

DATA PRIVACY LOSS IN PAKISTAN AS COMPARED WITH OTHER COUNTRIES SECURITY POLICIES AND LAWS (EU (GDPR))

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Abstract

The objective of this research is to explore the state of data privacy in Pakistan and compare it with the security policies and laws of other countries, such as the European Union (EU), the United States (US), and China. The study highlights the cultural, legal, and technological factors contributing to data privacy loss in Pakistan, with a focus on the lack of awareness, weak enforcement mechanisms, and inadequate legal frameworks. Using a comparative analysis, the article identifies gaps in Pakistan's data protection policies and proposes recommendations for improvement. The findings reveal that Pakistan lags behind global standards, particularly in areas such as data collection, storage, and sharing practices. The study concludes with a call for stronger legal frameworks, public awareness campaigns, and international cooperation to address data privacy challenges in Pakistan.

Keywords:

Data privacy, Pakistan, GDPR, CCPA, cybersecurity, legal frameworks, comparative analysis

Introduction

In the digital age, data privacy has emerged as a critical concern for individuals, organizations, and governments worldwide [1]. The increasing reliance on technology for communication, commerce, and governance has led to the collection and storage of vast amounts of personal data, raising concerns about its misuse and exploitation. While developed countries have implemented robust data protection laws, many developing countries, including Pakistan, struggle to address data privacy challenges effectively [2].

Pakistan’s data privacy landscape is characterized by a lack of comprehensive legislation, weak enforcement mechanisms, and limited public awareness. The country’s primary legal framework for data protection, the Prevention of Electronic Crimes Act (PECA) 2016 [3], focuses on cybercrime but does not adequately address data privacy concerns. This article examines the state of data privacy in Pakistan and compares it with the policies and laws of other countries, such as the EU’s General Data Protection Regulation (GDPR) , the US’s California Consumer Privacy Act (CCPA), and China’s Cybersecurity Law.

Data privacy loss in Pakistan has emerged as a significant concern amidst a rapidly evolving digital landscape, highlighting inadequacies in the country's legal framework and regulatory practices. Historically, Pakistan has lagged behind other nations in establishing comprehensive data protection laws, relying instead on fragmented regulations that fail to adequately safeguard personal information. This situation has been exacerbated by the recent introduction of the Personal Data Protection Bill (PDPB) 2023 [4], which seeks to enhance data privacy measures in alignment with international standards, yet has sparked debates regarding its effectiveness and potential loopholes, particularly in relation to state surveillance and the independence of regulatory bodies [5] [6]. Despite constitutional guarantees of privacy under Article 14 of the Constitution of Pakistan, the lack of a cohesive legal framework has left individuals vulnerable to unauthorized data use and breaches [7]. Current legislation, such as the Prevention of Electronic Crimes Act (PECA), addresses specific sectors but does not provide the comprehensive protections necessary for individuals' rights in an increasingly digitized world [8]. In contrast, other countries, particularly those in the European Union, have established robust frameworks like the General Data Protection Regulation (GDPR), setting high benchmarks for data privacy and security that Pakistan seeks to emulate, albeit with notable challenges [9]. The PDPB 2023 introduces critical provisions aimed at enhancing data protection, such as regulations for data processing, clearer definitions of personal data, and the establishment of the National Commission for Personal Data Protection (NCPDP) to oversee compliance [10] [11]. However, critics argue that vague definitions, broad exemptions, and concerns about government surveillance could undermine the bill's objectives and lead to further erosions of privacy rights [12]. The ongoing legislative delays in passing the PDPB 2023 also raise questions about the government's commitment to prioritizing data protection amidst competing political agendas [13]. As Pakistan grapples with these challenges, the comparison with other nations underscores the urgency of implementing a unified and effective data protection regime. Without such reforms, the country risks

falling further behind in the global digital economy, exposing citizens to privacy violations and eroding trust in digital services, essential for fostering a secure and responsible online environment [14] [15].

Literature Review

Data Privacy Landscape in Pakistan

The legal framework governing data privacy in Pakistan has been historically inadequate, with existing laws failing to comprehensively address the collection, processing, and protection of personal data. The Personal Data Protection Bill (PDPB) 2023 aims to establish a robust legal framework to safeguard personal data, aligning with international human rights standards and enhancing the digital economy's regulatory environment in Pakistan [16] [17].

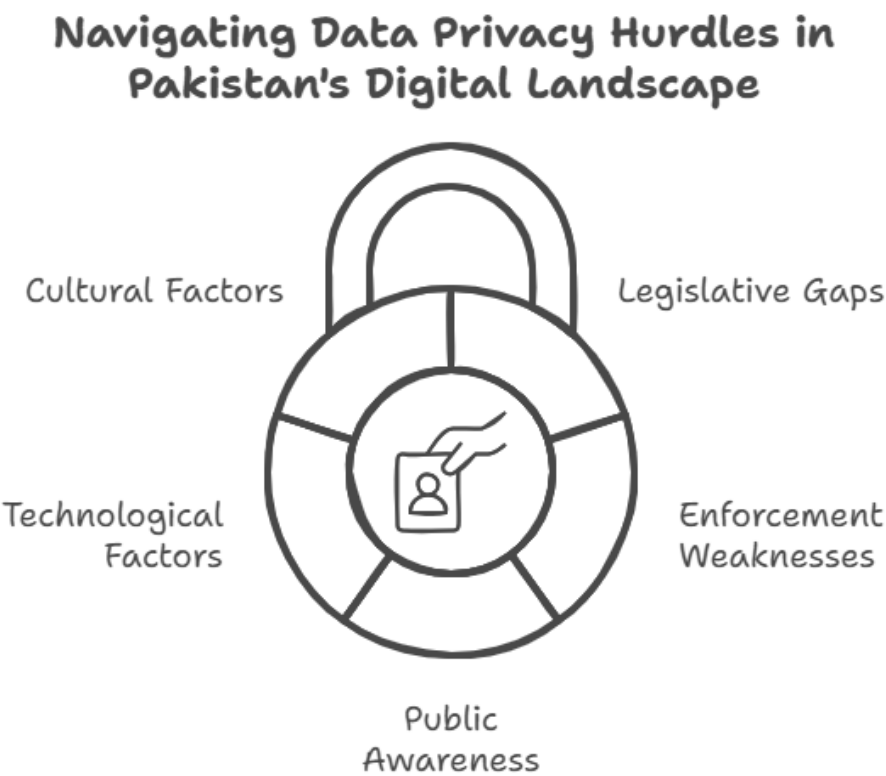


Figure 1: Data Privacy Landscape in Pakistan

Prior to the PDPB 2023, data protection in Pakistan was primarily governed by fragmented regulations, including the Prevention of Electronic Crimes Act (PECA) [18], the Pakistan Telecommunication (Re-organisation) Act (PTRA), and the Official Secrets Act (OSA) [19]. While these frameworks address specific sectors, they leave significant gaps in data protection, failing to cover data handling practices by many entities. This highlights the urgent need for a comprehensive data protection law that recognizes and protects individuals' rights to privacy, as stipulated by the Constitution of Pakistan.

Table 1: Legal Framework in Pakistan

Provision	Description
Protection of Personal Data	Ensures individuals' personal data is respected and their rights are upheld, establishing a legal basis for data protection.
Regulation of Data Processing	Outlines guidelines for the lawful collection, storage, and sharing of personal information, promoting transparency and accountability among data controllers.
Data Localization Requirements	Proposes revisions to data localization requirements, aiming to balance protecting personal data and facilitating business operations.
Independence of the Regulatory Commission	Establishes a dedicated regulatory body, the National Commission for Personal Data Protection (NCPDP), to monitor compliance and enforce the law.
Clear Definitions	Aims to provide clearer definitions of key terms related to personal data, reducing ambiguity and fostering a predictable regulatory environment.

Key Provisions of the Personal Data Protection Bill 2023

The PDPB 2023 introduces several critical provisions aimed at enhancing data privacy:

Protection of Personal Data: The bill seeks to ensure individuals' personal data is respected and their rights upheld, establishing a legal basis for data protection.

Regulation of Data Processing: It outlines guidelines for the lawful collection, storage, and sharing of personal information, promoting transparency and accountability among data controllers

Data Localization Requirements: The bill proposes revisions to data localization requirements, aiming to strike a balance between protecting personal data and facilitating business operations

Independence of the Regulatory Commission: A dedicated regulatory body, the National Commission for Personal Data Protection (NCPDP), is established to monitor compliance and enforce the law. However, concerns have been raised about its independence from political influence, as it currently operates under the Federal Government's control

Clear Definitions: The PDPB 2023 aims to provide clearer definitions of key terms related to personal data, reducing ambiguity and fostering a predictable regulatory environment

Challenges and Criticisms

Despite the bill's positive intentions, there are several challenges that need to be addressed for effective implementation:

Vague Definitions and Broad Exemptions: Critics have pointed out that some definitions within the bill are ambiguously defined, which could lead to misuse and subjective interpretations. Terms such as 'national interest' and 'public interest' may be exploited to justify breaches of privacy

Concerns over Surveillance: There is ongoing debate about the balance between individual privacy rights and the government's need for surveillance, particularly in the context of national security and counter-terrorism. This has led to apprehensions about potential state overreach and the implications for citizens' privacy

Legislative Delays: As of now, the PDPB 2023 has not yet been passed by the National Assembly, raising concerns about the prioritization of data protection legislation in the face of other pressing political issue.

Historical Context

The evolution of data privacy laws in Pakistan has been significantly influenced by the country's constitutional framework and the growing recognition of individual rights. Article 14 of the Constitution of Pakistan, adopted in 1973, enshrines the right to privacy as a fundamental right, stating that "the dignity of man, and subject to law, the privacy of home, shall be inviolable." [20]. However, despite this constitutional recognition, the absence of a comprehensive data protection law has left many gaps in safeguarding personal data, resulting in a fragmented legal landscape. Historically, the legal framework surrounding data privacy in Pakistan has been limited. Prior to recent developments, the country relied on sector-specific regulations, such as the Prevention of Electronic Crimes Act (PECA), which addresses certain aspects of data privacy and cybersecurity but lacks a cohesive structure to protect personal data across all sectors. This piecemeal approach has led to inconsistencies and challenges in enforcement, often leaving individuals vulnerable to unauthorized data use and breaches. In recent years, there has been a growing awareness among policymakers and the public regarding the importance of robust data protection mechanisms. The Ministry of Information Technology and Telecommunication (MoITT) has initiated steps toward drafting a comprehensive data protection bill, incorporating feedback from various stakeholders. However, concerns remain regarding specific provisions in the bill that could undermine the independence of regulatory bodies and limit access to justice for data subjects. Comparatively, other countries have taken significant strides in establishing data privacy frameworks, often leading the way in defining rights and responsibilities surrounding personal data. The European Union's General Data Protection Regulation (GDPR), for example, has set a global benchmark for data protection, emphasizing transparency, accountability, and individuals' rights to access and control their personal information. In contrast, Pakistan's efforts to enact comprehensive data protection legislation are still in their nascent stages, highlighting a critical need for legal reforms that align with international best practices and safeguard citizens' rights in the digital era. As the digital landscape continues to evolve, it is imperative for Pakistan to prioritize the establishment of a unified and robust data protection regime. This not only aims to protect individual rights but also fosters trust in digital services, positioning the country to compete effectively in an increasingly interconnected world [21].

Current State of Data Privacy in Pakistan

In Pakistan, the rapid advancement of technology has led to an increased reliance on digital platforms for personal and commercial transactions, raising significant concerns regarding data privacy and protection. The Constitution of Pakistan recognizes the right to privacy as a fundamental right under Article 14, which asserts that "the dignity of man and, subject to law, the privacy of home, shall be inviolable". However, the country currently lacks a comprehensive data protection law, which poses challenges for individuals seeking redress for unauthorized data usage or breaches.

Surveillance and Privacy Issues

Despite constitutional guarantees, instances of surveillance and infringement of privacy rights are reported frequently. Notably, in 2016, Senator Saleem Mandvi Walla alleged that the federal government authorized the interception of his personal data, highlighting the pervasive nature of state surveillance, particularly against activists and journalists. A report by the Digital Rights Foundation in 2017 documented the experiences of female journalists who faced extensive social surveillance and harassment, indicating a troubling trend towards invasive monitoring in the digital landscape.

Legal Framework and Challenges

The existing legal framework includes sector-specific laws such as the Prevention of Electronic Crimes Act (PECA), which mandates the Federal Investigation Agency (FIA) to report on its activities regarding electronic crimes. While PECA provides some mechanisms for the protection of sensitive data, critics argue that a dedicated data protection law is essential to comprehensively address the complexities of personal data management in a digital age. The absence of such a law hinders the establishment of a robust framework for data privacy, leaving individuals vulnerable to unauthorized data handling.

Public Awareness and Education

To enhance data privacy protections, it is crucial to raise public awareness regarding the risks associated with sharing personal information online. Government-led initiatives to educate the population about digital scams and the importance of protecting personal data are necessary to empower individuals, particularly those less familiar with technology. Moreover, the effectiveness of existing laws can be improved by reforming the complaint system to make it more victim-friendly and efficient.

The Need for Comprehensive Legislation

In light of the increasing importance of data privacy in the digital age, experts argue that robust privacy laws are urgently needed in Pakistan. These laws must not only address current issues but also prepare for emerging threats

to personal data as technology continues to evolve. By enacting comprehensive data protection legislation, Pakistan can build trust in its digital economy and ensure the security of its citizens' personal information, thereby fostering a safer and more responsible digital environment.

Comparison with Other Countries

Data privacy regulations vary significantly across countries, with some regions implementing robust legal frameworks while others lack basic protections for personal information. The European Union (EU) is widely regarded as a leader in data privacy, primarily due to the General Data Protection Regulation (GDPR), which establishes stringent guidelines for data management and grants individuals extensive rights regarding their personal information [22].



Figure 2: Comparison with Other Countries

The GDPR applies uniformly across all member states, ensuring that personal data is protected regardless of where it is processed or stored, which has significant implications for companies operating internationally, particularly those based in the United States. In contrast, countries like China have stringent state control over personal data, with minimal privacy protections for individuals. The Chinese government exercises extensive monitoring and data interception without judicial oversight, posing significant risks to citizens' privacy rights. While recent regulations, such as the Cybersecurity Law, have been introduced to provide some level of data protection, these measures fall short of the comprehensive frameworks seen in the EU. On the other hand, many countries in Africa and Asia are lagging behind in terms of data privacy regulations. The absence of robust legislation means individuals must take

proactive steps to safeguard their personal information. According to recent assessments, only 128 of the 194 countries globally have some form of data privacy legislation, leaving 66 countries, including major economies with rapidly growing internet usage, without legal protections for their citizens. Pakistan's current regulatory framework exhibits weaknesses that hinder effective data protection.

Table 2: Comparison with Other Countries

Category	Pakistan (PDPB 2023)	EU (GDPR)	US (CCPA)	China (Cybersecurity Law)	Brazil (LGPD)	India (DPDP Act 2023)	South Africa (POPIA)
Scope	Aims to establish a robust legal framework to safeguard personal data.	Establishes stringent guidelines for data management and grants individuals extensive rights.	Focuses on enhancing privacy and consumer protection for California residents.	Exercises stringent state control over personal data with some level of data protection.	Establishes a comprehensive framework for personal data protection across various sectors.	Regulates the processing of digital personal data while recognizing the right of individuals to protect their personal data.	Promotes the protection of personal information processed by public and private bodies.
Enforcement	National Commission for Personal Data Protection (NCPDP) to oversee compliance.	Applies uniformly across all member states.	Enforced by the California Attorney General.	Government exercises extensive monitoring and data interception.	Enforced by the National Data Protection Authority (ANPD).	Data Protection Board of India will enforce the provisions of the Act.	Enforced by the Information Regulator.
Individual Rights	Seeks to ensure individuals' personal data is respected and their rights upheld.	Grants individuals extensive rights regarding their personal information.	Provides specific rights to consumers, including the right to access and delete personal information.	Provides some level of data protection but falls short of comprehensive frameworks.	Grants individuals' rights like access, correction, deletion, and portability of their data.	Grants individuals rights to access, correction, deletion, and grievance redressal.	Grants individuals rights like access, correction, deletion, and objection to processing.
Challenges	Vague definitions, concerns over surveillance, and legislative delays.	Balancing data protection with other interests.	Varying state laws create complexity.	State control and surveillance pose risks to privacy rights.	Implementing and adapting to the new regulations, and ensuring consistent enforcement.	Balancing innovation with privacy, clarity on cross-border data flows, and effective implementation.	Ensuring compliance across diverse sectors and addressing capacity constraints in enforcement.

The existing regulations, such as the Prevention of Electronic Crimes Act (PECA), focus primarily on specific industries, neglecting a comprehensive approach to data privacy that could safeguard all entities. This creates a gap that may leave personal data vulnerable to misuse and abuse. Furthermore, proposals for data localization in Pakistan could complicate compliance for foreign companies and hinder local businesses' ability to compete in the global market, as such requirements impose additional costs and limit access to innovative technologies[23].

Methodology

Data Privacy Challenges in Pakistan

The landscape of data privacy in Pakistan is fraught with challenges that hinder the effective protection of personal data and the growth of the technology sector. One of the most significant concerns is the proposed data localization requirements, which critics argue will limit access to global digital services for Pakistani users and complicate operations for technology companies. Stakeholders have expressed that the current draft legislation fails to meet their expectations, particularly regarding broad definitions of data categories and the scope of applicability. This lack of clarity may impede cross-border data flows and pose compliance challenges for businesses operating in Pakistan. Furthermore, the proposed amendments to existing laws, such as the Prevention of Electronic Crimes Act (PECA) [24], raise alarms about the potential for increased state control and surveillance. Critics, including digital rights advocates, emphasize the need for open debate and stakeholder input before passing such legislation to avoid repercussions on civil liberties and the operations of digital businesses. The legislation is viewed as particularly detrimental to marginalized communities, including women, who may face further risks online without adequate protections in place. Additionally, the enforcement of existing data protection laws presents a major hurdle. Although there are legal frameworks intended to safeguard personal data, issues such as insufficient resources for regulatory bodies and a lack of trained personnel result in poor compliance among organizations. This enforcement challenge is compounded by the rapid evolution of technology, which outpaces legislative measures and leaves gaps that cybercriminals can exploit. Moreover, penalties for non-compliance, while potentially severe, are often viewed as minimal by organizations, which may not prioritize data protection efforts. The patchwork implementation of data protection regulations across different sectors further complicates the issue. Some industries have established sound data handling practices, while others, particularly smaller businesses, may operate without adequate safeguards, leading to inconsistent protection for individuals. This disparity underscores the urgent need for a comprehensive data protection law in Pakistan to establish clear standards and foster a culture of accountability within organizations handling personal data. Overall, the challenges and gaps in existing laws pose significant risks to individual privacy rights and hinder the development of a robust digital economy in Pakistan.

Recommendations for Improving Data Privacy

To effectively combat the challenges of data privacy in Pakistan, there is a need for comprehensive reforms that include stronger legal frameworks, efficient regulatory bodies, and increased public awareness. It is essential to establish a robust legal framework that not only addresses current issues but is also equipped to handle emerging threats to personal data. This can be achieved by incorporating international best practices, such as those seen in the EU’s GDPR, strengthening enforcement mechanisms to ensure compliance, and ensuring the independence of regulatory bodies like the National Commission for Personal Data Protection (NCPDP) to avoid political influence [25].

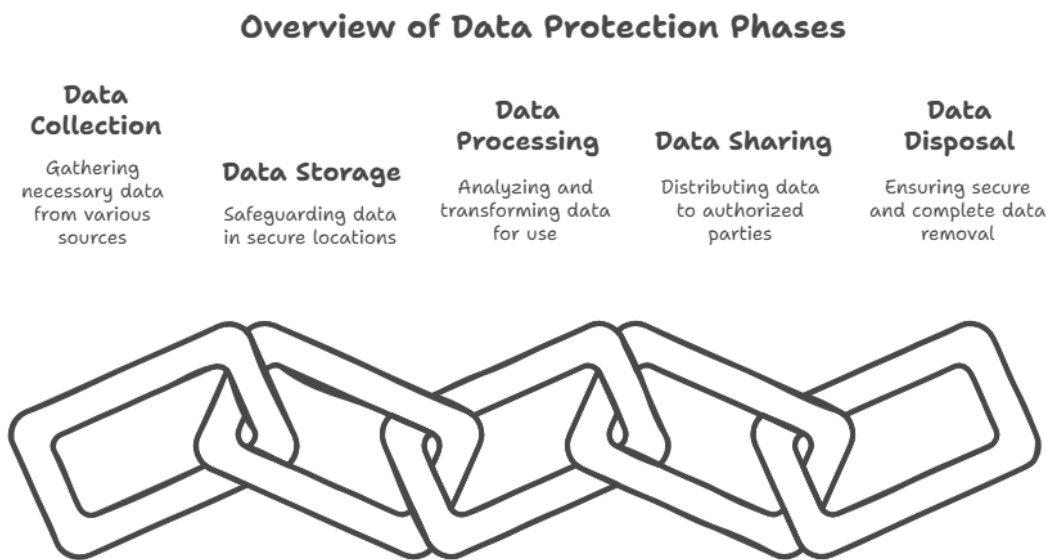


Figure 3: Recommendations for Improving Data Privacy

In addition to legal and institutional improvements, launching public awareness campaigns is crucial to educate individuals about digital scams and the importance of protecting their personal data. Such initiatives can empower citizens, particularly those less familiar with technology, to take proactive steps in safeguarding their privacy. Furthermore, the effectiveness of existing laws can be enhanced by making the complaint system more victim-friendly and efficient, ensuring that individuals have access to justice and can seek redress for unauthorized data usage or breaches.

Table 3: Recommendations for Improving Data Privacy

Challenge	Recommendation
Lack of comprehensive legislation	Expedite the passage and implementation of a robust data protection law.
Weak enforcement mechanisms	Strengthen the regulatory authority and provide it with necessary resources.
Limited public awareness	Launch extensive public awareness campaigns to educate citizens about their data privacy rights.
Technological factors(Data breaches and Cyber Attacks)	Enforce strict cybersecurity laws, promote encryption, and regular security audits.
Cultural factors (lax data handling practices)	Conduct sensitivity training and education regarding data privacy best practice for private and public sector workers.

Ultimately, by prioritizing these reforms, Pakistan can foster a culture of accountability, build trust in its digital economy, and ensure the security of its citizens' personal information, thereby creating a safer and more responsible digital environment.

Conclusion

Data privacy is a critical issue that requires immediate attention in Pakistan. Compared to other countries with well-established security policies, Pakistan’s data protection framework lacks the necessary enforcement, regulatory bodies, and public awareness. By adopting international best practices and strengthening legal frameworks, Pakistan can significantly reduce data privacy loss and enhance its cybersecurity infrastructure. This study emphasizes the need for comprehensive reforms to ensure the protection of personal data in the digital age.

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