UFSM

InterAção

ISSN 2357-7975
OPEN ACCESS

IA., Santa Maria, v. 17, n. 3, e98322, p. 1-29, 2026 • https://dx.doi.org/10.5902/2357797598322
Submissão: 20th/08/2026 • Aprovação: 14th/09/2026 • Publicação: 2nd/10/2026

Artigos Dossiê

Brazilian diplomacy and technological autonomy: from the 2005 GGE to the 2025 OEWG and AI governance

Diplomacia brasileira e autonomia tecnológica: do GGE de 2005 ao OEWG de 2025 e à governança da IA

Jomar Barros de Andrade[I]

[I]Universidade Federal de Santa Maria, Santa Maria, RS, Brazil

Abstract

This study examines the extent to which Brazilian foreign policy has strengthened technological autonomy amid the expansion of global digital governance. It argues that Brazil pursues a pragmatic autonomy strategy: gaining normative prominence in multilateral cybersecurity and artificial intelligence forums while simultaneously reducing its dependence on external infrastructure and suppliers at the same pace. To test this claim, this study proposes a second-generation exploratory Digital Sovereignty Index, building on the GEPSI framework with a focus on longitudinal autonomy dynamics, built from open-source data, structured into five sub-indexes, and calculated for three time points (2005, 2015, and 2026). The analysis combines longitudinal measurements, document analysis, and historical narrative analysis. The results confirm a persistent asymmetry: normative autonomy advances substantially faster than technical-corporate autonomy, supporting a broader argument about the limits of diplomatic agency for semiperipheral states.

Keywords: Artificial intelligence; Cybersecurity; Digital governance; Foreign policy; Sovereignty

Resumo

O Brasil exerce liderança normativa internacional em temas do ciberespaço, impulsiona o BRICS no desenho da governança da Inteligência Artificial e é o país da América do Sul com nível mais alto nos índices internacionais de cibersegurança, mas depende de empresas estrangeiras para disponibilizar seus dados públicos em nuvem e é exposto a riscos pela dependência de cabos submarinos e data centers no exterior. O artigo argumenta que o Brasil pratica uma estratégia pragmática de autonomia tecnológica: busca o protagonismo normativo nos regimes multilaterais, enquanto promove ações para alcançar o nível essencial de soberania cibernética. O argumento é examinado por meio de um Índice de Soberania Digital, construído a partir de dados de fontes abertas, estruturado em cinco subíndices e calculado para três pontos temporais (2005, 2015, 2026), que quantifica a assimetria estrutural entre o ativismo normativo e a dependência da infraestrutura.

Palavras-chave: Inteligência artificial; Cibersegurança; Governança digital; Política externa; Soberania

Published by InterAção under a CC BY-NC-SA 4.0 license.

1 INTRODUCTION

International cyberspace governance has consolidated over the past two decades into one of the most complex arenas of contemporary foreign policy, and the digital environment has become a site of geopolitical contestation that, although intense, has remained below the threshold of open conflict. Reaching even a minimal consensus on related issues has proven difficult, generating extensive debate at the United Nations (UN), both in the Group of Governmental Experts (GGE) and in the Open-Ended Working Group (OEWG).

Brazil occupies a relevant position in this landscape through its participation in nearly every GGE, which it chaired in 2015 and 2021, both resulting in consensus reports, and through its increasingly proactive stance on artificial intelligence (AI) governance, both within BRICS (2025) and through bilateral initiatives.

Brazilian Foreign Policy (BFP) has a track record of success in these initiatives; however, this dynamic external posture coexists with domestic vulnerabilities. The view that BFP implementation occurs only at the international level is too narrow (Ramanzini Junior and Farias 2025, 22), since the existence of domestic capabilities to sustain diplomatic rhetoric is essential for technological autonomy, without which one cannot speak of complete sovereignty.

This article examines this gap through the lens of the original concept of autonomy, whose foundations, properly interpreted, still inform International Relations (IR) scholarship in the Information Age. The bridge to more recent theory runs through the concept of Active Non-Alignment (ANA), which operationalizes the state's capacity to exercise normative agency and create multilateral room for maneuver while managing structural technological dependence.

Cyber sovereignty is widely understood as the capacity to create and enforce rules in cyberspace through state governance (Leiter 2020, 2). To measure this evolution in the Brazilian case, this study proposes an exploratory Digital Sovereignty Index (DSI)

built from open sources available for the period under study.

The research question is: To what extent does the BFP contribute to strengthening technological autonomy, understood as the capacity to exercise normative leadership in international regimes while progressively reducing structural dependence on external suppliers, in a way measurable by a DSI?

Although the article uses "technological autonomy" and "digital sovereignty" in close proximity, the two terms are not synonyms. Autonomy denotes agency, defined by the capacity to act and decide independently within a given structure, whereas sovereignty implies authority, characterized by the recognized prerogative to exercise control over a domain. The DSI assesses the progress toward autonomy (normative and technical-corporate capacity to act), and digital sovereignty is treated here as the broader, aspirational condition toward which accumulated autonomy gains may eventually contribute.

To answer this question, this study sets two objectives: (a) to analyze the historical trajectory of Brazilian normative leadership in UN cyber diplomacy, identifying artificial intelligence as its recent extension, and (b) to measure, through the DSI, the distance between this external prominence and the country's material and domestic coordination capabilities.

The article is organized into four subsequent sections: analytical-interpretive design, theoretical framework, presentation of the DSI, and analysis of Brazilian diplomacy from a longitudinal perspective from 2005 to 2026, followed by the conclusion.

2 ANALYTICAL-INTERPRETIVE DESIGN

This study brings together cyber diplomacy, technological sovereignty, AI governance, and Brazilian autonomy, connecting a rapidly evolving international agenda with the country's structural vulnerabilities. The combination of Brazil's international normative agency with its domestic technological capacity allows us to ask whether

material and institutional advances accompany international prominence.

By placing the concept of power at the center of the analysis, this study aligns with the **problem-driven** tradition of social inquiry (Flyvbjerg 2011, 36–39). Furthermore, by seeking arguments that engage both academic debates and the practical dilemmas faced by policymakers, the research subscribes to the principles of analytic eclecticism (Sil and Katzenstein 2010, 19), flexibly utilizing the distinct insights that various theories and methodologies offer.

To this end, complementary lines of inquiry were adopted, operating at different levels of abstraction.

– Digital Sovereignty Index : The study's quantitative component. Built from 14 variables, five sub-indexes, and three time points (2005, 2015, and 2026), it operationalizes Jaguaribe's (1979) analytical categories in the digital domain, with variables measuring national viability through digital infrastructure, the construction of international permissiveness via normative leadership, and progress (or stagnation) in technical-corporate autonomy. Its role in the methodological design is to quantitatively organize the evidence identified by the qualitative lines of inquiry without carrying the weight of the central argument alone.

– Comparative documentary analysis (documentary-historical) : the core normative corpus comprises six GGE reports (A/60/202 to A/76/135) and the OEWG Final Report (UN 2025). The procedure identifies how the GGE reports, led by Brazil, and Brazilian positions during the OEWG were incorporated into the final report, examining the pattern of effective normative leadership.

– Diplomatic corpus (documentary-historical) : the analysis combines three sources; the Concordia Corpus, filtered using the terms "cybersecurity," "artificial intelligence," and "technological sovereignty"; the Brazilian Foreign Policy Reviews (1990–2025); and Ministry of Foreign Affairs (MRE) Press Notes (2020–2026), which yielded 49 bilateral and multilateral agreements of interest, organized into four historical phases: 2005–2011 (discreet genesis), 2012–2015 (normative inflection),

2016–2021 (multilateral consolidation), and 2022–2026 (transition to AI and a permanent mechanism); and

– Finally , these three lines are connected through *historical narrative analysis* , relating critical events of the period (the Snowden case, the interception of then-President Dilma Rousseff's phone, among others) to normative mobilization in the GGE-OEWG forums and its non-linear unfolding in domestic policy aimed at strengthening digital sovereignty, complemented by the DSI's quantitative indicators. This historical narrative analysis establishes event sequencing and contextual association between critical events and subsequent normative mobilization; it does not claim to test alternative causal explanations or to meet the evidentiary standard of process tracing as a causal-inference method.

Generative artificial intelligence tools were employed exclusively to support auxiliary, verifiable computational tasks in this study. These operations included the arithmetic verification of the Digital Sovereignty Index's weighted aggregation, consistency checks on normalization formulas, and the tabular organization of raw data, as detailed in the Methodological Annex. Crucially, these tools did not replace any core analytical stages, including variable definition, primary source selection, weight and ordinal value assignment, or the theoretical interpretation of results, all of which remain the authors' exclusive responsibility.

3 THEORETICAL FRAMEWORK: AUTONOMY, SMART POWER, WEAPONIZED INTERDEPENDENCE, AND ACTIVE NON-ALIGNMENT

The rise of digital technologies has redefined the nature of power, allowing states to project their influence beyond traditional military and economic means. Traditional IR theories have struggled to incorporate these changes (Garcia 2025, 2). Taking seriously the claim that "powers are inclined to seek opportunities to alter the world's distribution of power in their favor" (Mearsheimer 2001, 3), this study shows that a pragmatic reading of existing theoretical foundations is capable of proposing practical

solutions to current problems. The four theoretical resources introduced below, Smart Power, weaponized interdependence, and Active Non-Alignment, together with the graduation dilemma discussed further on, are not treated as competing paradigms to be reconciled, but as auxiliary mechanisms organized around autonomist theory (Jaguaribe 1979), which anchors the article's structural argument and, ultimately, the DSI itself. The closing synthesis of this section makes that architecture explicit.

According to Castro (2012, 318), realist theorists "argue that the international scenario lives under a state of relative latent anarchy, not in the sense of an absence of structures and rules or complete chaos, but in the absence of a central, supranational government capable of effectively correlating international norms and institutions." This description fits the reality of cyberspace well, where states are the principal actors, maximize power, prioritize their own agendas, and organize themselves hierarchically (ibid., 320-322), though cybersecurity also opens space for liberal approaches, which value multilateralism, good faith, and equal standing among countries (ibid., p.356).

States exercise power in cyberspace through the diffusion of values and ideas and through the use or threat of force. This dual register corresponds to what Nye (2011) defined as Smart Power: the balanced combination of coercion (hard power) and persuasion (soft power), the combination best suited to the reality of the digital domain, where nearly all disputes remain below the threshold of conflict.

The Information Age has increased interdependence among actors who compete for their interests without crossing this threshold. States that control the most important nodes in global communication networks (data centers and submarine cables, among others) occupy a privileged position to impose costs on others, in what Farrell and Newman call weaponized interdependence (2019, 45). This asymmetry did not result from state planning but from the market's pursuit of efficiency, which benefited traditional centers of power (ibid. 54).

These market demands are dynamic, however, since the same centralization that increases efficiency also generates risk as new markets consolidate, and the high

operating costs in developed countries justify the search for alternatives. Gaps then emerge that can be exploited by peripheral actors attentive to the weaknesses of power centers (Puntigliano 2015, 79).

Jaguaribe's autonomist theory, to which this article anchors its argument, supplies the framework for understanding how a state can exploit such gaps without overturning the underlying structural asymmetry. Jaguaribe, working within the realist tradition, defined autonomy not as territorial inexpugnability but as a wide margin of self-determination in conducting domestic affairs and the capacity for independent international action (1979, 93). Similarly, Puig understood it as the way in which "the groups responsible for steering the destiny of the State perceive international reality and accept (or not) pursuing the maximum degree of national decision-making capacity attainable within the objective context of the international system" (Bernal-Meza 2015, 106).

The end of the Cold War, fluctuating confidence in multilateralism, the brief moment of US unipolarity, and the rise of China have fundamentally shaped this landscape. Fortin, Heine, and Ominami (2023, 7) go so far as to argue that the United States is reviving Dependency Theory through its pursuit of decoupling from the Chinese economy. While this is arguably an overstatement, it underscores a crucial reality in that both powers now stand at the technological frontier, to the point where even traditionally core nations face structural vulnerabilities once confined to the periphery.

Puig already considered it "practically impossible for situations of total dependence or autonomy to occur in reality" (Briceño Ruiz 2015, 36), since cases in which powers act entirely independently and still achieve their objectives are rare. It is precisely for this reason that Autonomy, with its unusual combination of realism and idealism at its foundations (Bernal-Meza 2015, 98), finds a new chance at rehabilitation.

Here, Jaguaribe's view of enabling and exercising requirements offers greater practical application than Puig's solidary integration. Analyzing international

stratification in the 1970s, the former already positioned Brazil as a country moving from regional to general autonomy (1979, 95). The enabling requirements would be national viability, a critical minimum of human and natural resources, including the capacity for international exchange (1979, 96), and international permissiveness, that is, the capacity to neutralize external coercion through one's own economic-military capability. The exercising requirements would be given by technical-corporate autonomy with a minimum degree of endogeneity (Friedland, 1979, p.97). These three pillars are precisely those structuring the Digital Sovereignty Index presented in the next section, underscoring the continued relevance of Jaguaribe's framework for the challenge of cybersovereignty.

However, the analytical payoff of the typologies developed in the concept's wake is worth questioning. Gelson Fonseca Júnior's classic typologies of "autonomy through distance" and "autonomy through participation" exemplify this analytical limitation. Originally coined to contrast the foreign policies of the military regime and the Fernando Henrique Cardoso administration (Lopes 2023, 147), these variants possess diminishing contemporary utility. While the former lost its relevance with the collapse of the Cold War, the latter, defined by a renewed commitment to multilateralism and active engagement in collegiate decision-making, functions better as a historical description of a specific era than as an exportable analytical category. The same applies to Vigevani and Cepaluni's "autonomy through diversification," coined for Brazilian foreign policy under Lula as adherence to South-South alliances and non-traditional partners (2007, 283). Diversifying alternatives and avoiding external dependence are indeed realist postures, valid beyond peripheral states, but they also describe a tactic, not a theoretical structure.

This is why this study aligns with Pinheiro and Lima, who place state agency at the core of the concept of autonomy, without which no policy critical of the normative structure of the international order can exist (2018, 16), and who point to the risk that such qualifiers confuse more than they clarify (2018, 12). Without dismissing their

importance to academic debate, this article holds that the strength of autonomist theory lies in its original foundations and not in the variants that followed.

However, there is an important caveat: applying Autonomy today requires disconnecting it from the rigidity of Dependency Theory, which is bound to the context of its time. This reconfiguration does not deny power asymmetries or differing degrees of interdependence among states; it merely updates the diagnosis and allows the foundations of Autonomy to reach a general scope beyond the Global South.

The world has changed since Jaguaribe, and even though the term "Technological Cold War" (Garcia 2025, 3) already circulates in the press and in academic debate, any eventual confrontation between superpowers will not repeat earlier patterns of the Cold War. The concept of Active Non-Alignment (ANA) (Fortin, Heine, and Ominami 2023) has no rigid definition, but gains clarity precisely through what it rejects: it is neither a reissue of the Non-Aligned Movement of the 1960s-70s nor a posture of permanent neutrality. Its strength lies in the flexibility of "adapting concepts and terms from other eras to a rapidly changing world, with the necessary corrections and adjustments" (2023, 3). The authors point to South America as the most viable terrain for ANA, given its greater distance from the US, the combination of relative US decline with growing Chinese presence in the region, and Brazil's ties to the Global South (2023, 11-12).

By avoiding the rigidity of formal alliances, maintaining equidistance from rival superpowers, and strengthening regional bodies and multilateralism (2023, 272), the ANA preserves freedom of action, allows negotiation from an advantageous position, and positions the country as a trustworthy interlocutor. Thus, the concept fits squarely within the analytical framework of the pursuit of autonomy, with a clear affinity to the Brazilian tradition of independent, pragmatic foreign policy.

A more recent approach comes from the debate on the "graduation dilemma" (Milani, Pinheiro, and Lima 2017), which productively engages with autonomist theory without directly addressing its foundations. While Jaguaribe speaks of "countries

emerging from dependence toward regional autonomy" (1979, 95), the graduation model applies to semiperipheral countries with relative international weight, no nuclear weapons, and a desire to raise their status (ibid. 591). If autonomist theory defines enabling and exercising requirements, graduation defines a historical process conditioned by the simultaneous competition of five factors: growing material capabilities, explicit political will, recognition by peers and major powers, cohesion among domestic strategic elites, and social support (ibid. 598).

On domestic cohesion, Milani, Pinheiro, and Lima capture contemporary liberal democracies better than Puig, who spoke of "power groups responsible for steering the destiny of the state" (Bernal-Meza 2015, 106), or Jaguaribe, who tied national viability to the degree of sociocultural integration (1979, 96). Today, internal elite cohesion is less a matter of cultural integration than minimal consensus among the political, economic, and academic sectors around a national project of ascent. Therefore, the complementarity between the two frameworks is more than theoretical compatibility, since autonomist theory supplies the structural foundations while the graduation model updates the vocabulary, placing cohesion among domestic elites across all sectors and the full ideological spectrum as the central condition for success.

Taken together, the five theoretical resources mobilized above are not equally weighted contributions to the argument, but an anchor and four auxiliary mechanisms organized around it. Jaguaribe's autonomy supplies the structural requirements, the enabling and exercising conditions, operationalized below in the DSI's three pillars (national viability, international permissiveness, technical-corporate autonomy), against which Brazil's trajectory is read. The four auxiliary concepts specify mechanisms and scope conditions within this structural framework. First, smart power explains **how** autonomy is exercised through the combination of coercive and normative tools available to a semiperipheral state. Second, weaponized interdependence explains **why** technical-corporate autonomy lags by locating Brazil's structural position within asymmetric global digital networks. Third, Active Non-Alignment operationalizes **what**

autonomy looks like under 2020s multipolarity, where selective alignment replaces rigid bloc allegiance. Finally, the graduation dilemma identifies **where** the domestic condition of elite cohesion mediates between external autonomy gains and internal consolidation. None of the four auxiliary concepts is treated as a competing paradigm requiring reconciliation with the others; each is invoked only for the specific analytical work it performs, with Jaguaribe's structural framework as the constant thread running through all four.

The discussion in this section allows the article's argument to be synthesized into three interpretive propositions, which guide the reading of the data in the sections that follow and offer a vocabulary exportable beyond the Brazilian case. These are not falsifiable hypotheses in the deductive sense, but structured expectations derived from autonomist theory, used to organize the interpretation of longitudinal evidence presented in the following sections.

P1: A semiperipheral country's normative prominence produces effective autonomy gains only when accompanied by advances, even if partial, in the exercising requirements of autonomist theory, that is, in technical-corporate autonomy.

P2: Domestic strategic-elite cohesion is expected to mediate the relationship between diplomatic agency and reductions in structural technological dependence, consistent with Milani, Pinheiro, and Lima's (2017) account of the conditions for graduation. The subsequent analysis examines the extent to which the Brazilian trajectory is consistent with this expectation.

P3: The expansion of a semiperipheral country's strategic room for maneuver, even when favored by intensifying hegemonic rivalry, does not necessarily entail a reduction in structural dependence on external suppliers. In short, normative and technical-corporate autonomy may evolve out of step with one another.

4 ASSESSING AUTONOMY: THE DIGITAL SOVEREIGNTY INDEX

Inspired by the National Cyber Power Index (NCPI, Voo, Hemani, and Cassidy 2022), produced by the Belfer Center for Science and International Affairs at the Harvard Kennedy School, the DSI was built as an exploratory contribution to systematically organize evidence of digital sovereignty in longitudinal perspective, spanning the dimensions that, together, evidence the country's technological autonomy.

A methodological caveat applies from the outset, since four of the fourteen variables rely on a qualitative ordinal scale rather than cardinal measurement, and two further variables are back-projected from verified later milestones rather than drawn from documented historical records (Methodological Annex, Sections 6–9). The DSI's quantitative form should not be mistaken for statistical precision; its value lies in rendering visible, in a structured and auditable way, a pattern that the article's qualitative and documentary-historical analysis independently corroborates.

Based on open data, the index offers methodological transparency and a path toward future cross-country comparisons. By aligning its timeframe with central events in the cyber landscape, it allows the evolution of the period under study to be tracked. Because the article was written during 2026, several of the 2026 data points (Methodological Annex, Tables A2, A4, A8) reflect the most recent available releases rather than complete year-end figures and should be read as preliminary, pending year-end updates from the cited sources. To ensure transparency and reproducibility, the corresponding dataset has been publicly deposited (Andrade 2026).

The index's construction logic derives from the article's theoretical matrix, translating Jaguaribe's (1979) requirements into five sub-indices:

I_1 (Sovereign Infrastructure, weight 20%) : serves as an indicator of national viability—the material base without which no diplomatic agency can be sustained.

I_2 (Normative Autonomy, 25%) and **I_5 (Cyber Capacity, 20%)** : capture international permissiveness and cyber operational capacity, the two faces through

which Brazil converts diplomatic prominence into effective room for maneuver.

I_3 (AI Capacity, 15%) and **I_4 (Supplier Independence, 20%)** : capture recent disruptive advances in AI and function as direct indicators of technical-corporate autonomy, the exercising requirement that, in Jaguaribe's theory, is typically the last to consolidate.

The differentiation of weights is not arbitrary; it reflects the importance of the theoretical framework assigned to each dimension. The priority given to indices reflecting state action over internal deficiencies evidences the emphasis on state agency; the higher individual weight assigned to Normative Autonomy (I_2) recognizes the importance of Brazilian diplomacy's systematic efforts.

The time points chosen were 2005 (start of GGE activities), 2015 (first consensus report under Ambassador Carlos Perez's chairmanship), and 2026 (end of the OEWG cycle). The 14 variables composing the indices were selected based on the availability of quality open data for the year closest to each milestone (2025 data, when more current, were used for the 2026 index).

Source selection prioritized open, documentable bases across two key dimensions: digital infrastructure and institutional policy. Infrastructural metrics were drawn from official Ministry of Management and Innovation and Serpro panels for the Government Cloud, NIC.br releases on IX.br traffic, the International Telecommunication Union's ICT Development Index (IDI), and the Submarine Cable Map nominal registry. Data center tracking relied on Cetic.br/NIC.br's Internet Sectoral Overview, supplemented by exponential back-projection for years lacking data, alongside World Bank high-technology export indicators. Policy and regulatory frameworks were mapped using primary United Nations documents, Ministry of Defense and Federal Government Digital Secretariat regulations, and a project-filtered subset of the Concordia Corpus containing 49 Brazilian bilateral and multilateral agreements on cyber, AI, and technological sovereignty (2001–2026).

A battery of sensitivity tests, documented in the Methodological Annex, probes whether the I_2–I_1 asymmetry depends on specific modeling choices: replacing the

differentiated sub-index weights with equal weights; back-projecting V3.1 linearly instead of exponentially; reassigning V2.3 (bilateral agreements) from I_2 to I_1; and recoding V4.1 across the full range its ordinal scale permits. Across every one of these tests, the gap between normative and technical-corporate autonomy never reverses sign, even under the most extreme, maximally favorable trajectory that could plausibly be assigned to I_4, though its magnitude varies. This indicates that the asymmetry's direction, not merely its size under the specific coding adopted, is robust to the modeling choices tested.

The Table 1 below maps each sub-index against propositions P1–P3, guiding the reading of the results in the sections that follow.

Table 1 – Sub-index–proposition mapping

Sub-index / evidence	Related proposition
I_2 (Normative Autonomy)	P1 and P3 — measures normative prominence, whose gap with I_4 supports both propositions
I_4 (Supplier Independence) and I_3 (AI Capacity)	P1 and P3 — measure exercising requirements (technical-corporate autonomy), whose weak evolution limits effective autonomy gains
I_1 (Infrastructure) and I_5 (Cyber Capacity)	Enabling requirements (national viability) — background condition, with no direct link to a specific proposition
Domestic elite cohesion (qualitative historical evidence)	P2 — mediating variable between diplomatic agency and reduced structural dependence

Source: Author (2026)

The Methodological Annex and the DSI Calculation Spreadsheet contain the full elaboration of the index, which, given its length, does not fit within the article body. A summary of the scores used in the analysis is as follows in Table 2.

The DSI rises from 1.16 (2005) to 2.66 (2015) and 5.57 (2026), placing Brazil in the "in transition" range in 2026, with Smart Power still emerging on top of limited material capabilities. More relevant than the aggregate value is the asymmetry between sub-indexes: the largest gains occurred in I_2 (+6.56), the sub-index that directly measures diplomatic action, while I_4 (+2.00), technical-corporate autonomy, the exercising requirement par excellence, practically stagnated. This gap of more than four points

between the fastest- and slowest-growing sub-indices is not a statistical detail; it is the central empirical evidence for propositions P1 and P3. Brazil expanded its normative prominence (P3) without that expansion translating, at the same pace, into reduced dependence on external suppliers, precisely the gap between normative and technical-corporate autonomy that the theoretical framework anticipates. I_1 and I_5, in turn, advanced at an intermediate pace, indicating that national viability, an enabling but insufficient condition, per Jaguaribe, improved without reaching the same degree of consolidation as the normative agency.

Table 2 – Consolidated DSI

Sub-index	2005	2015	2026	Δ 2005-2026
I1 — Sovereign Infrastructure	0.40	0.99	5.88	+5.48
I2 — Normative Autonomy	0.17	4.67	6.72	+6.56
I3 — AI Capacity	1.58	1.55	4.73	+3.15
I4 — Supplier Independence	2.00	2.00	4.00	+2.00
I5 — Cyber Capacity	2.00	3.33	6.00	+4.00
DSI TOTAL (weighted)	1.16	2.66	5.57	+4.41

Source: Author (2026)

In where: Interpretive scale: 0.0–2.0 Absent Digital Sovereignty; 2.1–4.0 Limited; 4.1–6.0 In Transition; 6.1–8.0 Consolidated; 8.1–10.0 Full.

In May 2026, the Digital Sovereignty Index (Rocha-Dashicheva et al. 2026) was released by a separate Brazilian research initiative, which ranked Brazil 48th among 86 countries (9th/11 among BRICS), with a score of 57.8125/100 (Ibid., 71). Following distinct methodological paths, the two studies converge on the same diagnosis: Brazil occupies an intermediate range of cybersovereignty. The convergence is one of diagnosis, not of scale, as GEPSI measures accumulated digital sovereignty capacity through expert coding across a wide cross-national sample, while the DSI tracks autonomy exercised in multilateral forums longitudinally within a single case; the two are not directly commensurable. What both instruments independently identify, however, is the same structural gap: diplomatic and normative prominence running ahead of accumulated material and supplier capacity, which is precisely the I_2–I_4 asymmetry

this article documents in greater temporal detail. This convergence should be read as partial corroboration, not formal validation: GEPSI does not separately score normative leadership and technical-corporate capacity, so it cannot independently confirm the I_2–I_4 asymmetry on its own terms, only the broader diagnosis of an intermediate, uneven sovereignty profile that the DSI specifies in greater temporal and dimensional detail.

This pattern is consistent with Farrell and Newman's (2019) notion of weaponized interdependence operating against, rather than through, Brazilian agency: the country gained the normative standing to contest global digital rules but not the infrastructural position to be insulated from them.

5 BRAZILIAN DIPLOMACY IN LONGITUDINAL PERSPECTIVE (2005–2026)

5.1 Phase 1 — Discreet Genesis (2005–2011)

Brazilian participation in the GGE began in 2005 (Brazil 2025a) in the group's first edition, whose report was not approved (UN 2005, 2). This initial presence was discreet, without leadership positions or participation in the 2010 GGE.

The Concordia Corpus confirms this pattern, showing that Brazil had only three bilateral agreements on cyber and technological sovereignty in 2005, including the pioneering Budapest Convention on Cybercrime, with modest growth to 13 by 2011 (full listing in Methodological Annex, Section 7.2).

The DSI confirms this nascent phase's diagnosis, insofar as an I_2 (Normative Autonomy) score of 0.17 reflects the modesty of initial GGE engagement, while the I_4 (Supplier Independence) and I_5 (Cyber Capacity) scores of 2.00 indicate high concentration and a minimal technical base sustained by CERT.br, respectively.

The index's low initial value (1.16), in the "Absent Digital Sovereignty" range, confirms that Brazil already had diplomatic presence but not yet the critical mass to convert that participation into effective autonomy, a deficit affecting precisely the exercising requirements of the theory (P1).

5.2 Phase 2 — Normative Inflection (2012–2015)

Edward Snowden's 2013 revelations that the US National Security Agency had intercepted the personal communications of President Dilma Rousseff and German Chancellor Angela Merkel triggered an immediate diplomatic response from Brazil. In coordination with Germany, the Brazilian government proposed UN Resolution A/RES/68/167 (UN 2013; Milani, Pinheiro, and Lima 2017, 601), the first to address the right to privacy in the digital age.

In 2014, Brazil hosted the Global Multistakeholder Meeting on the Future of Internet Governance (NETMundial), the first event of its kind to bring together governments, civil society, academia, and the private sector, chaired by the Minister of Communications, Paulo Bernardo Silva. That same year, Resolution A/RES/69/166 (UN 2014) advanced beyond the previous one, creating a Special Rapporteur on the topic at the Human Rights Council (Brasil, 2015).

In 2015, Ambassador Carlos Perez's chairmanship of the GGE produced the group's first consensus report, establishing eleven norms of responsible state behavior in cyberspace (UN 2015), rescuing a process widely seen as a failure (Lewis 2024). In parallel, bilateral cyber dialogues took place, documented in Foreign Policy Reviews, and formalized in the Concordia Corpus (full listing in Methodological Annex, Section 7.2).

Domestically, the Internet Civil Rights Framework (Law 12,965/2014) was enacted months after the scandal, institutionalizing Brazil's response to the privacy crisis (Brasil 2014a). The Ministry of Defense then focused on the cycle of major sporting events, created the Cyber Defense Command—ComDCiber (2014b), and approved the Military Cyber Defense Doctrine (2014c).

Internet use grew exponentially (NIC.br 2015, 46-48), but data center infrastructure (Brasil 2023b) and high-technology exports (World Bank Group 2026) did not keep pace. The DSI captures this asymmetry, with a slight increase in I_1, driven by traffic and Internet exchange point infrastructure; a jump in I_2, the largest among

all variables across all periods, driven by leadership positions and the growing number of bilateral agreements; stagnation in I_3 and I_4; and significant growth in I5, driven by advances in Cyber Defense.

The overall value in the "Limited Digital Sovereignty" range marks the point at which external vulnerability converts into normative leadership, with Brazil gaining normative agency and domestic cohesion around the issue, but with the technical-corporate base remaining largely untouched, foreshadowing the gap that P1 and P3 anticipate.

5.3 Phase 3 — Multilateral Consolidation (2016–2021)

The third phase was marked by the end of the major events cycle following the 2016 Olympics, the COVID-19 pandemic, and Brazil's efforts to sustain its international standing in cybersecurity. The period's highlight was Brazil's chairmanship of the fourth GGE edition, held by Ambassador Guilherme Patriota, which concluded with a second consensus report (UN 2021), achieved under the combined pressure of the 2016–2017 GGE's failure and the start of OEWG proceedings (Hurel 2022).

The 5G spectrum auction illustrates the entanglement of geopolitics, economics, and technology during this period: in 2019, under Donald Trump's first administration, Huawei was banned from US infrastructure over security concerns (van der Westhuizen, 2024, p.4), generating pressure for its exclusion from other markets as well. In Brazil's auction, pragmatism prevailed over rhetoric: Huawei was not barred from participating (ibid., 15) and became the supplier for most of the winning bidders.

The episode illustrates, on a smaller scale, Bradford's (2012, 39) regulatory power, in which regulation and market access function as a simultaneous instrument of persuasion and coercion, aligned with Nye's (2011) *Smart Power*, although Brazil, unlike the EU, lacks the scale to export this "geopolitics of standards" to third parties. The case also shows that diplomatic room for maneuver (Chinese backing reduced the decision to a political risk assumed without major consequences) does not eliminate technological dependence, evidencing the concept in P3.

Regarding bilateral agreements, the period marked relative stability, which was plausibly associated with the pandemic's global effects. The Concordia Corpus expanded to 28 agreements, with the first AI-related initiatives (full listing in Methodological Annex, Section 7.2).

Domestically, progress came through the legal framework, with the General Data Protection Law (Brasil 2018), the creation of the National Data Protection Authority (ANPD), and the first version of the National Cybersecurity Strategy (E-Ciber), both in 2020, alongside the Brazilian Artificial Intelligence Strategy (EBIA, Brasil 2021). Internet traffic intensified with mobile services, remote work, and streaming (Brasil 2023b, 42), and the federal government held its first cloud computing procurement auctions in 2018 and 2020 (ibid., 2026a).

The phase ends with Brazil holding a strong external position at the inception of the Open-Ended Working Group (OEWG), yet facing a domestic landscape weakened by the pandemic despite progress in infrastructure and legal frameworks. This divergence is consistent with **Proposition 2**, which holds that external gains risk stagnation in the absence of sustained internal cohesion.

5.4 Phase 4 — Transition to AI and a Permanent Mechanism (2022–2026)

The final phase is defined by the conclusion of the OEWG, the explosion of AI, intensifying strategic competition between the US and China, and the impacts of the war in Ukraine and more recent conflicts in the Middle East, which are critical events with direct repercussions for the topic under study.

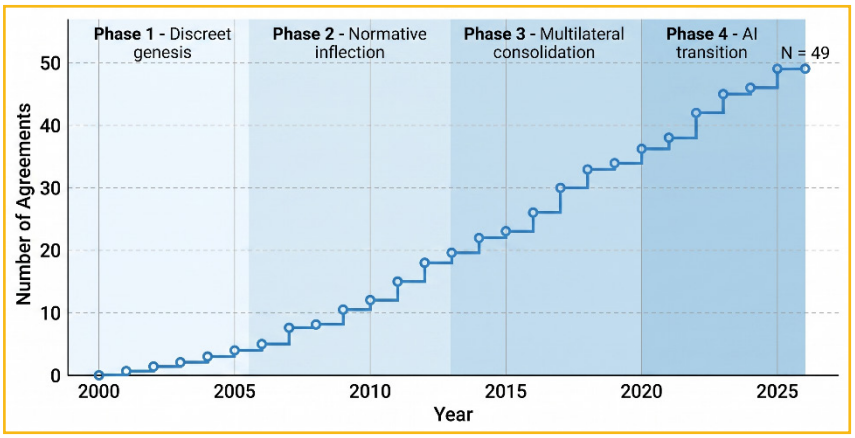
The OEWG produced compendiums of national positions at each session. Brazil made statements in 2022, 2023, and 2025, in addition to issuing a specific note on a future permanent ICT dialogue mechanism. Analysis of these documents reveals Brazil's main positions: the primacy of state sovereignty, international law, and the UN Charter in cyberspace; the importance of consensus and multilateralism; the need for a permanent institutional dialogue; the importance of capacity building, especially for

less-developed countries; and support for creating a permanent body on the topic.

These positions were fully reflected in the OEWG's final report, which reaffirmed and amplified the GGE's eleven principles, the clearest evidence of Brazil's decisive contribution to the process. There was also a resurgence of intense bilateral activity, with 21 new agreements identified in the period, of which 18 were already formalized and three remained at the announcement or negotiation stage (full listing and notes in Methodological Annex, Section 7.2), with a growing emphasis on AI.

The acceleration described above becomes visible when the corpus is plotted cumulatively. Figure 1 shows the growth of the diplomatic corpus across the four phases, with a marked inflection in Phase 4.

Figure 1 – Cumulative Growth of the Diplomatic Corpus (V2.3), 2001–2026

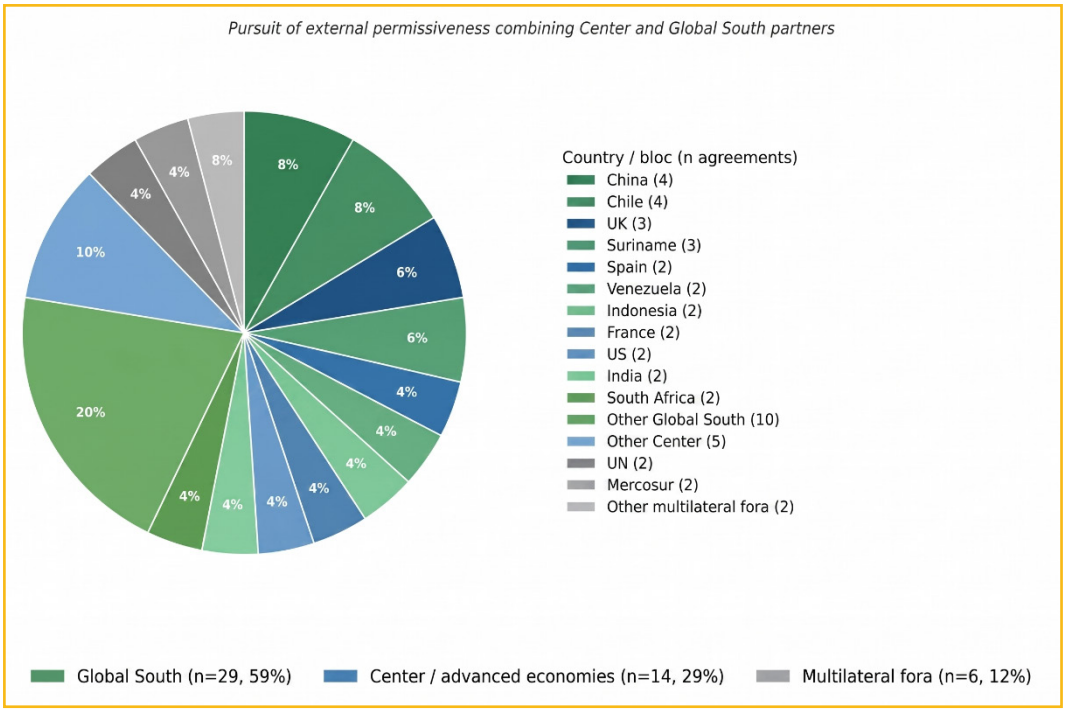


Source: Adapted from the Concordia Corpus (2026)

Phase 1 and Phase 2 grew at a comparable, modest pace (roughly 1.2 agreements per year); Phase 3 accelerated moderately (1.7/year); Phase 4 more than doubled that rate (4.2/year), confirming that the diplomatic dimension of Brazil's technological autonomy did not merely persist but actively accelerated as artificial intelligence rose on the global agenda. This growth is not evenly distributed across partners. Figure 2 breaks down the corpus by country and bloc, grouped into Center (advanced economies), Global South, and multilateral fora, revealing a pattern consistent with Active Non-Alignment: Brazil pursues external permissiveness by combining partnerships with the

Center and with the Global South, rather than aligning exclusively with either pole.

Figure 2 – Diplomatic Corpus by Country/Bloc: Center vs. Global South (N=49)



Source: Adapted from the Concordia Corpus (2026)

Global South partners account for 59% of the corpus (n=29), against 29% for the Center (n=14) and 12% for multilateral fora (n=6). This distribution is consistent with the strategy of pragmatic technological autonomy this article documents: rather than substituting dependence on the Center with dependence on new poles, Brazil diversifies the field of external permissiveness in which it operates, exactly as Jaguaribe's exercising requirements predict for a state seeking room for maneuver without committing to bloc allegiance.

By 2026, 92% of federal citizen-facing services were digitized, Brazil was the only South American country in the highest tier of the ITU's Global Cybersecurity Index (2024, 24), IX.br traffic reached 50 Tbps, and 579 data centers operated on national soil (Brandão and Lins 2025, 12; updated with Data Center Map data). Governance advanced with the National Cybersecurity Policy and Committee (Brasil, 2023b), Normative Instruction No. 8/GSI of October 6, 2025, on security requirements for classified

information in cloud computing (ibid., 2025c), and the inauguration of ComDCiber's new Operations Center in 2025. The period ends with the DSI at its highest score in the "In Transition" range, evidencing that the persistent asymmetry between prominence and objective capability means that the transition toward AI governance extends the same dispute that began in cyberspace, without altering its structural logic.

Milani, Pinheiro, and Lima warn that the graduation process is not linear, and a country may advance, stall, or even regress depending on the simultaneous availability of material capabilities, political will, external recognition, elite cohesion, and social support (2017, 604). Brazil's trajectory met the first three conditions but failed to sustain an equivalent degree of cohesion among domestic elites and public support for a project to increase Brazil's influence and capacity, helping to explain why sectoral advances did not translate into effective external independence. This lack of consensus around such a project is far from a minor matter: the absence of a lasting strategy connecting state, economic, and civil society actors meant that each diplomatic gain in I_2 had no institutional channel through which to compel the investment needed to overcome dependence.

The current scenario still opens new prospects, with commercial rivalry between the US and China directing investment toward third countries perceived as reliable partners, and the EU seeking alternatives to the Sino-American axis, as shown by the EU-Brazil Digital Partnership announced in June 2026 at the Web Summit Rio (Brasil, 2026b). This window of opportunity does not automatically translate into strategic autonomy. Seizing it requires Brazil to avoid replicating the offensive realism characteristic of great powers (Mearsheimer 2001, 164) and instead forge a path consistent with its own diplomatic tradition by assuming international responsibilities commensurate with its established structural position (Milani, Pinheiro, and Lima 2017, 596–598).

6 CONCLUSION

This study investigates the extent to which Brazilian Foreign Policy contributes to strengthening technological autonomy, which progressively reduces external dependence. The longitudinal trajectory from 2005 to 2026, synthesized by the DSI, confirms the asymmetry between the normative and material axes: Brazil reaches 2026 in the "In Transition" range, a position that fits well with an ongoing process.

Revisiting the three propositions from the theoretical framework, P1 finds partial support, with normative prominence ($\Delta I_2 = +6.56$) not translating into an equivalent gain in technical-corporate autonomy ($\Delta I_4 = +2.00$); thus, the effective autonomy gain remained conditioned by the weak evolution of the exercising requirements. P2 finds interpretive support, in that the lack of domestic institutional cohesion, especially in Phases 3 and 4, offers the most theoretically consistent reading of why growing material capability, explicit political will, and recurrent external recognition were not enough to close the I_2–I_4 gap. This reading should be understood as a theoretically motivated interpretation of the observed stagnation, not as a causal mechanism independently demonstrated through direct measures of cohesion; it is offered as a mediator, and a priority for future research using indicators such as legislative votes, public-private partnership announcements, or continuity of policy across administrations. P3 finds direct support in the DSI results, with the expansion of Brazil's room for maneuver, including in the 5G auction episode, not entailing a proportional reduction in structural dependence on external suppliers. Normative autonomy and technical-corporate autonomy did, in fact, evolve out of step with one another.

Two alternative readings are worth considering here. The first would attribute the normative advance less to specific diplomatic agency than to the general expansion of multilateral digital governance. However, GGE chairmanships and authorship of pioneering resolutions are positions earned, not granted, and the rise in I_2 in several instances precedes the deepening of this broader agenda. The second would attribute

the stagnation in I_4 to the structural limits of Brazil's semiperipheral position in the global digital economy, rather than to domestic coordination failures, a hypothesis compatible with the argument advanced here, since it points precisely to the resistances that elite cohesion, when absent, fails to overcome.

The DSI proved capable of rendering visible patterns already perceived through qualitative analysis, showing substantial convergence with the conclusions of the pioneering *Digital Sovereignty Index* produced by GEPSI.

The present moment offers conditions distinct from those that prevailed throughout most of the period studied: intensifying technological competition between the United States and China, combined with Europe's lag in the race for artificial intelligence infrastructure, has repositioned Brazil as a valued partner for actors also seeking to avoid peripheralization vis-à-vis the two superpowers. While the analysis above is descriptive rather than prescriptive, it points toward one plausible strategic implication: to seize this window, the country needs to demonstrate capacity and responsibility, taking on risks commensurate with its stature it already holds. Selective alignments that preserve equidistance from great powers while leveraging multilateral fora to advance the national agenda, consistent with the foundations of Active Non-Alignment, emerge as a plausible alternative.

Finally, Brazilian IR thought has cultivated, since the 1960s, a genuinely Latin American tradition that is now experiencing a renewed opportunity for global recognition. Updating its foundations provides a path toward scholarly contributions that extend far beyond the country's regional borders. Although this study was developed around the Brazilian case, it offers an analytical framework whose three-pillar structure of national viability, international permissiveness, and technical-corporate autonomy is theoretically generalizable. Its empirical applicability to other semiperipheral states navigating a similar tension between normative ambition and technological dependence, such as India, Indonesia, South Africa, and Turkey, remains an open invitation for dedicated comparative research.

REFERENCES

ANDRADE, Jomar. 2026. **Digital Sovereign Index**. Harvard Dataverse. https://doi.org/10.7910/DVN/DSBUMC.

BERNAL-MEZA, Raúl. 2015. **The Doctrine of Autonomy**: Realism and Purpose. Its Continued Relevance. *In*: Integration and Cooperation in Latin America: A Rereading from the Theory of Autonomy, Buenos Aires: Biblos.

BRADFORD, Anu. 2012. **The Brussels Effect**. Available at: https://scholarship.law.columbia.edu/faculty_scholarship/271/. Accessed: June 23, 2026.

BRANDÃO, Rodrigo, & LINS L., M. 2025. **Data Centers in Brazil**: Mapping Brazil's Digital Infrastructure, Notes for a Study on Data Centers. Available at: https://cetic.br/pt/publicacao/ano-xvii-n-4-data-centers-no-brasil/. Accessed June 18, 2026.

BRAZIL. 2014a. **Law No. 12,965 of April 23, 2014**: Establishes Principles, Guarantees, Rights, and Duties for the Use of the Internet in Brazil [Marco Civil da Internet]. Available at: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l12965.htm. Accessed June 18, 2026.

BRAZIL. 2014b. **Normative Order No. 2,777/MD of October 27, 2014**: Establishes Guidelines for Implementing Measures to Strengthen National Cyber Defense. Available at: https://mdlegis.defesa.gov.br/norma_pdf/?NUM=2777&ANO=2014&SER=A. Accessed June 18, 2026.

BRAZIL. 2014c. **Normative Order No. 3,010/MD of November 18, 2014**: Approves the Military Cyber Defense Doctrine. Available at: https://mdlegis.defesa.gov.br/norma_pdf/?NUM=3015&ANO=2014&SER=A. Accessed June 18, 2026.

BRAZIL. 2015. **Establishment of the Special Rapporteurship on 'The Right to Privacy in the Digital Age'**. Available at: https://www.gov.br/mre/pt-br/canais_atendimento/imprensa/notas-a-imprensa/criacao-da-relatoria-especial-sobre-o-direito-a-privacidade-na-era-digital. Accessed April 28, 2026.

BRAZIL. 2018. **Law No. 13,709 of August 14, 2018**: General Personal Data Protection Law (LGPD). Available at: https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2018/lei/l13709.htm. Accessed June 18, 2026.

BRAZIL. 2021. **MCTI Ordinance No. 4,979 of July 13, 2021**: Brazilian Artificial Intelligence Strategy — EBIA. Available at: https://www.gov.br/mcti/pt-br/acompanhe-o-mcti/transformacaodigital/ebia.pdf. Accessed April 28, 2026.

BRAZIL. 2023a. **National Cybersecurity Policy**. Available at: https://www.planalto.gov.br/ccivil_03/_ato2023-2026/2023/decreto/d11856.htm. Accessed April 28, 2026.

BRAZIL. 2023b. **Strategy for Implementing a Public Policy to Attract Data Centers**. Available at: https://www.gov.br/mdic/pt-br/assuntos/sdic/comercio-e-servicos/comercio/estudo_completo_datacenters_jun2023.pdf. Accessed June 18, 2026.

BRAZIL. 2025a. **Cybersecurity**. Available at: https://www.gov.br/mre/pt-br/assuntos/defesa-e-seguranca-cibernetica/seguranca-cibernetica. Accessed April 28, 2026.

BRAZIL. 2025b. **Signing of the United Nations Convention against Cybercrime**. Available at: https://www.gov.br/mre/pt-br/canais_atendimento/imprensa/notas-a-imprensa/assinatura-da-convencao-das-nacoes-unidas-contra-o-crime-cibernetico. Accessed April 28, 2026.

BRAZIL. 2025c. **GSI/PR Normative Instruction No. 8 of October 6, 2025**: Establishes Minimum Information Security Requirements for Handling Classified Information in Cloud Computing." Available at: https://www.in.gov.br/en/web/dou/-/instrucao-normativa-gsi/pr-n-8-de-6-de-outubro-de-2025-660716869. Accessed June 22, 2026.

BRAZIL. 2026a. **Cloud**. Digital Government. Available at: https://www.gov.br/governodigital/pt-br/infraestrutura-nacional-de-dados/ambiente-tecnologico/nuvem/nuvem. Accessed June 21, 2026.

BRAZIL. 2026b. **Digital Government: Brazil and the European Union Formalize Digital Partnership and Expand Strategic Cooperation for People-Centered Technological Transformation**. Available at: https://www.gov.br/gestao/pt-br/assuntos/noticias/2026/junho/brasil-e-uniao-europeia-formalizam-parceria-digital-e-ampliam-cooperacao-estrategica-para-transformacao-tecnologica-centrada-nas-pessoas. Accessed June 21, 2026.

BRICEÑO RUIZ, José. 2015. **Knowledge and Theory**: Reconstructing the Autonomist Tradition in Latin American Integration Studies." *In*: Integration and Cooperation in Latin America: A Rereading from the Theory of Autonomy, Buenos Aires: Biblos.

BRICS. 2025. **Declaration of BRICS Leaders on Global Governance of Artificial Intelligence**. Available at: https://www.gov.br/mre/pt-br/canais_atendimento/imprensa/notas-a-imprensa/declaracao-dos-lideres-do-brics-sobre-governanca-global-da-inteligencia-artificial. Accessed April 28, 2026.

CASTRO, Thales. 2012. **Theory of International Relations**. Brasília: FUNAG. Available at: https://funag.gov.br/biblioteca-nova/produto/1-40-teoria_das_relacoes_internacionais. Accessed June 18, 2026.

FARRELL, Henry, and Abraham L. Newman. 2019. **Weaponized Interdependence**: How Global Economic Networks Shape State Coercion. https://doi.org/10.1162/isec_a_00351.

FLYVBJERG, Bent. 2011. **Making Social Science Matter**. *In*: Social Science and Policy Challenges: Democracy, Values and Capacities, 25-56. UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000211705. Accessed June 12, 2026.

FORTIN, Carlos, Jorge Heine, and Carlos Ominami. 2023. **Latin American Foreign Policies in the New World Order**: The Active Nonalignment Option. London: Anthem Press.

GARCIA, Eugenio V. 2025. **Technology for Whom and for What?** A Global South View of Tech Diplomacy. https://doi.org/10.1111/1758-5899.70024.

HUREL, Louise Marie. 2022. **Unpacking Brazil's Cyber Diplomacy**. Available at: https://eucyberdirect.eu/blog/unpacking-brazil-s-cyber-diplomacy. Accessed April 28, 2026.

ITU. 2009. **Measuring the Information Society Report 2009**. Available at: https://www.itu.int/en/ITU-D/Statistics/Documents/publications/mis2009/MIS2009_w5.pdf. Accessed April 28, 2026.

ITU. 2015. **Measuring the Information Society Report 2015**. Available at: https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2015/MISR2015-w5.pdf. Accessed April 28, 2026.

ITU. 2024. **Global Cybersecurity Index 2024**. Available at: https://www.itu.int/en/ITU-D/Cybersecurity/pages/global-cybersecurity-index.aspx. Accessed April 28, 2026.

ITU. 2025. **Measuring Digital Development**: ICT Development Index 2025. Available at: https://www.itu.int/pub/D-IND-ICT_MDD-2025-1. Accessed April 28, 2026.

JAGUARIBE, H.. 1979. Peripheral Autonomy and Central Autonomy." **Estudios Internacionales**, 12, no. 46: 91-130.

LEITER, A. 2020. Cyber Sovereignty: A Snapshot from a Field in Motion. **Harvard International Law Journal Frontiers**, 61. https://journals.law.harvard.edu/ilj/wp-content/uploads/sites/84/Leiter-PDF-format.pdf.

LEWIS, J. A. 2024. **Why the United Nations Is Chasing Its Tail on Cybersecurity**. Available at: https://www.csis.org/analysis/why-united-nations-chasing-its-tail-cybersecurity. Accessed June 9, 2026.

LOPES, Dawisson Belém. 2023. **A Grotian in the Tropics: The Impact of Gelson Fonseca Jr.'s Thought on the Field of International Relations in Brazil**. Available at: https://funag.gov.br/biblioteca-nova/produto/1-1202. Accessed June 15, 2026.

MEARSHEIMER, J. J. 2001. **The Tragedy of Great Power Politics**: New York: W. W. Norton & Company.

MILANI, C. R. S. et al. 2017. Brazil's Foreign Policy and the 'Graduation Dilemma. **International Affairs**. https://doi.org/10.1093/ia/iix078.

NIC.BR. 2015. **2015 Activity Report**. Available at: https://nic.br/publicacao/relatorio-de-atividades-de-2015/. Accessed April 28, 2026.

NYE, Joseph S. 2011. **The Future of Power**. New York: PublicAffairs.

UN. 2005. **Group of Governmental Experts on Developments in the Field of Information and Telecommunications in the Context of International Security" (A/60/202)**. Available at: https://docs.un.org/en/A/60/202. Accessed June 19, 2026.

UN. 2013. **The Right to Privacy in the Digital Age" (A/RES/68/167)**. Available at: https://digitallibrary.un.org/record/764407/files/A_RES_68_167-EN.pdf. Accessed April 28, 2026.

UN. 2014. **The Right to Privacy in the Digital Age" (A/RES/69/166)**. Available at: https://digitallibrary.un.org/record/788140?v=pdf. Accessed April 28, 2026.

UN. 2015. **Report of the GGE on Developments in the Field of ICTs in the Context of International Security (A/70/174)**. Available at: https://digitallibrary.un.org/record/799853?v=pdf. Accessed April 28, 2026.

UN. 2021. **Report of the GGE on Advancing Responsible State Behaviour in Cyberspace (A/76/135)**. Available at: https://digitallibrary.un.org/record/3934214?v=pdf. Accessed April 28, 2026.

UN. 2025. **Report of the OEWG on Security of and in the Use of ICTs 2021–2025 (A/80/257)**. Available at: https://docs.un.org/en/A/80/257. Accessed April 28, 2026.

PINHEIRO, L.; LIMA, M. R. S. 2018. **Between Autonomy and Dependency**: The Place of Agency in Brazilian Foreign Policy. https://doi.org/10.1590/1981-3821201800030003.

PUNTIGLIANO, Andrés Rivarola. 2015. **Autonomy and Geopolitics**. *In*: Integration and Cooperation in Latin America: A Rereading from the Theory of Autonomy. Buenos Aires: Biblos.

RAMANZINI JUNIOR, Haroldo; FARIAS, Rogério de Souza. 2025. **Implementation and Brazilian Foreign Policy**. https://doi.org/10.1590/0102-044hr.

ROCHA-DASHICHEVA, I. W. et al. **Digital Sovereignty Index [v. 1.0]**: A Country Ranking of Digital Sovereignty Based on Expert Coding. Zenodo, May 18, 2026. https://doi.org/10.5281/zenodo.20277299.

SIL, Rudra; KATZENSTEIN, Peter. 2010. ***Beyond Paradigms***: Analytic Eclecticism in the Study of World Politics. New York: Palgrave Macmillan.

VAN DER WESTHUIZEN, Janis. 2024. **Huawei or the US Way?** Why Brazil and South Africa Did Not Securitize 5G. https://doi.org/10.1590/0034-7329202400216.

VIGEVANI, Tullo; CEPALUNI, Gabriel. 2007. **Lula's Foreign Policy**: The Strategy of Autonomy through Diversification. https://doi.org/10.1590/S0102-85292007000200002.

VOO, J. et al. 2022. **National Cyber Power Index 2022**. Available at: https://www.belfercenter.org/publication/national-cyber-power-index-2022. Accessed June 15, 2026.

WORLD BANK GROUP. 2026. **DataBank: Jobs**. Available at: https://databank.worldbank.org/source/jobs/Series/TX.VAL.TECH.MF.ZS. Accessed June 18, 2026.

Authorship

1 Jomar Barros de Andrade

Master of Military Science from the Army Command and General Staff College; General Officer (Reserve) of the Brazilian Army; Researcher with the Strategic Analysis Group on Defense Systems

https://orcid.org/0009-0000-6136-1289 • jomar@pobox.com

How to quote this article

ANDRADE, J. B. Brazilian diplomacy and technological autonomy: from the 2005 GGE to the 2025 OEWG and AI governance. **InterAção**, Santa Maria, v. 17, n. 3, e98322, p. 1-29, 2026. DOI 10.5902/2357797598322. Available from: https://dx.doi.org/10.5902/2357797598322. Accessed in: day month abbr. year.