions show that ICT is perceived as a driver of efficiency and economic modernization, whereas its effects on subjective economic perceptions and institutional trust appear more moderate and complex. These results support the main hypotheses of the study, suggesting a positive relationship between ICT use and economic development, while also emphasizing the need for public policies that accompany digitalization with institutional and social reforms.

5. Discussion of Results

5.1 Interpretation of Findings in Relation to the Existing Literature

The empirical results of this study consistently confirm the main conclusions of contemporary scholarship regarding the role of information and communication technologies (ICTs) as structural factors of economic development and institutional transformation. The findings indicate that the majority of respondents agree that the use of digital technologies directly contributes to increased economic efficiency, improved access to information, and enhanced organizational productivity, which aligns with digital economy analyses emphasizing ICT's positive effects on economic growth and competitiveness (Castells, 2010; Brynjolfsson & McAfee, 2014).

In particular, the high levels of agreement concerning the impact of digitalization on transparency and trust in economic institutions support theoretical approaches that view technology as a tool for reducing information asymmetries and strengthening economic governance (Stiglitz, 2002). However, the presence of a non-negligible share of neutral responses suggests that positive perceptions of digitalization are not fully consolidated, reflecting a digital transformation process that remains under development in the context of Kosovo.

5.2 ICT as a Driver of Economic Development and Perceptual Stability

One of the most significant findings of the study concerns ICT's role not only as an objective economic factor but also as a shaper of public economic perceptions. The results show that respondents to a considerable extent associate the use of digital technologies with improvements in perceptions of the economic situation and long-term development prospects. This finding reinforces the argument that economic development is not measured solely through macroeconomic indicators, but also through how citizens perceive stability, transparency, and the direction of the economy (Akerlof & Shiller, 2009).

In this sense, ICT emerges as a perceptual stabilizing factor, influencing the strengthening of economic trust and generating more positive expectations about the future. Nevertheless, the fact that a portion of respondents remain neutral or skeptical regarding the role of technological investments as the basis for long-term growth suggests that the benefits of digitalization are not yet distributed evenly across all segments of society and the economy.

5.3 The Specificities of Kosovo's Context

The study's results should be interpreted in light of Kosovo's structural and institutional specificities as a transition economy. Kosovo is characterized by a relatively recent institutionalization of digital policies, sectoral inequalities in technology use, and persistent challenges in building institutional trust. In this context, the perception of ICT as a driver of economic development reflects potential and expectations more than a consolidated economic reality.

The findings indicate that digitalization is perceived more strongly at the individual and organizational levels than at the macroeconomic and strategic levels. This suggests that public policies in Kosovo have succeeded in establishing a functional baseline for ICT use, yet have not produced a stable public narrative framing digitalization as a long-term development project. This outcome is consistent with the literature on transition economies, which emphasizes that technology's developmental impact depends substantially on institutional capacity and the coherence of development policies (Rodrik, 2007).

5.4 Theoretical Implications for Information Science and the Digital Economy

From a theoretical perspective, this study contributes to the integration of information science and the digital economy by providing empirical evidence that ICT functions simultaneously as technological infrastructure and as a social mechanism shaping public economic perceptions. The findings support an interdisciplinary approach according to which digital development should not be analyzed solely in technical or economic terms, but also through its communicative and perceptual dimensions.

The study strengthens the argument that economic perceptions represent an important accompanying variable in analyzing ICT's impact, and that technology's developmental role materializes through interaction among information, trust, and public expectations. In this sense, the results enrich theoretical scholarship by offering an interpretative model suitable for transition economies and for contexts where digitalization remains uneven and fragmented.

6. Conclusions and Recommendations

6.1 Summary of Key Findings

The purpose of this study was to analyze the role of information and communication technologies as drivers of economic development and public economic perceptions in Kosovo. The empirical findings demonstrate a broad consensus that ICT contributes to economic development and improves institutional transparency, although its impact on citizens' direct perceptions of the economic situation remains more moderate.

The results confirm that digitalization is perceived as an important foundation for long-term economic growth, while also indicating that this perception is conditioned by institutional performance and economic governance.

6.2 The Study's Scholarly Contribution

The theoretical contribution of this study lies in the construction of an analytical framework linking ICT, economic development, and public perceptions, treating digitalization as a socio-economic and communicative process.

The empirical contribution consists in providing original data from the Kosovo context—an area that remains underexplored in international literature on the digital economy and public economic perceptions.

6.3 Recommendations for Public Policy

Based on the study's findings, it is recommended that public policies in Kosovo focus on developing inclusive digital strategies that link technological investments with tangible economic development and transparent public communication. Digitalization should be accompanied by clear mechanisms of transparency and economic accountability, so that its benefits are perceived more directly by citizens.

It is also recommended to invest in strengthening the digital capacities of public administration and the private sector, as well as improving public economic communication through digital platforms, with the aim of increasing trust and perceptual economic stability.

6.4 Study Limitations and Directions for Future Research

This study has several limitations, including the sample size and the use of primarily descriptive analysis, which restricts the ability to test causal relationships. Future research may apply inferential analyses, regression models, or longitudinal studies to explore more deeply the impact of ICT on economic development and public perceptions.

In addition, comparative studies with other countries in the region would contribute to further enriching the literature on transition economies and digital governance.

REFERENCES

- Castells, M. (2010). *The rise of the network society* (2nd ed.). Wiley-Blackwell.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- Laudon, K. C., & Laudon, J. P. (2020). *Management information systems: Managing the digital firm* (16th ed.). Pearson Education.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading digital: Turning technology into business transformation*. Harvard Business Review Press.
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies*. W. W. Norton & Company.

World Bank. (2020). *Digital economy for development: Kosovo country diagnostic*. World Bank Group.

European Commission. (2021). *Digital economy and society index (DESI) 2021: Western Balkans*. Publications Office of the European Union.

OECD. (2019). *Going digital: Shaping policies, improving lives*. OECD Publishing.
<https://doi.org/10.1787/9789264312012-en>

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