



A Tax Leader's Guide to Saving Money, Time & Resources with a Tax Engine

Why you should calculate tax with one tax engine rather than across multiple source systems



Introduction

As a tax leader, you're under more pressure than ever to ensure tax accuracy and compliance while navigating complex, constantly evolving jurisdictional requirements. Every time a new sales or buying channel is created, it introduces another platform for tax calculation and adds complexity to core processes like purchasing, invoicing, e-commerce, billing, reconciliation, and downstream compliance. And because each of these requires accurate, compliant tax calculations, your team's responsibilities grow.

That includes managing tax rules for each tangible and intangible product you sell or purchase—such as sourcing rules, tax rates, and calculation formulas, tax-sensitizing business data, and customizing tax logic—across multiple ERPs, e-commerce platforms, and procurement systems. To put it simply, in a disconnected environment, tax becomes a consistency and efficiency challenge.

To help you navigate these complexities, we've created this guide. It explores the real-world impact of managing tax processes across disparate source systems. You'll learn how our centralized tax engine, Vertex O Series—with pre-built connectors to leading vendor systems and flexible API—can help your tax team save money, time, and resources— so you can focus on driving innovation and delivering business value.



The Problems with Disparate Systems

The Financial Drain

You may be maintaining—and your company may be paying for—a patchwork of tax solutions: a custom-built tax matrix, middleware to update your varying systems, native tax logic within your financial platforms, or supplemental tax engines. Each is connected to its own source systems yet disconnected from one another. This approach drives up operating expenses through duplicate licensing, unnecessary technical debt, and costly custom tooling. It also increases reliance on manual labor and external consultants.

Another hidden cost? Audit penalties from threshold mismanagement. In the U.S. or abroad, each taxing jurisdiction has its own threshold at which companies must register, collect, and remit sales tax or VAT. When transactions are spread across multiple systems, it becomes difficult for your tax team to monitor cumulative activity and remain compliant. This lack of visibility can lead to incorrect tax collection—and ultimately, costly penalties that hit your bottom line.

The Time Sink

If you rely on the native tax calculation functionality embedded in each of your source systems, your tax team spends significant time manually updating tax content, tax-relevant master data, and custom tax logic—which IT must then replicate across each system. These updates are required regularly as tax rules, product catalogs, and customer data changes. The more systems you use to calculate tax, the more time-consuming this becomes. If your enterprise uses five separate ERP and e-commerce systems, that means five separate updates every time something changes.

Plus, maintaining this approach isn't simple. It often requires detailed documentation and complex environment matrices that map where and how tax content is applied. When issues arise—such as incorrect tax applied at checkout or on an invoice—troubleshooting becomes a scavenger hunt. Your colleagues in IT have to spend time tracing the problem across multiple systems, often involving cross-departmental collaboration with you to identify the root cause. And when exemption certificates are misapplied or missing or VAT ID registrations aren't accurate, your tax team is left managing the fallout.

Backup and recovery processes also become more complex when tax data is fragmented across systems. In the event of a system failure, this can delay access to critical tax data—putting compliance, financial reporting, and business continuity at risk.

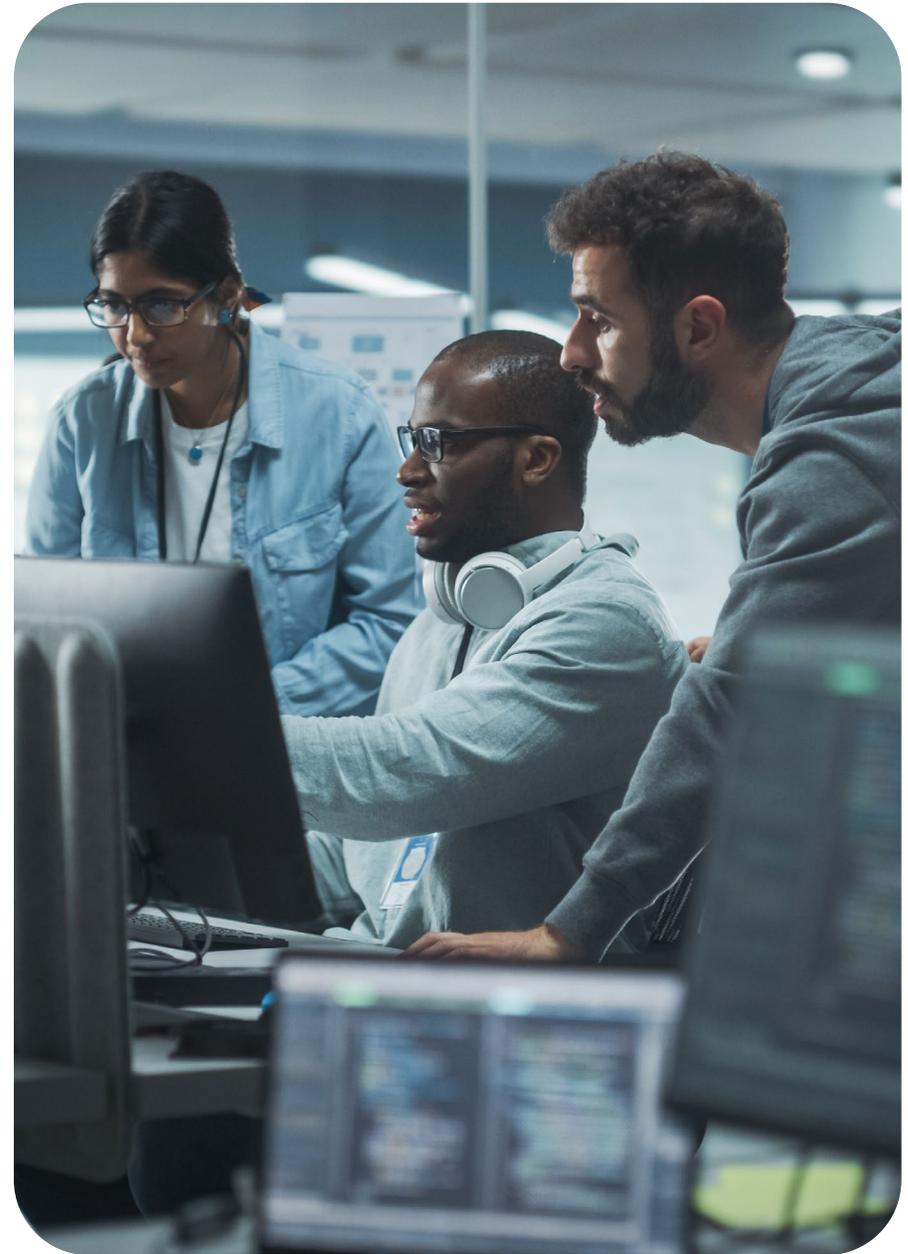


The Resource Strain

Managing tax across multiple systems adds complexity to onboarding and training for your tax team. They must understand the unique tax configurations, logic, and data flows within each system—whether ERP, e-commerce, or procurement—resulting in longer ramp-up times and a higher risk of errors. This fragmented knowledge can create silos, making it difficult to maintain consistency and continuity. If a key team member leaves, critical tax knowledge may be lost—making replacement time-consuming and costly.

Scalability also strain resources. Launching a new store, entering a new region, or adding a new product line all come with tax implications—and those must be addressed in every system where tax is calculated. The number of resources required to prepare for these events grows with the number of systems that need updating.

And it's not just about scale—it's about complexity. Managing cross-border transactions, third-party scenarios, and drop-shipments introduces layers of tax rules and jurisdictional nuances. What may seem like a simple calculation on an invoice is rarely simple in practice. Without centralized control, the risk of improper sourcing, under- or overcharging tax, or failing to charge at all increases exponentially.



How Vertex O Series Solves the Problem

Our tax engine, Vertex O Series, provides you with a smarter, centralized approach to tax determination technology. Instead of managing tax logic in every source system, O Series can be implemented as a single tax engine to support all of them—ERP, e-commerce, point-of-sale, procurement, and more. With O Series, your tax team maintains logic across one tax system that informs all financial systems. Tax requirements and content are in one place, giving you the following benefits:

Money: Reduce Costs

- **Cut costs across the business.** O Series centralizes tax content, which eliminates the need to license, support, and maintain multiple tax solutions, custom code, laborious matrices, and middleware. O Series also has many deployment options including edge technology, which provides flexibility and control.
- **Minimize audit penalties.** Centralizing tax policy logic in O Series helps prevent costly errors that can impact your bottom line.

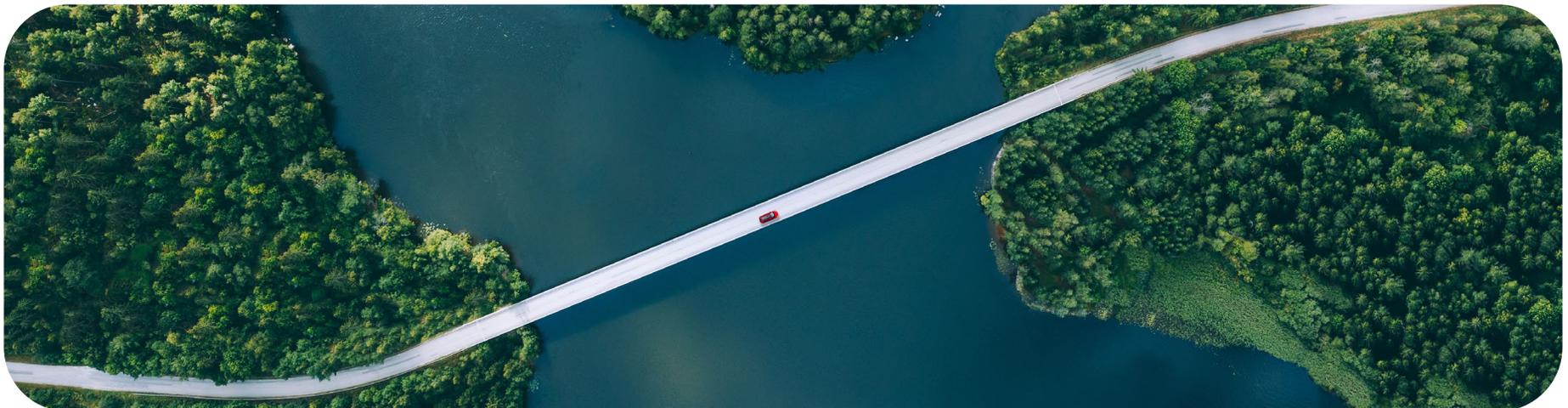
“Cost is often the biggest hindrance to businesses being able to sustain long-term success. However, with a single Vertex tax engine integrated across all source systems, you gain much needed cost efficiency”, explains Larry Mellon, Senior Director Global Tax - Chief Tax Office.



Time: Eliminate Redundancy

- **Stop wasting time on repetitive updates.** With O Series your tax team only needs to update logic in one place—no more duplicating updates across multiple ERPs, e-commerce platforms, or procurement systems. This reduces the time spent maintaining various tax rules, rate tables, jurisdictional logic, exemption certificates, allocations, complex logistics, and more.
- **Troubleshoot faster.** O Series makes it easier to identify and resolve issues. When exemption certificates are misapplied or missing or master VAT ID registrations go unvalidated, having a centralized system like O Series allows your tax team to quickly fix problems which ultimately minimizes disruption and helps maintain compliance.
- **Simplify backup and recovery.** Managing one tax engine means your colleagues in IT only need one backup strategy. Built-in redundancy and failover in O Series helps eliminate the volume and processing constraints that tax customizations often place on core systems, especially those requiring complex configurations.

“With a Vertex tax engine, IT teams get a lot of time back in their day because they don’t have to bother with the manual tasks of updating tax content in multiple ERP/source systems. Tax content is automatically updated in the tax engine in the cloud. Everything is right there for tax teams to view and make adjustments to, eliminating the need for them to lean on their IT counterparts for ongoing support”, says Mellon.



Resources: Simplify and Scale

- **Improve onboarding and reduce silos.** With O Series your team only needs to learn one system, eliminating the need to master multiple tax configurations across ERPs, e-commerce platforms, and procurement systems. With a single source of truth, knowledge is easier to document, share, and retain—minimizing the risk of silos and knowledge loss.
- **Lower dependency on IT.** Use a single engine for localized tax calculation wherever you transact, so your team no longer needs to rely on IT for tax updates. You can manage those updates directly within the platform.
- **Scale faster with less tax-side rework.** Whether you're launching a new store, entering a new region, adding a business line, migrating source systems, merging/acquiring another company, or supporting a homegrown build—O Series gives you the flexibility to configure tax once and apply it for every business need. Even if you need to keep data segmented by region or entity, O Series Edge gives you the flexibility to compartmentalize tax operations while maintaining centralized control.

What Enterprises Gain by Centralizing Tax with O Series

- Connects to all your source systems
- Reduces the risk of errors across platforms
- Lowers dependency on IT for support
- Scales effortlessly with your business



“By integrating a single tax engine to all source systems, tax is centralized which adds agility for your tax team. Tax processes are no longer putting the brakes on growth to allow time to get calculation processes and content ready, states Mellon. “Our solutions can be very elastic by ramping up billing runs for peak times. We see a lot of instances where businesses make adjustments to their tax engine infrastructure for Christmas, Black Friday, and Cyber Monday, then scale them back down during those valley times.” This is also true on the procurement side for large volume invoices, sometimes thousands of line items deep.

Customize O Series to Meet Your Business Needs

- **Deployment Options:** Cloud (SaaS), Edge, Hybrid Cloud, On-Demand Cloud, On-Premise
- **Tax Content:** Industry-specific, Consumer Use Tax, and VAT
- **Integrations:**
 - **ERPs:** SAP, Oracle, NetSuite, Microsoft, Salesforce, Workday, Coupa, and more.
 - **E-Commerce:** Shopify, Adobe Commerce, commercetools, Mirakl, Spryker, and more.
- **Support:**
 - **Implementation Services:** Over 2,000 successful implementations with our Global Professional Services Team
 - **Customer Support:** Won the [IDC SaaS Customer Satisfaction Award](#) for Tax three years in a row—leading in customer satisfaction for SaaS tax solutions



Customer Story: Vertex Helps Siemens Consolidate 50+ ERP Systems

When it comes to transforming your tax technology, choosing a provider you can trust is essential. At Vertex, we partner with some of the world's most complex enterprises to simplify tax across their systems. See how one of our customers, Siemens, successfully consolidated over 50 ERP systems and streamlined their tax operations with Vertex.

Hear from Siemens' Head of Functional Excellence, Andrea Spandau.

[Watch Customer Story.](#)



Ready to reduce headaches and manage tax in one place?

[Visit our O Series page to learn more.](#)

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