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Programmatic advertising, transparency deficits and systemic disinformation risk in Brazil

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Abstract

This article examines how programmatic advertising shapes the influence economy in Brazil under conditions of platform concentration, limited transparency, and transnational infrastructural control. It argues that real time auctions, behavioral targeting, and opaque advertising intermediation convert engagement into an economic signal, expand rent extraction, and create structural incentives for the circulation of polarizing and misleading content. Under these conditions, disinformation becomes a systemic externality of digital advertising markets and a governance problem intensified by deficits in auditable transparency and by the regulatory sovereignty gap faced by peripheral democracies. Methodologically, the study combines conceptual analysis with documentary examination of transparency centers, ad libraries, and policy documents of major platforms operating in Brazil, with particular attention to elections, public health, and children and adolescents. The findings reveal significant limitations in traceability, targeting disclosure, and independent scrutiny. Effective platform governance therefore requires robust transparency obligations and enforceable mechanisms capable of addressing systemic market risks.

Introduction

The expansion of the influence economy has consolidated a digital environment in which visibility, reputation, and circulation are converted into economic value through metrics and privately controlled forms of intermediation. On digital platforms, creators, brands, and advertisers compete for attention in markets mediated by algorithmic systems and data infrastructures. This intermediation structure is financed largely through programmatic advertising, whose automated operation enables the large-scale distribution of advertisements based on inferred behavioral profiles and real-time auctions, remunerating intermediaries through commissions and targeting services (Couldry & Turow, 2014; Bezerra & Borges, 2021). This architecture reshapes competition and value creation, but it also deepens informational asymmetries and generates social harms whose costs are not incorporated into firms' economic calculations.

In Brazil, these dynamics unfold in an environment characterized by the dominant role of foreign platforms in the mediation of attention, infrastructural dependence, and institutional asymmetries that constrain the production of auditable evidence about the market itself (Valente, 2021; DeNardis, 2020). The result is a field of contestation in which economic power and infrastructural control combine with the capacity to shape the public sphere and influence the regulatory agenda. Even when informational harms are widely recognized, structural corrections face obstacles of enforcement and coordination, particularly when costs are diffuse and data asymmetries prevent the identification of responsible actors and the tracing of financial flows.

The central problem addressed in this article is that programmatic advertising, by structuring an attention market at scale, creates incentives to maximize engagement and intensify behavioral targeting in ways that may favor the circulation of content characterized by low production costs and high viral

potential. Under this regime, disinformation tends to operate as a structural externality and, in certain contexts, as an economically functional input to the market, since engagement dynamics become parameters for monetization and distribution (Diaz Ruiz, 2023). In peripheral democracies, where institutional stability may be more vulnerable to informational shocks and distributive conflicts, the transformation of disinformation into a profitable business becomes a systemic risk, with consequences for public health, violence, and political trust (Comitê Gestor da Internet no Brasil [CGI.br], 2019; Rêgo, 2024).

This systemic risk is further compounded by a regulatory sovereignty dimension. The critical infrastructure of the influence economy is controlled by transnational corporations marked by high levels of economic concentration and by the capacity to impose private standards of governance and measurement. This widens the gap between the scale of the market and the national capacity to impose obligations, monitor compliance, sanction misconduct, and generate auditable data. As a result, regulatory circumvention becomes possible, and economic and communicative resources may be mobilized to influence political processes and public debate (DeNardis, 2020; Valente, 2021). In Brazil, recent legislative disputes have highlighted the asymmetry of resources in the public arena and the ability of platforms to mobilize their own communication infrastructures in order to influence regulatory debates, thereby reinforcing the gap between public interest and market power (Reuters, 2023b; Agência Brasil, 2023b; Câmara dos Deputados, 2024).

Against this background, this article asks how concentration in the AdTech market and deficits in auditable transparency in programmatic advertising reshape the distribution of value and power among platforms, brands, influencers, and citizens in Brazil, creating economic incentives for disinformation and widening the regulatory sovereignty gap in a peripheral democracy.

The article makes three contributions. First, it repositions the influence economy as a problem of market dynamics and governance by linking concentration, opacity, and monetization incentives to the systemic risks associated with disinformation. Second, it operationalizes transparency as a verifiable and auditable condition, distinguishing performative transparency from forms of disclosure capable of supporting social oversight, regulatory enforcement, and independent research, and applies this distinction to a documentary evaluation of advertising libraries and transparency centers in the Brazilian context (Tworek & Wanless, 2022; Jozwiak, 2022). Third, it introduces regulatory sovereignty as a structural variable that intensifies asymmetries in peripheral markets by linking transnational infrastructural control, economic power, and the capacity to exert political influence (DeNardis, 2020; Valente, 2021).

Methodology

This article combines conceptual development with an illustrative empirical section based on documentary analysis. This choice reflects a structural characteristic of the research object. The key data required to understand programmatic advertising, targeting practices, and monetization

mechanisms, including during informational crises, are largely private and mediated by instruments controlled by platforms and advertising intermediaries. Under these conditions, the first methodological step is to evaluate the quality, completeness, and auditability of the transparency regime itself before drawing more ambitious inferences about specific causal effects. This design is consistent with platform governance research because it connects theory to verifiable criteria of accountability and regulatory implications without presuming that market observability is already guaranteed (Gorwa, 2019; Urman & Makhortykh, 2023; Tworek & Wanless, 2022; Parsons, 2019).

The study focuses on the influence economy in Brazil, understood as a market arrangement in which visibility and circulation are converted into economic value through metrics, algorithms, and advertising intermediation. Empirically, the focus is on programmatic advertising and the publicly accessible layer of its governance infrastructure, namely transparency centers, ad libraries, and policy documents governing advertising and targeting practices, as well as institutional materials that help contextualize the systemic risks associated with disinformation and the enforcement dilemmas faced by a peripheral democracy (CGI.br, 2019; UNESCO, 2023; Congresso Nacional, 2023). The article does not seek to measure the overall prevalence of disinformation or to estimate its direct effects on attitudes or voting behavior. Instead, it aims to clarify how the architecture of the market and its deficits in auditable transparency may make the circulation of divisive content economically functional while simultaneously reducing the capacity of society and institutions to trace financing flows and hold actors accountable.

For the illustrative empirical section, the documentary scope centers on three platforms with major economic and informational relevance in the Brazilian advertising and communication environment, Meta, Google, and X. The analysis focuses on ad libraries, transparency centers, and policy documents governing advertising and targeting, applying the Brazil filter wherever the interface provides this option. To enhance replicability and allow at least a minimal assessment of stability, coverage, and auditability, the data collection procedure was repeated on two dates recorded in the manuscript in order to capture possible changes in interface design, available data fields, and access conditions over time.

The material basis of the analysis consists of publicly accessible documents and interfaces provided by platforms and services related to the influence economy. This includes ad libraries and transparency centers, terms of service and policies applicable to advertising and targeting practices, as well as public records relevant to understanding the regulatory disputes and institutional environment in which market governance is negotiated. Within this set, the controversy surrounding Bill 2630, which sought to limit disinformation on social networks and digital platforms, provides an illustrative case of corporate resistance and resource asymmetry in the deliberative process, including episodes involving public campaigns and institutional contestation over alleged undue interference in legislative debate (Reuters, 2023a; Agência Brasil, 2023a; Câmara dos Deputados, 2023). In addition, the Joint Parliamentary Committee of Inquiry (CPMI) into the events of January 8, when an attempted coup d’état took place in Brazil, serves as an institutional reference point for characterizing the broader context of democratic risk and the role of digital infrastructures in the organization and legitimization of anti-democratic actions (Congresso Nacional, 2023). The analysis also incorporates, as part of the Brazilian regulatory context,

the Federal Supreme Court ruling that redefined the parameters of civil liability for platforms regarding third-party content, illustrating the growing judicialization of governance arrangements when legislative processes remain stalled (Supremo Tribunal Federal, 2025; Agência Brasil, 2025).

The analytical strategy uses a multidimensional framework to evaluate transparency and auditability, distinguishing performative transparency from forms of disclosure that are verifiable, replicable, and comparable and therefore capable of supporting social oversight, regulatory enforcement, and independent research (Tworek & Wanless, 2022; Jozwiak, 2022). The framework draws on parameters operationalized in indices and rankings, particularly the Social Media Advertising Transparency Index and Ranking Digital Rights' Corporate Accountability Index, which translate transparency and accountability into observable and comparable dimensions (Santini et al., 2024b; Ranking Digital Rights, 2025). In parallel, international guidelines oriented toward rights protection and risk mitigation inform the normative interpretation of what constitutes adequate transparency in environments characterized by systemic informational risks, especially during critical periods (UNESCO, 2023).

The procedure is structured around three analytical questions that together define the scope of governance possibilities under the current transparency regime. The first concerns existence and access, namely whether the relevant information exists and can be accessed without disproportionate barriers. The second concerns minimal traceability, that is, whether the available information allows the reconstruction of basic market flows, such as who paid, how much was paid, for how long, and through which forms of targeting, even at an aggregated level. The third concerns auditability, namely whether technical and institutional conditions exist for replication and scrutiny, including search functionality, data export capabilities, temporal stability, interoperability, methodological documentation, and the internal consistency of the information provided. This last dimension is particularly important in the Brazilian case because, even when data exist, restrictive terms of use, lack of documentation, and unstable interfaces may prevent research and oversight, thereby preserving epistemic asymmetry as a mechanism of power (Urman & Makhortykh, 2023; Parsons, 2019; Tworek & Wanless, 2022).

The limitations of the study derive from the nature of the object itself. Because the empirical section relies on public instruments controlled by platforms, it describes both what is observable and what remains hidden rather than replacing comprehensive audits or extensive quantitative analyses. Frequent changes in platform interfaces and policies may affect replicability, and part of the core mechanisms of programmatic advertising, including internal auction rules, intermediation dynamics, and inference systems, are not directly observable. Nevertheless, the governance diagnosis remains analytically relevant because it demonstrates that deficits in auditable transparency are not merely informational gaps but structural conditions that shape contestability, accountability, and the very production of evidence about digital markets (Tworek & Wanless, 2022; Urman & Makhortykh, 2023).

The article proceeds as follows. First, it explains how platform markets tend toward concentration and how this concentration extends to infrastructural layers, including advertising and measurement systems, thereby generating data asymmetries and technological dependency in peripheral democracies

(Rochet & Tirole, 2003; Parker & Van Alstyne, 2005; Gawer, 2014; Dolata, 2018; Valente, 2021). It then shows how programmatic advertising operates as a form of market infrastructure that prices attention and converts engagement into economic value while maintaining a functional opacity that enables rent extraction and reduces contestability (Couldry & Turow, 2014; Pasquale, 2015). Building on this analysis, the article draws on a market-shaping perspective to argue that disinformation may become a structural externality and, in certain circuits, a profitable input, particularly when auditability is weak and national enforcement is constrained by the regulatory sovereignty gap (Diaz Ruiz, 2023; DeNardis, 2020; Rêgo, 2024). Finally, it discusses the governance and regulatory implications of this diagnosis, arguing that auditable transparency in advertising and targeting should be treated as a structural market obligation, including standardized disclosure, national-level data segmentation, methodological documentation, and structured access for research in order to reduce asymmetries and limit the conversion of disinformation into a viable business model (Jozwiak, 2022; Santini et al., 2024b; UNESCO, 2023; Ranking Digital Rights, 2025).

Influence markets under concentration and transnational infrastructure

The influence economy can be understood as a recent development within a broader process of the commodification of communication, in which attention, sociability, and informational circulation are organized as markets. On digital platforms, this organization takes place through forms of intermediation that not only connect different market sides, such as users, advertisers, and content producers, but also define rules of access, measurement standards, and conditions for monetization. In two-sided markets, network effects tend to amplify returns to scale and favor trajectories of concentration, particularly when perceived utility increases with the size of the user base and the availability of data. This dynamic raises barriers to entry for competitors and reinforces cumulative advantages (Rochet & Tirole, 2003; Parker & Van Alstyne, 2005; Gawer, 2014). The central economic implication is that competition shifts from price rivalry to control over intermediation infrastructure and information about the market itself, thereby altering the distribution of value among actors and reducing contestability (Dolata, 2018; Crémer et al., 2019).

From the perspective of the political economy of information and communication, the decisive asset is not merely audience reach but the capacity to convert behavior into an economic signal. Data and behavioral inferences function as productive inputs, enabling segmentation, discriminatory pricing, and delivery optimization. These mechanisms increase the private efficiency of the market while simultaneously deepening informational asymmetries between platforms, advertisers, producers, and society. Such asymmetries operate as a form of market power because they determine who is able to observe, measure, and explain circulation patterns and who remains dependent on proprietary metrics and opaque criteria. As a result, platforms function not only as intermediaries but also as authoritative arbiters of measurement, capable of restructuring the value chain by imposing technical standards and performance indicators (Van Dijck, 2017; Pasquale, 2015).

In this context, concentration is associated with economies of scope and with the integration of infrastructural layers. Platforms tend to expand from user interfaces into services related to data management, identity systems, measurement, distribution, and advertising. This expansion reduces the autonomy of actors that historically controlled parts of the value chain, such as news organizations, press agencies, and distribution networks. When a single corporation controls multiple stages of the chain, its capacity to internalize transactions, impose unilateral rules, and capture intermediation rents increases. This dynamic alters price formation because opacity and technical complexity make it difficult to compare transaction costs, commissions, and the quality of advertising inventory, thereby creating conditions for rent extraction throughout the chain (Dolata, 2018; Stucke & Ezrachi, 2016; Couldry & Turow, 2014).

The influence economy also reshapes the relationship between risk and remuneration. Creators and content producers assume reputational risks, ongoing labor demands, and uncertain demand, while platforms capture value through control over distribution, measurement, and monetization with only limited direct responsibility for the informational externalities generated by the system. In economic terms, this arrangement externalizes social costs such as polarization, reputational damage, erosion of trust, and informational overload, while revenues are concentrated among actors who control the infrastructure of data extraction and attention markets (Couldry & Turow, 2014; Diaz Ruiz, 2023). This asymmetry suggests that the issue is not simply an efficient market subject to occasional deviations, but a form of economic coordination in which certain harms are structurally compatible with the maximization of engagement and revenue.

Once the transnational dimension is taken into account, the problem also takes on a distributive dimension at the macroeconomic level. In peripheral democracies, a substantial share of the surplus generated by advertising and intermediation tends to be appropriated by foreign corporations. This has implications for the sustainability of local media markets, for the financing capacity of journalism, particularly local journalism, and for the circulation of resources within the domestic communication economy. These dynamics can be interpreted as a form of infrastructural dependency and as a relocation of economic decision-making centers, since monetization parameters, algorithmic changes, eligibility criteria, and advertising policies are defined outside the national institutional arena. The consequence is a relative weakening of local actors, who become rule takers in a market governed through private and transnational arrangements (Valente, 2021; DeNardis, 2020).

This displacement also generates bargaining asymmetries. In concentrated markets, advertisers and publishers depend on a small number of intermediaries to reach audiences and generate revenue. Such dependence reduces their bargaining power and increases their vulnerability to unilateral changes in access conditions, advertising formats, and measurement criteria. From a competition perspective, these conditions raise entry barriers, may constrain local innovation, and favor strategies of market enclosure based on proprietary standards and vertical integration, reinforcing a cycle in which the platform becomes indispensable for economic participation in the attention economy (Crémer et al., 2019; Stucke & Ezrachi, 2016).

Measurement itself becomes an arena of economic dispute. Metrics define value and guide investment decisions, but when they are produced through proprietary systems, the possibilities for auditability, comparability, and contestation are limited. This situation creates a market governance problem analogous to an informational failure. Buyers and sellers lack equivalent conditions for evaluating quality, actual reach, and the risks associated with advertising inventory. Under such conditions, the market may misprice externalities, underestimate democratic risks, and overvalue content capable of generating short-term engagement, thereby generating distorted incentive structures (Pasquale, 2015; Urman & Makhortykh, 2023).

In Brazil, these economic implications acquire additional relevance for two reasons. First, platforms play a central role in the distribution of attention, which makes the influence economy a significant component of the advertising market and of the circulation of financial resources within the communication sector. Second, opacity functions as a mechanism that limits contestability and reduces the capacity for evidence-based oversight, thereby weakening both competition policy and democratic governance. When markets depend on concentrated transnational infrastructures, transparency ceases to be merely an ethical assumption or normative value and becomes a minimum condition for market verifiability and for the internalization of social costs through regulatory and competition mechanisms (Tworek & Wanless, 2022; Jozwiak, 2022; Valente, 2021).

For this reason, concentration in platform and advertising intermediation markets is not merely a structural feature but an organizing principle of value distribution within the influence economy. It enables rent capture through infrastructural control, amplifies informational asymmetries, and shifts decision-making power beyond national institutional spaces, particularly in peripheral democracies. This provides the economic foundation that links programmatic advertising, opacity, regulatory sovereignty, and disinformation as dimensions of the same political economy problem rather than as separate themes connected only externally (Couldry & Turow, 2014; Dolata, 2018; DeNardis, 2020; Diaz Ruiz, 2023; Valente, 2021).

Programmatic advertising as a mechanism that prices engagement

Programmatic advertising organizes the buying and selling of advertising through automated processes and real-time auctions, with targeting based on personal data and behavioral inferences. Each ad impression involves an automated decision based on profiles, behavioral signals, and pricing models, while intermediaries capture commissions and rents across the chain by converting attention and behavior into commodities (Couldry & Turow, 2014; Bezerra & Borges, 2021). This infrastructure is central to the influence economy because it links content performance to remuneration. In economic terms, engagement ceases to be merely a cultural indicator and becomes a market variable that affects price formation, reach, and the sustainability of content production.

The link with disinformation begins with the logic of optimization. Automated ad buying tends to allocate budgets where there is a greater probability of generating clicks, conversions, dwell time, and other

attention signals. Emotionally mobilizing, polarizing, and divisive content is often especially effective at generating such signals and can be produced at relatively low marginal cost. When performance is measured by the intensity of interaction and the speed of circulation rather than by informational quality, the market creates a structural incentive for the production and diffusion of content capable of provoking rapid reactions, including indignation and fear. This outcome is predictable within an architecture that remunerates whatever captures attention, even when doing so produces significant social costs (Diaz Ruiz, 2023; Rêgo, 2024).

Opacity helps stabilize this arrangement economically and reduces its competitive constraints. The literature on algorithmic governance argues that opacity is not merely a matter of technical complexity but a mechanism of power that limits contestability and accountability (Pasquale, 2015; Gorwa, 2019). In the programmatic regime, opacity affects the intermediation chain, the definition of audiences, the optimization of ad delivery, the signals incorporated into price formation, and the placement of advertisements. This situation generates a market governance failure. Advertisers face difficulties auditing the pathways of their spending and the risks of indirect financing, publishers depend on proprietary metrics to understand how their inventory is priced, and society loses the ability to identify the financiers and targeting strategies behind informational campaigns. In concentrated markets, such asymmetry tends to function as a competitive advantage while simultaneously diffusing responsibility for externalities.

At this point, disinformation may become economically functional through a logic of arbitrage. Misleading or conspiratorial content is often inexpensive to produce and capable of generating intense traffic by exploiting informational shocks and cognitive vulnerabilities. Programmatic advertising converts this traffic into revenue by monetizing attention at scale, even when the actors responsible for content production and intermediation are difficult to trace. In this way, the programmatic chain and targeting mechanisms may transform disinformation into advertising inventory and inventory into revenue while the associated social costs remain externalized. This economic link does not necessarily imply an explicit intention to finance disinformation, but rather depends on the compatibility between optimization incentives, low transparency, and limited capacity for independent audit (Couldry & Turow, 2014; Diaz Ruiz, 2023).

Disinformation as a structural externality in a market performed by metrics

If programmatic advertising converts engagement into value, a governance problem arises when the most efficient way of maximizing engagement does not coincide with the public interest. The market-shaping perspective suggests that metrics, algorithms, and advertising do not merely reflect markets but actively perform them by configuring incentives and norms that favor certain types of content while penalizing others (Diaz Ruiz, 2023). Polarizing and emotionally mobilizing content tends to be competitive in environments where virality is rewarded and informational quality is not incorporated into

economic calculations. In this sense, disinformation can be understood as a structural externality, a social cost displaced outside private accounting even as its circulation continues to generate revenue through the maximization of attention (Rêgo, 2024).

In Brazil, this mechanism became particularly visible during the COVID-19 pandemic. The country surpassed 700,000 recorded deaths, a figure that helps convey to international readers the gravity of the public health crisis and its underlying dynamics of political communication (Ministério da Saúde, 2023). During this period, disinformation functioned not merely as social noise but as a risk variable, producing negative effects on institutional trust, adherence to protective measures, and acceptance of vaccination. Part of this process was driven by the federal government in power at the time, led by a far-right coalition marked by scientific denialism. This coalition used digital platforms to amplify narratives that minimized the severity of the pandemic, contested public health measures, and promoted misleading content, including attacks on experts and institutions, with the stated objective of reducing economic disruption (Ricard & Medeiros, 2020; Asano et al., 2021; Senado Federal, 2021). The analytical point is that, once mass attention generated by controversy and indignation becomes monetizable, the economic system creates channels through which low-quality informational content can circulate efficiently and generate value through engagement while public health and social costs remain outside private balance sheets (Couldry & Turow, 2014; Diaz Ruiz, 2023).

The link between public health harm and the influence economy reinforces the need to address disinformation as a problem of market governance. In an environment where engagement is priced, selection dynamics tend to favor content capable of maximizing short-term metrics even when it is socially harmful. The absence of robust transparency regarding advertising, targeting, and delivery reduces the capacity to trace informational financing flows and identify circuits that profit from crisis conditions, thereby limiting the possibility of institutional correction and proportional accountability (Pasquale, 2015; Gorwa, 2019).

The same architecture of incentives and opacity also helps explain the political crisis that culminated in the attacks on the Brazilian federal capital on January 8, 2023. Parliamentary investigations characterized these events as an attempted coup d'état and attributed political responsibility to authorities, financiers, and civilian and military organizers (Congresso Nacional, 2023). This interpretation was later reinforced in the criminal sphere. In November 2024, the Federal Police concluded its investigation into the violent abolition of the democratic rule of law and the attempted coup, submitting a final report to the Federal Supreme Court that indicted 37 members of the criminal organization under investigation (Polícia Federal, 2024). In 2025, the Supreme Court accepted the charges filed by the Prosecutor General's Office and opened criminal proceedings against the main operational groups involved in the plot, including the central leadership group and the disinformation group, both directly linked to the political and communication-related preparation of the institutional rupture (Supremo Tribunal Federal, 2025a, 2025b; Ministério Público Federal, 2025a, 2025b). Later that same year, the Court convicted defendants from these groups of crimes including attempted coup d'état, violent abolition of the democratic rule of law, and criminal organization, rejecting interpretations of the

events as a spontaneous episode of political unrest and instead confirming their coordinated and institutionally oriented character (Supremo Tribunal Federal, 2025c, 2025d; Ministério Público Federal, 2025c).

For international readers, it is important to clarify that this process did not begin in January 2023. It was preceded by a prolonged strategy aimed at eroding confidence in electoral integrity, through which the far-right government defeated in the 2022 elections and its allies used digital platforms to spread doubts about the electoral process and the legitimacy of electronic voting machines (Associated Press, 2022; Reuters, 2023a). Electronic voting has been used nationwide since 1996, and both national and international observation missions classified the 2022 Brazilian elections as secure, reliable, transparent, and effective, underscoring the performative and destabilizing role of disinformation when directed at core institutions of democratic coordination (Tribunal Superior Eleitoral, n.d., 2022).

For the argument advanced in this article, the decisive issue is not merely the existence of such content but the difficulty of reconstructing, with auditable data, how financial resources circulated, which promotional strategies were activated, and which forms of economic intermediation were involved in amplifying both public health disinformation and coup-related narratives. This difficulty is itself constitutive of the problem because it derives from a transparency regime in which the evidentiary infrastructure depends on what platforms choose to disclose and in which the programmatic advertising chain tends to diffuse responsibility. In a market where engagement is priced and opacity is functional, regulation must address the economic conditions of governance by requiring robust and comparable transparency regarding advertising, targeting, and delivery. Such measures are necessary to reduce asymmetries, make informational financing traceable, and limit the transformation of disinformation into a viable business model (Tworek & Wanless, 2022; Jozwiak, 2022; Santini et al., 2024b; Ranking Digital Rights, 2025; UNESCO, 2023).

Findings

Documentary results on advertising transparency and auditability in Brazil

This section applies the transparency and auditability framework to three platforms of major economic and informational relevance in the Brazilian advertising and media environment, Meta, Google, and X. The empirical scope is limited to Brazil, and data were collected during two collection windows, on February 20, 2026 and March 6, 2026. The objective is to determine what can be publicly verified in a replicable manner regarding informational financing, targeting practices, and ad delivery across three high-risk domains selected for analysis, namely elections, pandemic-related information, and the health and well-being of children and adolescents.

The analysis focuses on the gap between available transparency and effective auditability. Auditability depends on the granularity and stability of the data provided, as well as on the availability of search and

export functions, methodological documentation, and the preservation of relevant records over time. When these elements are weak or incomplete, opacity operates as an economic asset that reduces contestability and sustains informational rents along the advertising intermediation chain while social costs remain externalized.

Table 1 summarizes the comparative results for the Brazilian context. The category “Yes” indicates that the item is consistently available in a replicable form, with sufficient granularity and documentation to allow a minimal reconstruction of financing and ad delivery. The category “Partial” indicates that the item exists but with restrictions that reduce auditability, such as broad aggregated ranges, incomplete coverage, conditional access, the absence of standardized export functions, or insufficient methodological documentation. The category “No” indicates either the absence of the item in the publicly observable architecture within the Brazilian context or the lack of a feature enabling independent verification. The comparative reading suggests more systematic disclosure by Meta for ads related to social, electoral, and political issues, a stronger emphasis by Google on advertiser identity and ad creatives, and more pronounced gaps in X with regard to domestic auditability.

Table 1. Comparative matrix of transparency and auditability in the Brazilian context

Indicator	Meta	Google	X
Publicly accessible advertising library	Yes	Yes	Partial
Country filter with explicit Brazil option	Yes	Yes	No
Advertiser identification and level of verification	Yes	Yes	Partial
Creative available and preserved over time	Yes	Yes	Partial
Exact campaign dates	Yes	Partial	Partial
Spending and impressions with useful granularity	Partial	No	No
Information on targeting criteria, attributes, or verifiable proxies	Partial	Partial	No
Keyword and advertiser search functions	Yes	Yes	Partial
Data export, API, Access or download options, including usage limits	Partial	No	Partial
Methodological documentation on coverage, exclusions, and counting procedures	Yes	Partial	Partial
Persistence of removed ads and explanations for removal	Partial	No	Partial
Terms of use for research, including restrictions and risk of account suspension	Partial	Partial	Partial

The economic interpretation of Table 1 depends on the interaction between granularity, stability, and verifiability. Fields offered only in broad ranges may create the appearance of transparency while simultaneously reducing the ability to reconstruct budget flows and estimate the magnitude of

campaigns during critical moments. The absence of verifiable information on targeting and delivery preserves opacity at the core of the comparative advantage of the influence economy, namely the capacity to infer audiences, optimize delivery, and monetize attention under conditions of informational asymmetry. This limitation complicates advertiser due diligence, constrains oversight, and increases the cost of ex post correction.

The domain-based application follows the same verification logic. In elections, the test concerns the traceability of financing and the possibility of reconstructing the temporal persistence of campaigns and their presence across different platform surfaces. In the pandemic context, the test concerns the capacity to observe paid circulation associated with critical public health themes and to reconstruct who financed particular messages in a context of systemic health risk. In the domain of adolescent and child health and well-being, the test concerns whether disclosure allows verification of age restrictions and sensitive categories or whether governance depends on opaque and non-auditable forms of self-regulation.

The domain-specific results are presented below and are followed by a comparative synthesis and a framework that connects the documentary findings to the mechanisms of the conceptual model, emphasizing the competition and governance implications for a peripheral democracy.

Elections and the integrity of informational financing

In the electoral domain, the empirical test concerns whether the transparency regime allows the auditable reconstruction of who pays, how much is paid, for how long, and through which delivery parameters, particularly when narratives of institutional delegitimization may serve as inputs for mobilization and coordination. In the recent Brazilian case, the attempted coup d'état of January 8, 2023 was preceded by persistent campaigns casting doubt on electoral integrity and on the legitimacy of electronic voting systems, which makes the traceability of informational financing a requirement not only of democratic governance but also of market discipline (Congresso Nacional, 2023; Associated Press, 2022).

Within the Brazilian context, Meta provides a systematic repository for advertisements related to social, electoral, and political issues, including advertiser identification, creative content, campaign dates, and ranges of spending and impressions, as well as aggregated information on reach by age group, gender, and location. These elements make it possible to infer patterns of investment and distribution, even if precision remains limited (Meta, 2026). In Google's case, the Ads Transparency Center allows users to trace advertisements by verified advertisers and observe which creatives were displayed in a specific region and the most recent date of display. This strengthens the dimension of identity and basic traceability but provides fewer resources for estimating investment magnitude and delivery patterns in a way that supports comparison over time (Google, 2023; Google, n.d.). In X, the advertising transparency tools available for Brazil rely largely on historical archives and instruments designed for external compliance obligations, which weakens domestic capacity to reconstruct recent campaigns and

increases the cost of attributing economic responsibility for electoral externalities (X Corp., 2026; Santini et al., 2024b).

Pandemic, public health risk, and the monetization of controversy

In the pandemic domain, applying the framework shows that systemic risk extends into the public health sphere and that disinformation can generate harms of considerable magnitude in environments characterized by low auditability. Brazil surpassed 700,000 recorded deaths from COVID-19, and the period was marked by intense informational conflict, including the encouragement and legitimization of denialist narratives by federal authorities aligned with the far-right. These dynamics had measurable consequences for institutional trust, adherence to protective measures, and acceptance of vaccination (Ministério da Saúde, 2023; Ricard & Medeiros, 2020; Asano et al., 2021; Senado Federal, 2021).

From a market governance perspective, the central difficulty lies in tracing informational financing when advertising related to health issues is not classified as political advertising and when repositories provide limited information for estimating targeting and delivery. Within the Brazilian context, Meta allows advertisements to be located through keyword searches and makes it possible to identify advertisers and creatives, but the absence of verifiable information on microtargeting parameters and the limited granularity of spending and impression ranges restrict the reconstruction of budget flows in public health campaigns. In Google's system, transparency strengthens advertiser identity and the historical record of creatives and regions, yet it remains less informative regarding investment magnitude and delivery, thereby reducing the possibility of evaluating differential exposure and the economic incentives surrounding public health controversies. In X, the limited contemporary availability of data for Brazil constrains the investigation of advertising and promotional practices linked to the public health crisis, reinforcing the asymmetry between the scale of informational circulation and the capacity for independent audit (Meta, 2026; Google, 2023; X Corp., 2026; Santini et al., 2024a).

Health and well being of adolescents and children

The third domain extends the argument beyond acute events and addresses a persistent governance problem associated with algorithmic recommendation systems and the intermediation of attention among vulnerable audiences. Public health literature and policy recommendations increasingly emphasize risks to the mental health and well-being of children and adolescents in digital environments characterized by intensive recommendation systems and advertising exposure. For this reason, the verifiability of age restrictions and sensitive categories becomes a relevant governance dimension (Office of the Surgeon General, 2023; UNESCO, 2023).

Within the Brazilian context, the documentary evidence available in public repositories provides only limited scope for direct verification of age-based targeting in non-political advertising. In Meta's case,

aggregated information about reach by age group and gender is more structured for advertisements related to social, electoral, and political issues, but for general commercial advertising it does not constitute a verifiable basis for auditing microtargeting directed at young audiences. In Google's system, transparency is concentrated on advertiser identity, creatives, region, and date of display without consistently revealing the targeting parameters used in campaigns related to health, body image, diets, self-esteem, gaming, or betting. In X, the absence of a contemporary and comprehensive public repository for the Brazilian context further restricts verification. These limitations reinforce reliance on self-regulation and weaken market discipline because advertisers, researchers, and regulators cannot consistently audit whether declared restrictions are effectively applied in delivery practices (Google, 2023; Meta, 2026; X Corp., 2026; Ranking Digital Rights, 2025).

Comparative synthesis

The comparison among Meta, Google, and X should be interpreted as the result of market governance arrangements rather than merely as an inventory of data fields. In the Brazilian context, significant heterogeneity can be observed. Meta provides more systematic disclosure for advertisements related to social, electoral, and political issues, although limitations remain regarding data granularity and programmatic access conditions governed by technical and compliance requirements. Google offers greater transparency regarding advertiser identity and the historical record of creatives and regions but provides less information about investment magnitude and delivery patterns, which reduces economic comparability and traceability. X remains a case of fragmented transparency for Brazil, with gaps that increase the cost of research and oversight while reinforcing dependence on extraterritorial regulatory obligations for any structured level of disclosure (Meta, 2026; Google, 2023; X Corp., 2026; Santini et al., 2024a).

Framework 1. Research model and documentary grounding of the mechanisms

Mechanism	How it is documented in the Brazilian case
Concentration and infrastructural control	Centrality of advertising libraries and transparency centers, dependence on proprietary standards of measurement and access, informational asymmetry regarding performance and reach
Programmatic intermediation and rent extraction	Available fields for spending, impressions, and campaign duration, evidence of advertiser verification procedures and eligibility rules for political and issue-based advertising
Opacity and information asymmetry	Absence or limitation of verifiable information on targeting and delivery, low granularity of available data, lack of export functions, insufficient methodological documentation, and temporal instability of access
Disinformation as an externality and systemic risk	Application of the same analytical instrument to elections, pandemic communication, and adolescent health issues to determine whether it is possible to reconstruct financing flows, promotion patterns, and the persistence of advertising records
Regulatory sovereignty gap	Gaps in the Brazil-specific data scope, research access restrictions, dependence on unilateral platform disclosure, and evidence of corporate resistance to structural transparency obligations

Discussion

Regulatory sovereignty, corporate resistance, and the case of Bill 2630

Taken together, the documentary results function as a plausibility test for the conceptual model by making observable the gap between declared transparency and effective auditability. Programmatic advertising operates as a real-time mechanism of price discovery and budget allocation in which engagement functions as an economic signal. When disclosure is incomplete, transaction costs increase for due diligence, research, and oversight, making it more difficult to attribute responsibility and allowing informational externalities to persist. The following discussion examines how this deficit intersects with regulatory sovereignty and corporate resistance in the Brazilian legislative process, showing that auditable transparency obligations are a condition not only for democratic governance but also for competitive discipline in electronic markets.

The documentary findings presented above show that, even where advertising libraries and transparency centers exist, the auditability of advertising and targeting in the Brazilian context remains incomplete. Significant gaps remain regarding data granularity, methodological documentation, and the traceability of targeting practices. This deficit is not merely a technical problem but also an expression of the regulatory sovereignty gap in transnational markets because it limits domestic capacity to impose obligations, conduct oversight, and enforce sanctions proportionate to systemic risks. Regulatory sovereignty becomes strained when communication and market infrastructures are controlled by transnational corporations capable of imposing private governance rules and maintaining informational

asymmetries, including asymmetries surrounding their own processes of governance and monetization (DeNardis, 2020; Valente, 2021).

The controversy surrounding Bill 2630 provides an illustrative case because it shows how regulatory disputes can evolve into disputes over influence. In May 2023, during the imminent vote on the bill in the Chamber of Deputies, both the Executive and Judicial branches reacted to campaigns conducted by major technology companies against the proposal, including accusations of undue interference in the legislative debate (Reuters, 2023a). During the same period, Agência Brasil reported the removal of a link and a message opposing the bill from the homepage of a search platform following a notification and precautionary measure, highlighting tensions around the use of service interfaces as tools for political mobilization (Agência Brasil, 2023a). The bill's rapporteur subsequently requested that the proposal be temporarily withdrawn from the legislative agenda in order to incorporate revisions, and the vote was postponed in a context of intense polarization and public pressure (Câmara dos Deputados, 2023; Agência Brasil, 2023a). The Federal Supreme Court also ordered the removal of advertisements attacking the bill and requested investigative actions related to potential misconduct, reinforcing the institutional perception that there was a risk of abuse of economic power on the eve of legislative deliberation (Supremo Tribunal Federal, 2023).

For international readers, the most analytically relevant aspect of this episode is the combination of resource asymmetry and the lack of auditable evidence. When market transparency is limited, public debate tends to shift toward normative slogans and simplified framings, such as censorship versus freedom of expression, while questions concerning monetization architecture, intermediation structures, targeting practices, and the traceability of funding remain secondary. This shift is not neutral. It favors actors with greater communication and mobilization capacity, raises the political cost of structural regulatory obligations, and widens the regulatory sovereignty gap by reducing the ability of the state to sustain policy decisions on the basis of verifiable evidence (Tworek & Wanless, 2022; Parsons, 2019).

The subsequent stalemate is also relevant to the argument. In 2024, the president of the Chamber of Deputies announced the creation of a working group to reconsider the regulation of social networks and explicitly stated that Bill 2630 would not be voted on in its current form, reinforcing the prolonged and contentious nature of the deliberative process (Câmara dos Deputados, 2024; Agência Brasil, 2024). The practical result is a fragmented governance landscape. Some accountability pressures shift to the judiciary, as illustrated by the parameters defined by the Federal Supreme Court in 2025 regarding the civil liability of platforms. These decisions expand obligations in certain circumstances and reinterpret the role of Article 19 of the Brazilian Internet Civil Framework in the absence of new legislation (Supremo Tribunal Federal, 2025; Agência Brasil, 2025). Although this ruling does not directly address the economic core of programmatic advertising, it reveals the institutional environment in which regulatory authority shifts when legislative processes remain stalled and reinforces the argument that regulatory sovereignty in transnational markets cannot rely solely on voluntary self-regulation.

Implications for governance, competition, and sovereignty in peripheral democracies

The documentary findings reinforce that auditable transparency in advertising and targeting should be treated as market infrastructure rather than as a reputational gesture. From the perspective of the political economy of communication, such transparency reduces informational asymmetries and transaction costs that currently fall on advertisers, researchers, and public authorities. It also makes it possible to reconstruct budget flows and assess the risk of financing informational externalities. Auditable transparency implies minimum requirements for verifiable disclosure within advertising libraries, including standardized data fields, national-level filtering, the availability of time series data, methodological documentation, and structured access for independent research under appropriate safeguards (Jozwiak, 2022; Santini et al., 2024a; UNESCO, 2023).

From a competition perspective, concentration in the AdTech market and vertical integration within platform ecosystems expand market power by combining control over advertising inventory, data resources, and measurement systems. When opacity remains a competitive advantage, contestability declines and market discipline over intermediation practices and inventory quality weakens. Policies that promote interoperability, limit lock-in strategies, and impose auditable transparency can reduce informational rents, lower entry barriers, and improve resource allocation by enabling comparisons of performance and risk among intermediaries (Crémer et al., 2019; Stucke & Ezrachi, 2016).

At the democratic and institutional level, the conclusion is that disinformation cannot be treated solely as a problem of individual conduct. It is rooted in structural monetization incentives and in an environment characterized by low verifiability, where public health and political costs are socialized. Requiring robust transparency and duties of systemic risk prevention shifts intervention to the level of market architecture, makes informational financing traceable, raises the costs of opportunistic arbitrage, and enables predictable enforcement, particularly in peripheral democracies where regulatory sovereignty is strained by the transnational operation of platforms (CGI.br, 2019; Diaz Ruiz, 2023; Rêgo, 2024).

Conclusion

The influence economy should not be understood merely as an innovation within the communication industry, but rather as a structural reordering of the informational value chain. By transforming attention into an economic asset and structuring its exploitation through a concentrated and transnational programmatic advertising infrastructure, the market redistributes power toward actors who control data, measurement, and intermediation. This shift deepens informational asymmetries between platforms, intermediaries, advertisers, producers, and society, reduces contestability, and consolidates a form of private governance in which opacity functions as an economic resource rather than as an accidental failure.

Within this regime, disinformation emerges as a structural externality. When engagement is priced and converted into revenue, content capable of maximizing attention signals becomes economically competitive even when it produces social harm. Optimization based on metrics and behavioral targeting encourages production and distribution strategies oriented toward emotional response and virality while collective costs remain externalized. Responses focused solely on content removal or individual liability leave intact the incentive infrastructure that makes informational toxicity economically functional.

The Brazilian case illustrates the severity of this arrangement by showing that the effects of disinformation extend beyond the political sphere. During the pandemic, the circulation of misleading content about risks, protective measures, and vaccination generated significant public health and economic impacts. These effects were intensified when the federal government in power at the time, guided by scientific denialism, actively stimulated and legitimized disinformation narratives while using digital platforms as infrastructures for mobilization. Brazil surpassed the threshold of 700,000 recorded COVID-19 deaths, offering international readers a concrete measure of the social costs associated with an informational regime structured around engagement and low auditability (Ministério da Saúde, 2023; Ricard & Medeiros, 2020; Asano et al., 2021; Senado Federal, 2021).

The political crisis that culminated in the attempted coup d'état on January 8, 2023 further demonstrates that disinformation functions as a systemic risk when combined with infrastructures of circulation and monetization capable of amplifying those effects at scale. The radicalization process was preceded by persistent campaigns aimed at eroding confidence in electoral integrity, including the use of digital platforms to spread doubts about the legitimacy of electronic voting systems used nationwide since 1996. In peripheral democracies, this risk is intensified by the regulatory sovereignty gap because critical infrastructures are controlled by transnational corporations capable of influencing legislative arenas while maintaining informational asymmetries that complicate the imposition of obligations and proportional sanctions (DeNardis, 2020; Valente, 2021; Congresso Nacional, 2023).

In light of these dynamics, democratic platform regulation should be approached as an economic policy of communication oriented toward sovereignty and the reduction of asymmetries. This requires binding obligations for robust and auditable transparency regarding advertising, targeting, and delivery, including the minimum standardization of disclosure fields, national-level data segmentation, methodological documentation, and export and access conditions that allow independent research and social oversight under proportionate safeguards (Tworek & Wanless, 2022; Santini et al., 2024b; UNESCO, 2023; Ranking Digital Rights, 2025). It also requires obligations aimed at preventing and constraining disinformation as a profitable economic practice by addressing the incentive infrastructure that converts attention into revenue. Corporations that concentrate the principal channels of circulation, measurement, and monetization exercise structural power over society, and this power cannot remain governed solely through selective self-regulation and opacity as a competitive advantage.

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