



## The Portability of Ideas in Global Data Governance: A Coxian Reading of 'Data Free Flow with Trust' Journey to the UN Global Digital Compact

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Received : August 21, 2025

Accepted : October 13, 2025

Published : January 31, 2026

Citation: Dasnita, M.N., Sudirman, A., & Wibawa, S., (2026). The Portability of Ideas in Global Data Governance: A Coxian Reading of 'Data Free Flow with Trust' Journey to the UN Global Digital Compact. *Ilomata International Journal of Social Science*, 7(1), 100-116.

<https://doi.org/10.61194/ijss.v7i1.1922>

**ABSTRACT:** This article investigates the institutionalization of “trusted cross-border data flows” and “interoperability” within the UN Global Digital Compact. Employing a Coxian framework of ideas, material capabilities, and institutions, it argues this outcome was not passive diffusion. Instead, it was the product of a historic bloc that aligned U.S. policy with the interests of major technology firms. Through a directed content analysis of key diplomatic texts from the G20, OECD, and UN, the study traces the genealogical journey of this conceptual pairing. The analysis reveals how this highly portable formula was progressively embedded and proceduralized in the GDC's final text. The article also demonstrates that the success of this ideational project is underwritten by material power: the concentrated structure of global cloud infrastructure, which makes this governance settlement the most feasible option. The research illuminates how hegemonic consensus in digital governance is achieved through a mutually reinforcing alignment of adaptable ideas, strategic institutionalization, and the realities of material capabilities.

**Keywords:** DFFT, Global Digital Compact, Cox, Regime Complex



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## INTRODUCTION

In the contemporary global landscape, the seamless transfer of data across national borders has emerged as the veritable lifeblood of the digital economy. Underpinning this reality is the conceptualization of data itself as a primary form of capital, a paradigm that now affects and transforms a multitude of spaces and sectors. The proliferation of technologies such as the Internet of Things, ubiquitous online platforms, and sophisticated data analytics has vastly expanded the scope of what constitutes a "digital product" or "service," thereby rapidly enlarging the domain of the digital economy (Kumar et al., 2019). This expansion, in turn, establishes data as a foundational economic input for an ever-widening array of domains, and without a constant and reliable supply

of data, many of these complex technologies and the organizations that manage them would be unable to function and generate economic values ([Sadowski, 2019](#)). It is precisely this foundational role that elevates the governance of data flows into such a critical issue, giving rise to a series of profound challenges that cut to the core of societal values and state functions. These challenges encompass persistent concerns over personal privacy, the escalating complexities of cybersecurity, the protection of intellectual property, and even fundamental questions of national sovereignty ([Aaronson & Leblond, 2018](#); [Ford, 2024](#); [Heidebrecht, 2024](#); [Pohle & Thiel, 2020](#); [Seidl & Schmitz, 2024](#)).

Among these issues, one dimension has become particularly salient in recent years: the expanding influence wielded by large technology corporations in the construction and administration of global data infrastructures. Specifically, a small cohort of American technology firms, often referred to as 'Big Tech'—a group that prominently includes Apple, Google, Facebook (Meta), Amazon, and Microsoft—now holds direct control over immense volumes of data and profoundly influences the flow of information across the globe. These companies have come to dominate the global digital space, providing not only its critical infrastructure but also shaping data policy and governance to a significant degree. In fact, their pervasive influence over the political economy, culture, and public policy is often considered comparable to the dominance once held by 'Big Oil' or major financial institutions in their respective eras, positioning them as the defining institutional forces of the digital age ([Birch & Bronson, 2022](#); [Kwet, 2019](#)). This development, which positions corporate actors as quasi-sovereign entities in the digital realm, has created a new locus of power that increasingly rivals that of traditional state actors ([DeNardis, 2014](#); [Rahman, 2018](#)). Consequently, this shift has served to intensify long-standing debates, prompting scholars like Nye (2014) to question traditional perspectives on cyber governance and re-examine the complex role of states in this new reality.

The contemporary governance landscape for data is best characterized by fragmentation, with competing regulatory models emerging among the world's major economic powers. On one hand, the European Union champions a rights-based approach, epitomized by its General Data Protection Regulation (GDPR) prioritizes the privacy of individuals and asserts its authority through robust extraterritorial enforcement mechanisms. In stark contrast, the People's Republic of China's Personal Information Protection Law (PIPL) advances a state-centric model, mandating the localization of data and imposing stringent controls over any cross-border transfers, reinforcing state sovereignty over its domestic digital sphere ([Ultimate Guide to PIPL Compliance: Navigating China's Personal Information Protection Law - China Guide, 2024](#)). The United States, for its part, has historically pursued a market-oriented strategy that favors the relatively unimpeded flow of data, primarily facilitated through digital trade agreements and a reliance on sector-specific regulations and corporate self-governance ([Chin & Zhao, 2022](#)). The inherent difficulty of bridging these divergent philosophies, even between allied powers, is vividly illustrated by the protracted negotiations between the EU and the U.S. over the Data Privacy Framework ([Ford, 2024](#)). It is clear, therefore, that no single, universally accepted rulebook governs cross-border data flows. Instead, what exists is a complex mosaic of bilateral agreements, regional standards, and national laws, which often overlap and, at times, directly compete with one another in their scope and objectives ([Aaronson & Leblond, 2018](#)).

This divergence reflects not just technical or legal preferences but a core arena of geopolitical and economic contestation. This is particularly evident in the debate over data localization, a practice that Selby (2017) observe is strategically framed either as a legitimate cybersecurity measure or as a form of digital protectionism, depending on the speaker's interests. Simultaneously, the American market-oriented strategy is increasingly being formalized through the integration of internet governance principles directly into international trade law (Mira, 2017; Mishra, 2019). This maneuver effectively reframes data governance as a core component of national economic interest, creating a direct normative and legal challenge to state-centric localization mandates. It is within this contested space that economic interdependence itself becomes a potential tool for coercive power, a dynamic that Farrell and Newman (2019) have influentially explored.

In response to this fractured and often contentious environment, a number of international initiatives have emerged with the goal of establishing shared principles for what have come to be known as trusted data flows. Among the most prominent of these is Japan's concept of "Data Free Flow with Trust" (DFFT), first introduced at the World Economic Forum in Davos in 2019. This formula, which seeks an explicit balance between economic openness and robust data protection, has since gained considerable momentum within influential forums such as the G7, G20, and the OECD. A critical component for realizing such trust is the principle of interoperability, which refers to the practical ability of diverse technical, legal, and institutional systems to communicate and function together effectively (Bacchus et al., 2024). Building on this momentum, the United Nations' Global Digital Compact (GDC), adopted in September 2024 as an integral component of the Pact for the Future, represents a landmark effort to codify international norms for data governance, alongside commitments to universal connectivity, the protection of human rights in the digital environment, and the governance of artificial intelligence (United Nations, 2024b).

This article seeks to investigate the institutional trajectory of these interconnected concepts, tracing how the principles of trusted cross-border data flows and interoperability have traveled from their incubation in G20 and OECD contexts to their recent formalization within the United Nations Global Digital Compact. To analyze this process, the article employs a Coxian theoretical lens, which emphasizes the dynamic interplay between ideas, material capabilities, and institutions in shaping world order (Cox, 1981). We argue that the powerful fusion of the DFFT concept with the principle of interoperability should not be understood as a simple case of passive policy diffusion. Rather, it is more accurately interpreted as the deliberate product of an emerging "*historic bloc*": a mutually beneficial alignment between the foreign policy objectives of the United States and the commercial and strategic interests of U.S.-based technology companies. This alignment has been successfully embedded across a complex regime of governance that includes not only intergovernmental organizations but also international trade instruments and private technical standards bodies.

## METHOD

This research employs a qualitative design with directed content analysis (Lamont, 2015). The method is used to reconstruct the discursive pathway of a key conceptual dyad: the pairing of trusted cross-border data flows (DFFT) with interoperability. The analysis traces how this pairing

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moves across international venues before becoming institutionalized in the United Nations Global Digital Compact (GDC). The framework is based on three a priori codes that translate the Coxian triad into observable textual markers. The paragraph is the primary unit of analysis.

**Trusted Flows:** This code was applied to identify all explicit references to “trusted” data flows, the DFFT acronym, or closely related cognate concepts that convey a similar meaning.

**Interoperability:** A second code captured mentions of interoperability itself, as well as associated terms such as mutual recognition, equivalence, or the alignment of regulatory systems.

**Follow Up:** A final institutional code, designated FOLLOW UP, was developed to track the procedural mechanisms of institutionalization. It flagged language pertaining to future actions, including calls for consultations, exercises in mapping convergence and divergence, mandates for progress reporting, proposals for high-level reviews, and official endorsements or calls for coordination among different bodies.

The corpus includes selected policy and diplomatic documents: the G20 Osaka Leaders’ Declaration (2019); the OECD’s Declaration on Government Access to Personal Data (2022) and its Global CBPR Framework (2023); U.S. submissions to the GDC (2024); and all drafts of the GDC leading to its adoption in the Pact for the Future. Quotations of no more than fifteen words were extracted and linked to their source paragraphs. To ensure accuracy, at least one paragraph before and after each coded instance was also reviewed.

This design addresses a central Coxian question. By tracing these discursive threads through influential texts, the analysis evaluates whether they collectively exhibit the features of a historic bloc: portable ideas, institutional memory, and material or procedural feasibility for a new global order.

## RESULT AND DISCUSSION

### A Coxian Reading of Regime Complexes in Global Digital Governance

Robert W. Cox’s historical materialist framework stands as one of the most enduring and influential critical approaches within the field of International Political Economy (IPE) ([Newell, 2019](#)). In his landmark 1981 essay, "*Social Forces, States, and World Orders*," Cox posits that global hegemony is sustained not only through overt coercion but through the strategic and mutually reinforcing alignment of three core elements: ideas, material capabilities, and institutions. Within this triad, ideas furnish the *intersubjective meanings* and normative vocabularies that serve to legitimize a particular world order. Material capabilities, which have evolved from the industrial capacity of the 19th century to the digital infrastructures of today, provide these ideas with their essential *carrying power*. Finally, institutions function as the collective "memory" of that order, codifying its dominant norms and ensuring their reproduction across both time and space ([Cox, 1981, 1983](#); [Cox & Sinclair, 1996](#); [D’Alisa & Kallis, 2016](#); [Konrad, 2012](#); [Unay, 2010](#)).

When these three foundational elements achieve a state of mutual reinforcement among state actors, private sector interests, and influential epistemic communities, they coalesce into what Cox

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terms a historic bloc. This represents a powerful coalition whose distinct political, economic, and ideological objectives have effectively converged. Within such a formation, states are far from being impartial arbiters of the common good; instead, they are deeply embedded in, and are often the principal architects of, the very transnational governance arrangements that are designed to advance their structural position within the global order ([S. Gill, 1993](#); [S. R. Gill & Law, 1989](#)).

Crucially, this theoretical approach reframes the classic approach of hegemony in IR studies. It is understood not only as the direct coercion or domination of one state by another, but rather as an order that is presented as a reciprocally beneficial arrangement. The hegemon secures and maintains its preeminent position by articulating and promoting a set of shared norms, effectively projecting its particular interests as universal ones that serve the stability and prosperity of the entire system. As Münkler defines it, hegemony is a form of superiority in a group of political actors who have legally equal rights, a definition that admitted the existence of a clear hierarchy even within a system of formally sovereign states. Depending on its strategic objectives, such a hegemonic power may choose to exercise its influence either to preserve the existing international order or to pursue expansionist policies to reshape it ([Ozcan & Haq, 2023](#)).

In the nascent and highly contested field of global digital governance, the conceptual coupling of *trusted cross-border data flows* with *interoperability* provides a compelling contemporary illustration of this Coxian model. As an idea, this pairing possesses rhetorical versatility. It concurrently promises the economic efficiencies of innovation-friendly openness while also preserving the necessary space for national safeguards and cross-system coordination. It is this flexibility that broadens its appeal to a diverse set of actors: states envision expanded access to global markets, technology firms secure the operational scale required for their business models, and technical standards communities are able to frame the issue as one of manageable compatibility rather than an intractable geopolitical dispute ([Aaronson & Leblond, 2018](#); [OECD, 2022](#)).

The portability of this vocabulary rests not only on discursive appeal but also on material capabilities. In Cox's formulation, material power is not reducible to economic wealth alone but encompasses the technological and infrastructural foundation that enables a particular idea to be realized and sustained over time ([Cox, 1981](#)). In the current era, the tangible infrastructure of the digital age, including hyperscale cloud platforms, transoceanic submarine cable networks, artificial intelligence compute clusters, and global bandwidth pipelines, is overwhelmingly concentrated within a small number of U.S.-based corporations. This concentration of capabilities allows the actors promoting DFFT and interoperability, whose interests are closely aligned with U.S. digital trade policy, to not only advance the concept normatively but also to operationalize it on a global scale (DeNardis, 2014; Farrell & Newman, 2019).

Institutions, in turn, furnish the durability required for such ideas to become entrenched over time ([Carstensen & Schmidt, 2016](#)). According to Cox's theory, institutions do not exist in a vacuum, independent of power relations; they are better understood as the crystallization of prevailing social forces and function to stabilize the dominant order ([Cox, 1983](#)). The "trusted flows + interoperability" vocabulary has been systematically embedded in a series of high-level forums and agreements, including the G20 Osaka Leaders' Declaration, the OECD's *Declaration on Government Access to Personal Data*, numerous digital trade agreements, and, most recently, the

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UN's Global Digital Compact. Each instance of institutional uptake reinforces the perception of its legitimacy, creating a powerful feedback loop where adoption by one influential venue encourages and legitimizes its adoption by others ([Abbott et al., 2016](#); [Ruggie, 1982](#)).

This process of institutional embedding unfolds within what international relations scholars have termed a *regime complex*: a loosely coupled system of partially overlapping and non-hierarchical institutions that all address a common issue area without the presence of a single, overarching authority ([Keohane & Victor, 2011](#); [Orsini et al., 2013](#); [Raustiala & Victor, 2004](#)). In the domain of global data governance, this complex includes intergovernmental forums like the G7, G20, OECD, and UN; regional trade agreements such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and United States–Mexico–Canada Agreement (USMCA); and private, voluntary standard-setting organizations like the International Organization for Standardization (ISO), Institute of Electrical and Electronics Engineers (IEEE), and World Wide Web Consortium (W3C). Within this polycentric environment, powerful actors can strategically advance their preferred norms across multiple venues simultaneously. This creates a condition of normative redundancy, ensuring the resilience of an idea, for if one forum proves resistant, others may still adopt the concept, thereby keeping it alive within the broader governance ecosystem.

From a Coxian perspective, this institutional multiplicity is not a limitation but rather a strategic opportunity to be exploited by a historic bloc. Material dominance over digital infrastructure grants bloc members the unique ability to shape agendas across these different venues, thereby ensuring a remarkable consistency in language and conceptual framing. Consequently, actors aligned with U.S. interests can promote the "trusted flows + interoperability" agenda at the OECD, introduce similar language into UN consultations, embed it within the legal text of digital trade chapters, and advocate for compatible technical interoperability standards, with each action serving to reinforce the others.

In the specific case of the UN's Global Digital Compact, the eventual adoption of the "trusted flows + interoperability" framework reflects a distinct genealogy. This lineage began with the more general "open-yet-protected" language that characterized earlier OECD and G20 work, was crystallized in Japan's 2019 DFFT initiative, and subsequently migrated through a series of institutional venues before arriving at a universal forum. Cox's framework illuminates how this concept journeyed so effectively through diverse venues, attributing its success to a combination of its conceptual flexibility, its alignment with the material power of dominant infrastructure providers, and its deep institutionalization, which created formidable political barriers to its reversal.

In a contested digital order, where the European Union advances a rights-based regulatory model (GDPR) and China promotes a sovereignty-first approach (PIPL), the U.S.–Big Tech historic bloc has masterfully leveraged the interplay of ideas, material power, and institutions to normalize its preferred vocabulary across the global digital regime complex. This represents a form of hegemony achieved not through overt imposition, but through the deliberate construction of a consensus that appears both legitimate and inevitable. This is precisely the dynamic of hegemonic construction that Cox identified four decades ago.

### Genealogical Timeline of Data Flow

The analysis reveals a clear genealogical and institutional trajectory for the “trusted flows + interoperability” couplet, moving from its initial articulation in high-level political declarations to its codification in administrative principles and certification schemes, and finally to its procedural embedding within the UN Global Digital Compact (GDC). This journey demonstrates how portable policy ideas travel across multiple venues — the G20, OECD, Global CBPR Forum, U.S. diplomacy, and the UN — while retaining their core semantic structure and adapting to new institutional environments.

The genesis of this conceptual pairing within the analyzed corpus can be traced to the 2019 G20 Osaka Leaders’ Declaration. This document was pivotal as it formally introduced the phrase “*Data Free Flow with Trust*” (DFFT) and, in the same breath, explicitly encouraged “*the interoperability of different frameworks*” (G20, 2019). This dual framing represented a judicious piece of diplomatic language, innovative in its capacity to speak simultaneously to advocates of market access and defenders of privacy sovereignty. It skillfully bound the promise of economic openness to the necessity of safeguards, all while signaling a formal respect for jurisdictional diversity. In Coxian terms, this was the articulation of an idea endowed with immediate carrying power, precisely because it could be deployed across multiple institutional contexts without requiring substantial redefinition.

By the time of the OECD’s 2022 *Declaration on Government Access to Personal Data*, the “trust” component of the couplet had been significantly operationalized. It was translated into a set of concrete procedural safeguards, including principles of legality, legitimate aim, formal approvals, handling limitations, transparency, oversight, and redress (OECD, 2022). This move was critical, as it preserved the rhetorical portability of the Osaka formula while substantially deepening its content, transforming trust from a broad normative aspiration into a tangible administrative program. The OECD’s language also introduced a global public-good dimension by explicitly linking the establishment of trust to the stability of an “*open, accessible, interconnected, interoperable, reliable and secure Internet*.”

Building on this momentum, the Global CBPR Framework, established in 2023, served to reinforce the interoperability half of the couplet. It embedded this principle into practical mechanisms such as cross-certification and privacy recognition for data processors (Global CBPR Forum, 2023). The CBPR’s framing, which declares that “*trusted cross-border data flows are indispensable*” and calls for “*Interoperability with data protection and privacy frameworks*” was significant because it repositioned interoperability not solely as a diplomatic principle but as a technical and institutional process capable of bridging disparate national regulatory regimes.

The official United States submissions to the GDC process in 2024 then adopted the conceptual couplet wholesale. This was accompanied by FOLLOW UP language urging a multilateral process to “*identify areas of alignment on data governance that are specific and targeted...*” (Government of the United States of America, 2024). This move is particularly telling, as it reflects a clear alignment of U.S. foreign policy objectives with the established compliance architectures of U.S.-based hyperscale platforms. The convergence of state, corporate, and epistemic interests here suggests the presence of Cox (1981) historic bloc working to sustain a shared governance model.

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Finally, the GDC Final text (2024) marks the culmination of this journey, institutionalizing the couplet within a durable procedural architecture. This architecture includes mandates for multi-stakeholder consultations, a formal mapping of convergence and divergence among regulatory systems, requirements for periodic progress reporting, and a high-level review scheduled for the 82nd UN General Assembly ([United Nations, 2024a](#)). This represents the critical transition from a traveling idea to institutional memory, embedding the vocabulary into repeatable governance routines that are designed to be self-reinforcing over time.

**Table 1.** Journey from the Coded Corpus

Sources Document		Code	Phrases
G20 Leaders’ Declaration (2019)	Osaka	Trusted Flows	“In this respect, it is necessary that legal frameworks, both domestic and international, should be respected. Such data free flow with trust will harness the opportunities of the digital economy.”
G20 Leaders’ Declaration (2019)	Osaka	Interoperability	“We will cooperate to encourage the interoperability of different frameworks, and we affirm the role of data for development.”
OECD Government Access (2022)		Trusted Flows	“Promoting trust in cross-border data flows,” reaffirming countries’ commitment to data free flow with trust,...
OECD Government Access (2022)		Interoperability	“...promoting data free flow with trust in the digital economy, and maintaining a global, open, accessible, interconnected, interoperable, reliable and secure Internet.”
Global Framework (2023)	CBPR	Trusted Flows	“Conscious that trusted cross-border data flows are indispensable – not just for big, multinational technology companies, but for companies across all sectors of the economy, and for micro, small- and medium-sized businesses, workers, and consumers as well”
Global Framework (2023)	CBPR	Interoperability	“Members should promote interoperability of the Global CBPR System and PRP System with other data protection and privacy frameworks that give practical effect to this framework”
US Submissions (2024)	GDC	Follow Up	“The United States is also pleased by the efforts of many stakeholders to organize their own consultations, and we encourage all interested parties to review those contributions. The United States has begun engaging with U.S. stakeholders and international partners and is committed to further dialogue.”
GDC Final (2024)		Follow Up	“We recognize the urgent need for strengthened data governance cooperation at all levels with the effective, equitable and meaningful participation of all countries and in consultation with relevant stakeholders to unlock the full potential of digital and emerging technologies.”

What is most striking about these extracts is their remarkable semantic stability. The same compact phraseology is repeated across different venues, often verbatim, with minimal need for reinterpretation. This pattern reflects a high degree of portability, which is one of Cox’s primary criteria for ideational hegemony, where a concept retains its utility and meaning across diverse institutional and political settings.

### The Material Bases

A Coxian analysis requires that we also examine the material capabilities that give these ideas carrying power. The governance settlement of “trusted flows + interoperability” does not gain traction solely by its conceptual elegance; it travels well because it is deeply aligned with the physical and economic realities of the global digital infrastructure. These material patterns, when examined together, reveal why this particular settlement has become the path of least resistance for both market actors and states.

The most visible foundation of this material reality lies in the scale and concentration of the cloud computing market. By the first quarter of 2025, global enterprise spending on cloud infrastructure had soared to approximately US \$94 billion, reflecting a year-on-year growth rate of 23%. Within this expanding market, the top three providers, namely AWS, Microsoft Azure, and Google Cloud, collectively controlled roughly 63% of the total ([Canalys, 2025](#); [Synergy Research Group, 2025a](#)). This market concentration is even more pronounced in key regions like Europe, where U.S. providers command around 70% of the market share, compared to a mere 15% held by their European counterparts ([Synergy Research Group, 2025b](#)). This concentration is politically significant because the same firms that promote interoperability in diplomatic and standard-setting forums are the ones that operate the software-defined control planes of global infrastructure. These control planes, which manage everything from networking and identity to encryption and compliance, make it technically feasible to operationalize “trusted flows” without having to re-architect the physical network for every jurisdiction. Thus, the idea of interoperability survives its institutional travels because it can be implemented as a software configuration layered atop an already shared infrastructure.

This logic of concentration is further cemented by the geographic clustering of digital infrastructure. As of 2024, the top 20 hyperscale metropolitan areas accounted for an estimated 62% of global capacity, with the hubs of Northern Virginia and Greater Beijing alone representing roughly 20% of that total ([CBRE Research, 2024](#)). Vacancy rates in these critical hubs are exceptionally low, hovering around 0.76% in Northern Virginia and between 2.6% and 2.8% in the North American colocation market more broadly ([CBRE Research, 2024](#)). This structural scarcity of both space and power makes the universal localization of data storage economically and physically impractical in the short to medium term. In such an environment, governing data flows with robust safeguards, rather than attempting to build redundant facilities in every jurisdiction, becomes the most pragmatic and cost-effective path. The portability of the DFFT concept depends on this underlying calculation: it offers a governance model that works within existing capacity bottlenecks rather than fighting against them.

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The dynamic is reinforced yet again by patterns of vertical integration in long-haul data transport. In 2024, used international bandwidth surpassed 6.4 petabits per second, with the vast majority of this traffic being driven by a handful of content and cloud networks like Google, Meta, Microsoft, and Amazon (Mauldin, 2025). Further analysis indicates that these same firms now own or lease approximately half of all global subsea cable capacity (Runde et al., 2024). This ownership structure means that the very actors demanding high-volume, low-latency cross-border flows also control the physical pathways along which that data travels. It becomes logistically straightforward to implement “interoperability” at the transport layer when the same few operators own the cables, the landing stations, and the cloud regions they connect. The “trust” component is therefore not only a normative principle but also a logistical necessity, enabling jurisdictional safeguards to be enforced through routing policies without undermining network efficiency.

A final and perhaps decisive set of constraints emerges from chokepoints in AI compute and electricity. NVIDIA currently dominates over 90% of the market for training-class AI accelerators, the vast majority of which are deployed in existing hyperscale data centers (CNBC, 2024). At the same time, the International Energy Agency (International Energy Agency, 2025) projects that data center electricity demand will likely exceed 945 terawatt-hours by 2030, with AI workloads being the principal driver of this growth. In key North American markets, structural scarcities in available power are already apparent. Under such tight constraints, duplicating compute clusters and power provisioning simply to comply with strict data localization mandates would be vastly more expensive than deploying compliance primitives like encryption, access audits, and certification schemes on shared infrastructure. The material realism of the trusted flows and interoperability model lies precisely in its ability to deliver on sovereignty and privacy commitments without triggering the exorbitant capital and energy costs of network duplication.

When viewed through the lens of Cox’s triad, these material capabilities cease to be only a background conditions. Instead, they are the enabling substrate that makes the G20’s (2019) compact language, the OECD’s (2022) procedural safeguards, the CBPR’s (2023) certification mechanisms, and the GDC’s (2024) institutional follow-up all work in practice. Without the realities of concentrated cloud platforms, clustered geography, vertically integrated transport, and compute and power chokepoints, the couplet of “trusted flows + interoperability” might have remained a rhetorical aspiration. With them, it becomes a governance settlement that is not only discursively portable but also materially entrenched.

The findings show that the diffusion and institutionalization of this conceptual couplet are best explained through a Coxian framework. This analytical model, which emphasizes the dynamic interplay of ideas, material capabilities, and institutions (Cox, 1981, 1983), offers a more holistic account than can be provided by competing theoretical approaches. While frameworks such as the “Brussels Effect” (Bradford, 2020) or “weaponized interdependence” (Farrell & Newman, 2019) offer powerful insights into regulatory power and network control respectively, the Coxian triad provides a unique capacity to explain the synergy between ideational portability, infrastructural feasibility, and institutional routinization that characterizes this particular case.

On the ideational dimension, the findings confirm that the linguistic compact from the 2019 G20 Osaka Leaders’ Declaration has proven portable. It paired “*data free flow with trust*” with the

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“*interoperability of different frameworks.*” It is worth clarifying that while Robert Cox himself does not explicitly use the term “portability,” the concept itself is fundamental to his analytical approach. We can see this in the way Cox describes his own intellectual project, which involves carefully adapting Antonio Gramsci's concepts from a national context to the much broader study of world order. Cox explains that a powerful concept is inherently, in his words, “*loose and elastic, attaining its full precision only when it is brought into contact with a particular situation which it helps to explain.*” Idea's capacity to travel to new contexts and evolve in its application without losing its fundamental identity. The purpose of this elasticity, as Cox makes clear, is to give a concept “wider applicability.” (Cox, 1983). This allows it to be freed from its original, historically specific context and applied to new relations of dominance and subordination, including those that define the international system.

In this light, the couplet serves as a prime example of a portable idea. Its success stems directly from this designed flexibility, which gives it a powerful dual appeal: it simultaneously promises the benefits of economic openness to trade-oriented states and technology platforms while reassuring advocates of data sovereignty through the language of trust and safeguards. Its consistent replication across the OECD (2022), the Global CBPR Forum (2023), U.S. diplomatic submissions (2024), and the UN GDC (2024) illustrates a key dynamic of regime complexes. Once the concept was articulated in a high-level forum like the G20, it became an established focal point for subsequent negotiations. Other institutions within the complex, such as the OECD and UN, found it easier to build upon this existing language rather than creating a new framework from scratch. This creates a cycle of mutual reinforcement, another core feature of the regime complex model, where each adoption by an influential institution enhances the concept's legitimacy and encourages its uptake elsewhere (Keohane & Victor, 2011).

From an institutional perspective, the GDC Final's decision to embed this conceptual couplet within a formal procedural calendar is a decisive step. This move exemplifies what Cox (1981) identifies as the process of institutionalisation, which he describes as the primary means of “*stabilising and perpetuating a particular order.*” Rather than allowing the idea to remain only as an aspiration, the GDC's formal calendar of consultations, mapping exercises, and high-level reviews provides the very routines that give the concept durability over time. In this sense, these procedures serve as what Cox would call an “*anchor for... a hegemonic strategy.*” They establish a settled framework that reflects the prevailing power relations at its point of origin and channels future debate and policy development. By structuring the routines through which the “*trusted flows*” vocabulary is revisited, assessed, and applied, the GDC's institutional design works to continually reinforce the legitimacy of this particular governance settlement.

The findings also highlight material capabilities—concentrated cloud infrastructure, clustered data centers, vertically integrated subsea transport, AI compute bottlenecks, and systemic power constraints. These conditions make the couplet the most materially rational governance settlement. In Cox's model, material capabilities actively creating a condition in which feasibility and attractiveness of particular ideational constructs. In this case, the prohibitive cost and immense logistical burden of achieving full data localization, particularly in a world where roughly 63% of cloud infrastructure is controlled by just three firms (Synergy Research Group, 2025a) and where vacancy rates in key hyperscale hubs are below one percent (CBRE Research, 2024), make

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interoperability-based solutions far more viable. These material realities generate a powerful structural logic that biases actors toward governance arrangements that can be deployed on shared infrastructure via policy-based controls, such as jurisdictional data handling rules and access safeguards, rather than through costly physical duplication.

This powerful dynamic, where material capabilities shape the diffusion of ideas, finds a compelling theoretical parallel in Susan Strange's (1994) seminal concept of structural power. Strange defined this as the distinct capacity not only to decide how things shall be done, but more fundamentally, to shape the very frameworks within which other actors must operate. In this context, the immense control that hyperscale providers wield over global cloud capacity and subsea transport endows them with a disproportionate influence over the concrete technical parameters through which concepts like "interoperability" and "trusted flows" are actually implemented. It is in this sense that their power becomes truly structural. The governance arrangements they favor cease to be mere policy preferences subject to international negotiation. Instead, as Strange's framework would suggest, they become the de facto infrastructural conditions that other actors must accept as the baseline for meaningful participation in the global digital economy. Consequently, what may appear as a voluntary adoption of a shared idea is, on closer inspection, a pragmatic adaptation to a set of underlying rules of the game that have already been largely determined.

This confluence of U.S. state policy, the infrastructure designs of U.S.-based hyperscale providers, and the uptake of their preferred vocabulary in multilateral institutions strongly suggests the emergence of what Cox (1981) would identify as a "historic bloc." This coalition of social forces, encompassing states, capital, and epistemic communities, works to sustain a particular world order. Here, the bloc's core interest appears to be the prevention of a deeper fragmentation of the global data infrastructure, while simultaneously accommodating national sovereignty concerns through the deployment of procedural safeguards and interoperability standards. The genealogy of the conceptual couplet demonstrates how this bloc effectively leverages both its ideational and material assets: its ideational asset is a compact and highly portable vocabulary, while its material asset is its control over the infrastructure that makes implementation practical. The institutional asset, in turn, is the successful embedding of this settlement into a regime complex with follow-up mechanisms that ensure its durability.

This is not to suggest, however, that this settlement is immutable; indeed, the Coxian lens also illuminates its inherent contingencies. Should the material capabilities that underpin it shift, for instance, if new cloud providers were to emerge at scale, if energy constraints were to tighten dramatically, or if geopolitical rivalries were to drive large-scale infrastructure decoupling, then the feasibility calculus supporting trusted flows and interoperability could change significantly. Furthermore, as Farrell and Newman (2019) cogently remind us, interdependence can be "weaponized" if the control points in a network are exploited for strategic advantage. In such a scenario, the very concentration that currently sustains the bloc's preferred governance settlement could transform into a critical source of vulnerability and contestation.

Finally, it is crucial to recognize that the GDC's procedural design creates openings for counter-blocs to influence the interpretation of these norms over time. The follow-up verbs enshrined in the text, such as to consult, map, report, and review, are not self-executing. Their outcomes will

depend on who participates in these processes, what evidence is considered to constitute convergence, and which interoperability toolkits ultimately become standardized. It is entirely plausible that competing coalitions, particularly those from the Global South, may seek to redefine the substantive content of “trust” or to expand the definition of interoperability to include stronger data residency guarantees, thereby attempting to shift the historic bloc’s center of gravity.

## **CONCLUSION**

In conclusion, this study has traced the intricate genealogical diffusion, institutionalization, and material underpinnings of the “trusted flows + interoperability” couplet within the sphere of global data governance. It has demonstrated the process by which an initially concise diplomatic formula has been progressively transformed into a durable, proceduralized governance settlement, now formally embedded within the United Nations Global Digital Compact (GDC). Employing a Coxian framework, the analysis has sought to demonstrate that the remarkable success of this conceptual couplet is predicated upon a symbiotic relationship between three interconnected pillars: its inherent ideational portability across diverse institutional settings; its deliberate embedding into institutional routines that preserve and reproduce it; and, most critically, its firm grounding in a set of material capabilities that make its implementation both feasible and attractive when compared to plausible alternatives.

The evidence presented strongly suggests that this settlement is emblematic of an emerging historic bloc operating within the digital domain. This bloc constitutes a powerful alignment between the foreign policy objectives of the United States, the infrastructural dominance of U.S.-based hyperscale providers, and the procedural follow-up mechanisms of key multilateral venues. The efficacy of this formation derives from its unique ability to offer a governance pathway that adeptly accommodates pressing sovereignty concerns without necessitating a fundamental fragmentation of the underlying global infrastructure, primarily by leveraging compliance primitives and interoperability mechanisms to sustain global data flows.

Yet, as this analysis also underlines, the stability of this settlement is inherently contingent and should be understood as far from preordained. The equilibrium it represents could be significantly destabilized by profound shifts in material capabilities, whether arising from the emergence of new market entrants, the acceleration of geopolitical decoupling, or the onset of acute energy constraints. Furthermore, the procedural openness deliberately designed into the GDC creates distinct apertures for counter-coalitions to reinterpret or expand the meanings of trust and interoperability over time. In this sense, the hegemonic position of the bloc is neither inevitable nor permanent; rather, it is a dynamic achievement that must be continuously maintained through the ongoing alignment of ideas, institutions, and material power.

By linking ideational genealogy with infrastructural feasibility, this study contributes to debates on regime complexes, digital sovereignty, and global governance. It demonstrates that ideas do not gain traction by their merits alone; their endurance depends on material infrastructures that make them practical and enforceable.

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