PART 10

The Tax Technology Stack

Tax technology is bifurcating between indirect tax automation that is essentially solved and direct tax automation that has barely begun, and the CFO must understand both trajectories.

The Finance Technology Stack
A CFO's Strategic and Architectural Guide

Why Tax Technology Is No Longer Optional

Tax has been the last major area of the finance function to receive technology investment commensurate with its strategic importance, and the underinvestment is now being corrected by external pressure rather than by internal initiative. The global e-invoicing wave, the OECD Pillar Two regime, the proliferation of state and local tax obligations in the United States following the South Dakota versus Wayfair decision, the digital services tax regimes emerging in multiple jurisdictions, and the broader trend toward real-time tax reporting have together produced a regulatory environment in which manual tax operations have become untenable at any scale above the smallest. The chief financial officer who has not yet engaged with the tax technology agenda is engaging with it now, whether the engagement is chosen or imposed.

The pattern of historical underinvestment had recognizable causes. Tax was traditionally treated as a specialist function operated by professionals who served the rest of the finance organization rather than as an operational function deserving its own technology architecture. The compliance work was conducted on calendars that allowed for substantial manual effort at quarter end and year end rather than requiring continuous automation. The strategic tax planning work was conducted as project-based analysis rather than as ongoing capability requiring platform support. The pattern produced a tax function that operated effectively for the regulatory environment of the previous era and that is structurally inadequate for the regulatory environment of 2026 and beyond.

The current environment requires structural change. Real-time tax reporting through e-invoicing means that the tax calculation must occur at the moment of the transaction rather than at the period end. The volume of tax obligations across jurisdictions has grown to a point where manual tracking becomes infeasible. The complexity of multinational tax planning under the Pillar Two regime exceeds what spreadsheet analysis can reliably support. The audit and disclosure requirements have grown to a point where the structured platforms have become necessary rather than optional. The chief financial officer who allows the tax function to continue operating with the technology stack of the previous era is accepting compliance risk that the current environment will not tolerate and is foreclosing strategic opportunities that the modern tax function can capture.

The work of this part is to lay out the tax technology stack with awareness of both the operational requirements that compliance demands and the strategic opportunities that capability creates. The part treats the category landscape across direct and indirect tax, examines the e-invoicing regulatory wave that is the most consequential development in the field, surfaces the architectural decisions, and provides the diligence questions. The reader will leave with the framing to elevate the tax technology agenda to the strategic priority the regulatory environment requires.

Indirect Tax: The Category That Is Essentially Solved

The indirect tax category is the area of tax technology that has matured most substantially over the past two decades. Indirect tax, which includes sales tax in the United States, value-added tax across most of the rest of the world, goods and services tax in several jurisdictions, and the various other transaction-based taxes that apply to specific products or services, is the area in which technology has converged on effective solutions. The category is essentially solved in the sense that the technology exists to handle indirect tax compliance comprehensively, with the leading platforms providing accurate calculation, automated filing, and structured reporting that satisfies the regulatory requirements across most jurisdictions.

The Tax Engine Architecture

The tax engine is the platform at the center of the indirect tax architecture. The engine maintains the canonical record of tax rates, rules, and exemptions across the jurisdictions in which the enterprise operates. The engine receives transaction data from the order-to-cash and procure-to-pay spines. The engine calculates the appropriate tax for each transaction by applying the rules to the transaction characteristics including the product, the customer, the geography, the customer's tax status, and any applicable exemptions. The engine returns the calculated tax to the source system for application to the transaction. The engine maintains the audit trail of the calculations to support compliance and audit.

The category leaders include Avalara, which has built a dominant position in the mid-market with broad geographic coverage and a particularly strong position in the United States sales tax market. Vertex, which has been a long-standing leader in the enterprise segment with deep functional capability and global coverage. Sovos, which serves the enterprise segment with particular strength in the European value-added tax market and in regulatory reporting. Thomson Reuters ONESOURCE Indirect Tax, formerly Sabrix, which serves the enterprise segment with depth in compliance reporting. Wolters Kluwer CCH SureTax, which serves the telecommunications and utilities segments with depth in the specialized tax requirements of those industries.

Several specialized platforms serve specific segments. Anrok has built a strong position in the software-as-a-service segment with focus on the specific complexity of digital service taxation across jurisdictions. TaxJar, now part of Stripe, serves the small business and lower mid-market segments with simplicity-oriented capability. TaxCloud serves the mid-market with a focused offering on United States sales tax. The category continues to add new entrants, but the established leaders have consolidated substantial market share in their target segments.

The Filing and Reporting Layer

Beyond the tax engine, the indirect tax architecture includes the filing and reporting platforms that handle the production of the tax returns and the regulatory reports across jurisdictions. The major tax engine vendors all offer filing and reporting capabilities as part of their broader platforms. Avalara Returns handles the United States sales tax filing across thousands of jurisdictions. Vertex Returns handles the multinational filing requirements. Sovos handles the European value-added tax reporting and the various regulatory reporting requirements in jurisdictions like Brazil and Mexico that have particularly complex e-invoicing regimes.

The filing and reporting layer has become more complex as jurisdictions have moved toward more detailed reporting requirements. The traditional periodic tax return has been supplemented and in some cases replaced by transaction-level reporting requirements that demand integration between the operational systems and the tax reporting platforms. The chief financial officer of a multinational enterprise must understand the filing requirements of each jurisdiction in which the enterprise operates and must ensure that the tax technology architecture supports those requirements in their current and projected forms.

The Indirect Tax Architecture Decision

The architectural decision in indirect tax is the design of the integration between the tax engine and the operational systems. The standard pattern involves the order-to-cash and procure-to-pay platforms calling the tax engine at the moment of transaction calculation, receiving the calculated tax, and applying it to the transaction. The pattern works well when the integration is implemented carefully and when the tax engine is configured to handle the specific characteristics of the enterprise's products and customer base. The pattern fails when the integration is incomplete, when the tax engine is misconfigured for specific transaction types, or when the tax engine cannot handle the complexity of the enterprise's business model.

The chief financial officer who understands the indirect tax architecture will engage with the implementation decisions deliberately rather than treating them as technical details that the tax function and the implementation partner can handle. The implementation decisions include the product tax categorization that maps the enterprise's products to the tax engine's product taxonomy, the customer tax status management that handles exemption certificates and reseller relationships, the geographic configuration that handles the specific jurisdictions where the enterprise has nexus, and the integration with the order-to-cash and procure-to-pay platforms at the architectural level rather than as point integrations.

Direct Tax: The Category That Has Barely Begun

If indirect tax is the category that is essentially solved, direct tax is the category that has barely begun. Direct tax, which includes corporate income tax, franchise tax, and the various other taxes calculated on income or capital rather than on transactions, is the area in which technology has been slower to mature and in which substantial manual effort remains the norm even at sophisticated enterprises. The reasons are structural rather than incidental, and the chief financial officer must understand them to reason about the trajectory of the category.

Why Direct Tax Resists Automation

The structural reasons that direct tax has resisted automation are several. Direct tax calculation involves the application of complex statutes and regulations to the financial results of the enterprise, with substantial judgment required at each step. The judgment is not formulaic in the way that indirect tax calculation is formulaic. The treatment of book-tax differences, the determination of tax basis, the application of tax credits, the handling of international tax provisions, and the integration of direct tax with the transfer pricing framework all involve discretion that the tax professional brings to the work. The discretion cannot be reduced to platform configuration in the way that indirect tax rates and rules can be.

Direct tax calculation also involves data that may not exist in clean form in the source systems. The book financial results are produced by the enterprise resource planning system, but the tax adjustments to those results are derived through analysis that combines the book results with information that may sit in supplementary systems or in spreadsheets maintained by the tax function. The book to tax reconciliation is itself a substantial activity that requires structured handling that few platforms have provided historically. The compliance calendars vary across jurisdictions in ways that complicate the coordination of the work.

The category is beginning to mature. The platforms have evolved substantially in the past five years, with capabilities that did not exist a decade ago. The artificial intelligence tools have begun to provide capabilities that may transform the discretion-heavy aspects of direct tax work. The regulatory pressure toward more structured reporting is forcing investment in platform capability. The chief financial officer who tracks the direct tax category trajectory will see the changes that are underway and will plan for the architectural decisions that will become available rather than being surprised by them when the platforms reach maturity.

The Tax Provision Platforms

The tax provision platforms are the area of direct tax technology that has matured most. The tax provision is the calculation of the income tax expense that flows through the income statement and the income tax balances that flow through the balance sheet. The calculation is performed at each financial reporting period and is subject to audit. The traditional approach to the tax provision was a spreadsheet-based calculation that took substantial effort at each period end. The modern approach uses dedicated platforms that automate the calculation and that provide structured handling of the inputs and outputs.

The category leaders include Thomson Reuters ONESOURCE Tax Provision, which serves the enterprise segment with depth and broad geographic coverage. Longview Tax, which serves the enterprise segment with particular strength in multinational tax provision calculation. Corptax, which serves the enterprise segment with breadth across direct tax workflows. Bloomberg Tax Provision, which has emerged as a modern alternative to the established platforms. The category is mature enough that most large enterprises operate one of the dedicated platforms rather than the spreadsheet approach of the previous era.

The Tax Compliance Platforms

The tax compliance platforms support the preparation and filing of the various direct tax returns the enterprise files. The category includes platforms that focus on United States federal and state income tax compliance, platforms that focus on international tax compliance, and platforms that combine the two. The category leaders include Thomson Reuters ONESOURCE Income Tax, Corptax, and Bloomberg Tax, which all serve the enterprise segment. The category includes the broader tax compliance capabilities of the major accounting firms, which serve enterprises that outsource the compliance work rather than performing it internally.

The compliance category is in transition as the regulatory environment moves toward more structured reporting. The country-by-country reporting requirements under the OECD base erosion and profit shifting framework, the Pillar Two reporting requirements that have come into force in the past several years, the digital services tax reporting in multiple jurisdictions, and the various forms of mandatory disclosure regimes have together produced compliance requirements that the platforms must support. The platforms are evolving to support these requirements, with varying speed and varying success. The chief financial officer of a multinational enterprise must engage with the compliance platform decisions deliberately to ensure that the platforms support the regulatory requirements that apply to the enterprise.

The Transfer Pricing Frontier

Transfer pricing is the discipline of pricing the transactions between entities within the same consolidated group when those entities operate in different tax jurisdictions. The discipline is governed by the arm's length principle, which requires that intercompany transactions be priced as if they were transactions between unrelated parties. The application of the principle requires substantial analysis to establish the appropriate transfer prices, to document the analysis to support the prices, to monitor the actual transfer prices against the documented analysis, and to defend the prices in tax audits.

Transfer pricing has historically been performed through project-based analysis conducted by the tax function with support from external advisers. The platforms supporting transfer pricing have been limited, with most enterprises operating transfer pricing through spreadsheets, custom databases, and the documentation produced by the external advisers. The category is now beginning to mature. Platforms like ONESOURCE Transfer Pricing, Aibidia, Exactera, and several emerging entrants are providing structured platform support for transfer pricing analysis, documentation, monitoring, and audit defense.

The Pillar Two regime has accelerated the maturation of the transfer pricing category. The global minimum tax requirements introduce additional data requirements and additional reporting requirements that the platforms must support. The enterprises that are subject to Pillar Two are discovering that the manual approaches to transfer pricing that were tolerable in the previous regime are inadequate for the new regime. The platform investments in transfer pricing have accelerated in response. The chief financial officer of a multinational enterprise subject to Pillar Two must engage with the transfer pricing platform decisions in the near term rather than deferring them as has been the historical pattern.

The E-Invoicing Regulatory Wave

The most consequential development in the tax technology field over the past five years is the global wave of e-invoicing regulations that is reshaping how transactions are reported to tax authorities. The wave originated in Latin America, where countries including Brazil, Mexico, and Chile have operated mandatory e-invoicing regimes for over a decade. The wave has now spread to Europe, with Italy, France, Spain, Poland, and other jurisdictions implementing or announcing mandatory e-invoicing regimes. The wave is reaching Asia and the Middle East. The chief financial officer of any multinational enterprise must understand the e-invoicing regulatory landscape because the requirements affect operational systems across the order-to-cash spine and the procure-to-pay spine.

What E-Invoicing Means

E-invoicing in the modern regulatory sense is more than the electronic transmission of an invoice. It is the integration of invoice transmission with tax authority reporting in a way that produces real-time or near-real-time visibility into transactions for tax authorities. The specific requirements vary substantially across jurisdictions. Some jurisdictions require invoices to be transmitted through tax authority platforms that validate and clear the invoices before they are sent to the customer. Some jurisdictions require invoices to be reported to the tax authority simultaneously with their transmission to the customer. Some jurisdictions require periodic reporting of invoice data in structured formats. The variability across jurisdictions means that an enterprise operating in multiple jurisdictions must navigate multiple e-invoicing regimes with different technical requirements, different timing requirements, and different consequences for non-compliance.

The architectural implications are substantial. The order-to-cash spine must produce invoices in the formats and through the channels that each jurisdiction requires. The procure-to-pay spine must handle the receipt of supplier invoices that have been cleared through the tax authority platforms. The tax engine must integrate with the e-invoicing platforms to produce the calculations that the e-invoicing reporting requires. The integration architecture must accommodate the timing requirements of each jurisdiction. The chief financial officer who has not yet engaged with the e-invoicing architecture is operating an architecture that is not aligned with the regulatory environment in jurisdictions where the regulations have already taken effect.

The E-Invoicing Platforms

A category of dedicated e-invoicing platforms has emerged to support the requirements. Sovos has built a strong position in e-invoicing compliance across multiple jurisdictions, with particular

strength in the European and Latin American markets. Pagero, now part of Thomson Reuters, provides a global e-invoicing network with broad jurisdiction coverage. Avalara has extended its broader tax compliance platform into e-invoicing in multiple jurisdictions. Several country-specific platforms serve the requirements of specific jurisdictions where the regulatory requirements are particularly distinctive.

The architectural choice is the choice between a single e-invoicing platform that handles all jurisdictions and a portfolio of country-specific platforms that each handle their respective jurisdictions. The single-platform approach offers operational simplicity at the cost of depth in any specific jurisdiction. The portfolio approach offers depth in each jurisdiction at the cost of integration complexity. The right answer depends on the geographic footprint of the enterprise and the strategic importance of each market. The chief financial officer who holds this decision deliberately will design an e-invoicing architecture that supports the enterprise's geographic strategy. The chief financial officer who treats e-invoicing as a series of compliance problems to be solved jurisdiction by jurisdiction will produce an architecture that fragments and that requires increasingly costly remediation as the regulatory wave continues to spread.

The Trajectory Forward

The e-invoicing regulatory wave is not slowing. The European Union has signaled an intention to harmonize e-invoicing requirements across member states under the ViDA initiative. Additional jurisdictions in Asia, Africa, and the Middle East are announcing or implementing e-invoicing regimes. The chief financial officer planning a tax technology architecture in 2026 should design for the e-invoicing-pervasive future rather than for the current state in which e-invoicing remains a jurisdiction-specific requirement. The architectural decisions that anticipate the trajectory will be reinforced by the regulatory developments. The architectural decisions that resist the trajectory will require expensive remediation.

The Architectural Decisions Across the Tax Stack

Several architectural decisions span the tax technology stack and must be held deliberately.

The Tax Data Architecture

The first architectural decision is the design of the tax data architecture. The tax function consumes data from across the enterprise. The transaction data from the order-to-cash and procure-to-pay spines supports the indirect tax calculations and the e-invoicing reporting. The financial data from the general ledger and the consolidation platform supports the direct tax provision and compliance. The legal entity data supports the multinational tax planning. The transfer pricing data supports the intercompany pricing analysis. The historical data supports the audit defense work. The tax data architecture is the structured handling of these data flows.

The traditional approach to tax data was a series of point integrations and manual extracts that produced the data the tax function needed for each specific work product. The modern approach establishes a tax data foundation that consolidates the relevant data into a structured form that supports the multiple work products the tax function produces. The foundation may sit within a tax-specific data warehouse, within the broader enterprise data warehouse with tax-specific access patterns, or within the integration layer that connects the tax platforms to the source systems. The chief financial officer who holds this decision deliberately will produce a tax data architecture that supports both the current tax requirements and the trajectory of additional requirements that the regulatory environment is producing.

The Outsourcing Decision

The second architectural decision is the partition of tax work between internal capability and external advisers. The major accounting firms and specialized tax advisory firms perform substantial tax work for most enterprises. The work ranges from compliance preparation through strategic tax planning through audit defense. The partition between internal and external work shapes the technology architecture because the internal capability and the external capability require different platforms and different integration patterns.

The dominant trend has been toward bringing more of the routine compliance work in-house, supported by the platforms that have made internal compliance more efficient, while continuing to engage external advisers for strategic planning and audit defense. The trend has merits. The internal compliance produces better visibility into the tax position and supports better strategic decision-making. The trend has limits. The strategic tax planning often benefits from the external perspective that the advisers bring. The audit defense often requires the credibility that the

external adviser provides. The chief financial officer who holds this decision deliberately will design a partition that fits the specific enterprise. The chief financial officer who follows the trend without examining the specific case may produce a partition that under-invests in either the internal capability or the external relationship.

The Real-Time Tax Posture

The third architectural decision is the posture on real-time tax operations. The traditional tax function operated on the calendar of regulatory deadlines. The compliance work was performed at the deadlines. The strategic planning was performed as projects. The audit defense was performed when audits occurred. The modern tax function increasingly operates in real time, with continuous calculation and continuous reporting that the e-invoicing requirements and the structured reporting requirements demand.

The real-time posture requires investment in the technology architecture and the operational discipline to operate at the faster cycle. The benefits include the visibility into the tax position at any moment, the capacity to respond to operational changes in real time, and the structural alignment with the regulatory direction. The costs include the technology investment and the operational discipline required. The chief financial officer who anticipates the real-time direction and invests accordingly will produce a tax function that scales with the regulatory environment. The chief financial officer who continues to operate on the traditional cycle will produce a tax function that lags the regulatory environment and that requires expensive remediation as the lag becomes visible.

The Diligence Questions

The diligence questions for the tax technology decisions address both the operational compliance requirements and the strategic capability the platforms must support.

Questions to Ask of Platform Vendors

How does your platform handle the specific tax obligations of our business: the jurisdictions in which we have nexus, the products and services we sell, the customer types we serve, the supplier relationships we manage, and the regulatory regimes that apply to our operations? How does your platform integrate with our specific order-to-cash and procure-to-pay platforms, and what is the level of automation versus manual intervention required? What is your jurisdiction coverage today, and what is your roadmap for expanding it? How does your platform handle the e-invoicing requirements in the jurisdictions where we operate, and how does it handle the jurisdictions where requirements are being implemented? How does your platform support the OECD Pillar Two requirements that apply to our enterprise? What is your customer concentration in our segment, and how does that concentration shape your roadmap? What is your typical implementation duration and cost for a company of our size and complexity? How does your platform evolve as the regulatory environment evolves, and what is the cost to our enterprise of regulatory changes that you implement?

Questions to Ask of Reference Customers

How does the platform integrate with your operational systems, and what is the ongoing maintenance burden of the integrations? What was your implementation experience, and what would you do differently in retrospect? How is the platform handling the compliance requirements in the jurisdictions where you operate, and what gaps have you experienced? How is the platform handling the e-invoicing requirements, and what has your experience been with the rollout of e-invoicing in each jurisdiction? How is your relationship with the tax authorities since the platform implementation, and how has the structured reporting affected the audit experience? How is the platform evolving, and how is the vendor responding to your specific requests for capability extensions? What is your day-two operating model, and how is the platform owned and operated within your tax function? How would you evaluate the platform now against the platforms you did not select?

Questions to Ask of One's Own Team

What is the current state of our tax function, and where specifically are the gaps in capability that the platform investment must address? What is our jurisdiction footprint, and what is the regulatory environment in each jurisdiction including the e-invoicing requirements? What is our current state on indirect tax calculation, indirect tax filing, direct tax provision, direct tax compliance, transfer pricing, and audit defense? What is our integration architecture between the tax function and the operational systems, and what is the maintenance burden? What is our partition between internal capability and external advisers, and is the partition aligned with the strategic priorities of the tax function? What is our team capacity to operate a more sophisticated tax platform architecture, and where do we have gaps in expertise or capacity? What is our governance structure for the tax function, and is it adequate for the regulatory environment we face?

Operating Implications

The tax function is operated continuously, with the technology platforms supporting the work across the cycle of regulatory deadlines. The operating implications follow from this continuous operational reality.

The Tax Operating Cadence

A well-architected tax function operates on a cadence that combines continuous operational work with periodic compliance work. The continuous work includes the indirect tax calculations that occur at the moment of each transaction, the e-invoicing reporting that occurs as the transactions are processed, the monitoring of the tax position as the financial results develop, and the engagement with operational decisions that have tax implications. The periodic work includes the quarterly and annual tax provision calculations, the various compliance filings on their respective regulatory deadlines, the transfer pricing documentation and analysis, and the audit defense work when audits occur.

The cadence is supported by the tax technology platforms but is operated by the tax team. The platforms make the cadence achievable at granularity and consistency that manual operation cannot support. The team brings the judgment and the regulatory knowledge that the platforms cannot provide. The chief financial officer who designs the cadence deliberately and the team that operates it will produce a tax function that satisfies the regulatory environment while supporting the strategic agenda.

The Relationship with the Tax Authorities

The tax authorities are the regulatory counterparties of the tax function. The relationships with the authorities require active management. The active management includes the routine compliance interactions in which the enterprise files returns and provides information that the authorities request. It includes the audit interactions in which the authorities examine specific positions or transactions. It includes the structured engagements in which the enterprise participates in cooperative compliance programs or advance pricing agreements or other arrangements that produce certainty in exchange for transparency.

The technology architecture shapes the relationships with the authorities. A tax function that produces structured, timely, and accurate information through modern platforms has a different relationship with the authorities than a tax function that produces information through manual effort with delays and errors. The chief financial officer who invests in the platform architecture is also investing in the relationship with the authorities. The chief financial officer who allows the

platform architecture to lag the regulatory environment is also allowing the relationship to deteriorate.

The Strategic Tax Function

The tax function has strategic dimensions beyond the compliance work. The strategic dimensions include the tax-efficient structuring of business operations, the planning of major transactions including acquisitions and divestitures, the management of the global effective tax rate, the engagement with the broader strategy of the enterprise on tax-sensitive matters, and the contribution to the strategic decisions of the chief financial officer on capital structure, geographic expansion, and operational design.

The strategic tax function is supported by the technology architecture but is not produced by it. The platforms produce the data and the operational efficiency that allow the tax professionals to focus their attention on the strategic work. The chief financial officer who treats the platform investment as a compliance investment alone will achieve the compliance benefits but not the strategic benefits. The chief financial officer who treats the platform investment as an enabler of the strategic tax function will achieve both.

Synthesis

Tax technology is no longer optional. The global e-invoicing wave, the OECD Pillar Two regime, the proliferation of state and local tax obligations, the digital services tax regimes, and the broader trend toward real-time tax reporting have together produced a regulatory environment in which manual tax operations have become untenable at any scale above the smallest. The chief financial officer who has not engaged with the tax technology agenda is engaging with it now, whether the engagement is chosen or imposed.

The category bifurcates between indirect tax, where the technology is essentially solved, and direct tax, where the technology is still maturing. The indirect tax category includes the established tax engines from Avalara, Vertex, Sovos, Thomson Reuters ONESOURCE, and Wolters Kluwer CCH, alongside specialized platforms like Anrok for the software-as-a-service segment. The direct tax category includes the tax provision platforms from Thomson Reuters ONESOURCE, Longview, Corptax, and Bloomberg Tax, with the compliance and transfer pricing platforms still evolving.

The e-invoicing regulatory wave is the most consequential development in the field. The wave originated in Latin America, has spread to Europe, and is now reaching Asia and the Middle East. The architectural implications affect the order-to-cash spine, the procure-to-pay spine, and the integration between the tax engine and the operational systems. The chief financial officer of any multinational enterprise must engage with the e-invoicing architecture or face compliance failures in the jurisdictions where the regulations have taken effect.

Three architectural decisions span the tax stack. The tax data architecture decision determines whether the tax function operates on a structured data foundation or on a series of point integrations and manual extracts. The outsourcing decision determines the partition between internal capability and external advisers. The real-time tax posture decision determines whether the function operates on the traditional regulatory calendar or in continuous real time as the regulatory environment increasingly requires.

The operating implications include the tax operating cadence that combines continuous operational work with periodic compliance work, the active management of the relationships with the tax authorities, and the strategic dimensions of the tax function that the platform investment enables but does not produce.

With Parts Four through Ten, the masterclass has completed the treatment of the systems of record and the systems of differentiation that constitute the operational backbone of the finance function. The next part begins the treatment of the data and intelligence layer that sits beneath and above the operational platforms. The data architecture is the substrate on which the operational platforms depend and on which the analytical and intelligence capabilities are built.

The architectural reasoning developed across the preceding parts carries forward into the treatment of the data layer in Part Eleven.