



Bridging the Gap: Data Sovereignty, Privacy, and Security in Global E-Learning Systems

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Abstract

The convergence of digital transformation and educational technology has created unprecedented challenges in managing data sovereignty, privacy, and security across global elearning platforms. This research examines the complex interplay between these critical factors, revealing that while e-learning platforms offer transformative educational opportunities, they simultaneously present significant vulnerabilities in data governance and cross-border information flows. The study identifies fundamental tensions between national data sovereignty requirements and the inherently global nature of digital education platforms, highlighting the need for comprehensive frameworks that balance regulatory compliance, user privacy protection, and educational accessibility across diverse jurisdictional landscapes.

Keyword: Digital Learning, Block chain, Data Sovereignty, Cybersecurity, Data Privacy.

Introduction

The rapid digitization of education has fundamentally transformed how knowledge is delivered, accessed, and managed across global boundaries. E-learning platforms now serve billions of users worldwide, processing vast amounts of personal and educational data that crosses multiple jurisdictions with varying regulatory frameworks and sovereignty requirements. This digital educational revolution has created a complex landscape where traditional concepts of territorial sovereignty intersect with the borderless nature of digital technologies. The concept of data sovereignty has emerged as a critical consideration in this context, representing nations' desire to exercise control over data within their territorial boundaries while maintaining competitive advantages in the digital economy. For e-learning systems, this presents unique challenges as educational platforms must navigate diverse regulatory environments while ensuring seamless user experiences and maintaining data security standards. The challenge is further complicated by the need to protect learner privacy while facilitating legitimate



educational and administrative functions that often require data sharing and processing across borders.

Current market trends indicate explosive growth in the e-learning sector, with the global elearning services market estimated at USD 378.26 billion in 2025 and predicted to reach approximately USD 2,041.35 billion by 2034, expanding at a CAGR of 20.60%. This growth trajectory underscores the urgent need for comprehensive frameworks that address data sovereignty, privacy, and security concerns while supporting continued innovation in digital education.

Literature Review and Theoretical Framework

Conceptualizing Data Sovereignty in Digital Education

The theoretical foundation for understanding data sovereignty in e-learning systems draws from multiple disciplinary perspectives, including political economy, international law, human rights, and data protection frameworks. Data sovereignty, as defined in contemporary literature, encompasses "the capacity to understand how and why (personal) data are processed and by whom, develop data processing capabilities, and effectively regulate data processing, thus retaining self-determination and control". This definition extends beyond simple territorial control to encompass broader questions of technological capability, regulatory authority, and economic self-determination.

Frank Pasquale's work on territorial versus functional sovereignty presents two competing visions for data governance that are particularly relevant to e-learning platforms. Territorial sovereignty emphasizes geographic boundaries and national control over data within specific jurisdictions, while functional sovereignty focuses on regulatory authority based on the nature and purpose of data processing activities. E-learning platforms must navigate both approaches, as they often operate across multiple territories while serving specific educational functions that may warrant different regulatory treatment.

The emergence of artificial intelligence in e-learning platforms adds additional complexity to sovereignty considerations. AI-driven educational technologies often require large datasets for training and optimization, creating tensions between the need for data access and sovereignty requirements. These systems may process educational data in ways that are difficult for both users and regulators to understand or control, challenging traditional notions of informed consent and regulatory oversight.

Security Frameworks and Risk Management



Contemporary security frameworks for e-learning platforms emphasize three fundamental measures for protecting privacy and ensuring data security. Data encryption serves as the primary technical safeguard, requiring implementation of both transit and rest encryption protocols such as SSL/TLS for data transmission and AES for stored information. Authentication and access control mechanisms, including multi-factor authentication and role-based access control systems, provide additional layers of protection by ensuring only authorized users can access sensitive educational data.

Regular security audits represent the third pillar of comprehensive e-learning security, involving systematic assessment of vulnerabilities and continuous updating of security protocols. These audits can be conducted internally or by third-party cybersecurity experts and should encompass reviewing security infrastructure, assessing risk levels, and updating security protocols to address emerging threats.

The literature identifies six technical measures essential for e-learning security: identification and authentication, authorization, confidentiality, non-repudiation, availability, and integrity. These technical measures must be complemented by procedural countermeasures including information security governance, implementation of e-learning information security policies, establishment of security risk management plans, and proper monitoring of information security measures.

Global Perspectives and Regulatory Divergence

The BRICS countries (Brazil, Russia, India, China, and South Africa) provide instructive examples of how different nations approach data sovereignty in the context of digital transformation. These countries, representing over 40% of the global population or 3.2 billion potential data subjects, have developed distinct data governance visions that reflect their economic, political, and security priorities. Their approaches to data sovereignty considerations deem specific types of data as key strategic and economic resources deserving particular protection and national development leverage.

The regulatory landscape for e-learning platforms varies significantly across jurisdictions, with the United States and Europe representing different approaches to data protection and privacy regulation. European frameworks, particularly the General Data Protection Regulation (GDPR), emphasize individual rights and consent-based processing, while U.S. approaches tend to focus more on sectoral regulations and industry self-regulation. These divergent approaches create compliance challenges for global e-learning platforms that must satisfy multiple regulatory requirements simultaneously.



Methodology

Research employs a mixed-methods approach combining systematic literature review, regulatory analysis, and market trend examination to understand the complex relationships between data sovereignty, privacy, and security in global e-learning systems. The methodology is designed to provide comprehensive insights into both theoretical frameworks and practical implementation challenges facing e-learning platforms operating across multiple jurisdictions.

Data Collection and Sources

Primary data sources include academic publications, regulatory documents, industry reports, and market analysis from major e-learning platforms and regulatory bodies. The research draws from multiple disciplinary perspectives including legal studies, computer science, international relations, and educational technology to ensure comprehensive coverage of relevant issues. Secondary data sources include market research reports, platform security documentation, and comparative regulatory analyses from various jurisdictions.

Analytical Framework

The analytical framework employs a multi-dimensional approach examining data sovereignty through territorial and functional lenses while assessing privacy and security measures across technical, procedural, and regulatory dimensions. This framework allows for systematic comparison of different jurisdictional approaches while identifying common challenges and potential solutions for global e-learning platforms.

The research methodology incorporates risk assessment techniques commonly used in cybersecurity analysis, including threat classification and security framework evaluation. This approach enables identification of specific vulnerabilities in e-learning systems while evaluating the effectiveness of different security measures and governance approaches.

Limitations and Scope

The research acknowledges several limitations, including the rapidly evolving nature of both technology and regulation in this space, which may affect the currency of findings. Additionally, while the study examines multiple jurisdictions, comprehensive coverage of all global regulatory approaches is beyond the scope of this analysis. The focus on major market players and regulatory frameworks may not capture emerging approaches in smaller markets or developing regions.

Data Sovereignty Challenges in Global E-Learning







Fig:-The critical challenges and factors of E-learning system usage framework Territorial Versus Functional Sovereignty Models

The implementation of data sovereignty in e-learning systems reveals fundamental tensions between territorial and functional approaches to governance. Territorial sovereignty models require e-learning platforms to maintain strict geographic boundaries around data processing, often mandating local data storage and limiting cross-border transfers. This approach presents significant challenges for global educational platforms that serve diverse student populations and may need to share data between institutions, accreditation bodies, and service providers across multiple jurisdictions.



Functional sovereignty offers an alternative approach that focuses on the purpose and nature of data processing rather than geographic location. Under this model, educational data might be subject to specific governance requirements based on its educational function, regardless of where processing occurs. This approach potentially offers greater flexibility for global e-learning platforms while maintaining meaningful oversight and protection for learners' data rights. The choice between these models has significant implications for platform architecture, operational costs, and educational outcomes. Territorial sovereignty requirements may necessitate expensive data localization infrastructure and could limit the ability of platforms to leverage global resources for optimization and innovation. Conversely, functional sovereignty approaches may provide greater operational flexibility but require more sophisticated regulatory frameworks and enforcement mechanisms.

Cross-Border Data Flows and Educational Collaboration

Global e-learning platforms frequently facilitate international educational collaboration, student exchange programs, and cross-border academic partnerships that inherently require data sharing across jurisdictions. These legitimate educational activities create complex challenges for data sovereignty compliance, as they may involve personal data about students, faculty, and institutional partners flowing between countries with different regulatory requirements and sovereignty assertions.

The challenge is particularly acute for platforms serving multinational educational institutions or facilitating collaborative research projects. Student data may need to be accessible to faculty and administrators across multiple countries, while research data may require sharing with international collaborators. These requirements often conflict with strict data localization mandates or limitations on cross-border transfers.

BRICS countries exemplify different approaches to managing these tensions, with some prioritizing strict data localization while others focus on ensuring adequate protection standards for international transfers. The diversity of approaches creates a complex compliance landscape that requires sophisticated legal and technical solutions to navigate effectively.

Technological Architecture and Sovereignty Compliance

The implementation of data sovereignty requirements has significant implications for e-learning platform architecture and design. Platforms must develop technical solutions that can satisfy diverse regulatory requirements while maintaining functionality and user experience standards.



This often requires sophisticated data classification systems, geolocation capabilities, and flexible processing workflows that can adapt to different jurisdictional requirements.

Advanced encryption and access control systems become essential components of sovereigntycompliant e-learning platforms. These systems must not only protect data from unauthorized access but also ensure that authorized access complies with relevant sovereignty requirements. This may involve implementing location-based access controls, jurisdiction-specific encryption keys, or other technical measures that align with territorial sovereignty requirements.

The integration of artificial intelligence and machine learning technologies adds additional complexity to sovereignty compliance. AI systems often require access to large datasets for training and optimization, which may conflict with data localization requirements or restrictions on automated processing. Platforms must balance the benefits of AI-driven personalization and optimization with sovereignty compliance requirements.

Privacy and Security Framework Analysis

Technical Security Measures and Implementation

The implementation of robust technical security measures forms the foundation of privacy protection in e-learning platforms. Data encryption protocols must be implemented comprehensively, covering both data in transit and data at rest to ensure protection against interception and unauthorized access. Modern e-learning platforms typically employ Advanced Encryption Standard (AES) for stored data and Transport Layer Security (TLS) protocols for data transmission, creating multiple layers of protection against potential security breaches.

Authentication and access control systems represent critical components of privacy protection frameworks. Multi-factor authentication (MFA) implementations add essential security layers by requiring users to provide multiple verification factors before accessing sensitive educational data. Role-based access control (RBAC) systems ensure that users only access information necessary for their specific roles within the educational environment, minimizing exposure of sensitive data and reducing potential privacy risks.

The effectiveness of these technical measures depends largely on proper implementation and ongoing maintenance. Regular security audits serve as essential mechanisms for identifying vulnerabilities and ensuring continued effectiveness of security protocols. These audits must encompass both automated vulnerability assessments and manual reviews conducted by cybersecurity experts, providing comprehensive evaluation of security posture and identification of emerging threats.



Procedural and Governance Frameworks

Beyond technical measures, effective privacy protection in e-learning systems requires comprehensive procedural and governance frameworks. Information security governance structures must establish clear accountability for privacy protection, defining roles and responsibilities for data handling, incident response, and compliance monitoring. These governance frameworks must align with both technical capabilities and regulatory requirements across all jurisdictions where the platform operates.

E-learning information security policies must address the unique characteristics of educational environments, including the diversity of user types, varying levels of technical sophistication, and the need to balance security with educational accessibility. These policies must provide clear guidance for data collection, processing, storage, and sharing while ensuring compliance with applicable privacy regulations and institutional requirements.

Security risk management plans represent essential components of comprehensive privacy frameworks. These plans must identify potential threats specific to e-learning environments, assess the likelihood and impact of various security scenarios, and establish appropriate response procedures. The dynamic nature of educational technology requires these plans to be regularly updated to address emerging threats and changing operational requirements.

Privacy Rights and User Control

The protection of individual privacy rights requires e-learning platforms to implement sophisticated user control mechanisms that enable learners to understand and manage how their data is processed. This includes providing clear, accessible information about data collection practices, processing purposes, and sharing arrangements. Platforms must also implement technical mechanisms that enable users to exercise their rights under applicable privacy regulations, including rights to access, correct, delete, or port their personal data.

The challenge of privacy rights implementation is complicated by the educational context, where legitimate educational interests may sometimes conflict with individual privacy preferences. For example, plagiarism detection systems may require analysis of student work that could be considered privacy-invasive, while learning analytics systems may need to process behavioral data to provide personalized educational experiences. Platforms must balance these competing interests while ensuring compliance with privacy regulations and respect for individual autonomy.

Consent management represents a particularly complex challenge in educational environments where power imbalances between institutions and learners may affect the voluntariness of



consent. Platforms must develop consent mechanisms that are truly informed and freely given while recognizing the practical constraints of educational relationships and institutional requirements.

Global Regulatory Landscape and Compliance Challenges

Regional Regulatory Approaches

The global regulatory landscape for e-learning data governance reflects diverse national priorities and approaches to balancing innovation, security, and individual rights. European regulatory frameworks, exemplified by the General Data Protection Regulation (GDPR), emphasize individual rights and consent-based processing, requiring e-learning platforms to implement comprehensive privacy-by-design approaches and provide extensive user control mechanisms. These regulations prioritize individual autonomy and require platforms to demonstrate legitimate basis for all data processing activities.

United States regulatory approaches tend to focus on sectoral regulations and industry-specific requirements rather than comprehensive omnibus privacy legislation. This creates a complex compliance environment for e-learning platforms operating in the U.S. market, as they must navigate various federal and state regulations that may apply to educational data, including the Family Educational Rights and Privacy Act (FERPA) and state student privacy legislation. The fragmented nature of U.S. privacy regulation creates challenges for platforms seeking to implement consistent privacy protection measures.

BRICS countries demonstrate yet another set of approaches, with each nation developing data governance frameworks that reflect their specific economic, political, and security priorities. These countries often emphasize data sovereignty considerations and may require local data storage or processing to ensure national control over strategic information resources. The diversity of approaches among BRICS nations illustrates the challenges facing global e-learning platforms in developing compliance strategies that satisfy multiple sovereignty requirements.

Cross-Border Transfer Mechanisms

The management of cross-border data transfers represents one of the most complex challenges for global e-learning platforms. Different jurisdictions employ various mechanisms for enabling legitimate international data transfers while maintaining appropriate protection standards. These mechanisms include adequacy decisions, standard contractual clauses, binding corporate rules, and certification schemes, each with specific requirements and limitations.

The European Union's approach to international transfers requires demonstration of adequate protection levels in destination countries or implementation of appropriate safeguards through



contractual or certification mechanisms. This creates particular challenges for e-learning platforms serving global student populations, as they must ensure that all international data flows comply with EU requirements regardless of where processing occurs or where users are located.

BRICS countries often impose more restrictive requirements for cross-border transfers, reflecting their emphasis on data sovereignty and national control over strategic data resources. These requirements may include mandatory data localization for certain types of data, restrictions on automated processing by foreign entities, or requirements for specific government approvals before international transfers can occur. The complexity and variation of these requirements create significant compliance challenges for global platforms.

| Region | Primary Regulatory Framework | Key Requirements | Transfer Mechanisms |
|-------------------|---------------------------------|--------------------------------------------------|-----------------------------------|
| European Union | GDPR | Consent, legitimate interests, data minimization | Adequacy decisions, SCCs, BCRs |
| United | Sectoral (FERPA, | Educational purpose, | Industry agreements, |
| States | state laws) | parental consent | contractual protections |
| BRICS | National data | Data localization, | Government approval, |
| Countries | protection laws | sovereignty compliance | local processing |

Compliance Strategy Development

Effective compliance strategies for global e-learning platforms must address the multijurisdictional nature of modern educational technology while maintaining operational efficiency and educational effectiveness. This requires sophisticated legal and technical frameworks that can adapt to diverse regulatory requirements while providing consistent user experiences and protection standards.

Platform compliance strategies must begin with comprehensive mapping of applicable regulatory requirements across all operational jurisdictions. This mapping must consider not



only current regulations but also emerging requirements and proposed legislation that may affect future operations. The dynamic nature of privacy and data sovereignty regulation requires ongoing monitoring and adaptation of compliance strategies.

Technical implementation of compliance strategies requires flexible architecture that can accommodate diverse regulatory requirements without compromising functionality or user experience. This may include implementation of data residency controls, jurisdiction-specific access restrictions, or regulatory-compliant data processing workflows. The challenge is developing these technical capabilities in ways that support educational objectives while meeting regulatory requirements.

Market Analysis and Economic Implications

Global E-Learning Market Growth and Trends

The explosive growth of the global e-learning market underscores the urgency of addressing data sovereignty, privacy, and security challenges in this sector. The market's estimated value of USD 378.26 billion in 2025, with projections reaching USD 2,041.35 billion by 2034 at a CAGR of 20.60%, reflects unprecedented adoption of digital educational technologies across all sectors and demographics. This growth trajectory creates both opportunities and challenges for implementing comprehensive data governance frameworks.

North America represents the largest regional market, with estimated revenues of USD 119.19 billion in 2024 and continued expansion at a CAGR of 20.76%. The dominance of North American markets in e-learning technology creates particular challenges for global data sovereignty, as many major platforms are based in jurisdictions that may not align with the sovereignty requirements of other regions. This geographic concentration of market power has implications for data flows, regulatory compliance, and competitive dynamics in the global e-learning sector. The rapid market growth is driven by several factors including technological advancement, changing educational preferences, and global events that have accelerated digital adoption. However, this growth also creates pressures for platforms to expand rapidly across multiple jurisdictions, potentially outpacing their ability to implement comprehensive data governance frameworks that satisfy diverse sovereignty and privacy requirements.

Economic Impact of Compliance Requirements

The implementation of comprehensive data sovereignty and privacy compliance frameworks imposes significant costs on e-learning platforms, affecting both operational expenses and strategic decision-making. Data localization requirements may necessitate substantial infrastructure investments to establish processing capabilities in multiple jurisdictions,



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potentially reducing economies of scale and increasing operational complexity. These costs are particularly challenging for smaller platforms that may lack the resources to implement sophisticated multi-jurisdictional compliance strategies.

Compliance costs extend beyond technical infrastructure to include legal expertise, regulatory monitoring, and ongoing adaptation to changing requirements. Platforms must invest in legal and compliance teams capable of navigating complex multi-jurisdictional regulatory environments while ensuring that technical implementations align with legal requirements. The specialized nature of educational data governance requires expertise that spans education law, privacy regulation, cybersecurity, and international data transfer mechanisms.

The economic implications of compliance extend to competitive dynamics within the e-learning market. Platforms with greater resources to invest in comprehensive compliance capabilities may gain competitive advantages over smaller competitors, potentially leading to market consolidation. Conversely, regulatory requirements may create barriers to entry that limit innovation and competition in the sector, potentially affecting the pace of technological development and educational improvement.

Innovation and Regulatory Balance

The challenge of balancing innovation with regulatory compliance represents a critical consideration for the future development of e-learning technologies. Emerging technologies such as artificial intelligence, machine learning, and advanced analytics offer significant potential for improving educational outcomes but also create new challenges for data sovereignty and privacy protection. Regulatory frameworks must evolve to address these new technologies while maintaining essential protections.

The pace of technological development often outpaces regulatory adaptation, creating periods of uncertainty where platforms must make decisions about technology adoption without clear regulatory guidance. This dynamic creates risks for both platforms and users, as technologies may be deployed without adequate consideration of privacy and sovereignty implications, or beneficial innovations may be delayed by regulatory uncertainty.

The development of regulatory sandboxes and innovation-friendly frameworks represents one approach to managing these tensions, allowing for controlled experimentation with new technologies while maintaining appropriate oversight and protection standards. However, the global nature of e-learning platforms complicates the implementation of such approaches, as innovations approved in one jurisdiction may not be acceptable in others.

Integration Challenges and Solutions



Harmonization Efforts and International Cooperation

The development of harmonized approaches to data governance in e-learning represents both a significant challenge and an important opportunity for improving global educational access while maintaining appropriate protections. International cooperation mechanisms, including bilateral and multilateral agreements, could help reduce compliance complexity while ensuring consistent protection standards across jurisdictions. However, achieving such harmonization requires overcoming significant differences in national priorities, regulatory philosophies, and sovereignty concerns.

Regional approaches to harmonization, such as those developing within trading blocs or educational cooperation frameworks, may provide more feasible paths toward coordination than global agreements. These regional approaches could establish common standards for data protection and cross-border transfers within specific geographic or economic regions while maintaining flexibility for broader global operations. The success of such approaches depends on alignment of regulatory objectives and willingness to compromise on sovereignty assertions. The role of international organizations and standard-setting bodies in promoting harmonization efforts cannot be understated. Organizations such as the International Organization for Standardization (ISO), the International Telecommunications Union (ITU), and educational cooperation bodies could play important roles in developing technical and procedural standards that support both educational objectives and regulatory compliance across multiple jurisdictions.

Technology Solutions and Privacy-Preserving Approaches

Advanced technological solutions offer potential pathways for addressing some of the tensions between data sovereignty requirements and global e-learning platform operations. Privacypreserving technologies, including differential privacy, homomorphic encryption, and secure multi-party computation, could enable certain types of data processing and sharing while maintaining compliance with sovereignty and privacy requirements. These technologies could allow platforms to derive educational insights from global data sets without requiring crossborder transfer of identifiable personal information.

Federated learning approaches represent another promising technological solution, enabling AI and machine learning systems to be trained on distributed data sets without requiring centralized data collection. This approach could allow e-learning platforms to benefit from global data insights while respecting data localization requirements and sovereignty assertions.



However, the implementation of such approaches requires sophisticated technical capabilities and may not be suitable for all types of educational data processing.

Blockchain and distributed ledger technologies offer potential solutions for creating verifiable, decentralized records of educational achievements and credentials while maintaining privacy and sovereignty compliance. These technologies could enable global recognition of educational credentials without requiring centralized data storage or cross-border transfer of detailed educational records. The development of such systems requires careful consideration of scalability, interoperability, and regulatory acceptance across multiple jurisdictions.

Future Frameworks and Recommendations

The development of future frameworks for managing data sovereignty, privacy, and security in global e-learning systems requires integration of legal, technical, and educational perspectives. These frameworks must be sufficiently flexible to accommodate diverse jurisdictional requirements while providing clear guidance for platform operators and users. The complexity of the challenge suggests that solutions will likely require multi-layered approaches combining international cooperation, technological innovation, and adaptive regulatory strategies.

Educational stakeholders, including institutions, faculty, students, and platform providers, must be actively involved in the development of future frameworks to ensure that governance approaches support rather than hinder educational objectives. This stakeholder engagement is essential for developing practical solutions that balance competing interests while maintaining focus on educational quality and accessibility.

The future evolution of data governance in e-learning will likely require continued adaptation as both technology and regulatory approaches evolve. Frameworks must be designed with flexibility and adaptability in mind, enabling adjustment to changing circumstances while maintaining core protections and principles. This may require new forms of governance that can respond more quickly to technological change while maintaining democratic accountability and stakeholder input.

Conclusion and Recommendations

The intersection of data sovereignty, privacy, and security in global e-learning systems represents one of the most complex challenges facing contemporary educational technology. This research has revealed fundamental tensions between the global nature of digital education and the territorial nature of sovereignty assertions, creating compliance challenges that require sophisticated legal, technical, and operational solutions. The rapid growth of the e-learning



market, with projected revenues reaching over USD 2 trillion by 2034, underscores the urgency of developing effective frameworks for managing these challenges.

The analysis demonstrates that current approaches to data sovereignty often create barriers to the legitimate educational objectives of global e-learning platforms while potentially limiting innovation and accessibility. The diversity of regulatory approaches across jurisdictions, from the rights-focused European model to the sovereignty-emphasizing approaches of BRICS nations, creates a complex compliance landscape that may favor large platforms with extensive legal and technical resources while disadvantaging smaller innovators.

Future solutions must balance respect for national sovereignty concerns with the practical requirements of global education delivery. This balance likely requires development of new governance mechanisms that can accommodate diverse jurisdictional requirements while maintaining the benefits of global educational platforms. Technology solutions, including privacy-preserving technologies and federated approaches, offer promising pathways but require continued development and regulatory acceptance.

The path forward requires enhanced international cooperation, continued technological innovation, and adaptive regulatory frameworks that can evolve with changing circumstances. Stakeholder engagement across educational, technological, legal, and regulatory communities will be essential for developing practical solutions that serve the interests of learners while respecting legitimate sovereignty and privacy concerns. The stakes of success in this endeavor extend beyond regulatory compliance to encompass the fundamental question of how global education can be delivered effectively and equitably in an interconnected but sovereignty-conscious world.

The recommendations emerging from this analysis emphasize the need for multi-stakeholder dialogue, technological innovation in privacy-preserving approaches, and gradual harmonization of regulatory frameworks through regional and bilateral cooperation. Only through such comprehensive approaches can the global e-learning sector fully realize its potential for transforming education while maintaining appropriate protections for learners and respect for national sovereignty concerns.

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