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How to Achieve Digital Sovereignty

CIOs consistently report that software vendors are dramatically increasing license costs while reducing negotiation flexibility. Increased prices result from the erosion of digital sovereignty, limiting an organization's ability to control its digital infrastructures. Our research reveals how vendors leverage the "triple bind" (lock-in, bundling and scaling) to create insurmountable dependencies, which will likely intensify further in the AI era. This leaves enterprises with little room to negotiate or exit. Though there is no silver bullet, we recommend four strategies that CIOs can adopt to regain control.^{1,2}

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Rising Software License Costs Are a Growing Business Challenge

When speaking in confidence to CIOs, a consistent complaint emerges: Large software vendors are dramatically increasing their licensing costs while simultaneously reducing flexibility in negotiations.³ Numerous media reports have documented similar experiences. Prominent examples include IBM increasing its IT services fees by 24% and VMware's licensing costs surging by more than 1,000% in some cases following its acquisition by Broadcom. Similarly, Salesforce implemented a 9% price increase across its entire product portfolio, Oracle announced similar increases, and Microsoft recently added a monthly per-user fee of \$20 to \$30 for its artificial intelligence (AI) features on top of its existing Microsoft 365 licenses. These aggressive pricing strategies occurred against a backdrop of steadily growing software revenues. The global software market has grown from approximately \$422 billion in 2016 to



¹ Iris Junglas is the accepting senior editor for this article.

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³ Throughout this article, we use "vendor" rather than "provider" to describe software companies. Though these companies often position themselves as "providers" or "partners," the term "vendor" more accurately reflects the transactional, price-driven relationships documented in our research. "Vendor" emphasizes the commercial nature of these relationships, particularly when characterized by lock-in, forced bundling and limited negotiation flexibility. This terminology also aligns with established industry usage such as "vendor lock-in" and "vendor management."

over \$700 billion in 2024 and is projected to exceed \$900 billion by 2030, representing over 20% growth between 2025 and 2030.⁴

Our CIO survey revealed that these examples are part of a broader pattern. End-user enterprises face annual license cost increases of between 5% and 20% (volume-adjusted), creating substantial pressure on tightening IT budgets. These increases drive a persistent upward pricing trend, with enterprise software spending per employee almost doubling from \$50 to \$88 over the past decade.⁵

When CIOs sign off on these cost increases, it signals a fundamental transfer of power from the buyer to the seller. When software vendors impose double-digit price increases with minimal customer recourse, it shows that enterprises are losing control (or have lost control) over their own digital infrastructure. The critical question is no longer why costs are rising, but why enterprises have lost the capacity and authority to push back. The answer lies in the erosion of digital sovereignty.

Digital Sovereignty Threatened by the Triple Bind

Digital sovereignty is an organization's ability to act independently and control its digital destiny. This includes the data, hardware and software it relies on and creates, a sovereignty that is becoming increasingly illusory.^{6,7}

4 The global software market includes productivity software (e.g., Microsoft, Adobe), enterprise software (e.g., SAP, Oracle), application development software (e.g., AWS) and system infrastructure software (e.g., Cisco); it excludes PC and gaming software, social networking platforms, free-of-charge software, and custom-made applications. For details, see *Software – Worldwide*, Statista, 2025, available at <https://www.statista.com/outlook/tmo/software/worldwide>.

5 Ibid.

6 Fleming, S. What is Digital Sovereignty and How Are Countries Approaching It? World Economic Forum, January 10, 2025, available at <https://www.weforum.org/stories/geo-economics-and-politics/europe-digital-sovereignty/>.

7 Throughout this article, we examine digital sovereignty from the perspective of CIOs, digital leaders and enterprises. This organizational-level analysis differs from the geopolitical discourse on digital sovereignty, which typically addresses nation-states, governmental bodies and defense agencies. Our focus is on how corporate IT departments can maintain control over their technology infrastructure and vendor relationships. For the foundational concept of digital sovereignty as a struggle for “legitimate, controlling power” over digital assets, see Floridi, L. “The Fight for Digital Sovereignty: What It Is, and Why It Matters, Especially for the EU,” *Philosophy & Technology* (33:3), September 2020, pp. 369-378.

Sovereign enterprises retain the power to negotiate and switch vendors. Without it, they are forced to accept the terms that dominant vendors impose. Rising software costs are a symptom of this sovereignty loss, not the root cause. Our analysis focuses on the mechanisms that erode sovereignty and thereby enable escalating costs.

CIOs describe a remarkably consistent pattern of experiences in their vendor interactions. Their organizations pay for software features they neither requested nor use, with no ability to opt out of the unwanted additions. Vendors bundle new capabilities into core products, exploiting enterprise dependency on systems that cannot easily be replaced. When CIOs explore alternatives to escape rising costs, they often discover that switching costs exceed expectations or that switching vendors is entirely infeasible. License agreements that once provided predictable, annual costs are increasingly replaced by subscription or usage-based pricing models. These models often lead to significant cost increases, leaving no option but to continue using legacy software versions. Such aggressive pricing strategies create vendor control over business-critical systems. As one CIO in our study summarized: “We’re forced to pay for features we don’t want, in systems we can’t leave, at prices that increase every year.”

These experiences reflect the systematic transfer of power from IT organizations to software vendors, even as they market their relationships as “partnerships.” This shift is driven by three interlocking mechanisms that together constitute a “triple bind.” Through *lock-in*, vendors engineer prohibitively high exit barriers via technical dependencies and deep integration into business processes. Through *bundling*, they force organizations to pay for unwanted functionality packaged alongside essential services. Simultaneously, *scaling* enables vendors to extract maximum value from expanding their user base while their own marginal costs approach zero. These mechanisms are not isolated; they are mutually reinforcing, stripping enterprises of their bargaining power and leaving them with diminishing leverage.

AI integration threatens to accelerate this shift. Software vendors are embedding AI

capabilities across their product portfolios, deepening lock-in (as AI implementations become data-dependent and business-specific), simultaneously increasing bundling (through mandatory AI features) and driving scaling (through usage-based AI pricing). Moreover, some companies burn through their token purchases, creating a new era of bill shock. While the full magnitude remains uncertain, our research suggests that this AI-powered intensification will amplify cost pressures and dependencies beyond anything previously seen.

Despite these mounting budget impacts and dependency concerns, CIOs have remained largely silent. Confidentiality agreements, non-disclosure agreements (NDAs) and antitrust concerns create information asymmetries, isolating CIOs in their negotiations and preventing collective learning. Because this evidence remains fragmented, enterprises lack a clear picture of how these mechanisms systematically erode their leverage.

From Hidden Challenges to Evidence-Based Actions

Our work with CIOs has revealed a consistent pattern: Vendor negotiations are rarely fact-based and frequently emotional. Executives appear resigned to their limited negotiating power, often putting on a “brave face” despite significant internal frustration.

To move beyond anecdotal evidence, we conducted a multistage research study targeting highly experienced CIOs. Through a combination of surveys, in-depth interviews and practitioner workshops (see the Appendix for details), we captured candid perspectives on software vendor relationships that are rarely discussed publicly. The evidence we present reveals how the triple bind creates lopsided relationships and mounting financial pressure.

The Triple Bind in Practice

Though lock-in, bundling, and scaling are well-known concepts in the digital economy, our data shows that when deployed together against enterprise customers, they create extreme dependency. This triple bind results in lopsided vendor relationships and relentless financial

pressure that are cemented by software vendors’ shift to subscription models.

Lopsided Relationships

We identified concerning patterns in how CIOs characterize their vendor relationships. While most described these relationships as “neutral” (59%), nearly a quarter (24.3%) characterized them as “unfair,” and only 13.5% described their relationships as “fair.” Most telling is that 85.3% of CIOs reported perceiving “too great a dependency” on large software vendors, a clear indicator that lock-in mechanisms are working as vendors intend. When asked to elaborate, CIOs consistently expressed feeling trapped, with one stating bluntly: “We’re at their mercy without a Plan B.”

Mounting Financial Pressures

The financial consequences appear equally stark. Software licenses now consume a significant share of IT budgets. Over half of surveyed CIOs (53%) allocate more than 20% of their IT budgets to software licenses and maintenance, with one in five (20.6%) dedicating over 30% to software costs alone.

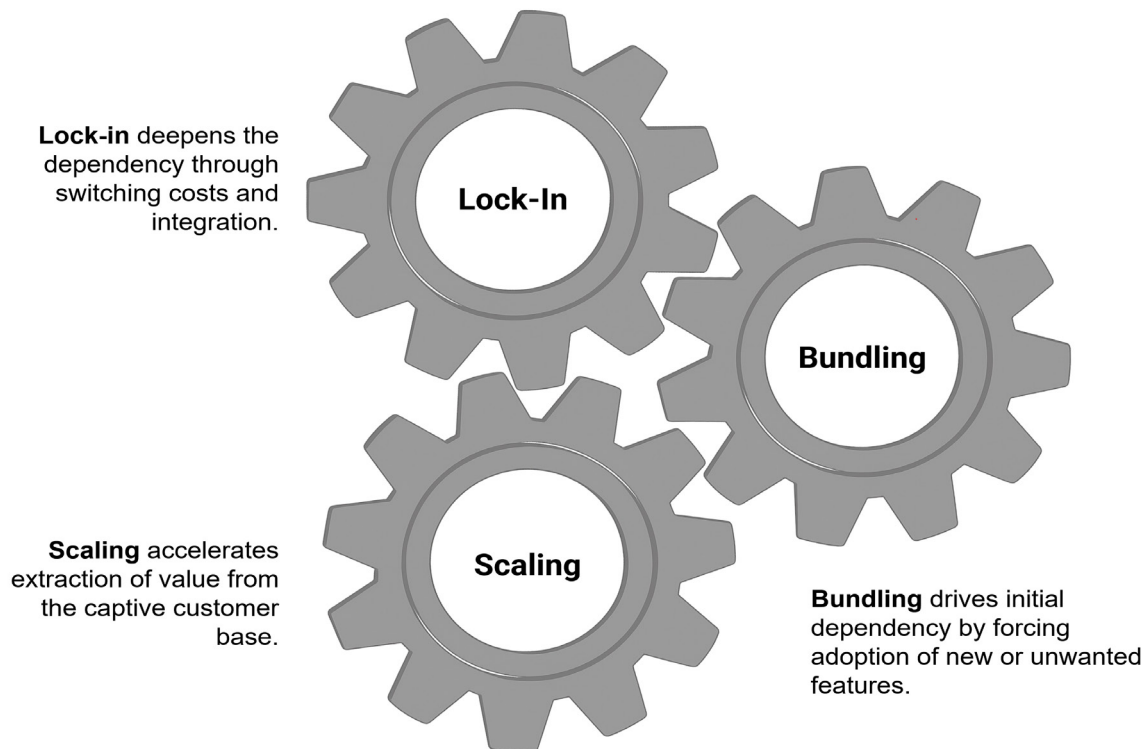
These costs are also rising faster than company revenue. Among respondents, 70% reported that software spending outpaced revenue growth, while only 15% saw proportional increases, and a mere 5% experienced cost increases below revenue growth. This pattern creates persistent budget pressure independent of the organization’s underlying performance.

What is most striking, however, are the price increases. Between 2022 and 2024, the majority of CIOs (62.1%) experienced volume-adjusted annual license cost increases ranging from 5% to 20%, with the largest segment (32.4%) reporting hikes in the 10% to 20% range. Additionally, more than one fifth (21.6%) encountered even steeper increases: 10.8% reported increases in the 20% to 30% range and another 10.8% reported extreme increases above 30% from individual vendors. For context, these figures far exceed inflation rates during this period.

The Shift to Subscription Models

These cost dynamics are amplified by an industry-wide transition to subscription-based

Figure 1: The Interlocking Mechanisms of the Triple Bind



pricing. More than two thirds of CIOs we spoke with reported a shift toward consumption-based models (69.4%) or user-related pricing models (66.7%). This transition removes any flexibility that organizations once had to manage their (software-related) spending during budget constraints/pressures—such as delaying upgrade cycles or reducing license counts. While subscription models ensure predictable and growing revenue streams for vendors, they simultaneously constrain the strategic and financial options available to IT departments, limiting their ability to plan, invest or reallocate resources in line with actual business needs.

The combination of lock-in, bundling and scaling creates a powerful system for ongoing cost extraction and a systematic erosion of digital sovereignty, especially in regulated industries. But how exactly do these mechanisms operate, and why do they prove so difficult to escape?

How the Triple Bind Works

Lopsided vendor relationships and financial pressures do not emerge by accident. Software vendors actively engineer these dependencies

through three mechanisms that reinforce one another (see Figure 1). Understanding how these mechanisms operate is essential for CIOs seeking to regain digital sovereignty. As shown in Figure 1, the three mechanisms operate as interlocking gears, creating a self-perpetuating system. *Lock-in* deepens dependency through switching costs and integration, *bundling* forces adoption of new features that extend that dependency, and *scaling* accelerates value extraction from the captive customer base. This interlocking dynamic explains why addressing any single mechanism proves ineffective. None of these mechanisms inherently serves customer interests. Few customers benefit from vendor dependency with prohibitive exit costs (lock-in), from receiving unwanted features that exist only to justify price increases (bundling), or from paying for each use of a digital service (scaling). For customers, these are not just inconveniences; they are the mechanisms through which control shifts from IT organizations to vendors, and through which digital sovereignty quietly erodes. The dependency patterns and financial pressures documented above illustrate this dynamic. AI

integration in productivity applications threatens to dramatically intensify this dynamic. Below, we examine each mechanism, drawing on examples from our survey respondents.

Lock-In Increases Switching Costs

Lock-in begins innocuously for most businesses. Vendors offer attractive entry points: competitive pricing, easy onboarding and seamless integration. But over time, dependencies deepen. Technical dependencies emerge as systems become intertwined with proprietary data formats and application programming interfaces (APIs). Organizational dependencies grow as business processes are redesigned around specific platforms. Human dependencies strengthen as teams identify value and build expertise in particular tools. Together, these make switching vendors prohibitively expensive.

Classic examples are office productivity applications, where switching from established suites to alternative software products involves considerable effort in retraining and data conversion. The deeper the integration into workflows, the higher the hurdle for changing vendors.

What often starts as an attractive offer can quickly transform into a comprehensive dependency as organizations invest in customization, training and process integration. Our findings reveal the severity: 53% of CIOs specifically cited “few alternatives/monopoly position,” while 36% described their situation as “forced relationship/dependency.”

The true cost of lock-in extends beyond licenses. One CIO explained: “The bigger part of switching isn’t the licensing but protecting our investments in implementing software into the organization—this often represents the largest cost block.” Training investments deepen and compound the challenge: “The technical dependency is one problem, but much worse: We have trained our entire teams on this specific software stack.” Another company that automated around 100 processes with robotic process automation (RPA) subsequently faced annual price increases of 50% for two consecutive years—with no viable exit strategy.

The practical implications are severe. CIOs reported that in some cases switching is “only

possible with enormous effort or not at all.” Many specifically mentioned being “heavily dependent on vendors like SAP and Microsoft,” particularly regarding product lifecycles and implementation changes that continually require additional effort and investment.

Bundling Includes Unwanted Features

Bundling forces customers to purchase expanded feature sets regardless of actual need. Vendors introduce new product features, expand existing functionalities or exclusively combine products that cannot be economically obtained separately. In doing so, they strengthen their market position while creating additional entry barriers for competitors.

For instance, dominant office software vendors now bundle their productivity suites with cloud storage services at competitive prices that make the option to use third-party cloud vendors uneconomic. Similarly, enterprise software vendors embed AI capabilities directly into ERP systems and other core business applications, without providing a way to opt out of these premium-priced features. Several CIOs reported paying for capabilities their organizations neither requested nor needed.

This practice follows a predictable pattern: Vendors add functionalities without customer input and then use these additions to justify significant price increases. As one CIO stated: “They added 15 modules we didn’t request, then used it to justify a 20% increase”—a practice several CIOs termed “unfair bundling.”

Such strategies are only likely to escalate with the integration of AI. For example, Microsoft’s aggressive push of Copilot—an optional \$30-per-user-per-month add-on positioned as essential to the future of work—illustrates how vendors steer enterprises toward broad deployment across their user bases.

CIOs frequently expressed their desire for “meaningful software packages” that align with actual business requirements, yet found themselves with little leverage to influence the package composition. The consequence is stark: IT budgets are wasted on capabilities that deliver little to no value, with limited options to license only what is needed.

Scaling Provides Vendors with Zero-Marginal-Cost Economics

Scaling enables software vendors to decouple their costs from revenues, achieving near-zero marginal costs while maintaining or increasing prices of mature products. Once software is developed, its replication and use costs amount to virtually nothing, yet vendors capture the full value through sophisticated pricing models. CIOs consistently noted pricing structures that are “not in reasonable proportion to the actual costs,” reflecting how vendors exploit this fundamental characteristic of software.

With 69.4% of respondents transitioning toward usage- and consumption-based pricing models, software vendors now fully internalize the scaling economies of their software products—benefits that customers previously shared under traditional licensing agreements. For example, cloud vendors offer short-term discounts on compute and storage resources based on optimistic growth projections. When actual usage falls short of those projections, customers remain locked into paying for unused capacity, which carries little to no marginal cost for the vendor yet is difficult for customers to scale down.

The international orientation of major software vendors amplifies this effect. As one CIO noted, “local sales organizations have only limited influence on strategic and commercial decisions,” enabling vendors to standardize offerings globally while extracting maximum value from each market.

The transition to subscription-based models represents the ultimate expression of a vendor’s scaling advantages. Where IT organizations once managed costs by extending replacement cycles during periods of budget constraints/pressures, subscription models now ensure predictable, growing revenue streams for software vendors while significantly reducing customers’ ability to adjust their spending. As one CIO pointedly summarized: “We used to skip an upgrade cycle to save money—now we pay every month regardless.”

How AI Intensifies the Triple Bind

The self-perpetuating triple bind is amplified by the arrival of artificial intelligence in business software. As AI embeds itself into business processes and operational decision-making, it runs deeper than technical dependencies. AI deepens each mechanism of the triple bind in ways that will prove difficult to reverse.

Consider lock-in. As AI implementations become business-specific and data-dependent, switching costs extend far beyond technical migration. AI systems learn from proprietary organizational data, embed themselves into decision-making routines and reshape how employees perform their work. Organizations develop institutional knowledge around specific AI tools. The AI itself accumulates context that cannot be transferred to competing systems. This results in structural dependency, where the cost of switching includes the loss of accumulated organizational intelligence.

The bundling mechanism operates under similar dynamics. Software vendors embed AI capabilities across their entire product portfolios, enriching existing applications with features that customers cannot decline. Organizations now pay for AI functionality packaged alongside the business-critical systems they already depend on. At the same time, AI vendors increasingly bypass traditional enterprise procurement by offering tools directly to end users, often called citizen developers. This creates bottom-up adoption pressure that undermines the IT department’s ability to control which capabilities enter the enterprise. Both dynamics force AI adoption regardless of organizational need or readiness.

The scaling mechanism is even more pronounced. Billions of dollars are currently committed to frontier AI model development and infrastructure. This unprecedented concentration of investment drives aggressive value extraction. Vendors must recover their massive capital expenditures while satisfying shareholder expectations for sustained revenue growth. Usage-based AI pricing models extend this extraction logic, transforming every AI interaction into a revenue event, typically based

on the use of tokens, while a vendor's marginal costs approach zero.

AI also accelerates the value transfer that subscription models currently enable. The volume and frequency of AI interactions far exceed conventional software usage. More significantly, the underlying intelligence infrastructure often resides entirely with the vendor. Customers consume AI as a service but own none of the key processing capabilities. This ownership asymmetry concentrates control on the vendor side while further deepening customer dependency. This amplifies the scaling dynamic beyond pure economics: A customer's risk becomes reliant on intelligence it cannot replicate, migrate or operate independently.

Organizations that are struggling to negotiate with software vendors today will find these negotiations even more constrained as AI-driven lock-in, bundling, and scaling take hold. However, knowledge alone will not help.

Recommended Strategies for Regaining Digital Sovereignty

Regaining sovereignty requires strategies that address the binding mechanisms directly. Most CIOs want an ideal solution to eliminate their dependency on large software vendors. Unsurprisingly, no silver bullet emerged from our research, but we identified four strategies that directly address the triple bind: vendor categorization, strategic software sourcing, discontinuity management and coalition building. These strategies are summarized in Table 1 and described below.

Across all four strategies, one principle emerged as fundamental: Risk assessment should be based on the degree of implementation in core business processes. The deeper the integration, the higher the switching costs and the greater the loss of control. This principle should guide CIOs in their vendor categorization, sourcing decisions, discontinuity or switching planning, and coalition priorities.⁸

⁸ We note that none of the CIOs represented in this study have implemented all the identified strategies, and many executives are currently looking for ways to reduce their dependence on software vendors.

1. Develop a Strategic Framework for Categorizing Vendors

Many CIOs evaluate their software vendor relationships systematically, focusing on risk, business impact and dependencies. This requires critically assessing the organization's position, degree of desired integration and vendor dependency while considering both internal and external factors.

CIOs should reconsider their operational context, for example, by asking: What type of company are we now: incumbent or start-up? What industry are we operating in, and what is changing within the market? How much independence from software vendors is acceptable for us? As one CIO noted: "With our current depth of technological capability, we have great independence." Organizations must consider the fundamental trade-off between maintaining a costly internal team versus adopting a standardized but not fully owned technology stack. Without this self-assessment, organizations risk treating all vendors equally, missing opportunities and recognizing a crisis only when it is too late. To categorize software vendors effectively, CIOs should take three actions:

1.1 Establish a Three-Tier Software Vendor Categorization

CIOs must establish a three-tier categorization of software vendors to systematically assess vendor dependencies (see Figure 2). This categorization distinguishes between indispensable software vendors (core systems with no alternatives), replaceable software vendors (important systems with 3-5 viable alternatives), and commodity software vendors (standardized solutions with many alternatives and minimal switching barriers).

The onion model illustrates how vendor categories relate to business criticality, with indispensable vendors at the core. The table in Figure 2 provides assessment criteria across five dimensions: business process integration, market alternatives (de facto standards versus commodities), market structure (monopolies and oligopolies versus competitive markets),

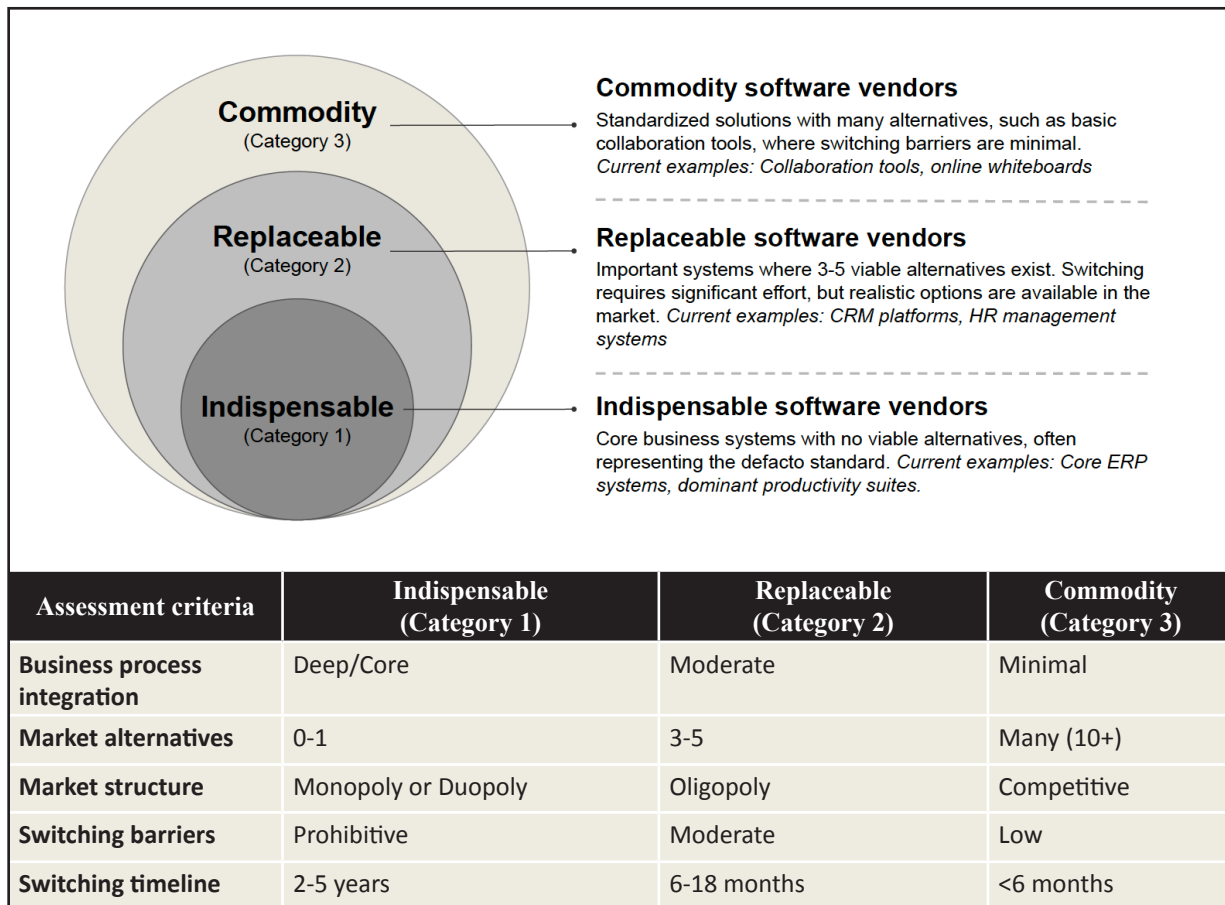
Table 1: Summary of Recommended Strategies for Regaining Digital Sovereignty

Strategy 1: Develop a Strategic Framework for Categorizing Vendors	
1.1 Establish a Three-Tier Software Vendor Categorization	Enables systematic identification of where control has been ceded. Distinguishes vendors with dominant positions from those in competitive markets, enabling differentiated approaches based on actual dependency exposure.
1.2 Report Dependencies to the Board and Enterprise Risk Management	Elevates lock-in from an operational IT issue to a board-level strategic concern. Ensures executive awareness of control concentration and dependencies before they materialize. Prevents vendors from exploiting information asymmetries between IT and business leadership.
1.3 Calculate True Switching Costs	Quantifies the full impact and cost of dependency beyond licenses, including implementation, training and process investments. Reveals where switching barriers have transferred control to vendors.
Strategy 2: Turn Software Purchasing into Software Sourcing	
2.1 Build Strategic Software Sourcing Capabilities	Counters vendors' professional sales organizations by building equivalent commercial sophistication. Restores negotiating leverage through capability parity.
2.2 Optimize Contracted Volume	Prevents vendors from using volume commitments to create artificial pressure and lock customers into oversized agreements. Right-sizing contracts limits vendor leverage.
2.3 Deploy Advanced Sourcing Strategies	Global sourcing exploits price differences across markets. Digital escrow protects against dependency risks for critical applications. Both restore options that vendors seek to eliminate.
Strategy 3: Establish Discontinuity Management to Generate Viable Strategic Options	
3.1 Evaluate Dual or Multivendor Architectures	Architectural choices directly determine future lock-in intensity. Modular designs preserve switching options and limit the vendor's ability to force unwanted features or price increases.
3.2 Develop Concrete, Executable Exit Strategies	Transforms theoretical switching options into credible alternatives. Exit plans must be executable and address all dependency dimensions (technical, organizational, ecosystem) to restore genuine choice.
3.3 Leverage Exit Strategies in Negotiations and Strategic Partnerships	Credible exit options shift negotiating power derived from lock-in back to the enterprise. Forces vendors to compete on value rather than dependency. Strategic collaboration can temporarily reduce costs but must be managed carefully to avoid deepening dependencies.
Strategy 4: Build Coalitions with Other Software Customers Through Interest Groups	
4.1 Join or Assemble Business User Interest Groups	Collective action overcomes individual powerlessness against vendors who use bundling and lock-in to segment and isolate customers. Aggregates customer influence to counter vendor market dominance and scaling advantages.
4.2 Implement Targeted Collective Actions	Public pressure transforms private dependencies into public accountability issues. Escalating tactics can force vendors to withdraw unfavorable terms (bundling or pricing changes), as demonstrated by historical precedents.

switching barriers and a realistic switching timeline.

This categorization serves a critical purpose: It enables systematic risk assessment and strategic governance over vendor dependencies.

By distinguishing between unavoidable dependencies that require acceptance and mitigation versus replaceable software vendors where alternatives exist, CIOs can present software vendors' dependencies as an enterprise

Figure 2: Three-Tier Software Vendor Categorization and Assessment Criteria

risk that requires board-level attention. This approach facilitates a new dialogue among IT leadership, the enterprise risk management team and senior executives, along with their board of directors.

Senior leadership must determine the organization's risk appetite: How much dependency risk is acceptable? Which indispensable software vendor represents an unacceptable concentration of resources? And where are investments in alternatives or exit strategies warranted? This governance approach elevates software vendor management from a reactive crisis response to a proactive risk management strategy.

Vendor categorization requires continuous attention rather than periodic reviews. As one CIO admitted: "How often do we actually deal with this? Not even annually." When maintained actively, however, this approach enables timely

identification of market shifts and negotiation opportunities.

1.2 Report Dependencies to the Board and Enterprise Risk Management

Adding software vendor dependency as a distinct category into enterprise risk management frameworks ensures executive attention to control concentration while establishing appropriate organizational accountability. One CIO underlined the importance of broad technology competence: "The board must possess adequate levels of technology assessment competencies to evaluate the technology-inherent risks from software vendors well enough to take the right strategic decisions." When technology risks materialize without prior board awareness, organizational tensions can surface. One CIO shared their CEO's reaction during a crisis: "How could you allow us to become so dependent

that we can be blackmailed?” Such situations typically reflect gaps in risk governance rather than individual oversight. This highlights why systematic reporting of software vendors and IT dependency matters. As another IT executive noted: “There is the old management saying: Reporting sets you free.”

1.3 Calculate True Switching Costs

Deep software dependencies extend beyond licensing costs. IT organizations should systematically assess the full spectrum of switching costs to understand the operational and strategic barriers to changing vendors. These include implementation and integration investments, which often exceed annual licensing costs and represent the largest barrier to switching; process automation dependencies, where deep integration into business processes creates extreme lock-in, leaving organizations vulnerable to aggressive price increases with no viable exit strategy; and training and organizational learning, which create human capital dependencies that reinforce technical lock-in. By quantifying these dimensions, CIOs can accurately assess their true negotiating position and make informed decisions about where concentrated dependencies exist that create unacceptable risk.

2. Turn Software Purchasing into Software Sourcing

Software procurement must evolve from a tactical purchasing function to a strategic sourcing function. Too often, organizations treat IT licensing as a simple procurement act rather than a strategic decision. This failing becomes critical when facing the highly skilled sales personnel of the software vendor.

Developing software sourcing capabilities represents an untapped opportunity that lies entirely within the organization’s control. Unlike software vendor dependencies, sourcing expertise depends solely on internal investment and commitment. To build strategic sourcing capabilities, CIOs should take three actions.

2.1 Build Strategic Software Sourcing Capabilities

A capability mismatch between buyers and sellers creates a systematic disadvantage. As

one CIO observed: “Vendors operate highly professional sales and strategy departments, while we typically assign procurement staff without specialized software sourcing expertise.” This mismatch in capabilities puts IT departments at a significant disadvantage.

Building strategic capabilities requires a stronger integration across business, sourcing, legal and IT functions. Procurement cannot remain an IT-only domain. As one executive insisted: “For long-term decisions, the business must be involved. IT cannot decide in a silo.”

Timing also matters. Too often, sourcing departments are engaged only after key decisions have been made. CIOs should involve sourcing professionals during the initial software vendor selection and architecture decisions, not after commitments have been made. When sourcing enters late, impact becomes minimal. As one executive explained: “When procurement is seen as purchasing rather than sourcing, they can affect merely the third decimal place in current negotiations and only influence follow-up costs later.” Another CIO advised: “You have to create a stage for the purchaser so they have cards in hand and can play the negotiation poker.”

2.2 Optimize Contracted Volume

Professional software sourcing begins with right-sizing contracts. Volume agreements for software licenses, compute capacity and storage often reflect overly optimistic growth projections. As documented earlier, this creates unnecessary leverage for vendors. Right-sizing contracts to actual usage patterns is an essential countermeasure.

The challenge intensifies during downturns. One CIO highlighted this asymmetry: “It is interesting to see how the situation looks when you are not in a growth phase buying more licenses or volume, but when you want to reduce resources.” Sourcing should distinguish between heavy users and occasional users through continuous license management and ensure contracts align with actual usage patterns instead of aspirational projections.

2.3 Deploy Advanced Sourcing Strategies

Beyond volume optimization, strategic sourcing deploys two advanced strategies that

require deeper expertise but deliver substantial risk mitigation and cost benefits.

Sourcing licenses globally can yield meaningful savings despite software vendors' efforts to prevent it. As one CIO reported: "Two years ago, I succeeded in purchasing licenses in Norway about 10% cheaper." While software vendors have since made this path more difficult, opportunities for price arbitrage still exist for determined buyers.

Another strategy to mitigate risk is digital escrow, which, in some cases, might even be required for compliance or regulatory purposes. This practice involves depositing source code or critical documents with a neutral third party, providing access in emergencies, such as insolvency, acquisition or discontinuation of development. For business-critical, custom-developed applications, digital escrow provides essential protection against software vendor failure.

These advanced strategies distinguish strategic sourcing from basic procurement. While global sourcing addresses immediate cost concerns, digital escrow protects against existential risks to business continuity.

3. Establish Discontinuity Management to Generate Viable Strategic Options

Switching software vendors, or credibly threatening to, remains one of the strongest levers for building price pressure. However, this leverage only works when backed by executable plans that ensure business continuity. Strategic reviews of software vendors should align with business planning cycles rather than arbitrary schedules triggered by negotiations with software vendors. As one CIO emphasized: "These are strategic decisions with multiyear implications. They require not just annual reviews but continuous market observation to gain tactical advantages."

Exit strategies remain consistently undervalued in practice. As one CIO observed: "Exit strategies are treated far too superficially in my view." Another added: "How do I get out of the contract again? That's usually what is complex." Organizations must also recognize that on-premise software is often no longer

a viable medium-term option. Software vendors increasingly bundle new functionality exclusively into cloud offerings, making this path unsustainable. To establish effective discontinuity management, organizations should implement three strategic actions.

3.1 Evaluate Dual or Multivendor Architectures

IT architecture significantly influences the long-term intensity of lock-in. Implementing modular architectures facilitates realistic software vendor changes and strengthens negotiation power. However, multivendor strategies involve fundamental trade-offs between independence and complexity.

The evolution of cloud services illustrates this tension. As one CIO reflected: "Is platform-as-a-service the new infrastructure-as-a-service? I can virtualize all my applications, but then I have lock-in again." Independence requires investment and ongoing coordination efforts that organizations must consciously accept.

3.2 Develop Concrete, Executable Exit Strategies

Viable exit planning requires strategies that can be executed, not just claimed. Plans must ensure continuity of critical software components. At the same time, switching vendors presents an opportunity to leapfrog to next-generation technology and leave legacy systems behind. As one CIO emphasized: "Switching vendors must be combined with technological innovation or disruption."

Exit strategies must account for all dimensions of lock-in. Training investments often create stronger barriers than technical integration. The ecosystem effect compounds this challenge. As one executive noted: "Every finance professional knows the ERP system—you don't need to train them." This user community effect must be factored into any realistic exit planning.

Where possible, organizations should pilot exits with small business units or non-critical systems to demonstrate switching capability and build organizational confidence. This approach validates exit plans, identifies hidden dependencies and sends credible signals to

software vendors that exit threats are backed by demonstrated capability.

Effective exit plans should also include technical migration roadmaps, cost-benefit analyses comparing switching investments to ongoing dependency costs, risk assessments covering operational and business continuity impacts, and realistic timelines with clear milestones. These plans require dedicated resources (time, people and budget) separate from emergency-oriented business continuity or disaster recovery capabilities.

3.3 Leverage Exit Strategies in Negotiations and Strategic Partnerships

Exit strategies gain power when actively used in negotiations. One CIO shared a successful approach: “To counter strong software vendor lock-in, we implemented a dual-vendor strategy. That was the first time we shocked the software vendor, especially after our board had raised serious concerns about it.”

Selective collaboration with software vendors can be strategically valuable while maintaining negotiation leverage. Software vendors are consistently interested in new, high-profile references. Innovation partnerships make sense when joining emerging technology paths or transitioning to new software vendors. However, organizations must recognize that serving as a reference typically yields only short-term, one-time price advantages without fundamentally resolving dependency issues.

4. Build Coalitions with Other Software Customers Through Interest Groups

Interest groups boost transparency and enable collective action at the CIO and company level. When individual organizations lack leverage against dominant software vendors, coalitions can shift the balance of power by aggregating customer influence, creating public accountability and demonstrating unified resistance to unfavorable terms. Success requires both critical mass and strategic use of public pressure. To build effective coalitions, organizations should pursue two complementary actions.

4.1 Join or Assemble Business User Interest Groups

Coalition effectiveness depends on achieving critical mass. As one participant noted: “Collective action is good when defending against unjustified price increases.” The power of coordinated action becomes clear when examining how user groups have successfully confronted even the most dominant vendors.

The 2008-2010 SAP case, which was referenced by several CIOs, illustrates how collective action can challenge an eminent software vendor’s market dominance. When SAP attempted to force existing customers onto its more expensive Enterprise Support model, maintenance fees rose from 17% to 22% of license value, a roughly 30% increase. Customers initially struggled to resist individually. The German SAP User Group (DSAG) proved too cautious to lead an effective opposition.

In response, CIOs from approximately 100 businesses representing over 2 million SAP seats organized through informal CIO networks and formed the “No Enterprise Support” initiative. As one CIO involved recalled: “The SAP interest group was formed because SAP wanted to push through outrageous price increases.” The coalition’s coordinated actions, including public opposition and a press conference, captured media attention and affected SAP’s stock price. This pressure ultimately contributed to SAP withdrawing the forced migration in December 2008.

Similar coalition-building continues today. Business user groups represent and organize collective actions for managing software vendor relationships. However, maintaining effectiveness requires sustained executive engagement. As one observer noted: “Many ‘big’ CIOs are no longer in the SAP interest group, which is why its influence has declined significantly.”

4.2 Implement Targeted Collective Actions

Effective coalitions employ escalating tactics to achieve their objectives. The progression typically begins with private dialogues, advances to public pressure and can ultimately include exploring alternative software vendors through coordinated exit strategies.

Press conferences represent a powerful escalation tool. In the SAP case, when private negotiations failed, the coalition organized a press conference that finally captured the vendor's attention. As one CIO recalled: "We gathered with 100 companies behind us and held a press conference in Düsseldorf. Only then did SAP listen."

Such a media strategy amplifies coalition power exponentially. While IT trade publications provide initial visibility, broader business media coverage transforms negotiations from private commercial matters into public accountability issues. The SAP coalition's ability to generate coverage in major German publications, including *Frankfurter Allgemeine Zeitung*, *Der Spiegel* and *Handelsblatt*, significantly increased the pressure.

Beyond immediate pressure tactics, coalitions also enable strategic alternatives. Interest groups can create transparency through experience exchanges and by sharing efforts to develop alternatives, including open source options where viable. This collaborative approach can distribute the cost and risk of exploring new solutions across multiple organizations, making previously unfeasible options possible through collective efforts.

Concluding Comments

Our research reveals an uncomfortable truth: Enterprises remain substantially dependent on a handful of dominant software vendors, with no financially viable escape route in sight. The triple bind we describe here operates as an interlocking system that vendors leverage to maintain their grip. Our findings reflect a global reality: Digital sovereignty remains more an aspiration than an achievement in enterprise software.

These dependencies are poised to deepen. As vendors embed AI assistants and copilots into their platforms, they create increasingly potent lock-in mechanisms. AI features deliver undeniable user benefits while simultaneously making escape even more impractical. Once workflows adapt around AI assistants, switching becomes nearly unthinkable.

Yet our research reveals reasons for measured optimism. Our four recommended strategies might not eliminate all dependencies entirely,

but they offer a credible path toward regaining control. The most successful CIOs have learned to work within constraints while constantly expanding their degrees of freedom.

One CIO perhaps captured it best: "Howling with the wolves helps in any case." In a software-driven world where complete independence remains illusory, success may lie in being both a cooperative partner and a shrewd negotiator. By understanding the mechanisms at play and applying targeted countermeasures, CIOs can ensure they are running with the pack rather than being consumed by it.

Appendix: Research Methodology

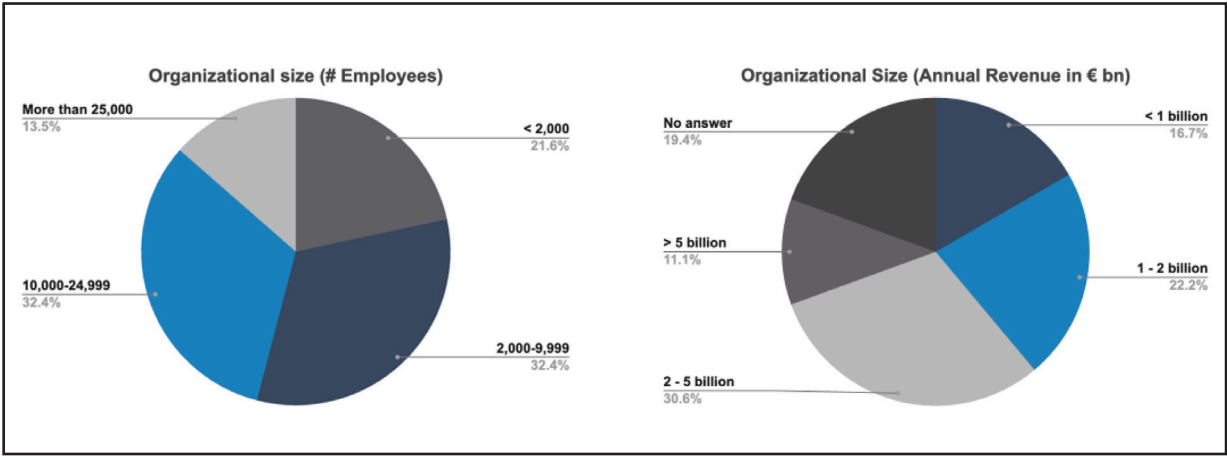
This study adopted a mixed-methods design to achieve deep, practice-oriented insights through methodological triangulation. We combined a quantitative survey of 37 CIOs (17 from Switzerland and 20 from Germany) with qualitative follow-up, including 12 in-depth interviews and validation workshops. Given the topic's sensitivity, our multistage approach (survey, interviews, follow-ups and practitioner workshops) enabled us to target highly experienced CIOs and capture candid perspectives on software vendor relationships that are rarely discussed publicly.

Phase 1: Quantitative Survey

In Phase 1, we developed a 24-item questionnaire covering: 1) respondent and company background, including license-cost trends; 2) behaviors and audit experiences with large software vendors; 3) strategic options for managing vendor relationships; and 4) current software inventories. Questions were primarily closed-ended, with three open-ended questions to capture nuanced insights.

The Swiss and German surveys were conducted in parallel during the summer and fall of 2024, respectively, using anonymous online questionnaires. Seventeen Swiss CIOs (12 of whom also provided software inventory data) and 20 German CIOs completed the survey. Participant profiles spanned enterprises of a variety of sizes. Swiss firms predominantly employed more than 10,000 people, while German firms ranged from under €2 billion

Figure A1: Composition of Survey Participants by Organizational Size and Annual Revenue



(\$2.31 billion) to over €5 billion (\$5.78 billion) in revenue. In total, the participating organizations represented a diverse cross-section of enterprises, with 78% having more than 2,000 employees and 80% generating annual revenues exceeding €1 billion (\$1.16 billion) (see Figure A1).⁹

To ensure candid responses under antitrust constraints, strict protocols and NDAs were established in collaboration with two European CIO organizations (one in Switzerland and one in Germany). No participant identities or sensitive pricing details were disclosed, aligning with antitrust-safe research frameworks.

Phase 2: Qualitative Research

We conducted semi-structured interviews with 12 CIOs to deepen our understanding of emerging strategies, early-warning indicators and contingencies. These conversations allowed us to enrich our perspective on the significance of vendor dependencies and identify nuanced challenges CIOs face. Interviews were transcribed and thematically analyzed following iterative coding procedures.

To validate and extend our findings, we engaged with practitioner communities at multiple points throughout 2025. In March, we presented preliminary results at a CIO workshop with approximately 15 participants, surfacing additional insights and documenting best practices. We further discussed findings at two CIO events: one in Dublin with approximately

70 European CIOs (June) and one in Cologne with approximately 20 CIOs (November), where informal discussions and observations provided additional perspectives. This continuous engagement ensured our findings remained grounded in the experiences of CIOs and digital leaders.

About the Authors

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⁹ Currency conversion as of June 2026.

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