

Global Perspectives on Digital and AI Legislation: A Comparative Study of Data Protection, AI Governance, and Healthcare Innovations with a Focus on Romania

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Abstract. *Digital and artificial intelligence (AI) technologies are reshaping governance, requiring adaptive regulatory frameworks to ensure data privacy, digital identity security, and AI ethics. This study examines global approaches to AI and data governance, focusing on the European Union's (EU) General Data Protection Regulation (GDPR) and AI Act, compared to regulatory structures in the United States (US). Romania serves as a case study to assess national implementation challenges and sector-specific impacts, particularly in healthcare. Using a mixed-methods approach combining legislative analysis, comparative study, and sectoral case examination, the research highlights key takeaways: Romania's progress in AI-driven healthcare solutions, the necessity of tailored digital infrastructure investments, and the role of government ordinances in ensuring compliance. Policy recommendations emphasize public-private collaboration, regulatory adaptation, and targeted sectoral strategies to enhance Romania's AI governance while aligning with EU standards.*

Keywords: digitalization, legislation, Data Protection, AI Governance, Romania, Digital Transformation, healthcare, innovation.

Introduction

Digital transformation has redefined how countries regulate personal data, medical data, digital identity, and artificial intelligence (AI). In the European Union, the General Data Protection Regulation (GDPR) and the AI Act serve as regulatory cornerstones, ensuring data privacy and ethical AI deployment. By contrast, the USA adopts a more fragmented approach, while Africa and Asia are rapidly advancing frameworks for data and AI governance. Romania has closely aligned with EU regulations but faces unique challenges in applying these policies across its healthcare and digital sectors. This study investigates how Romania aligns with EU standards, particularly in the healthcare sector, highlighting successful innovations in AI-driven diagnostics and telemedicine, as well as barriers in implementing centralized health data systems.

The subject is crucial due to the global impact of digital and AI technologies, especially in a world governed by challenges derived from demographic changes or sustainability-related issues (Petrescu, Bac and Zgura, 2011; Saseanu and Petrescu, 2011; Grosu and Constantin, 2013; Grosu and Dinu, 2016; Amicarelli et al., 2021; Grosu, 2024). As these technologies evolve, they require the creation and adaptation of regulatory frameworks to protect data privacy, to support digital identity, and to ensure ethical AI use.

The research question is: How can countries effectively govern data protection and AI use in the context of rapid digital transformation, and what lessons can be learned from the diverse regulatory approaches of different regions and countries like Romania?

Literature review

The technological revolution has the potential to completely change industries and societies and to bring a contribution to their development, especially in case of those highly confronted with profound challenges derived from conflicts, ageing, migration, or sustainability (Grosu, 2016). The extant literature on data protection and AI governance reveals a dynamic and rapidly evolving landscape. Key areas of focus include:

GDPR and EU's Regulatory Model: Scholars have analyzed the impact of the GDPR on data protection practices within and outside the EU (Wachter, S. 2018; Floridi et al., 2018). Some argue that the GDPR's principles-based approach and extraterritorial reach offer a robust model for global data governance, while others highlight challenges in enforcement and cross-border data flows (Cate, 2018; Leenes, 2018).

AI Ethics and Regulation: The literature on AI ethics and governance is growing with a focus on principles like fairness, transparency, and accountability (Floridi & Cows, 2018; Jobin et al., 2019). There is debate on the appropriate level of regulation, with some advocating for flexible, self-regulatory approaches and others calling for stricter legal frameworks (Cath, C et al, 2018, Mittelstadt, 2019).

Comparative Regulatory Approaches: Several studies compare data protection and AI governance models across different regions, highlighting the diversity of approaches and their implications (Cath, 2018; Cath, 2020). This research underscores the importance of considering cultural, economic, and political factors in shaping effective regulatory frameworks.

Digital Transformation and Governance: The literature on digital transformation emphasizes the need for adaptive governance models that can keep pace with technological change (Li, C et al, 2022). This includes balancing innovation with ethical and societal considerations.

Gap in the Literature

While the existing literature provides valuable insights into data protection and AI governance, there is a gap in research that specifically examines the interplay between these areas in the context of rapid digital transformation in diverse regional and national contexts. This paper aims to address this gap using the following methodology

Methodology

This research adopts a mixed-methods approach to comprehensively evaluate AI and data governance across different regulatory environments. The methodology consists of three interconnected components:

1. Legislative Analysis

A critical examination of primary legal documents and official regulations was conducted to assess the regulatory frameworks governing AI and data protection. The study reviewed key legislative instruments such as the General Data Protection Regulation (GDPR) and the proposed AI Act from the European Commission. Additionally, equivalent regulations in other jurisdictions were analyzed, including the Health Insurance Portability and Accountability Act (HIPAA) from the

United States and the California Consumer Privacy Act (CCPA). The European Health Data Space (EHDS) initiative was also examined to understand its implications for AI governance in Romania's healthcare sector. These legislative sources were retrieved from official government and institutional websites to ensure accuracy and credibility

2. Comparative Analysis

A comparative framework was employed to evaluate the differences between regulatory approaches in the European Union and the United States, with a specific focus on Romania's integration of EU policies. The comparison assessed factors such as compliance requirements, ethical considerations, enforcement mechanisms, and the extent to which regulatory models impact AI-driven innovation. The study prioritized Romania's alignment with GDPR and the AI Act, analyzing how national legislation has adapted these standards in practice.

3. Descriptive Sectorial Case Study: Romania's Healthcare system

To assess the real-world implications of AI and data governance, a sectoral case study was conducted focusing on Romania's healthcare sector. This analysis explored AI-driven innovations such as telemedicine platforms and AI-assisted diagnostics, evaluating their effectiveness under existing regulatory constraints. The study examined government ordinances and policies influencing AI adoption in healthcare, including initiatives led by the Romanian Ministry of Health and professional medical associations. Furthermore, public-private collaborations in AI implementation were analyzed to identify both facilitators and barriers to technological adoption.

Research Hypotheses

The research aims to test the following hypotheses:

1. *Harmonized Frameworks*: The EU's centralized approach (GDPR, AI Act) offers a more effective model for data protection and AI governance compared to the U.S.'s fragmented approach.
2. *Regional Adaptation*: Tailoring governance policies to specific national contexts is critical for successful implementation.
3. *Sector-Specific Considerations*: Healthcare and other sectors require specialized regulatory frameworks to balance privacy, ethics, and innovation.
4. *Collaboration and Investment*: Strong governance relies on partnerships between public and private sectors, coupled with investments in digital infrastructure and innovation incentives.

Results and discussions

This research contributes to a more nuanced understanding of data protection and AI governance and offers actionable insights for policymakers and practitioners.

The next comparative table (Table 1) provides an overview of regulatory systems, highlighting both successes and challenges in different regions.

Table 1. Digital Transformation and Governance

Aspect	European Union (EU)	United States (US)	Africa	Asia
Data Protection and Privacy Legislation	GDPR: Comprehensive and harmonized regulation protecting personal data. Key features: access and erasure rights, data portability, and fines for non-compliance (up to 4% of global revenue). Sets a global benchmark (Kolfschooten, 2022). EHDS (2025): Focuses on cross-border health data sharing and research.	Fragmented Regulation: Sector-specific laws like HIPAA (healthcare) and CCPA (California). Limited to certain states/sectors, causing inconsistencies and regulatory gaps. Innovation-friendly but lacks cohesion (Murdoch, 2021).	Emerging Frameworks: GDPR-inspired laws in countries like Kenya and South Africa. Enforcement challenges due to weak infrastructure and resource limitations (Townsend et al., 2023).	Rapid Advancements: Countries like Japan and Singapore enforce robust GDPR-like data protection. China emphasizes data sovereignty while prioritizing economic growth (Alami et al., 2020).
Digital Identity	EUDI Initiative: Centralized, interoperable digital identity platform across EU member states. Features a secure digital wallet for personal and medical data, enabling seamless cross-border interactions (Foulsham, 2019; Brînzac, 2023).	Fragmented Digital ID Systems: Lacks a national framework; state-specific or private sector solutions dominate, leading to a decentralized approach.	Limited Progress: Digital ID adoption remains in infancy. Infrastructure deficits limit development in many countries.	Advanced Systems: South Korea and Japan have well-established, secure digital ID frameworks for financial and healthcare interactions (Ke & Sudhir, 2022).
AI Legislation and Healthcare	AI Act: Risk-based AI classification with stringent regulations for high-risk sectors like healthcare. Promotes transparency, safety, and accountability. EHDS supports AI-driven healthcare innovations (Andrea, 2020). Romania has begun AI adoption for diagnostics.	AI Bill of Rights: Non-binding guidelines emphasizing ethical AI usage and minimizing bias in healthcare applications. No comprehensive federal AI law yet (Gilbert et al., 2023).	Early Stages: Few AI-focused healthcare policies. Efforts are hampered by technological gaps and lack of regional alignment.	Ethics and Efficiency: Japan and Singapore lead with AI healthcare policies. China focuses on scaling AI while addressing ethical concerns (Alami et al., 2020).
Implementation Challenges	Regulatory compliance costs for businesses; bureaucratic delays; slower innovation due to strict oversight. Romania's limited infrastructure and skills gap hinder adaptation of EU regulations (Brînzac, 2023).	Inconsistent rules across states; challenges in creating unified frameworks for multi-state businesses. Ethical concerns from weak oversight in certain sectors (Murdoch, 2021).	Limited digital literacy, weak infrastructure, and lack of resources remain significant barriers.	Economic growth prioritization in China creates tension with ethical concerns. Japan and Singapore excel in balancing innovation and governance.
Successes	GDPR's global influence; telemedicine and AI diagnostics in Romania highlight the potential for healthcare innovation (Brînzac, 2023).	Fosters rapid innovation, with advancements in AI-powered healthcare and diagnostics; private sector drives	Emerging GDPR-inspired frameworks in Kenya, South Africa; increasing focus on building	Well-regulated digital ID systems in Japan and South Korea; growing use of AI in healthcare, driven

Aspect	European Union (EU)	United States (US)	Africa	Asia
		innovation.	digital infrastructure (Townsend et al., 2023).	by robust policy frameworks (Alami et al., 2020).
Failures	Centralized EHR systems in Romania faced technical and interoperability challenges. High compliance costs can stifle SMEs (Andrea, 2020).	Limited protections for healthcare and consumer data beyond HIPAA and CCPA. Ethical lapses due to lack of cohesive regulation.	Enforcement of existing laws remains weak due to insufficient resources & infrastructure gaps.	Ethical violations and over-reliance on AI in China; uneven regulation across countries within the region (Shah & Chircu, 2018).

Source: Authors' own research.

In figure 1 we highlighted a visual structured comparison between different regions based on the AI and data criterion.

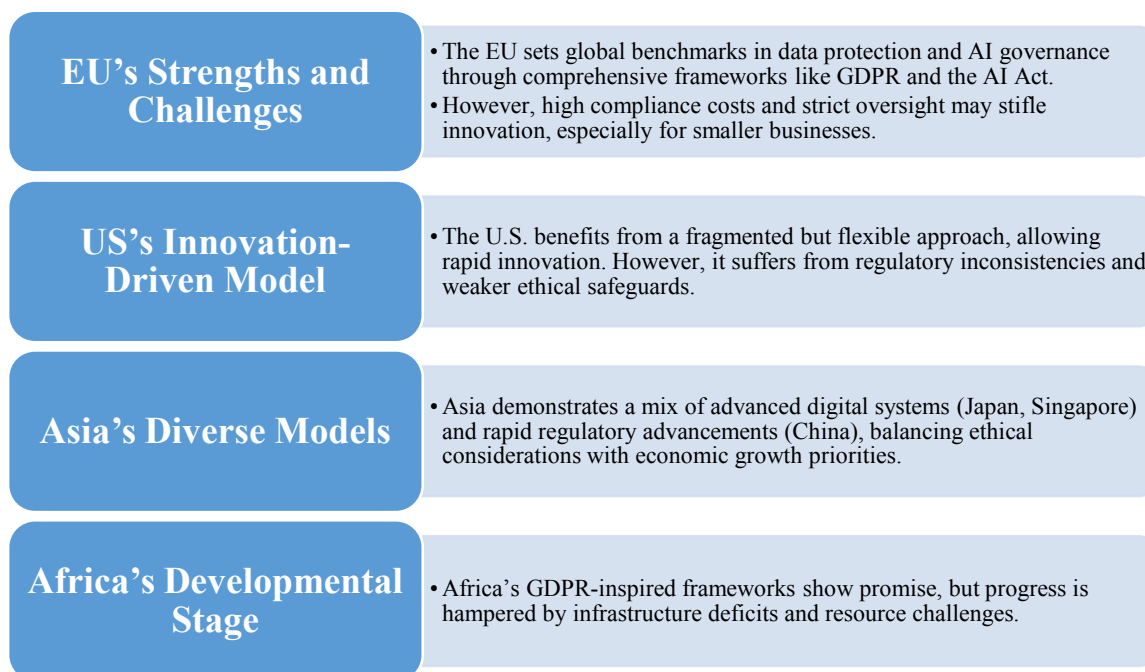


Figure 1. Observations on digital transformation and governance by region

Source: Authors' own research.

Challenges and Recommendations for Romania

Romania faces unique challenges in implementing the EU's AI and data regulations due to limited digital infrastructure and regulatory adaptability. Although compliance with GDPR and the AI Act enhances privacy and ethical standards, Romania's healthcare and business sectors require further investment in digital literacy and infrastructure to meet EU standards (Gușe & Mangiuc, 2022; Fitzek & Choi, 2023).

Romania's Digital and AI Policies

As an EU member, Romania aligns its digital regulations with EU frameworks such as the GDPR, EUDI, AI Act and the very new EHDS. However, Romania has also enacted specific national policies and strategies to support its digital transformation:

a. National Strategy on AI

Romania's National Strategy on AI focuses on fostering AI research and development while emphasizing ethical principles. The strategy aligns with the EU's AI Act but also addresses Romania's domestic priorities, such as boosting innovation in the public sector and creating a skilled workforce for AI technology.

b. Medical Data and E-health Initiatives

Romania has implemented several e-health initiatives that align with the EU's EHDS goals, including a national electronic health record system to facilitate data sharing. Romania's policies focus on increasing accessibility and quality of healthcare services while safeguarding patient data.

c. Digital Transformation and Cybersecurity

Romania has prioritized digital transformation in public administration and infrastructure, aiming to improve government services and cybersecurity resilience. The National Cybersecurity Strategy outlines policies to secure digital data and protect citizens' privacy.

Implemented and Unimplemented Regulations

Romania implemented data privacy regulations under GDPR and is advancing toward compliance with EU AI legislation, including the AI Act and the newly adopted EHDS. However, challenges remain due to the country's limited digital infrastructure and a gap in digital literacy (Popescu, 2023; Sandu & Anghel, 2012). The National Strategy on the Digital Agenda for Romania 2020, aligned with the Digital Agenda for Europe, outlines objectives for integrating digital technologies but faces delays in execution, attributed to resource constraints and institutional inefficiencies (Zamfir, 2016).

Public and Private Sector Initiatives

The public sector in Romania has initiated digital transformation efforts such as e-governance services, electronic signatures, and digital public health records, though progress is inconsistent. E-government initiatives encounter resistance due to low digital literacy among users and systemic inertia within government institutions (Vrabie, 2013). Public-private partnerships (PPPs) are being promoted to alleviate these issues, but they are still developing due to complex administrative processes and the need for a more supportive legislative framework (Popa, 2019).

The Romanian private sector, particularly small and medium enterprises (SMEs), struggles to adopt AI due to high implementation costs, regulatory uncertainty, and a lack of skilled personnel. Romanian companies, especially in healthcare and tech, require increased access to training programs and incentives to build digital competencies (Bătușaru, 2019). Key private sector initiatives in AI have been limited to isolated projects due to financial and operational barriers (Dumitrescu et al., 2022).

Challenges, Blocks, and Barriers

Infrastructure and Digital Literacy: Romania ranks low on the EU's Digital Economy and Society Index (DESI), indicating deficiencies in digital infrastructure and skills. Limited internet access, especially in rural areas, and a shortage of IT professionals create significant barriers to digital

transformation (Ciurea, 2019; Barna & Epure, 2020). Enhancing digital infrastructure and offering digital literacy programs can help bridge this gap.

Legal and Regulatory Delays: Adapting to the AI Act and further aligning with EU data privacy policies has been slow, partly due to bureaucratic obstacles and limited resources in regulatory bodies. Experts suggest a phased approach to policy implementation and dedicated funding for regulatory compliance (Popescu, 2023; Nitzberg & Zysman, 2021).

Solutions and Recommendations

For the private sector to thrive under new regulations, Romania needs to adopt policy incentives such as tax relief for AI investments and subsidies for SMEs engaging in digital transformation. Furthermore, partnerships with educational institutions to improve AI literacy and technical skills would support workforce development and long-term compliance (Tofan, 2020).

Digital Health Regulations and Applications in Romania

Public Sector Implementations

In the public healthcare sector, Romania advanced with electronic health records (EHRs) and telemedicine services, accelerated by the COVID-19 pandemic. However, issues with data interoperability and patient privacy have arisen due to outdated systems and a lack of integration standards. While successful implementations include the expansion of telehealth services, failed initiatives like centralized EHR systems reveal persistent infrastructure limitations and security concerns (Brînzac, 2023; Apostol, 2022).

Private Sector Innovations and Challenges

Romania's private healthcare sector has seen more rapid adoption of AI-driven diagnostics and personalized medicine, often in collaboration with international tech firms. Innovations such as AI-supported imaging diagnostics and patient management systems have demonstrated value, yet high costs and regulatory hurdles restrict widespread use. For example, successful cases in private hospitals include AI-enhanced diagnostics, while barriers such as data compliance issues limit broader application (Fitzek & Choi, 2023; Alami et al., 2020).

Best Practices and Failed Practices

Best Practices: In both sectors, incremental implementation of digital solutions with comprehensive training has proven effective. For instance, telemedicine platforms developed gradually with user training have increased accessibility to healthcare in rural regions (Brînzac, 2023).

Failed Practices: Attempts to implement centralized health databases without prior investment in compatible infrastructure have failed due to incompatibility and data breaches. These experiences underscore the need for careful planning and phased rollouts to minimize disruption (Popa, 2019; Popescu, 2023).

Romania's AI Governance and Healthcare Innovations

Romania's alignment with GDPR and the AI Act has facilitated advancements in healthcare, including AI-assisted diagnostics and telemedicine platforms (Brînzac, 2023). However, challenges persist, such as regulatory adaptation delays and insufficient digital infrastructure (Popescu, 2023).

Key Takeaways:

AI-enhanced imaging and predictive analytics improve diagnostic accuracy.
Telemedicine adoption surged during COVID-19, but data privacy concerns remain.
Lack of interoperability hinders centralized electronic health record (EHR) integration.

Practical Applications in the Romanian Healthcare System

To assess the real-world implications of AI and data governance, this study examined Romania's healthcare sector, focusing on regulatory initiatives, technological advancements, and sector-specific challenges.

1. National Regulations and Government Ordinances

Ordinance No. 89/2023: Establishes the National Digital Health Infrastructure, integrating AI-powered electronic health records (EHRs) with GDPR compliance requirements.

Romanian Ministry of Health's AI Strategy (2022-2027): Outlines the phased implementation of AI-driven diagnostic tools and telemedicine solutions, with a regulatory framework aligned with EU's AI Act.

Emergency Ordinance No. 196/2022: Facilitates the expansion of telemedicine services, ensuring compliance with GDPR while allowing secure data sharing between healthcare providers.

2. AI Applications in Romanian Healthcare

AI-Driven Diagnostics: Public and private hospitals have implemented AI-powered imaging analysis for early detection of diseases such as cancer, with pilot projects funded by the Ministry of Research, Innovation, and Digitalization.

Telemedicine Expansion: Government-supported platforms such as "TeleMedRo" enhance rural healthcare access while ensuring compliance with GDPR and EHDS requirements.

Electronic Health Records (EHRs): Romania has partially implemented AI-assisted patient data management systems under the EHDS framework, though interoperability challenges persist.

3. Professional Associations and Industry Initiatives

Romanian College of Physicians (2023 AI Policy Statement): Advocates for ethical AI deployment in clinical settings, focusing on transparency, bias mitigation, and data security.

National Institute for Medical Informatics (NIMI) Initiatives: Supports research on AI-driven predictive analytics and clinical decision support systems, ensuring alignment with EU regulatory standards.

Public-Private Partnerships: AI startups collaborating with university hospitals on machine learning applications for personalized treatment plans, partially funded by EU innovation grants.

This sector-specific analysis highlights Romania's efforts to integrate AI in healthcare while balancing innovation with regulatory compliance. Despite progress, further investment in digital health infrastructure and workforce training remains essential.

Comparison between EU and U.S. Legislation and Policies

The European Union's approach to digital data and AI regulation emphasizes a balance between privacy, innovation, and ethical AI use. In contrast, the United States adopts a more decentralized approach, with sectoral laws and voluntary guidelines. Romania (EU member state), aligns with EU standards but also pursues national initiatives to enhance digital infrastructure, AI adoption, and healthcare data management.

Table 2. EU Model: Regulatory Rigor and Its Global Influence

Advantages of the EU Model:
• Harmonized Standards: The EU's GDPR and proposed AI Act create unified, predictable rules across member states, offering clarity for companies operating within the EU. • Ethical Leadership: By focusing on transparency, fairness, and human-centric AI, the EU positions itself as a global leader in responsible AI governance. • Global Adoption: GDPR has already influenced data privacy laws worldwide (e.g., Brazil's LGPD, India's DPDP Bill), indicating that the EU's regulatory approach may serve as a global benchmark.
Challenges of the EU Model:
• Bureaucratic Slowness: The EU's stringent regulatory approach can stifle innovation and delay the deployment of new technologies. • Compliance Costs: Meeting the EU's high regulatory standards can be costly for businesses, particularly for startups and SMEs, potentially discouraging innovation. • Lagging Behind in AI Deployment: Due to cautious regulation, the EU risks falling behind the U.S. and China in AI development and commercialization.

Source: Authors' own research.

The EU's regulatory model, based on comprehensive, cross-sectoral laws, may set a global standard in data and AI ethics, whereas the U.S. framework provides more flexibility at the cost of regulatory consistency.

Table 3. U.S. Framework: Flexibility vs. Consistency

Advantages of Flexibility in the U.S. Model:
• Sector-Specific and Decentralized Regulation: The U.S. adopts a sector-specific approach (e.g., HIPAA for healthcare, CCPA for data privacy in California), allowing industries to innovate without one-size-fits-all constraints. • Market-Driven Innovation: U.S. innovation thrives in part due to minimal regulatory intervention, fostering entrepreneurship and rapid tech deployment (e.g., AI applications in healthcare and autonomous vehicles). • Private Sector Leadership: U.S. companies like Google, Amazon, and OpenAI lead in developing and deploying cutting-edge AI technologies, benefiting from a relatively permissive regulatory environment.
Challenges of Flexibility:
• Regulatory Inconsistency: The lack of a unified federal framework creates legal uncertainties, especially for businesses operating across multiple states (e.g., California's CCPA vs. Virginia's CDPA). • Ethical and Privacy Concerns: Minimal oversight can lead to privacy violations, algorithmic bias, and lack of accountability, which could erode public trust in AI. • International Compatibility: Divergent regulations may make it harder for U.S. companies to operate in markets like the EU, which enforces strict compliance standards under GDPR and the AI Act.

Source: Authors' own research.

The future interplay between the U.S. flexible framework and the EU's regulatory model in driving innovation or setting global standards remains uncertain, as it hinges on several critical factors, including economic priorities, societal values, and geopolitical dynamics.

Conclusion

We focused on an in-depth comparative analysis of global data protection and AI legislation, with a specific focus on Romania's adaptation of EU policies.

Hypotheses Evaluation

The analysis confirms that regional adaptation, sector-specific considerations, and collaboration & investment are essential for effective governance of digital transformation and AI regulation. While the EU's centralized model ensures consistency, it can slow innovation, whereas the U.S. model fosters rapid technological growth but lacks regulatory coherence, making neither approach universally superior. Romania's experience underscores the need for tailored policies, sector-specific regulations, and strategic public-private collaboration to optimize implementation and innovation.

1. Harmonized Frameworks

Hypothesis: The EU's centralized approach to data protection and AI regulation (GDPR, AI Act) offers a more effective model than the fragmented, sectoral approach of the US.

Outcome: Partially Confirmed.

The EU's centralized model ensures consistency and public trust and has set global standards, but its strict regulations sometimes slow innovation and compliance.

The U.S.'s fragmented approach enables rapid innovation but creates inconsistencies and gaps in ethical AI governance.

Conclusion: Neither model is universally superior, each has strengths and trade-offs depending on the sector and regional context.

2. Regional Adaptation

Hypothesis: Successful implementation of data and AI governance requires tailoring policies to regional and national contexts, as demonstrated by Romania's challenges and achievements in adapting EU regulations.

Outcome: Confirmed.

Romania's experience shows that while adapting EU regulations, national contexts (e.g., digital literacy, infrastructure) significantly influence outcomes.

Tailoring regulations to align with local capacities and socio-economic conditions leads to better implementation and innovation support.

3. Sector-Specific Considerations

Hypothesis: Digital transformation in specific sectors, like healthcare, necessitates specialized regulatory considerations to balance innovation with ethical and privacy concerns.

Outcome: Confirmed.

Healthcare requires specific data protection and AI governance mechanisms. Romania's telemedicine success during the COVID-19 pandemic demonstrates how sector-specific policies can drive innovation.

At the same time, failures in centralized electronic health record (EHR) implementation highlight the need for phased approaches and sector-specific investment.

4. Collaboration and Investment

Hypothesis: Effective governance requires collaboration between public and private sectors, investment in digital infrastructure, and incentives for innovation.

Outcome: Confirmed.

Public-private partnerships in Romania's healthcare sector have advanced AI-driven diagnostics and telemedicine platforms.

Persistent gaps in digital infrastructure, especially in rural areas, underline the need for increased public sector investment and incentivized private sector involvement.

The research question leads to the following key conclusions: Effective governance of data protection and AI requires a balance between regulatory consistency and innovation, with lessons from diverse global approaches highlighting the need for tailored, sector-specific, and collaborative strategies.

The research examines legal frameworks, compares regulatory models, and analyzes real-world sectoral applications, necessitating multiple methodological perspectives.

Legislative Analysis (Qualitative Component)

This method enables an in-depth examination of legal texts, official policies, and institutional regulations (e.g., GDPR, AI Act, HIPAA).

It ensures the study captures the formal structures, intent, and scope of AI governance frameworks globally.

Comparative Analysis (Comparative Component)

Comparing regulatory models across regions, the study evaluates divergent governance approaches, highlighting strengths, weaknesses, and adaptability.

This method provides a structured framework to analyze how Romania aligns with EU regulations and where gaps exist.

Sectoral Case Study (Applied Component)

The focus on Romania's healthcare sector allows for an exploration of practical implementation challenges, innovations, and regulatory adaptation.

It offers insights into how AI-driven healthcare solutions interact with existing data protection and digital identity frameworks.

Why Mixed-Methods?

Ensures a Holistic Perspective: By integrating legislative, comparative, and sector-specific approaches, the study bridges the gap between legal theory and real-world policy implementation.

Strengthens Validity: Different data sources and methodologies enhances credibility and reliability of findings.

Implications for Business and Future Research:

AI integration in Romanian healthcare offers investment opportunities in digital health infrastructure.

Future research should explore how Romania's AI regulations can balance compliance with fostering innovation.

The findings suggest a hybrid approach: harmonized global principles paired with regional and sector-specific adaptations, supported by strong collaboration and targeted investment. This model holds the potential to drive digital transformation while ensuring ethical and sustainable AI governance.

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