

SAFEGUARDING SOVEREIGNTY: WHY BOLIVIA'S ARTIFICIAL INTELLIGENCE FUTURE DEPENDS ON DATA PROTECTION

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Abstract. -

*This investigation evaluates the proposed Bolivian Artificial Intelligence Bill (Draft Law No. 178/2024-2025), identifying a critical “legal gap” that threatens the nation’s digital ecosystem. By conducting a comparative analysis of regional and international frameworks, this paper argues that attempting to regulate automated systems without a foundational Data Protection Law (DPL) result in a state of “legal lawlessness”, where the sovereignty of Bolivian citizens is effectively outsourced to the private terms of foreign technology corporations. Moving beyond a mere critique of current legislative efforts, this study offers a **proportionality-based solution** designed to balance rigorous safety standards with the necessity for economic growth. Central to this proposal is the pursuit of **strategic autonomy**, whereby Bolivia engages with global digital networks on its own legal terms rather than through passive imitation. The findings conclude that a “Bolivianized” regulatory framework featuring independent oversight and agile mechanisms like regulatory sandboxes is the essential prerequisite for transforming Bolivia into a secure and competitive participant in the global AI economy.*

Introduction. -

Bolivia Stands at a decisive technological crossroads. With the Senate's recent movements toward an AI **Bill (Draft Law No.178/2024-2025)**¹, the nation has signaled its intent to join the global digital vanguard. However, this ambition is hindered by a critical structural flaw: the absence of a comprehensive Data Protection Law. Building an AI framework without data protection is like building a house on shifting sand. This paper contends that true **strategic autonomy**- the ability of a nation to define its own digital destiny- cannot be achieved through the mere adoption of technology; it requires the assertion of legal authority over the data that fuels it. This investigation does not seek only to identify the "premature" nature of current drafts, but rather to propose a proactive, **proportionality-based roadmap** that safeguards the dignity of citizens while fostering an environment of legal certainty attractive to international investment.

Some scholars argue that you cannot be a leader in AI without a solid ethical/legal foundation.² Bolivia remains one of few South American nations without a comprehensive Data Protection Law. As neighbors like Brazil and Chile modernize their frameworks, Bolivia must act urgently to avoid being sidelined in the rapidly evolving regional digital market.³

¹ **Asamblea Legislativa Plurinacional. (2025).** Proyecto de Ley No.178/2024-2025. Regulación de la Inteligencia Artificial. La Paz. Bolivia

² **Floridi, L. (2021).** The Ethics of Artificial Intelligence.

³ **Ibero-American Data Protection Network (2023),** *"Established unified **standards** for the region, although the Ibero-American Standards for Data Protection (RIPD Standards) are not legally binding treaties; rather they serve as a non-mandatory model to help member countries align their national laws. Bolivia remains one of few South American countries without comprehensive data protection law. By not adopting these international standards, Bolivia risks significant **obstacles to international trade**, as trading partners like Argentina, Brazil, and Uruguay, who have already aligned their laws with global standards like the GDPR may restrict data transfers to countries they deem "inadequate". Furthermore, this gap creates **legal uncertainty** for businesses.*

Building an AI framework without data law is like building a house on shifting sand. In Bolivia, although the 2009 Constitution⁴ recognizes in **Article 130** the “**Action for the Protection of Privacy**”, introduced as “**Habeas Data**” during a constitutional reform in 2004. This is not enough for Data Protection. The risks of data misuse by AI systems are high, In the absence of a comprehensive Data Protection Law, the personal information of Bolivian Citizens is effectively governed by the arbitrary “Terms and Conditions” of foreign Big Tech corporations rather the sovereign laws of the Bolivian State. This regulatory gap creates a vulnerability that no AI bill, on its own, can bridge.

As Nations scramble to regulate Artificial Intelligence (AI), many are realizing that a robust Data Protection Law isn't just “nice-to-have” it's the essential foundation. Trying to regulate AI without a data law is like trying to enforce traffic rules before building the roads.

What is AI, exactly?

At its core, **Artificial Intelligence** is a field of computer science dedicated to creating systems capable of performing tasks that typically require human intelligence. This includes reasoning, learning from past experiences, and solving complex problems.⁵

Modern AI, specifically **Machine Learning** operates by identifying patterns within massive datasets to make predictions or decisions. A simple way to understand this is, the learning algorithm is the “**engine**” while data serves as the “**fuel**”, neither can function effectively without the other. However, its also important to have in mind that as the “engine” grows more complex, it often becomes what scholars call a “Black Box” considering these systems are fueled by opaque data and hidden logic, they create what

⁴**Constitución Política del Estado Plurinacional de Bolivia. (2009).** *Gaceta Oficial de Bolivia*.

⁵ **Russell, S., & Norvig, P. (2020).** *Artificial Intelligence: A Modern Approach* (4th ed.). Pearson. “At its core, Artificial Intelligence is a field of computer science dedicated to creating systems capable of performing tasks that typically require human intelligence. This includes reasoning, learning from past experiences, and solving complex problems. Russell and Norvig define these systems as “intelligent agents” that perceive their environment and act rationally to achieve goals, a definition that establishes perception of external data as the non-negotiable starting point for any intelligent action”.

they name as a “black box society” where critical decisions are made without transparency or accountability.⁶

Why Data Protection Comes First

You cannot govern the engine without first controlling the fuel. Here is why a DPA must be the priority:

1.- Privacy is the Input: AI models are trained on vast amounts of personal information. Without a DPA, there are no rules on how the data is collected, whether consent was given, or if the data is being used ethically.⁷

2.- Preventing Bias: If the training data is “garbage” or biased, the AI’s output will be too. Data Protection laws often include mandates for **data quality** and accuracy, which directly improves the reliability of AI systems.

3.- Establishing Rights: A DPA gives individuals the right to know when their data is being processed. This is the only way to ensure **transparency** once the data is fed into a complex, “black box” AI algorithm.

4.- Enforcement Infrastructure: Data Protection authorities usually serve as the blueprint for AI oversight. DPA creates the **legal habit** of transparency that AI then follows.

Why Data Protection is an Investment Magnet

It is a common misconception that data laws “scare away” investment. In reality, modern Big Tech companies prioritize **legal certainty** and predictability.⁸ Without a clear Data

⁶ **Pasquale, F. (2015).** *The Black Box Society: The Secret Algorithms That Control Money and Information*. Harvard University Press. <http://www.jstor.org/stable/j.ctt13x0hch>

⁷ **Zuboff, S. (2019).** *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. Public Affairs.

⁸ **UNCTAD. (2021). Digital Economy Report 2021:** Shaping the future of the Data-driven Digital Economy. United Nations Conference on Trade and Development “*As Highlighted by UN Trade and Development (UNCTAD), a clear Data protection Law (DPL) is not a barrier but a necessity to build trust in the digital economy. Without these frameworks, international companies face a fragmented legal landscape that creates risks and stalls digital growth, whereas robust regulations provide the stable environment needed to attract high-value international investment*”.

Protection Law (DPL), international companies face “regulatory gray zones”⁹ that increase their legal and reputational risks.

By establishing a clear DPL, Bolivia offers tech giants

- **Predictability:** Companies know exactly what is required for compliance, reducing the cost of long-term planning.
- **Trust:** Robust Privacy standards increase consumer confidence, which has been shown to shorten sales cycles and improve user engagement for digital services.
- **Interoperability:** Aligning with international standards like the GDPR makes it easier for global firms to integrate Bolivia into their regional operations.

Localizing the Vanguard: Beyond European Templates

While it is wise for Bolivia to look to international frameworks like the EU AI Act for inspiration, we must avoid the trap of “legal transplantation”. Simply coping European standards into a South American context ignores our unique reality.¹⁰

In a nation with a large informal economy and growing but still emerging tech ecosystem, “one-size-fits-all” regulation carries specific dangers. Excessive administrative burdens could accidentally suffocate local startups before they can compete with global giants. Furthermore, AI systems used for social benefits must be calibrated for the Bolivian social fabric ensuring that those without a traditional digital footprint are not excluded by algorithms designed for European infrastructures. Our regulation must be “Bolivianized”: agile enough to foster local innovation, yet strong enough to ensure that AI “engine” respects the diverse needs of our diverse country.

¹⁰ **Watson, A. (1993).** *Legal Transplants: An Approach to Comparative Law*. University of Georgia Press.” According to this scholar “legal transplantation” often fails because laws are not merely technical rules but are deeply rooted in the social and economic history of a Nation”. For Bolivia, a direct copy of the EU AI Act risks becoming a “dead letter” a law that exists on paper but is unenforceable in our informal economy.

Strategic Roadmap: Securing Bolivia's AI Future

To transform the draft AI Law from a symbolic gesture into a functional shield, Bolivia must take five decisive legislative actions:

- **Enact a Comprehensive Data Protection Law (DPL):** While the constitution offers a “Private Protection Action” (habeas data), it only provides defense after a violation occurs.¹¹ Bolivia requires a statutory Data Protection Law to provide the proactive “data architecture” the rules of the road that prevents harm before the AI algorithm is even deployed. A DPL is needed to set rules on how data is collected for AI training, requiring **express and informed consent** before the “fuel” enters the machine. In essence a DPL would create **compliance**, while the Constitution only offers **litigation**.
- **Establish an Independent Data Authority:** The current draft AI bill suggests the **Agency for Electronic Government (AGETIC)** as the oversight body. However, international standards suggest an **independent authority** is essential to prevent conflicts of interest ¹², especially when AI is used within state digital citizenship platforms.¹³
- **Adopt “Risk- Based” Accountability:** Bolivia’s draft bill correctly moves toward prohibiting high-risk AI, such as **social scoring** and unauthorized **remote biometric identification**. The next step is to mandate **Algorithmic Impact Assessments** for any system that could affect a citizen’s access to justice, health, or financial services.

¹¹ **Guillaumet, G. (2020).** *Habeas Data y Protección de Datos Personales en América Latina*. this scholar argues “that in the era of automated processing, constitutional remedies are purely reactive”.

¹² **OECD (2019).** *Recommendation of the Council on Artificial Intelligence*. This aligns with the OECD principles, which emphasize that oversight bodies must be structurally insulated from the entities they regulate to ensure public accountability

¹³ **Ringingeisen, T., & Hancock, P. (2022).** *Regulatory Sandboxes and the Future of AI Governance*. Journal of Digital Policy.

- **Launch Regulatory Sandboxes:** Bolivia can launch “Sandboxes” supervised spaces where local startups can test AI tools without the immediate burden of full compliance. These spaces are essential for adapting high-level international standards to the specific socio-economic reality of Bolivian businesses.
- **Modernize the 2011 Telecommunications Information Technology and Communication Law:** The 2011 Telecommunications Law is a relic of a pre-AI era. It must be synchronized with modern concepts like **automated decision-making** and **cross-border data flows** to ensure legal harmony across all digital sectors.

Conclusion: The foundation of Digital Prosperity

Bolivia's move toward AI regulation is a bold statement of intent, but a law without a foundation is a house divided. **Digital sovereignty**¹⁴, is not gained simply by adopting new technology, but by ensuring the data of Bolivian people remains under protection of a robust national law. Shifting Bolivia from a passive recipient of foreign norms to a sovereign architect of its own digital identity.

Crucially, this is not a choice between protection and progress. By enacting a modern Data Protection Law that is thoughtfully adapted to our local reality, Bolivia does not build a wall it builds a bridge. It creates a transparent, predictable, and secure environment that invites Big Tech to invest with confidence while ensuring that local innovation is not suffocated by foreign templates. The path forward is clear: to lead in the “Age of Intelligence”, Bolivia must first master the “Age of Privacy”.

¹⁴ **De Sousa Santos, B. (2002).** *Toward a New Legal Common Sense.*

Pinto, R. (2020). *Digital Sovereignty or Digital Colonialism? New Tensions of Data Governance in the Global South.* “As Pinto warns, the absence of such framework, risks subjecting the nation to “digital colonialism” where citizens data is extracted for foreign gain. Consequently, establishing a local shield aligns with the “new legal common sense” proposed by De Sousa Santos”.

Only then will the “Shifting sands” of the digital frontier turn into a solid foundation for national innovation and international partnership, and the enduring dignity of its citizens.

Ultimately, digital sovereignty must not be equated with isolationism; rather, it is the pursuit of '**strategic autonomy**' where the Global South engages with global networks strictly on its own legal terms.¹⁵

Ultimately, this investigation moves beyond diagnosing legislative gaps to advocate for a proactive based legal scholarship that designs, rather than just critiques. By proposing a **proportionality-based roadmap** centered on independent oversight and agile regulatory sandboxes this work established that a robust Data Protection Law is not an obstacle to innovation, but the primary engine of its legitimacy. For Bolivia, true **strategic autonomy** is found in the ability to engage with global technological networks strictly on its own legal terms. By mastering the “Age of Privacy” first, the nation secures a future where innovation serves its people, transforming the shifting sands of the digital frontier into a sovereign foundation for dignity and progress.

Editor's Note: *This analysis was developed with the assistance of artificial intelligence to synthesize regional legal frameworks and cross-reference legislative progress with international standards. While many today fear that technology will render human roles obsolete or displace jobs, I remain a firm believer that technology is neither inherently good nor bad; it is simply a tool whose value is defined by how we choose to use it. At the end of the day, no algorithm can replace the nuance of human judgment or the ethical oversight of human intelligence. By using AI to evaluate the very laws intended to govern it, this article serves as a practical example of how humans and machines can collaborate provided, we have the robust legal foundation necessary to keep that partnership safe, ethical and transparent.*

¹⁵**De Freitas, M. V. (2025).** *Shaping a Just Digital Order for the Global South.* Policy Center for the New South. “*DE Freitas presents **strategic autonomy** as a proactive survival strategy for Global South nations like Bolivia. It is the practical execution of “digital sovereignty” that focuses on reducing dependencies to ensure a country can act independently in the digital realm De Freitas argues that overdependence on foreign technologies creates strategic vulnerabilities where informational empires can shape local behavior and politics. Autonomy is the shield that preserves national resilience in the face of these asymmetries*

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