



Policy Brief

Digital Transformation in the Western Balkans

September 2024



This Policy Brief presents a comprehensive analysis of the digitalisation landscape in the Western Balkans (WB), addressing various dimensions including ICT infrastructure, skills, governance models, legal frameworks, eGovernment initiatives, and user experience. As the WB undergo a significant transition toward digitalisation driven by globalisation, technological advancements

and the EU integration process, understanding the current state of digitalisation in the WB is crucial for policymakers, stakeholders, and businesses.

Based on individual interviews, research, and outcomes from the Policy Dialogue Conference in Sarajevo (2023), the Policy Brief summarises the state of digital transformation in WB economies, showcases examples of best practices in each WB economy, identifies weaknesses and areas requiring improvements, and proposes potential solutions and recommendations.

But it's not just a Brief; it suggests action. Recognising the improvements in managing the digital transformation process and the need for clear leadership as instrumental for accelerating the digitalisation process, the Brief advocates for establishing new mechanisms in the WB region, such as dedicated institutions for digitalisation, like those established in Albania and Serbia. These mechanisms could facilitate better strategic planning for digitalisation, attract top experts and enhance cooperation between policymakers, businesses, and citizens.

Furthermore, the Policy Brief highlights the importance of leveraging best practices within each WB economy in digitalisation of public services, infrastructure, digital education, and businesses, often surpassing the EU average. These success stories offer valuable insights for aligning and accelerating digital transformation efforts across the WB.

However, persistent challenges remain despite progress in developing essential technical and supportive infrastructure and fostering a functional ecosystem.

These Challenges include the need to:



adopt missing legislative components



further expand technical infrastructure to facilitate a more robust implementation of digitalisation initiatives



improve in managing the digital transformation process



adopt new mechanisms that could facilitate better strategic planning for digitalisation.

To address these challenges, the Policy Brief underscores the importance of aligning with the EU Acquis, fulfilling the obligations of Chapter 10 - Digital Transformation and Media, and aligning with the Digital Compass for 2030 objectives.



The Key Recommendations are divided into six areas.



1) Strategic Prioritisation and Governance

- Recognise digitalisation as a critical priority and fully implement the digital-by-default principle
- Ensure robust political support and put in place clear strategies, solid policies, and targeted investments
- Establish new mechanisms for managing digital transformation and attracting top experts
- Strengthen coordination and cooperation mechanisms among all institutions responsible for inclusive digital transformation and innovation.

2) Legal and Regulatory Framework

- Enhance the legal and regulatory framework in alignment with EU directives.

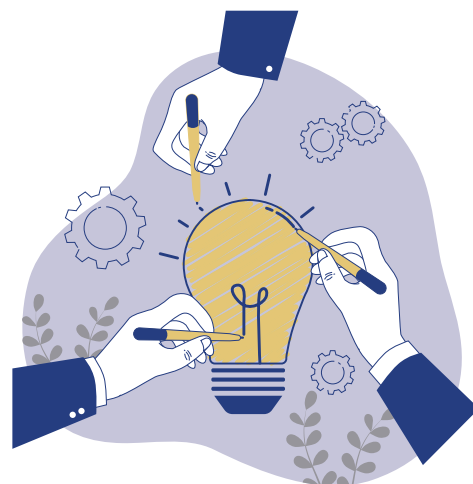


3) Inclusive Digital Infrastructure and Services

- Explore the potential of emerging technologies, such as AI, Blockchain, Internet of Things
- Prioritise digital literacy programmes within the agendas of the WB economies
- Improve current Electronic Identification (eID), eSignature and Public Key Infrastructure solutions and implement the Single Sign-On (SSO) system; complete transposition and implementation of the Electronic Identification and Trust Services (eIDAS); integrate all public sector websites and online services into the SSO framework
- Enhance technical infrastructure, promote the once-only principle, and improve data interoperability and sharing
- Enhance the accessibility and usability of online services, providing citizens and businesses with a convenient and efficient way to access government services through one-stop portals.

4) Monitoring and EU Support

- Strengthen the measurement and monitoring of strategic goals
- Enhance monitoring of the benefits realised from EU investments in digital transformation.



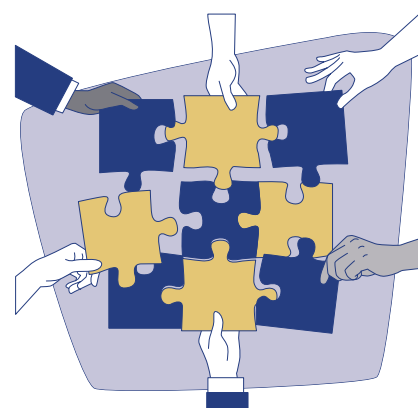
5) Support for Businesses and IT Industries

- Support the digital transformation of businesses by facilitating their adoption of cutting-edge technologies such as cloud computing, big data analysis, and AI
- Improve the data collection process to support effective, evidence-based policymaking
- Foster collaboration between businesses and governments
- Develop better strategies for engaging domestic successful innovation and IT companies in digitalisation efforts
- Finance digital growth by introducing venture capital investments.



6) European Collaboration and Learning from Best Practices

- Engage in European partnerships
- Learn from best practices of individual WB economies.



By implementing these recommendations and learning from best practices, the WB economies can expedite digitalisation initiatives, effectively navigate the challenges and opportunities of the digital age and unlock growth and innovation potential while ensuring inclusivity and sustainability.

Best Practices

The WB economies should draw valuable lessons from notable best practices achieved in each economy.

Albania

Albania's advancements in the digitalisation of public services and improved management of digital transformation serve as noteworthy examples for other Western Balkans economies.

Other WB economies can draw valuable lessons from Albania's progress by improving the management of the digital transformation: introducing a new mechanism similar to Albania's National Agency for Information Society, prioritising the digitalisation of public services and establishing similar platforms to streamline administrative processes. Additionally, Albania's proactive approach to digital skills development and cybersecurity strategy could serve as a commendable example.



Bosnia and Herzegovina

Bosnia and Herzegovina is performing well in digital skills and digital education with a level above the Western Balkans average.

Other WB economies can gain valuable insights from BiH's proactive approach to prioritising investments in digital skills development and enhancing coordination and interoperability. Adopting similar strategies can improve their digital readiness and foster economic growth through digitalisation.



Kosovo*

Kosovo's advancements in investing in digital infrastructures, particularly achieving 100% broadband access in all urban and rural areas, serves as a noteworthy example for other Western Balkan economies.

Other WB economies can draw valuable lessons from Kosovo's proactive approach to prioritising investment in digital infrastructure. By improving broadband access in urban and rural areas, enhancing connectivity, and facilitating the interoperability of digital services across agencies on government level, such as Kosovo's case with its 'Government Gateway', they can enhance their digital capacities and spur economic development.



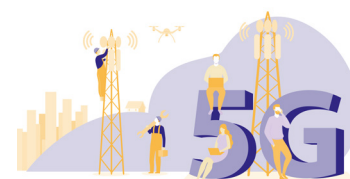
* This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

Montenegro

Montenegro's advancement in digital infrastructure development and establishment of high standard connectivity infrastructure, characterised by widespread adoption of high-speed broadband and 5G services, serve as noteworthy examples for other Western Balkan economies.

Other WB economies can draw valuable insights from Montenegro's strategic approach to digital infrastructure investment and prioritisation.

Montenegro has set a high standard in connectivity infrastructure, boosting extensive coverage of Fixed Very High Capacity Network (VHCN) and Fiber-to-the-Premises FTTP, Fiber-to-the-Premises, as well as widespread adoption of high-speed broadband, and successful rollout of 5G services. Furthermore, Montenegro's initiatives promoting electronic information sharing and achieving high adoption rates of e-invoices could serve as models for other WB economies to emulate in their digital transformation efforts for businesses.



North Macedonia

North Macedonia's advancements in the digital public services, surpassing the Western Balkans average, and the proactive adoption of cutting-edge technologies, such as big data, cloud computing, and AI, by enterprises, serve as noteworthy examples for other Western Balkan economies.

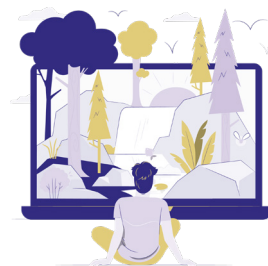
Other WB economies can derive valuable insights from North Macedonia's strategic approach to integrating emerging technologies into their economic sectors. By fostering an environment conducive to innovation and technological advancement, they can enhance competitiveness, drive economic growth, and position themselves as regional leaders in the digital age. These efforts can serve as models for other WB economies to emulate in their digital transformation efforts to achieve economic growth.



Serbia

Serbia's comprehensive approach to digital transformation, characterised by proactive investment in digital skills, robust digital infrastructure, advancements in the digitalisation of public services, and improved digital transformation management, serve as noteworthy examples for other Western Balkan economies.

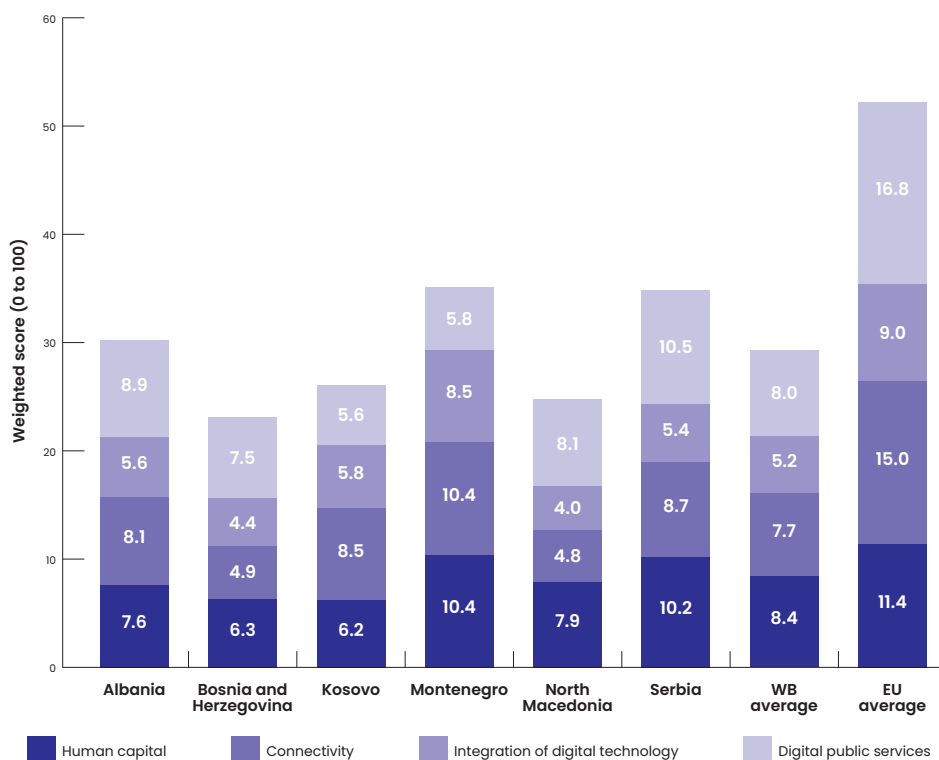
Other WB economies can draw valuable lessons from Serbia's comprehensive approach to digital transformation, focusing on proactive investment in digital skills with the ICT sector becoming a prominent branch of the economy, and investment in robust digital infrastructure and cybersecurity sets a best practice model for the entire WB region. Additionally, Serbia's exploration of emerging technologies like AI and blockchain to introduce innovation in public services offers valuable insights for other WB economies. Furthermore, introducing a new mechanism for improving digital transformation management, similar to Serbia's Office for Information Technologies and Electronic Government, could serve as a commendable example for other WB to efficiently navigate the complexities of the digital transformation.



Where do the WB stand on this Pathway to implementing the Digital Agenda?

In assessing the WB’s progress toward implementing the Digital Agenda, it is essential to consider key indices such as the Digital Economy and Society Index (DESI), the United Nations E-Government Survey, and the World Bank GovTech Maturity Index.

Figure 1: DESI indicators to monitor the progress relative to the EU towards the 2030 targets. Adapted from: Regional Cooperation Council. (2022). Western Balkans Digital Economy Society Index. <https://www.rcc.int/pubs/159/western-balkans-digital-economy-society-index-wb-desi-2022-report>. Accessed 23 August 2024.



Final Remarks

By fully embracing digital technologies and improving the legal and regulatory framework, WB economies can improve efficiency, competitiveness, and digital readiness.

Furthermore, fostering collaboration among institutions responsible for digital transformation and innovation is essential for successful implementation. Exploring emerging technologies and investing in digital literacy programmes are essential for building a prosperous and inclusive digital future.

Additionally, integrating advanced digital technologies and improving data collection processes will support evidence-based policymaking and drive the region’s digital transformation journey forward.

Collaborative prioritisation of digital transformation is essential for unlocking the WB’s socio-economic potential and ensuring a prosperous future. This requires effective cooperation among policymakers, citizens, and businesses to overcome challenges and seize opportunities for sustainable growth.

Adopting best practices and implementing mechanisms for learning lessons from successful digital transformation initiatives is crucial for accelerating progress in the WB.

By studying successful examples within and beyond the region and actively incorporating lessons learned into future strategies, the WB can enhance their digital transformation efforts and achieve greater success in navigating the challenges and opportunities of the digital age.

This Policy Brief is an executive summary of the Policy Report available here:



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Strengthening Research and Innovation in the Western Balkans: The POLICY ANSWERS project

POLICY ANSWERS is a strategic initiative funded by the European Commission through the Horizon Europe project “R&I POLICY making, implementation ANd Support in the WEStErN BalkanS”. The project focuses on enhancing research and innovation (R&I) policymaking and governance systems in the Western Balkans, while also addressing aspects of education, culture, youth, and sports. By providing essential support to the region’s development, POLICY ANSWERS plays a crucial role in strengthening the Western Balkans’ potential for successful participation in regional and multilateral research and innovation activities.

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