

# Cross-Border Data Governance and International Business Expansion in the Digital Economy

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**Abstract:** In the digital economy era, cross-border data flows have become increasingly intertwined with enterprises' international operations. However, the relationship between data governance and overseas growth is not singular. This paper, combining institutional theory, the resource-based perspective, and dynamic capability theory, explores how cross-border data governance may influence the international expansion of digital enterprises. By reviewing the evolution of relevant literature on cross-border data governance and international business, this paper constructs a mechanism model connecting the regulatory environment, enterprise capabilities, and international expansion performance. Research shows that the impact of cross-border data governance on enterprise internationalization is not simply one of promotion or hindrance; its effects can vary significantly under different institutional environments, levels of technological readiness, and organizational adaptability. This further prompts the consideration that enterprises should not remain passively compliant but should gradually cultivate strategic capabilities oriented towards governance.

**Keywords:** Cross-border data governance; digital economy; international business expansion; compliance capability; dynamic capabilities;

## 1. Introduction

In the context of the digital economy, data has increasingly moved from being regarded as a by-product of economic activity to being treated, at least in many policy and managerial discussions, as a strategic asset and, in some formulations, even as a core factor of production. This shift is not merely semantic<sup>[1]</sup>. It is closely associated with the transformation of international business itself: firms no longer expand abroad only through the movement of capital, goods, and labor, but also through the cross-border movement, processing, storage, and commercialization of data. Digital platforms, cloud services, algorithm-driven advertising systems, cross-border e-commerce infrastructures, and globally distributed customer relationship management systems all rely, to varying degrees, on relatively stable and operationally feasible arrangements for data circulation across jurisdictions<sup>[2]</sup>.

At the same time, what might once have been imagined as a largely technical issue of information transfer has, over the last decade, gradually become a field of political contestation, regulatory experimentation, and strategic adjustment. Governments have become increasingly concerned with data security, privacy protection, digital sovereignty, cybersecurity resilience, and the jurisdictional reach of domestic law over data generated, stored, or processed beyond national borders. It is precisely under these changing conditions that cross-border data governance has emerged as a central issue, not only for regulators and international organizations, but also for enterprises attempting to maintain or expand their global presence<sup>[3]</sup>.

Yet the matter is perhaps more complicated than a binary opposition between “free data flow” and “strict regulation” would suggest. On the one hand, restrictions on cross-border data transfer may increase compliance costs, slow down organizational coordination, fragment digital operations, and reduce the efficiency with which multinational firms integrate overseas markets into their business models<sup>[4][5][18]</sup>. On the other hand, an entirely unregulated or weakly governed data environment may undermine

user trust, increase legal uncertainty, and expose firms to reputational as well as operational risks. Considering these factors, one may begin to suspect that cross-border data governance is not simply an external obstacle to international business expansion, nor is it automatically a neutral institutional background; rather, it may function as a structured condition under which firms are compelled to reorganize capabilities, redesign governance arrangements, and reassess the meaning of global scalability in the digital era<sup>[6][20]</sup>.

This research interest did not arise from an entirely smooth or self-evident observation. In the initial stage of conceptualizing the present study, it seemed tempting to assume that stricter data governance would necessarily hinder international expansion by increasing institutional friction. However, upon reviewing discussions surrounding multinational digital firms and their adaptive strategies, such a linear assumption gradually appeared insufficient. Some firms seem capable of turning compliance pressure into organizational discipline, technological upgrading, and even competitive differentiation, while others appear to struggle despite operating in relatively permissive environments<sup>[7][15][24]</sup>. This discrepancy, although not easy to fully explain at the outset, led to a more cautious line of inquiry: perhaps what matters is not only the regulatory intensity itself, but also the interaction between governance structures, firm capabilities, and institutional distance across markets.

For this reason, the present paper situates cross-border data governance within the broader transformation of international business in the digital economy and attempts to examine how this governance domain may influence firms' overseas growth, not only through direct compliance burdens, but also through more layered mechanisms involving data capability, strategic responsiveness, trust formation, and adaptive organizational routines<sup>[8][12][17]</sup>.

Although cross-border data governance has received growing attention in policy debates and legal scholarship, its role in shaping international business expansion has not yet been fully clarified in management and international business research. Existing discussions often approach the issue from only one side. Some studies focus primarily on macro-level regulatory tensions, including data localization requirements, privacy legislation, cybersecurity review mechanisms, and digital trade negotiations. These analyses are undoubtedly important, yet they sometimes stop at the level of institutional description and do not fully explain how firms actually absorb, interpret, and respond to these constraints in concrete expansion processes. Other studies, by contrast, emphasize enterprise digitalization, platformization, and data-driven internationalization, but occasionally treat the regulatory environment as a relatively fixed background variable rather than as an active, evolving condition that may reshape business strategy itself<sup>[9][25][23]</sup>.

The central problem addressed in this paper lies precisely in this gap. More specifically, it remains insufficiently understood how cross-border data governance affects international business expansion, through what mechanisms this effect may unfold, and why similar regulatory pressures may generate markedly different outcomes across firms and across markets. The difficulty here is methodological as well as conceptual. If one relies only on a formal reading of regulation, it may be easy to overestimate institutional determinism. If one focuses only on firm agency and technological adaptation, one may understate the extent to which legal fragmentation and political uncertainty structure strategic choices in advance<sup>[10][11][13]</sup>.

Another problem worth noting is that international business expansion in the digital economy differs from traditional internationalization in several subtle but significant respects. Market entry is no longer solely a matter of production transfer or local subsidiary establishment; it increasingly involves the portability of user data, interoperability of digital systems, legality of algorithmic processing, and governance of distributed information infrastructures. Under these circumstances, the "distance" between markets may not be exhausted by cultural, geographic, or administrative differences in the conventional sense. Data regimes, privacy expectations, digital standards, and enforcement practices may form a newer layer of institutional distance that firms must navigate, though the analytical implications of this shift have not yet been sufficiently theorized.

This leads to a broader research problem: whether cross-border data governance should be conceptualized merely as a compliance issue or more fundamentally as a strategic factor that mediates, constrains, and occasionally enables international business expansion. The answer may not be singular or final. It may depend on the type of enterprise, the technological architecture of its

business model, the level of digital dependence in its overseas operations, and the degree to which governance capabilities have been embedded into organizational routines. It is precisely because the problem resists a simple formulation that a more integrated and mechanism-oriented analysis becomes necessary<sup>[14][21][22]</sup>.

Against the above background, this paper has several interconnected objectives. The first objective is to clarify the conceptual connotation of cross-border data governance in the digital economy and to distinguish it from adjacent notions such as data regulation, digital trade governance, cybersecurity control, or privacy compliance. These concepts overlap, but they are not fully interchangeable. A certain degree of conceptual clarification is necessary, otherwise later analysis may collapse heterogeneous institutional phenomena into an overly broad category and lose analytical precision.

The second objective is to examine the mechanisms through which cross-border data governance may affect international business expansion. Rather than presuming a direct and uniform impact, the paper attempts to unpack possible mediating channels, including compliance capability, data integration capacity, trust-building effects, and adaptive organizational routines. This objective partly emerged from the recognition that many existing interpretations rely on surface-level correlations—for instance, stricter regulation is associated with higher cost, or better governance is associated with stronger legitimacy—without sufficiently explaining how these links are produced and under what conditions they may weaken, reverse, or become contradictory.

The third objective is to construct an analytical framework linking governance environment, enterprise capability, and international expansion performance. The purpose of such a framework is not to claim final theoretical closure, but rather to offer a structured way of thinking about a problem that is currently discussed in fragmented terms across law, economics, public policy, and business studies. To some extent, the framework is intended as an intermediary device: not yet a fully closed theory, but more than a descriptive list of factors.

The fourth objective is to derive implications for both enterprise strategy and public policy. If cross-border data governance indeed reshapes the logic of internationalization, then firms may need to move beyond reactive compliance and cultivate more durable governance-oriented capabilities. At the policy level, this line of inquiry may also suggest that the design of data regimes affects not only security and privacy outcomes, but possibly the structure of global competition, the distribution of digital market opportunities, and the conditions under which firms from different jurisdictions can participate in international business.

### 1.1 Research Questions

To guide the analysis, the paper is organized around the following research questions:

First, what constitutes cross-border data governance in the digital economy, and how should its principal dimensions be understood in relation to international business activity?

Second, through what mechanisms does cross-border data governance influence international business expansion, particularly with regard to market entry, operational coordination, trust formation, and innovation capability?

Third, why do firms exposed to similar data governance pressures often display divergent international expansion outcomes? Is this divergence primarily attributable to internal capabilities, to differences in institutional context, or to the interaction between the two?

Fourth, to what extent can cross-border data governance be reconceptualized not merely as an external compliance constraint, but as a strategic condition that shapes the architecture and trajectory of international business expansion?

These questions are not entirely independent from one another. Rather, they build progressively from conceptual clarification to mechanism analysis and then to strategic interpretation. Even so, the paper does not assume that each question will receive a fully definitive answer. In some respects, the questions are intended to keep the analysis open, especially where empirical variation and institutional heterogeneity prevent overly neat conclusions.

### 1.2 Research Significance

The significance of this study may be considered from both theoretical and practical perspectives, although the boundary between the two is not always clear-cut.

From a theoretical point of view, the study attempts to contribute to the growing conversation on how digital transformation alters the assumptions of international business research. Traditional theories of internationalization have generated valuable insights into firm-specific advantages, transaction costs, market entry choices, and institutional distance. Yet these frameworks were largely developed in settings where physical production, territorial presence, and capital commitment constituted the central dimensions of cross-border expansion. In the digital economy, however, data infrastructures, algorithmic systems, and platform-mediated interactions increasingly mediate international operations. This does not invalidate earlier theories, but it may require their partial reinterpretation. The present study seeks to extend this conversation by inserting cross-border data governance into the analytical field, not as an auxiliary legal issue, but as a factor that may reshape the meaning of capability, legitimacy, and distance in international business.

A second theoretical significance lies in the effort to bridge literatures that often remain separated. Legal and policy scholarship has produced rich analyses of data protection, jurisdiction, digital sovereignty, and cross-border transfer mechanisms, yet such work sometimes pays limited attention to firm behavior, strategic adaptation, and performance consequences. Management and business studies, by contrast, are often more attentive to capability formation and competitive strategy, but may underestimate the specificity of legal regimes and governance architectures. This paper does not claim to fully overcome this divide, but it attempts, at least provisionally, to build a more integrated perspective.

From a practical perspective, the study may be relevant to enterprises operating in or entering foreign markets under conditions of regulatory fragmentation. Many firms still appear to treat data compliance as a downstream legal function, separate from international business strategy. Such an organizational separation may no longer be adequate. If data governance affects not only risk exposure but also market access, system architecture, customer trust, and innovation pathways, then compliance cannot remain peripheral to strategic management. This leads us to further thinking about how firms might institutionalize data governance as a strategic capability rather than a purely defensive obligation.

For policymakers, the study may also offer a more nuanced understanding of the consequences of data governance choices. Regulatory regimes designed to protect privacy and national security are often justified on public interest grounds, and such justifications may be entirely legitimate. Yet their business implications, especially for international market participation and digital trade opportunities, deserve closer scrutiny. Further research is certainly needed here, but it seems plausible that different governance models may produce uneven effects across firms of different size, origin, and technological maturity.

## **2. Literature Review and Theoretical Foundation**

The literature on cross-border data governance has expanded rapidly, but it remains fragmented across legal studies, public policy research, international political economy, and, to a lesser extent, management scholarship. One stream of research is primarily concerned with the legal basis and legitimacy of regulating cross-border data transfer. These studies often focus on privacy protection, personal data export rules, adequacy mechanisms, standard contractual arrangements, data localization measures, and cybersecurity review procedures. Their strength lies in doctrinal precision and institutional specificity. They are often able to demonstrate how governance mechanisms differ across jurisdictions and how legal incompatibilities generate practical obstacles for transnational data operations. At the same time, because many such studies are designed around legal interpretation or policy comparison, they sometimes leave open the question of how these regulatory arrangements are translated into firm-level strategic decisions.

Another strand emphasizes digital sovereignty and state capacity. Here, cross-border data governance is not only a matter of privacy or market regulation, but also a question of geopolitical order, technological dependency, and national control over critical information infrastructures. This line of work has contributed to understanding why states may resist unrestricted cross-border data flows even when such flows appear economically beneficial. Yet this perspective may occasionally privilege state intention

over organizational adaptation. Enterprises appear in these accounts mainly as objects affected by policy, rather than as actors that interpret, negotiate, or partially reshape governance constraints through organizational capability and market strategy.

A third body of literature, often located in digital trade and international economic governance studies, examines cross-border data flow as part of broader discussions on digital trade rules, platform economy regulation, and the future architecture of global commerce. Such research is valuable in that it links data governance to trade competitiveness and market openness. However, its level of analysis is frequently macro-institutional. It tends to ask whether governance regimes facilitate digital trade, rather than how specific firms absorb regulatory diversity in the course of international expansion.

These existing studies provide indispensable foundations, yet several limitations remain. First, the term “cross-border data governance” is often used inconsistently. In some studies it refers narrowly to legal restrictions on data transfer; in others it includes privacy compliance, cybersecurity management, platform accountability, and even algorithmic oversight. Such definitional fluidity is not surprising in an emerging field, but it can complicate cumulative theory-building. Second, much of the literature implicitly treats governance either as a barrier or as a protection mechanism, while paying less attention to its possible role as a capability-shaping condition. Third, firm heterogeneity is often underexplored. It is one thing to say that regulation imposes burdens; it is another to explain why some firms internalize these burdens more effectively than others.

For the purposes of this paper, cross-border data governance is understood in a relatively broad but still bounded sense: it refers to the institutional arrangements, legal norms, technical requirements, and compliance mechanisms that shape how data may be collected, transferred, processed, stored, and utilized across jurisdictions. This definition attempts to preserve the multidimensional nature of the issue without allowing it to become analytically limitless.

## 2.1 Literature Review on International Business Expansion

The literature on international business expansion has long been shaped by questions of why firms internationalize, how they choose foreign markets, and what determines performance across borders. Classical perspectives, including internalization theory, the eclectic paradigm, and transaction cost approaches, have highlighted ownership advantages, location conditions, and governance efficiency. These frameworks remain foundational because they explain how firms deal with uncertainty, opportunism, and the coordination costs associated with foreign expansion. Nevertheless, many of these theories were articulated in contexts where the movement of physical assets and the management of territorial presence were central. Their continuing relevance is undeniable, yet their explanatory vocabulary may require adaptation when applied to digital firms or data-intensive business models.

More recent studies on digital internationalization and platform expansion have begun to address this challenge. They note that digital firms often scale rapidly across borders with comparatively lower marginal costs, reduced dependence on physical infrastructure, and stronger reliance on data-driven user interactions. Market entry can be faster, experimentation can be more iterative, and user acquisition may be mediated by digital ecosystems rather than by conventional ownership structures alone. These studies have importantly corrected the assumption that internationalization necessarily follows gradual and sequential stages. However, some of this literature, in celebrating the fluidity and speed of digital expansion, may understate the governance frictions embedded in jurisdictionally differentiated digital environments.

Another relevant stream examines the role of institutions in international business. Research on institutional distance has shown that differences in legal systems, norms, regulations, and governance quality can affect market entry mode, subsidiary performance, and risk perception. This perspective is highly relevant to the present paper. Even so, traditional institutional distance measures may not fully capture data-related governance differences. Two countries may appear relatively close in general regulatory quality while diverging sharply in privacy standards, data localization demands, or cybersecurity enforcement. This suggests that cross-border data governance may introduce a more specific form of institutional complexity that cannot always be reduced to conventional indicators.

At the same time, the international business literature has increasingly recognized firm capability as a mediating and differentiating factor. Similar external conditions do not generate identical outcomes because firms differ in organizational learning, absorptive capacity, reconfiguration ability, and strategic flexibility. This insight is particularly valuable for the present study, since it prevents us from attributing all variation in overseas growth to policy environment alone. Yet one limitation remains: capability is often discussed in relatively generic terms, without specifying how data governance itself may shape the content of those capabilities. It is one thing to say that firms need dynamic capabilities; it is another to explain what governance-oriented dynamic capabilities might consist of under cross-border data constraints.

## 2.2 Literature Review on the Relationship between Data Governance and International Expansion

Compared with the two literatures discussed above, research directly examining the relationship between data governance and international business expansion remains relatively limited, although related discussions are gradually emerging. One group of studies suggests that data governance primarily enters international business through compliance cost and market access channels. Restrictions on data transfer, local storage obligations, and divergent privacy requirements may increase the fixed costs of entering foreign markets and complicate operational coordination after entry. This perspective is intuitively persuasive and likely captures an important part of reality. Yet, if taken alone, it risks reducing data governance to a friction variable and overlooking its broader organizational implications.

Another line of inquiry points to the legitimacy and trust effects of governance. Firms that demonstrate stronger data protection and governance standards may, under certain conditions, enjoy better reputational standing, reduced conflict with regulators, and stronger consumer trust in international markets. This argument is also plausible, particularly in digital services where user data practices are closely tied to perceived reliability. Still, the empirical basis for such claims is not always equally strong across sectors. In some price-sensitive or low-trust markets, governance signaling may matter less than expected, or its effects may be delayed and difficult to observe. This suggests that legitimacy benefits should not be overstated without attention to context. A further perspective, less developed but increasingly relevant, considers whether governance pressure can stimulate internal capability building. From this angle, compliance requirements do not merely impose cost; they may also force firms to improve data architecture, internal controls, cross-functional coordination, and strategic responsiveness. Such capability upgrading could, in some cases, strengthen longer-term international competitiveness. However, this possibility remains under-theorized. The literature has not yet fully clarified under what conditions governance pressure becomes capability-enhancing rather than merely burdensome. Factors such as firm size, technological modularity, managerial attention, and prior compliance maturity may all matter, but the evidence is still uneven.

Methodologically, the available literature also shows imbalance. Policy-oriented studies often rely on legal comparison or macroeconomic inference; management-oriented work frequently uses conceptual argument or selective case illustration. While both approaches are useful, they sometimes make it difficult to establish a more fine-grained understanding of causal mechanisms. In particular, there is still insufficient integration between analyses of regulatory architecture and analyses of firm-level adaptation. This gap is precisely where the current paper positions itself.

Thus, the relationship between cross-border data governance and international expansion should not be assumed to be uniformly negative or uniformly positive. It may involve a bundle of effects—cost, legitimacy, organizational learning, strategic constraint, and market differentiation—that do not move in the same direction or with the same intensity. This leads us to further thinking that the relationship may best be understood through an intermediate analytical layer: firm capability.

## 2.3 Theoretical Foundation

To analyze the relationship between cross-border data governance and international business expansion, this paper draws primarily on three theoretical perspectives: institutional theory, the resource-based view, and dynamic capabilities theory. These perspectives were not selected simply because they are widely used, but because each addresses a different part of the problem and each compensates, to some extent, for the limitations of the others.

Institutional theory helps explain why firms do not operate in a vacuum. Their strategies are shaped by regulatory systems, normative expectations, and legitimacy pressures within specific environments. This perspective is especially useful for understanding how cross-border data governance creates structured constraints and expectations across jurisdictions. Yet, if used alone, institutional theory may incline the analysis toward external determinism. It may explain why firms face pressure, but not fully why similarly pressured firms respond differently.

The resource-based view provides a second layer of explanation by emphasizing that firms differ in valuable, rare, and hard-to-imitate resources. In the context of this study, such resources may include data architecture, compliance systems, analytical capability, governance routines, and reputational assets. The resource-based view reminds us that not all firms enter governance-intensive environments with the same starting conditions. Still, one limitation of this perspective is that it can become too static if resources are treated as fixed endowments rather than evolving configurations.

This is where dynamic capabilities theory becomes particularly relevant. Dynamic capabilities refer to the firm's capacity to sense change, seize opportunities, and reconfigure internal and external resources under shifting conditions. Cross-border data governance is precisely the kind of environment in which such capabilities may matter. Regulations change, enforcement intensifies or relaxes, technological standards evolve, and user expectations become more demanding. Under such circumstances, competitive advantage may depend less on possessing data as a resource in itself than on being able to reorganize data-related processes, governance mechanisms, and market strategies in response to institutional complexity.

The decision to combine these theories was not entirely straightforward. There was a risk that the framework might become theoretically overloaded. In early drafting, the boundaries between institutional effects and capability effects were not always easy to draw. After several rounds of revision, it became clearer that the three perspectives should not be forced into perfect symmetry. Institutional theory explains the external structure of pressure; the resource-based view clarifies internal heterogeneity; dynamic capabilities theory connects the two by focusing on adaptive transformation. Their relationship is complementary, though not seamless. Some overlap remains, and perhaps cannot be fully eliminated.

On this basis, the paper proposes a preliminary theoretical understanding: cross-border data governance affects international business expansion not only through external institutional pressure, but through the interaction between that pressure and the firm's governance-oriented resources and adaptive capabilities. This understanding remains open to empirical refinement, but it offers a more layered alternative to explanations based solely on regulatory burden or market opportunity.

#### 2.4 Research Gap

Based on the above review, at least three research gaps can be identified. First, although cross-border data governance is widely discussed, its conceptual relationship with international business expansion remains insufficiently theorized. Much of the existing scholarship either remains at the macro-regulatory level or treats firm strategy and governance as separate domains. As a result, the question of how governance enters the internal logic of international expansion remains underdeveloped. Second, the mechanism linking governance conditions to overseas growth outcomes is still unclear. Existing explanations often rely on single-path assumptions—cost increase, legitimacy gain, or market restriction—without adequately accounting for the possibility that multiple effects coexist, interact, or offset one another. This is particularly problematic in digital business contexts, where governance may simultaneously create friction and induce capability upgrading. Third, there is still limited attention to governance-oriented capability as a mediating variable. Firm capability is certainly recognized in international business literature, but the specific content of capabilities required under cross-border data governance has not been sufficiently articulated.

Compliance capability, data integration capacity, and governance-related adaptive routines are often mentioned indirectly, yet rarely developed into a coherent analytical category.

These gaps do not imply that previous research is inadequate in a simple sense. Rather, they suggest that the research object itself is emerging at the intersection of multiple traditions, none of which alone can fully explain it. This paper seeks to respond to that situation by constructing a more integrated analytical framework.

## 2.5 Analytical Framework

In response to the above research gaps, this paper proposes an analytical framework in which cross-border data governance influences international business expansion through both direct and indirect pathways. The direct pathway refers to the immediate effects of governance conditions on market access, compliance cost, operational flexibility, and legal risk exposure. The indirect pathway operates through enterprise capability, especially compliance capability, data integration capacity, trust-building mechanisms, and adaptive governance routines.

More specifically, the framework assumes that cross-border data governance constitutes a structured external environment rather than a single regulatory variable. Enterprises encounter this environment not passively, but through interpretation, adjustment, and selective capability development. Where firms possess stronger governance-oriented resources and dynamic capabilities, they may be better able to convert regulatory complexity into manageable routines, and in some cases into differentiated competitive positioning. Where such capabilities are weak, the same governance environment may result in delay, fragmentation, or strategic retreat from overseas markets.

The framework also allows for contextual variation. Industry characteristics, business model architecture, firm size, and institutional distance may all moderate the relationship between governance and expansion. For instance, highly data-dependent service firms may be more sensitive to transfer restrictions than product-oriented firms, while firms operating modular digital systems may adapt more easily than those relying on rigid legacy infrastructures. These are not deterministic claims, but possible analytical directions that deserve further empirical testing. Accordingly, the basic analytical logic of the paper can be summarized as follows: Cross-Border Data Governance → Governance-Oriented Enterprise Capabilities → International Business Expansion Performance, with contextual factors shaping the intensity and direction of this relationship. This framework does not resolve every ambiguity. It leaves open questions regarding measurement, causal priority, and boundary conditions. Even so, it provides a more structured basis for the mechanism analysis developed in the following chapter.

## 3. Methodology

The analytical move from the previous chapter to the present one is not simply a shift from “what has been written” to “what this paper argues.” It is, more cautiously, an attempt to reconstruct a mechanism-based explanation for a phenomenon that is often described in static legal or strategic terms. Cross-border data governance does not act upon international business expansion as a single rule or a single cost shock. It is better understood as a layered field of obligations, permissions, frictions, certifications, and political expectations, within which firms interpret what is allowed, what is risky, and what is strategically worthwhile. Once the issue is framed in this manner, the research task becomes less about asking whether governance is good or bad for expansion, and more about identifying the channels through which it may alter the pace, scope, and architecture of overseas growth.

At a conceptual level, cross-border data governance in the digital economy may be divided into at least four partially overlapping dimensions. The first is the legal-regulatory dimension, which includes transfer rules, adequacy decisions, standard contractual safeguards, localization requirements, and sector-specific restrictions. The second is the technical-operational dimension, involving data architecture, cloud deployment, encryption, audit trails, and regional hosting arrangements. The third is the organizational-compliance dimension, which concerns internal controls, training, privacy coordination, and incident response. The fourth is the market-legitimacy dimension, where governance affects trust, procurement eligibility, customer willingness to share data, and the broader reputational standing of the firm. Although separating these dimensions is analytically useful, they do not remain separate in practice; indeed, one of the difficulties encountered in constructing this chapter was that many business consequences are generated precisely by the interaction between them rather than by any single dimension alone.

The contemporary governance landscape already suggests why a uniform explanation would be inadequate. The European Commission’s adequacy framework allows data to flow more freely to jurisdictions that it recognizes as providing essentially

equivalent protection, and the Commission’s official adequacy page currently lists jurisdictions such as Japan, the Republic of Korea, Switzerland, the United Kingdom, Brazil, and certified U.S. organizations under the EU-U.S. Data Privacy Framework. China’s 2024 rules on promoting and regulating cross-border data flows, by contrast, were introduced to clarify filing thresholds and exempt certain scenarios from security appraisals, thereby easing some burdens while retaining a sovereignty-sensitive approach. The Global CBPR Forum, established in 2022 by the former APEC CBPR participants, represents yet another model, one built around interoperable certification rather than a single supranational statute. These models do not merely differ in form; they create different strategic calculations for firms planning regional or global expansion.

**Table 1.** Selected cross-border data governance architectures

<b>Table 1. Selected cross-border data governance architectures</b>	<b>Core transfer logic</b>	<b>Implication for firms seeking international expansion</b>
EU adequacy model	Transfers are facilitated where the European Commission has adopted an adequacy decision for the destination jurisdiction or relevant certified entities	Favors firms that can align with recognized protection standards and document lawful transfer pathways
China 2024 cross-border data flow rules	Security-sensitive system retained, but thresholds clarified and some export scenarios exempted from prior procedures	Reduces compliance burdens for some routine business operations, while preserving scrutiny for higher-risk data flows
Global CBPR Forum	Voluntary interoperable certification system created to support trusted cross-border privacy governance	May lower friction across participating or interoperable jurisdictions, especially for firms seeking standardized privacy signaling

The first mechanism through which cross-border data governance affects international business expansion is the compliance-cost mechanism. This is the most visible and perhaps the easiest to observe, but it should not be reduced to direct legal fees alone. Firms entering multiple digital markets may need to redesign contracts, localize storage or processing functions, map data flows, create documentation trails, update product interfaces, and negotiate new liability allocations with enterprise customers. The OECD’s 2026 STRI report is instructive here: among 129 countries covered by the Digital STRI, 78 require local presence to provide cross-border services, 46 impose local data storage requirements, and 42 require commercial presence. Such restrictions raise not only monetary costs but also decision latency, since expansion plans often have to pass through legal and technical review before they become commercially executable.

A second mechanism is what may be called the data-flow-efficiency mechanism. International business expansion in the digital economy depends not only on whether firms can legally enter a market, but also on whether they can coordinate data-intensive operations across markets with acceptable speed and reliability. Customer analytics, fraud detection, personalization, cloud service delivery, model training, customer support routing, and internal managerial dashboards all depend, in different ways, on timely and lawful access to data. Restrictions that fragment these flows do not always block expansion outright, yet they may reduce economies of scale, complicate system design, and force firms into regionally segmented operating models. The point is subtle: a firm may still expand geographically while losing operational coherence, and that loss of coherence may to some extent erode the advantages normally associated with digital scalability.

The third mechanism is the trust and legitimacy mechanism, which deserves more careful treatment than it often receives. It is tempting to assert that stronger data governance straightforwardly increases consumer and regulator trust, and there is certainly some basis for such a claim. The European Commission describes adequacy decisions as enabling the free and safe flow of personal data, and the Global CBPR Forum explicitly presents itself as a framework for building digital trust through

interoperable privacy certifications. Yet trust does not arise automatically from regulatory compliance. It is possible that customers interpret certifications and legal safeguards differently across sectors, and in some low-visibility or low-involvement transactions privacy governance may have limited commercial salience. Even so, where enterprise procurement, public sector contracting, or cross-border consumer platforms are concerned, governance signals may function as an entry credential rather than merely a legal afterthought.

A fourth mechanism, and in some respects the most analytically interesting, is the capability-upgrading mechanism. Governance pressure may impose burdens, but it may also compel firms to improve data classification, cloud architecture, role allocation, auditability, privacy engineering, and cross-functional coordination. The OECD notes that between 2014 and 2025, 44 countries introduced or substantially modified rules governing cross-border data flows. In such a moving environment, firms that repeatedly adapt to new rules may accumulate governance-oriented dynamic capabilities, even if this learning process is costly and uneven. This does not mean that regulation is beneficial in a simple sense; weaker firms may be overwhelmed, and some sectors may experience more deadweight cost than learning benefit. Still, the possibility that compliance pressure can generate organizational upgrading should not be dismissed too quickly, especially when digital business models depend on durable trust and system resilience.

**Table 2.** Most common digital trade restrictions captured by the OECD Digital STRI, 2025

<b>Table 2. Most common digital trade restrictions captured by the OECD Digital STRI, 2025</b>	<b>Number of countries</b>
Local presence required to provide cross-border services	78
Certain data must be stored locally	46
Commercial presence required to provide cross-border services	42
Limitations on downloading and streaming affecting cross-border digital trade	40
Restrictions on internet banking or insurance	39
Performance requirements affecting cross-border digital trade	37
Discriminatory treatment for the protection of copyrights and related rights	35

Source: OECD Services Trade Restrictiveness Index 2026, Table 1 on the 2025 Digital STRI sample.

Considering the above factors, the effect of governance on expansion is unlikely to be linear. The same governance rule may generate markedly different business consequences depending on sectoral data intensity, platform architecture, customer sensitivity, and the pre-existing compliance maturity of the firm. A cloud software provider serving heavily regulated enterprises may react differently from a content platform monetized mainly through advertising, even if both face the same jurisdiction. Likewise, firms with modular systems and regional deployment capacity may absorb localization demands more effectively than firms whose legacy infrastructure presumes centralized global processing. This leads us to further thinking that “institutional distance” in the digital economy may need to be reconceptualized: not merely as a general difference between countries, but as a data-governance distance that interacts with technological design and organizational preparedness.

For the purposes of this paper, the chapter culminates in a mechanism-based proposition rather than a fully closed causal law. Cross-border data governance shapes international business expansion through a combination of direct constraints and indirect capability-mediated effects. Compliance cost and data-flow friction may suppress expansion, especially in the short run; legitimacy and trust effects may support market access and retention; governance-oriented dynamic capabilities may, in some firms, convert regulatory complexity into longer-term strategic resilience. The interaction among these channels is probably contingent rather than universal. Further research is needed to determine when the burden effect dominates, when the capability effect begins to compensate for that burden, and whether different regulatory architectures systematically favor different kinds of

firms. In that sense, the framework proposed here should be read less as a final model than as a disciplined opening for subsequent empirical work.

#### 4. Empirical and Case-Oriented Analysis

The empirical strategy of this chapter is deliberately modest. Instead of claiming a large-sample causal test that the currently available cross-country data may not yet support convincingly, the chapter adopts a comparative, secondary-evidence design combining official regulatory sources with company-reported operating and revenue data. This choice was partly methodological prudence and partly a response to a practical difficulty encountered during the research process: while regulation is increasingly measurable through datasets such as the OECD Digital STRI, firm-level governance capability remains harder to standardize across jurisdictions and industries. A small comparative analysis of data-intensive enterprise software firms therefore seemed more defensible than a pseudo-precise regression built on weak proxies.

Two firms are selected for comparative discussion: Salesforce and SAP. The selection is not arbitrary. Both derive substantial revenue from cloud- and data-intensive services across multiple regions; both disclose regional revenue in official annual reports; and both explicitly discuss privacy, cross-border transfer restrictions, data residency, or local compliance arrangements in their public filings. At the same time, they are not identical. Salesforce’s annual report foregrounds privacy law, data sovereignty, and uncertainty around cross-border transfer mechanisms as material business risks. SAP’s integrated report, while also attentive to risk, places greater emphasis on structured privacy operations, local coordinators, secure-by-design practices, and the adaptation of cloud delivery to local or regional data center requirements. This contrast allows for cautious comparative inference without assuming that one firm represents a universal model.

**Table 3.** Selected regional revenue data from official company reports

Table 3. Selected regional revenue data from official company reports	2025 revenue	2024 revenue	Growth	Notes
Salesforce Americas	US\$25,143m	US\$23,289m	8%	66% of FY2025 revenue
Salesforce Europe	US\$8,891m	US\$8,128m	9%	24% of FY2025 revenue
Salesforce Asia Pacific	US\$3,861m	US\$3,440m	12%	10% of FY2025 revenue
Salesforce Total	US\$37,895m	US\$34,857m	9%	FY ended Jan. 31, 2025
SAP EMEA	€17,025m	€15,575m	9%	46% of 2025 total revenue
SAP Americas	€14,499m	€13,808m	5%	39% of 2025 total revenue
SAP APJ	€5,276m	€4,793m	10%	14% of 2025 total revenue
SAP Total	€36,800m	€34,176m	8%	FY2025 total revenue

Source: Salesforce FY2025 Annual Report; SAP Integrated Report 2025.

A first observation from Table 4.1 is that both firms remain heavily internationalized, yet their regional structures differ in instructive ways. Salesforce generated 34% of its FY2025 revenue outside the Americas, while SAP generated 61% of its 2025 revenue outside the Americas, with EMEA alone accounting for 46%. This does not, by itself, prove anything about data governance. Revenue geography is shaped by product history, installed base, industry structure, and macroeconomic conditions. Even so, the figures matter for the present argument because they show that both firms operate at a scale where regulatory fragmentation is unlikely to be peripheral. The greater the share of revenue generated across multiple jurisdictions, the less

plausible it becomes to treat cross-border data governance as merely a background legal issue detached from operating performance.

The Salesforce evidence illustrates the burden side of the mechanism with unusual clarity. Its FY2025 annual report states that privacy concerns and evolving regulation of cloud computing, AI services, cross-border data transfer restrictions, and other domestic or foreign rules may limit the use and adoption of its services. The same filing notes that laws such as the GDPR, U.S. state privacy laws, India's Digital Personal Data Protection Act 2023, the EU Data Act, and the AI Act create additional regulatory burdens, while uncertainty following Schrems II and subsequent reliance on the EU-U.S. Data Privacy Framework may still raise the cost and complexity of offering services in certain markets. The report also notes customer demand for data residency and indicates that its infrastructure is designed to provide customers autonomy and control over data residency. In other words, regulation appears not merely as an ex post compliance expense, but as a factor influencing product architecture and sales execution.

The SAP evidence, while also consistent with the burden story, points more strongly toward the capability-upgrading mechanism. SAP's 2025 integrated report states that each global line of business is mandated to implement privacy, security, and compliance requirements, integrate controls into the product and service lifecycle, and perform risk and impact assessments. It further explains that local responsibility is supported by a network of Data Protection and Privacy Coordinators, that preventive measures are embedded across the product lifecycle, and that SAP adapts cloud service delivery to local or regional data center requirements. This is not a trivial organizational detail. It suggests that governance has been institutionalized in a distributed operational form, which may reduce the distance between legal obligation and day-to-day market execution. Whether this institutionalization is equally effective in all regions is another question, but the architecture itself is significant.

A second quantitative observation concerns the cloud component of regional expansion. SAP reports that 2025 cloud revenue rose to €8,876 million in EMEA, €9,075 million in the Americas, and €3,072 million in APJ, while cloud and software revenue represented 88% of EMEA revenue, 88% of Americas revenue, and 91% of APJ revenue. These figures are analytically useful because they show that SAP's international revenue is not mainly a legacy-license phenomenon; rather, it is increasingly cloud-centered and thus structurally more exposed to data governance conditions. When a firm's regional growth is driven by cloud and software delivery, requirements around local storage, lawful transfer, security controls, and privacy assurance become closely linked to revenue realization. This does not establish a one-to-one causal chain, but it narrows the space for claiming that governance is commercially immaterial.

At this point, however, caution becomes especially necessary. It would be too neat to say that Salesforce represents "regulatory burden" while SAP represents "governance capability." Both firms contain elements of both. Salesforce also emphasizes trust as a core value and has made product and infrastructure investments responsive to data residency expectations. SAP, for its part, openly acknowledges risks from local legal requirements or changes to data sovereignty that may lead customers to relocate landscapes to different data centers, potentially raising cost and complexity. The empirical implication is that the mechanisms identified in Chapter 3 are not mutually exclusive categories into which firms can be cleanly sorted. More plausibly, they coexist within the same enterprise, with one mechanism becoming more visible than another depending on the reporting lens, market conditions, and stage of organizational adaptation.

The broader regulatory context reinforces this interpretation. OECD data show that data localization requirements and local-presence obligations remain common across the Digital STRI sample, while the same report notes that 44 countries introduced or significantly modified cross-border data flow rules between 2014 and 2025. At the same time, official frameworks aiming at interoperability have expanded rather than disappeared: the European Commission continues to rely on adequacy mechanisms, and the Global CBPR Forum has sought to build cross-border trust through interoperable certifications. The empirical environment confronting firms is thus not one of a simple protectionist turn nor of pure liberalization. It is, instead, an

environment of uneven convergence, partial interoperability, and persistent fragmentation, which may explain why multinational digital firms simultaneously invest in local adaptation and in scalable global compliance structures.

A further interpretive difficulty lies in separating governance effects from other drivers of overseas performance. Currency movement, macroeconomic slowdown, product cycle timing, AI investment intensity, enterprise IT spending, and firm-specific execution all shape regional revenue. Even the location-based revenue data in company reports are not free from qualification: Salesforce specifies that revenue by geography is determined by the region of the contracting entity, which may differ from the region of the customer. Such caveats do not invalidate the data, but they do remind us that the evidence here is directional rather than dispositive. It supports the plausibility of the proposed mechanisms, especially the compliance-cost and capability-upgrading channels, yet it cannot by itself prove the magnitude of each effect. Further research using matched firm-level data and policy-event designs would be needed to push the analysis beyond cautious inference.

Considering the above factors, the most defensible conclusion from this chapter is not that stricter governance necessarily slows international expansion or that better compliance necessarily guarantees global success. The evidence instead points to a more differentiated proposition. Cross-border data governance appears to shape international business expansion through how deeply governance tasks are absorbed into infrastructure design, product architecture, sales processes, and local operating routines. Firms that treat governance as external legal housekeeping may continue to grow, but possibly with higher friction, slower deal cycles, or more limited strategic flexibility. Firms that embed governance into dynamic capability may still face substantial cost, yet they may also be better positioned to sustain cloud-based international expansion under conditions of regulatory plurality. That proposition remains open and contestable, but it is perhaps more faithful to the evidence than any cleaner and more absolute claim.

## 5. Conclusion

Taken together, the foregoing discussion suggests that cross-border data governance should not be reduced to a peripheral legal issue appended to international business strategy after the fact, nor should it be romanticized as a self-evident source of competitive advantage; rather, it appears, in a more layered and perhaps more realistic sense, as a structured yet evolving condition under which digital-era firms pursue overseas expansion while continuously negotiating compliance burdens, data-flow efficiency, organizational adaptability, and market legitimacy. Beginning with the conceptual and theoretical concerns outlined in the earlier chapters, this paper has attempted to show that the relationship between governance and international growth is not linear, and that the same regulatory environment may generate divergent outcomes depending on how governance-oriented capabilities are formed, embedded, and mobilized within the firm. The mechanism analysis in Chapter 3 and the comparative evidence discussed in Chapter 4, although necessarily limited and open to further refinement, both point toward a similar line of interpretation: international business expansion in the digital economy is increasingly shaped not simply by whether firms can cross borders, but by how they reorganize data, compliance, trust, and strategic flexibility across borders. It is from this analytical basis that the final chapter proceeds to draw together the main findings of the study, while at the same time reflecting on their theoretical implications, practical relevance, and the questions that remain unresolved and deserve more sustained inquiry.

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Data will be made available on request.

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### Conflicts of Interest

The author(s) declare no conflicts of interest.

## Ethical Approval and Consent to Participate

Not applicable.

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