



# A Holistic Game Plan for Tax Transformation

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The word *holistic* stems from the Greek word *holos* (“entire” or “all”), and it often describes an integrated system, the sum of which offers greater value than the parts themselves. This etymology and usage make *holistic* an ideal description of what makes tax technology implementations – especially those included with larger ERP migrations (e.g., Vertex O Series global enterprise tax engine with an SAP S/4HANA migration) – thrive.

Successful systems-driven digital transformations can be difficult to deliver. A recent analysis determined that organizations capture less than one-third of the value that they expected to gain from digital transformation endeavors.<sup>1</sup> Despite the difficulty of maximizing the value of systems-driven transformations, avoiding this work is not an option for most finance and tax functions due to the efficiency, accuracy, cost-reduction, and innovation-related benefits these initiatives deliver. The trick is to get tax technology transformation right.

“Fundamentally, tax transformation is about embedding relevant tax processes into an organization’s business structure and IT capability,” writes Vertex VAT Director Peter Boerhof. “This means it is not limited to the tax team activities; it crosses many disciplines from finance and IT to purchasing and operations.”<sup>2</sup>

This holds true regardless of what type of indirect tax compliance requirements (VAT or sales and use tax) a company must satisfy, and it helps explain why a holistic approach for technology transformation is optimal. This comprehensive game plan requires tax groups – often in partnership with their finance colleagues and IT functions – to:

1. **Recognize relevant tax department challenges and tax technology trends**
2. **Determine migration requirements;**
3. **Set an appropriate migration strategy, and;**
4. **Secure funding via a compelling business case.**

Tax teams also should craft an effective business case for investing in a new tax engine (see *Building the Business Case side bar*) while understanding, and avoiding, common pitfalls that impede system migrations.

### Building the Business Case

Effective business cases for new tax engine investments, including those that are part of larger ERP upgrades and migrations, typically detail benefits within three return on investments (ROI) categories:

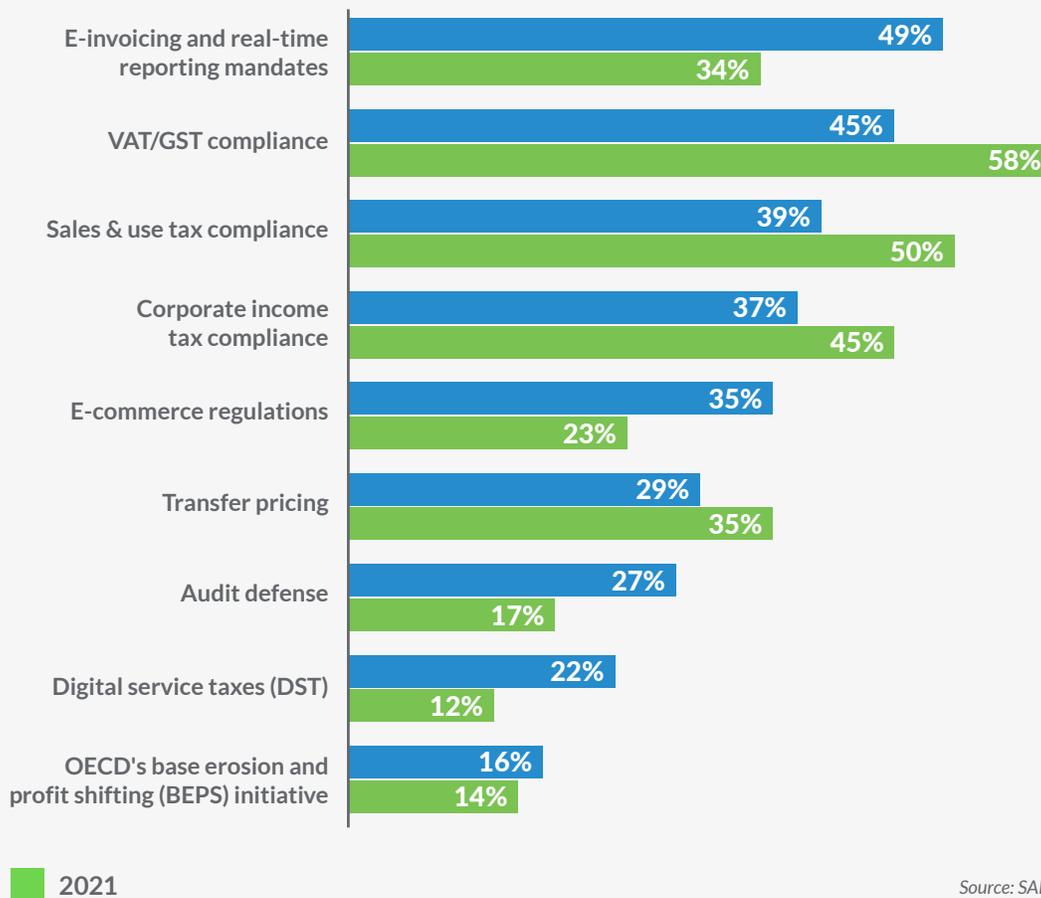
Efficiency	Accuracy	Overhead
<ul style="list-style-type: none"> <li>● Enhanced month-end reconciliation</li> <li>● Manage exemption certificate</li> <li>● Enhance tax decision automation capabilities</li> <li>● Automated tax reporting to support audits</li> </ul>	<ul style="list-style-type: none"> <li>● Business process changes</li> <li>● Product taxability determination</li> <li>● Limited use and project-based customer exemptions</li> <li>● Address cleansing/validation</li> <li>● Zip+4 precision</li> </ul>	<ul style="list-style-type: none"> <li>● IT infrastructure overhead eliminated with a move to cloud</li> <li>● Sales/use tax content updates handled by tax software provider</li> <li>● Upgrades/patches handled by tax software provider</li> </ul>

## Tax Challenges and Technology Trends

Tax groups and their finance and IT partners should monitor emerging tax technology trends. It is also essential to understand the most common challenges tax departments confront. This holistic perspective positions tax, finance, and IT teams to select and implement tax automation solutions whose features and functionality are best suited to address top challenges such as tax reporting and compliance.

SAPinsider's annual "Global Tax Management: State of the Market" research report (see Figure 1) shines a light on the current state of tax department challenges.<sup>3</sup>

**Figure 1: Regulatory Updates Most Impacting Tax Team Workloads**



These results are based on survey responses collected from 115 business and technology professionals who are members of the global SAPinsider community and who work in the IT, finance and accounting, tax, GRC, and operational groups of global companies across most industries. Two results are especially noteworthy.

First, respondents identify e-invoicing and real-time reporting mandates as their tax department's top challenge, followed by VAT/GST compliance, sales & use tax compliance, corporate income compliance, and e-commerce regulations, respectively.

Second, when comparing the current survey data to 2021 results, it is clear that tax departments have notched impressive improvements in several areas. Compared to 2021 respondents, substantially fewer 2022 respondents identified VAT/GST compliance, sales & use tax compliance, corporate income compliance, or transfer pricing as top challenges. This suggests that tax groups have made process enhancements and leveraged leveraging tax automation more effectively in the past 12 months.

“Clearly, tax groups are reducing the time they spend on compliance, which may be a function of the maturity of the supporting technology they’re deploying,” notes Vertex Vice President, Business Development, Suzy Soo. “And the fact that e-invoicing surfaced as a major challenge today compared to the previous year is a function of all the e-invoicing rules and regulations currently taking effect around the world.”

Additional tax management and compliance improvements are possible, given the number and scope of recent tax technology advancements. According to DuCharme, McMillen & Associates, Inc. Vice President of Tax Technology, Justin Barnes, some of the most exciting emerging technologies being incorporated into financial systems, tax automation, and other business systems include:

- **Artificial Intelligence (AI):** This is an umbrella term for applications that mimic human thinking and decision-making (it also describes the technologies that follow on this list with the quasi-exception of data analytics).
- **Robotic Process Automation (RPA):** A growing number of tax groups use this advanced technology, which automates repetitive, role-based (and manual) process steps.
- **Data analytics:** This marks another advanced technology present in tax departments with leading tax- and scenario-planning capabilities. Analytics derive actionable insights from raw data and big data (AI applications also analyze big data while detecting patterns and making predictions that tend to exceed human capacities).
- **Machine learning:** These algorithms automatically learn and improve output results.
- **OCR:** Optical character recognition converts printed characters to searchable and editable digital text (a common tool for digitizing invoices in recent years).

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Business Development



## Implementation Enhancements and Benefits

In addition to keeping tabs on how advanced technologies are impacting tax automation through enterprise resource planning (ERP) systems, tax, finance, and IT decision-makers should also consider monitoring what other companies are doing and learning as they progress through tax transformation efforts. Barnes reports that the following trends reflect the ways tax groups are leveraging, and optimizing, tax technology upgrades and implementations to enhance compliance:

- **Ensuring that master data fueling the tax engine is complete and accurate:** The most sophisticated form of tax automation “is only as good as the data being fed into it,” Barnes emphasizes, while underscoring the need to ensure that master data is complete and accurate.
- **Leveraging advanced automation for use tax determination:** Legacy tax engines and native ERP tax logic frequently lack the ability to make complex tax determinations. “This often means that someone in accounts payable winds up making a difficult tax determination decision,” Barnes notes. “That situation almost always leads to tax overpayments or under-payments.”
- **Conducting process optimization reviews:** Prior to an ERP upgrade or migration (e.g., to SAP S/4) that includes new tax automation, Barnes recommends conducting reviews of current tax processes to pinpoint areas that will benefit from greater efficiency and/or effectiveness. He also suggests making those improvements prior to the migration.
- **Considering exemption certificate management improvements:** Advanced tax technology contains capabilities that automate exemption certificate management. Tax groups should ensure that these capabilities will be fully leveraged once the new solution is in place.
- **Leveraging data analytics:** “While many tax departments have their hands full performing monthly reconciliations and getting returns out the door, they should look for ways to review tax data for accuracy, and to spot trends and strengthen tax planning activities,” Barnes notes. “There are solutions out there that can help with this effort.”
- **Making post-audit enhancements:** Under- and overpayment reviews can help tax groups find credits following audits that expose areas requiring improvement. Overpayment reviews can sometimes even fund the enhancements, Barnes notes.

“In the three decades that we’ve been implementing tax engines, we’ve seen tax leaders and their organizations come to recognize that a successful tax automation solution is not just about the tax engine,” Soo notes. “While it’s a crucial part of tax transformation, there are so many related opportunities to improve tax processes and performance.”

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Some of these opportunities reside within the ERP system. Making adjustments in the ERP system that the tax engine connects to can help tax groups get more bang for their tax technology buck, Soo and Barnes point out. By way of example, Barnes highlights four common technology enhancements tax groups should consider:

1. **Adjustments:** Adjustments may consist of process and tax calculation enhancements resulting from root-cause analyses, as well as corrections to master data that come about as a result of change management activities. Taking a proactive approach to data analytics and accrual analysis can also yield beneficial adjustments.
2. **Data-wrangling:** This category of enhancements relates to leveraging technology tools – including workflow applications, data warehouses and RPA applications – to strengthen month-end processes. “Data warehouses can be used to centralize data in decentralized organizations,” Barnes notes. “Companies that are in acquisition mode often find themselves in this situation.”
3. **Reconciliation:** Utilities within SAP can help organizations deploying a tax engine automate the reconciliation process. External applications can also help load files from a general ledger to a tax engine. “Organizations find these enhancements incredibly helpful because reconciliation is a common pain point that many tax departments experience on a monthly basis,” Barnes reports.
4. **Returns preparation:** SAP S/4 rollouts mark an opportune time for tax groups to reevaluate tax filing and remittance processes. These assessments can result in subsequent improvements or even a decision to outsource compliance. “If you choose to outsource, you still need to work on the front end to prepare the data to be filed,” Barnes adds. “While outsourcing absolutely makes sense for many organizations, there’s still work to be done to get that data out the door.”

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Vice President of Tax Technology,*



## Identifying Migration Requirements

Harnessing the value of those technology enhancements and setting the stage for an effective tax automation implementation (again, often in conjunction with an ERP migration) involves the determination of migration requirements and the selection of a migration strategy.

Migration requirements include factors related to the scope of the project concerning geographic regions, transactions (e.g., order to cash, procure to pay, and financial accounting), and which external systems that new system supports. Barnes stresses that external systems are frequently overlooked or insufficiently addressed in ERP migrations. “I’ve seen organizations get into an S4 migration and neglect to factor in EDI transactions, an e-commerce or point-of-sale, customer management, and/or vendor management. That’s not an exhaustive list. Anything that flows into SAP that affects a transaction there will have some sort of impact on tax.”

As such, project teams and their external partners should also evaluate the tax determination, calculation, and compliance implications of SAP interfaces. Given that tax determination and calculation accuracy hinge on access to master data, project teams need a firm understanding of where that master data is coming from and proof that it is consistent. Master data governance often can help instill this understanding and confidence, Barnes reports. From a procurement interface perspective, it is important to understand what master data the application (such as SAP Ariba) uses to calculate the tax. “If you plan on integrating Ariba or any other external system directly with the tax engine, the incoming tax code is critical and can definitely break that process if it’s not considered,” Barnes asserts. “It’s very important to understand what those systems are and how they’re flowing into SAP. And you want to ensure that this is defined in your requirements.”

Soo notes that project teams conducting SAP S/4 migrations involving both Ariba and Vertex’s tax engine frequently question which system – Vertex or SAP Ariba – should initiate the call to reconcile the tax calculation on a transaction. “To date, 99%, if not 100%, of customers trigger calls from SAP to Vertex,” Soo reports. “They might do estimate calls initially from Ariba, but they will trigger recalculations directly from SAP.”

Two other additional considerations round out the migration requirements project teams should evaluate:

1. the impact of SAP customizations
2. new S/4 features

Many companies use the S/4 transformation as a vehicle to remove customizations and standardize processes. But while complex businesses cannot remove all customizations and enhancements, they can use the transformation process to evaluate product offerings from SAP partners that “standardize” those enhancements. The SAP ecosystem offers a wealth of predeveloped ABAP enhancements that can close functional and technical gaps. This very much applies to the indirect tax domain. New S/4 features, such as the Rebates module, Down payments, revenue reporting & accounting, Central Finance, the Fiori (UI5) user interface and better reporting performance are also driving change for companies looking to reduce and consolidate the use of external applications.



## Selecting a Migration Strategy

When selecting a migration strategy, Soo and Barnes encourage project teams to identify which type of migration suits their needs before settling on an approach and subsequent rollout plan. Additionally, they should recognize and avoid common pitfalls that impede ERP and tax automation migrations (*See Errors & Omissions side bar*).

Barnes highlights three common migration types:

1. **Greenfield** migrations involve a complete overhaul, starting from a clean slate. This type of migration requires new master data and requires more time to complete than other approaches (Barnes estimates that approximately 10-15% of companies select this option).
2. **Brownfield** migrations resemble more traditional ERP upgrades in which existing workflows are emigrated to the new solutions (and master data is kept intact). This migration type requires less time than a greenfield migration.
3. **Bluefield** migrations blend greenfield and brownfield approaches by essentially porting over what's working well to new systems and redesigning processes and workflows that are broken or require improvement.

Organizations can select from a similar range of approaches to execute those migration approaches. A “lift and shift” approach moves processes and integrations to S/4. A potential downside of this approach, Barnes reports, is that some new tax engine features may not be available after the shift without the application of migration utilities. An enhancement-centric approach enables tax groups to immediately leverage new tax engine features (e.g., exception certificate management) and interfaces that are part of the migration. A hybrid approach starts with the lift and shift migration followed by a second phase in which enhancements are implemented.

## Errors & Omissions

Tax -related pitfalls regularly arise during ERP and tax migrations. The following oversights are relatively common and should be avoided:

- **Insufficient tax involvement:** The tax group is not involved in the early planning stages of the ERP migration or excluded from key meetings. The migration's efficacy is also at risk when tax groups are not involved in the review of new ERP functionalities and features that have tax compliance implications.
- **Tax leaders do not drive tax decisions:** To optimize investments in new tax automation that are part of ERP migrations, tax leaders should make, or at the very least strongly influence (in partnership with IT and finance), decisions related to the selection of a tax engine, implementation approach and migration approach.
- **Ineffective master data governance:** Tax groups should confirm that the master data required to perform accurate tax determinations and calculations is complete and accurate.
- **Overlooking external systems:** External systems are frequently overlooked or insufficiently addressed from a tax impact perspective during ERP migrations. Many different types of external systems that are part of the ERP ecosystem perform transactions with tax determination, calculation, and compliance implications.

Two primary options are available for the rollout of these migration approaches, and the options depend largely on scope requirements.

1. A **“big bang” roll-out** calls for all countries and companies/businesses to go live at that the same time. This approach allows for greater efficiency; a single testing cycle can be executed for all transactions. That said, big bang rollouts are much larger in scope, which means that more issues and obstacles can potentially arise.
2. A **phased rollout** executes the migration iteratively, usually by country, transaction category (e.g., order to cash, followed by procure to pay) or by company/business.

## Conclusion: Holistic Payoffs

The same research showing that relatively few organizations have captured the value they expected from digital transformation shows that the best-performing organizations succeed in sustaining the benefits they gain from these endeavors over time. They do so not by one approach, but by deploying several practices in a unified manner.<sup>4</sup>

In other words, a holistic approach to digital transformation delivers value that sustains over the long haul. The same holds true for tax technology transformations.

## Notes

1. Three new mandates for capturing digital transformation’s full value, McKinsey & Company, June 2022: <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/three-new-mandates-for-capturing-a-digital-transformations-full-value>.
2. A Roadmap For Tax Transformation, Peter Boerhof, Vertex: <https://www.vertexinc.com/resources/resource-library/roadmap-tax-transformation>.
3. Technology Pain Points in Global Tax Management, Michael J. Bernard, Vertex: <https://www.vertexinc.com/resources/resource-library/technology-pain-points-global-tax-management>.
4. Three new mandates for capturing digital transformation’s full value, McKinsey & Company, June 2022: <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/three-new-mandates-for-capturing-a-digital-transformations-full-value>.

## About Vertex

**Vertex Inc.**, is a leading global provider of indirect tax software and solutions. The company’s mission is to deliver the most trusted tax technology enabling global businesses to transact, comply, and grow with confidence. Vertex provides solutions that can be tailored to specific industries for major lines of indirect tax, including sales and consumer use, value added, and payroll. Headquartered in North America, and with offices in South America and Europe, Vertex employs over 1,300 professionals and serves companies across the globe.

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