



White paper

The bottom line on procurement-tax automation



The intersection of procurement and tax

Procurement activities and indirect tax processes intersect at numerous junctions. How effectively organizations manage these touch points is an important consideration, one with potentially \$6 million or more at stake. That's how much is routinely squandered each year — for every \$1 billion in transactions — on unnecessary processing costs when procurement-tax touch points are mishandled manually. That 6% waste calculation is based on Six Sigma research covered in the influential cost-accounting publication *Cornerstones of Cost Management*.¹

Given the rapid changes that procurement groups are undergoing, as well as the rising complexity of indirect taxes — which include sales tax, use tax, value added tax (VAT), and other goods and services taxes (GST), depending on which jurisdiction a procurement transaction is subject to — the high cost of inefficient processes is unsurprising.



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— Kristin Schwabenbauer, Global Partner Leader at Vertex

“U.S. consumer use tax and global supplier tax tend to be extremely complex,” notes Kristin Schwabenbauer, Global Partner Leader at Vertex. Unlike sales tax, which is calculated by adding a percentage to the cost of an item at checkout, use tax is self-assessed based on a tangle of rules and factors, and then remitted by the end consumer in a procurement transaction. “When you consider indirect tax from a corporate purchasing standpoint,” Schwabenbauer adds, “it's far more difficult to manage than the sales taxes we pay as consumers.”



Fortunately, it doesn't require a Six Sigma Black Belt or an advanced degree in cost management to ferret out inefficiencies within procurement-tax touch points. Instead, getting it right requires a knowledgeable grasp of:

- The procurement group's rapidly evolving role and post-pandemic opportunities
- The changing practices, considerations, and opportunities within procurement-tax touch points
- Three automation options organizations deploy to accurately calculate, validate, and report indirect taxes on procurement transactions

In many cases, the best option involves a third-party tax engine, a form of automation that ensures the accurate execution of all relevant transactional tax determinations and calculations. “We often see that as a best practice,” notes Mark Rems, National Transaction Tax Services Practice Leader at KPMG. “This type of third-party, stand-alone platform takes inputs from a source system and evaluates the nature of each procurement transaction to determine whether it is taxed and, if so, at what rate.”

1. Hansen, Don and Mowen, Maryann. “Cornerstones of Cost Management,” Cengage Learning, 2016: <https://www.cengage.com/c/cornerstones-of-cost-management-4e-hansen/9781305970663PF/>.

Procurement's post-COVID opportunity

The option Rems points to also has the benefit of leaving complex tax calculations and validations to tax experts so that procurement professionals and accounts payable (AP) teams can stick to their busy day jobs: “A revolution is sweeping the world of procurement,” asserts a recent KPMG report. “Digital labor — aided by robotic process automation (RPA), machine learning and cognitive technologies — is helping bring about automation and other technology-based enhancements in the procurement function. Digital procurement is enabling a progressive digitization of labor through automation of existing mundane processes and opening the door to new levels of performance at every stage of the procurement process.”²

Prior to the COVID-19 pandemic, most procurement groups maintained a laser-like focus on achieving annual 3% to 5% cost-savings targets, steadily adopting more automation, and increasing self-service functionality while getting more spend under management.

After the pandemic walloped supply chains in early 2020, new uncertainties tested companies' resilience and agility. “When COVID struck, procurement was tasked with an entirely new set of challenges on top of their existing goals,” notes Mike Shaffer, Procurement Technology Manager at KPMG. These responses, Shaffer says, included:

- Ensuring resource continuity and reducing supply risk
- Obtaining scarce resources to support the business due to increased market demand
- Addressing the challenges of working remotely and supporting a remote workforce
- Assessing contractual liabilities (e.g., minimum order quantities) to address fluctuating demand

“It's important to recognize that tax was also confronted with the challenges that arose from the shift to remote work,” Shaffer continues. “Plus, tax complexity intensified as the address book expanded and purchasing extended into more tax jurisdictions.”



Now, as organizations and procurement groups pivot toward a post-pandemic future, two sets of opportunities have emerged. First, procurement groups are reshaping their capabilities to foster greater operational resilience by:

- Deploying modern, agile solutions
- Transforming data into actionable knowledge
- Reducing supplier and supply chain risk
- Optimizing contract management
- Fostering remote workforce collaboration for the long term

Second, more mature procurement teams are seeking to increase the strategic value they deliver through additional digitalization, and by:

- Uncovering new opportunities for procurement to innovate throughout the supply chain
- Positioning the company for growth
- Optimizing business processes
- Accelerating return on investment (ROI) in automation

2. Digital Procurement: Driving a revolution in improved performance. KPMG, 2020: <https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/10/digital-procurement-driving-a-revolution-in-improved-performance.pdf>

As digital transformation becomes a table-stakes requirement for most procurement groups, executives are concentrating their digital transformation activities on:

- Contract management
- Supplier risk and performance management
- Collaboration with vendors and trading partners

Procurement groups that have already implemented advanced technology platforms are harvesting deeper business insights to enhance their strategic value. “The conversations we’re having with procurement leaders are about getting useful information into the hands of business leaders to support both proactive and responsive decision-making,” Shaffer notes. “Those insights are building blocks for agile and resilient capability. The COVID crisis created momentum for procurement to get a seat at the strategic decision-making table. Keeping that seat hinges on procurement’s ability to continue mining insights from its contracts.”

This ability depends more than you might expect on an important set of procurement-tax touch points.

Five procurement-tax touch points

As more organizations implement procurement platforms with advanced functionality, like electronic invoicing and self-service capabilities, more questions arise concerning tax determination and validation processes: Are the calculations accurate? Can we optimize indirect tax compliance to support our ongoing efforts to improve procurement efficiency? These questions are being asked as tax compliance requirements continue to change, Schwabenbauer emphasizes.

Optimizing indirect tax compliance for procurement transactions requires an understanding of the various points where tax management processes and procurement processes intersect.

For example, “If you have an automated procurement system and you want to validate the taxes being charged by a vendor, you need to understand what you’re buying,” Rems explains. “That means you need to invest sufficient time and energy on cleansing your master data. Once the master data’s accuracy is established, the procurement process starts with the requisition and purchase order (PO) — that’s the first time procurement systems generally look for a tax amount. At that point, you need a way to identify the who, what, where, when, and how aspects of the transaction



to determine whether it is subject to tax or not.” The timing and accuracy of this calculation is decisive from a tax compliance perspective as well as from a procurement perspective because it is needed to identify the true cost of procurement.

Those two illustrations represent two of five important procurement-tax touch points, which include:

- 1. Master data setup and vendor setup:** The objectives of this touch point are to ensure the accuracy of vendor addresses, ship-to addresses, and more. Commodity codes also need to be sufficiently detailed, or granular, for tax purposes.
- 2. Requisition and purchase order:** Procurement system users must clearly identify correct delivery locations (i.e., the ship-to address) and select appropriate commodity codes when making a purchase.
- 3. Goods receipts:** It is important to keep in mind that goods receipts may include indirect taxes.

4. **Invoice verification:** At this touch point, taxes charged by vendors should be validated; tax tolerances and thresholds should also be established.
5. **Invoice posting:** Once the invoice clears validation and is approved for payment, that data (including the vendor-charged taxes along with any self-assessed tax accruals) must be conveyed to the general ledger in an enterprise resource planning (ERP) system.

While accurate tax calculations are crucial from an accounting perspective, that accuracy can be elusive without the right automation in place. Different types of taxes have different accounting treatments, depending on where the transaction took place, and/or where the good were shipped to, and/or which tax jurisdiction's rules apply. In the U.S., sales tax is considered an expense. In Canada, some indirect taxes are considered an expense, others are not. That complexity poses significant risks in terms of the cost of accounting errors (tax rates can range from 10% to 27% on global purchases), the cost and time required to correct errors, and the reputational risks that tax compliance problems can ultimately lead to.

The most common problem associated with procurement-tax inaccuracy is inefficiency. "If your system indicates that vendors are not charging the right tax, it might prevent the invoice from posting," Rems notes. "That creates extra work for accounts payable teams. If you have to continually go back and forth with vendors on whether or not the tax they charged is accurate and/or whether or not an exemption applies, that consumes a lot of time and frustrates vendors. And if you don't have a process in place to accurately self-assess taxes when an audit occurs, that creates a reputational concern in addition to potentially resulting in penalties and interest."

Know your automation choices

Procurement-tax touch points can be complex, but that complexity can be managed. High-performing procurement and tax groups assess the risks and opportunities within these touch points and then move forward with plans for mitigating the former and harnessing the latter. This work requires attention to several important indirect tax considerations along with a well-informed decision concerning supporting automation.



Master data accuracy is a must. The management of tax variances is also important: tolerances should be defined in dollar amounts, percentages, or in some case, using both measures. "On the procurement side, it is impossible to achieve 100% accuracy," Rems notes. "The data within non-PO invoices is often limited, for example. In many cases, you will not have all of the information needed to make an accurate tax determination." Since procurement platforms are not the "system of record" from an accounting perspective, procurement and tax groups need to determine how tax amounts will be posted in the ERP system or accounting application.

Reporting requirements also need to be addressed. "Procurement solutions have a lot of different places to get data," Rems says, pointing to OK-to-pay files and transaction detail reports among other sources. "You need all of that information to support reconciliations, tax compliance, and tax audits."

Those needs bring procurement and tax groups to another crucial consideration: What type of tax automation should we use? This question often crops up as organizations are considering investing in a new procurement system.

The table offers a starting-point summary of the benefits and shortcomings of the choices. Each option requires additional scrutiny and an evaluation that reflects unique organizational structures, needs, and existing systems.

There are three primary options, and each comes with a set of pros and cons that should be evaluated:

	No tax validation	Native tax functionality	Third-party tax engine
	Do nothing — simply pay the taxes as charged and let the invoices pass through procurement.	Rely on the existing tax-calculation functionality (some tax tables, basic tax logic) within procurement applications.	Use a stand-alone tax system that pulls all relevant inputs from source systems to produce accurate tax determinations and validations based on current rates and rules.
Pros	<ul style="list-style-type: none"> Reduces procurement system implementation time and cost Automated use tax accruals can be generated when invoices post to ERP No third-party software integration 	<ul style="list-style-type: none"> No third-party software integration Provides baseline functionality to apply tax rates and rules (suited for low-complexity tax compliance requirements) 	<ul style="list-style-type: none"> The most accurate solution for validating vendor-charged taxes and accruing use taxes Tax discrepancies can be pushed back to vendor Taxes are included in budgeting and approval process within procurement system
Cons	<ul style="list-style-type: none"> Limitations on validating vendor-charged tax Requires significantly more integration development 	<ul style="list-style-type: none"> Manual maintenance of tax rules and rates required Potentially significant limitations on managing complex tax requirements 	<ul style="list-style-type: none"> Highest implementation cost, and integration must be performed and maintained

While Rems describes the tax engine as a best-practice option, he also stresses that the second option, relying on a procurement system’s native tax calculation functionality, can work well in the right situations (e.g., when purchasing takes place in a country, or countries, with a limited number of VAT rates). “A tax engine is the most accurate solution from a calculation reporting and compliance standpoint,” he notes. “It allows you to manage discrepancies, apply tolerances, and get taxes included in the PO and workflow process. There is an implementation cost, there’s work to be done.”

Based on his firm’s work helping companies decide on and implement procurement and tax automation, Rems finds that the cost of tax engine implementation is offset by the tax engine’s benefits within a couple of years.

“We’ve helped a lot of companies build the business case to decide which of these options is best,” he adds. “What we’ve seen from option three is that you typically recover the initial capital by year two or three. From that point onward, you have perpetual cost-savings — you’re not letting cash go out the door from inefficiencies, or penalties and interest.”

As organizations continue to invest in procurement's digital transformation, they're discovering that their investment in tax technology plays a complementary role in establishing the procurement function of the future. Given the high — and ongoing — costs associated with incorrect tax automation selections, procurement and tax leaders should have a firm grasp of their crucial touch points.

Q&A: How to detect procurement-tax misalignment

The following questions can equip procurement and tax leaders with a deeper understanding of how well the two groups work together.

Question	Answer
Are your suppliers charging you the correct sales tax?	Anything short of a confident "yes" requires follow-up.
Are you self-accruing when suppliers don't charge tax?	If so, assess the accuracy and efficiency of your process.
Do you have invoice errors due to tax issues?	If so, assess and benchmark the frequency and magnitude of those errors.
Do tax issues impede the payment process?	If so, the procurement-tax alignment likely can be improved.
Is your tax department frequently responding to AP questions?	If so, that's a strong sign that AP teams are performing too much tax work.
Do your AP professionals have the ability to make tax decisions?	In the vast majority of cases, they will not be able to handle complex tax matters.
Is your procurement department engaged with your tax team?	A constructive, ongoing collaboration reduces tax compliance risks and supports procurement transformation.

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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 cloud-based and on-premise 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 1,200 professionals and serves companies across the globe.

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