



Technology Insights

Reduce E-Filing Complexity with Intelligent VAT-related Data Mapping

Conversation with Vertex Tax and Technology Experts, Roger Lindelauf and Brian Wilchusky, to discuss the launch of the Vertex Indirect Tax Chain Flow Accelerator (CFA) for SAP ERP and its value proposition to the SAPinsider community



Ogo Nwanyanwu
Research Editor, SAPinsider

Extending Indirect Tax functionality in SAP ERP tax systems

Government efforts to curtail tax avoidance and fraud are driving continuous change in tax law and regulation. Decision makers at these organizations face increasing cost burden and compliance risks due to these challenges. Frequent tax authority content updates and real-time electronic filing demands from revenue authorities are driving business pressures to automate indirect tax business flows. The growing complexity represents a headwind for SAP ERP customers, tasked with maintaining indirect tax determination accuracy.

Across the EMEA region, indirect tax determination complexity is not just growing, but accelerating. Companies sourcing supplies within the European Union must satisfy regulatory demands to account for trading partners throughout the supply chain in real-time. In response to growing complexity, Vertex launched the 'Indirect Tax Chain Flow Accelerator (CFA)' solution for SAP ERP tax systems offers tools for multinational organizations to support a more efficient indirect tax management strategy. This tax technology can extend functionality in SAP ERP tax systems, adding automation and intelligence capabilities to data integration processes, connecting global tax engines. The CFA allows tax professionals to better leverage their domain expertise and drive indirect tax determination functionality of current SAP ERP tax systems. To better understand how, SAPinsider sat down with [Vertex Experts, Roger Lindelauf, SAP/VAT Professional, and Brian Wilchusky, Director of Global SAP Partnerships](#), to discuss opportunities for SAP customers to tackle increasing compliance complexity, utilizing the new CFA solution from Vertex.

Key Takeaways

- Growing complexity around Value Added Tax (VAT) determination driving business pressures across multi-national organizations to improve indirect tax management strategy
- Organizations can minimize tax compliance risk and secure cross-border supply chains with improved VAT determination automation and intelligence
- Vertex Indirect Tax CFA for SAP ERP provides SAPinsider community with visualization tool to enhance chain flow data mapping accuracy

Accelerating Indirect Tax Complexity

During the conversation, Lindelauf, a 35-yr veteran in VAT determination, shared key trends accelerating compliance complexity, most notably in Europe.

Flexibility within EU tax guidelines creates uncertainty for companies. Tax professionals must navigate increased compliance scrutiny to support innovation and growth. New digital business models require multinational organizations operate within several tax jurisdictions and manage multiple supply chain partners. Business transactions across borders and between local TJCs can highlight significant grey areas in tax guidelines and are difficult to interpret consistently with greater accuracy. Creating alignment among tax advisors on VAT determinations involving these business transactions is difficult. Deep customizations supported by manual processes are often needed to handle exceptions.

Difficulty staying on top of tax content updates. SAP ERP systems operating as a single source of truth across financial applications, integrate with tax engines to automate relevant content updates. However, revenue authorities routinely change VAT rates, requiring frequent updates of SAP TJCs. These updates can include changes at the state, county, city, and sub-city level, in coordination with the conditions that support these codes. The constant changes in VAT determination schedules often require custom builds to address more sophisticated business flows. This further adds to current technical complexity and increases costs of maintain tax management systems.

Shift to real-time reporting requirements and electronic audits. To scale new digital business models in the current operating environment, multinational organizations require real-time, end-to-end visibility. Demands from revenue authorities for real-time electronic filing, further prioritizes the need for electronic audit trails that support tax compliance accuracy. In fact, companies operating in the EU must also account for e-invoices from trade partners to maintain a compliant VAT position or risk supply chain disruption and fines.

Enhanced VAT-related data mapping to SAP ERP tax systems

SAP ERP systems provide robust data collection from transactions across multiple financial systems, key for indirect tax determinations. Within that dataset exists supplier invoice data, critical to account payable business flows that include confirmation of correct payments & vouchers, exception handling, and purchase order variance remediation. Lindelauf suggests, “Yet, if the SAP system is connected to a tax engine to perform the tax determination, the SAP data is not really suitable to immediately do a tax determination and requires intelligent mapping of the relevant VAT tax data to tax engines. This is a critical process for global organizations, as EU VAT determination schedules are among the most challenging indirect tax workflows to manage.” Organizations depend on IT departments, with the input of tax advisors, to develop custom rule sets (by building user exits) that surface specific tax regulation associated with supply-chain flow data stored in SAP ERP tax systems. This is both difficult and expensive to maintain, even with the support of a centralized tax engine.

The automation of these workflows can involve high levels of customization to implement. Tax systems with several high-level, deep customizations increase the difficulty for multinational organizations to scale business models across several TJCs. To maintain indirect tax determination accuracy at scale, collecting and mapping of VAT related information to ensure harmonized data is accessible for error correction is critical to mitigate indirect tax compliance risks. Vertex Indirect Tax Chain Flow Accelerator leverages insights from Vertex Indirect Tax Accelerator 3.1 for SAP to deliver innovation for the SAP ERP tax community, across three core functions:

- Streamlined intelligent pre-processing of SAP data prior to migration to tax engine
- Simple integration with SAP ECC or SAP S/4HANA
- Visualization tool for tax professionals to map VAT-related data from SAP ERP system to Vertex tax engine, with minimal support from IT siloed workflows and manual process

About Vertex

Vertex, Inc. is a trusted 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 serve specific industries for every major line of indirect tax, including sales and consumer use, value added and payroll. Headquartered in North America, and with offices in South America and Europe.

There are roughly 5 fields in SAP ERP for mapping data to VAT determinations, often requiring the development of customized rulesets that align with business logic and workflows to support complex indirect tax compliance processes. The Vertex Indirect Tax CFA provides visualization tools for SAP tax professionals to perform intelligent data mapping of up to 80 data fields. SAP customers can also access non-native SAP fields and tables (custom build fields and tables) for VAT determinations. Lindelauf provides insight into the feature, saying “We bring intelligence into their data before we send it to the tax engine, so we already do an interpretation of the data in the SAP system with our Chain Flow Accelerator, before we even send that (data) to the tax engine. That's easier to do in this source system than in the receiving systems, or easier in the system and in the tax engine, because you have all data present in the SAP system.”

Shifting the data mapping capabilities to VAT domain experts can enhance indirect tax automation and produce more efficient business flows. Robust data fields mapping offers the potential for more accurate multivariate association processes, that support burdensome 3-way and 4-way invoice matching flows. Tax experts can better align workloads with high-priority tasks and IT resources re-allocated more efficiently, as a result.

E-filing driving tax teams to modernize

Ongoing business growth and rapidly changing markets adds an additional layer of compliance complexity. Indirect tax management strategies must target real-time determination accuracy to eliminate potential costly errors and fines. Vertex experts cited multiple customer use-cases, exploring how implementing the CFA may support evolving tax management strategies at multinational organizations. Lindelauf notes, “The real need to do it first time right is all that e-business, so e-filing, e-audits, e-invoicing real time reporting. We are going into an era, where we see that tax authorities request that before sending out an invoice, you must send it them first and they will check that it is done correct and then companies can send it to their customers at that point. That is really driving for a fully automated tax determination solution.” Digital tax compliance continues to grow in complexity. CFOs should be increasing investments in tax technology and innovation to support the evolution and modernization of their tax teams.

What Does This Mean for SAPinsiders

The CFA solution may offer a straightforward implementation for both SAP ERP ECC and SAP S/4HANA and expands indirect tax functionality with key innovations in process automation and data visualization. To better align decision makers with tax technology investment ROI, here are a few concepts, SAPinsiders need to consider:

- **Integrate your tax strategy into your migration to SAP S/4HANA.** Despite the simplicity of integrating CFA, current SAP ERP deployment and migrations must be part of the consideration and planning process.
- **Start with the data.** Tax professionals should play a key role, relative to previous customization efforts, in surfacing VAT relevant data and documentation, to enable consistent tax treatment across transactions.
- **Define success and how it translates to more consistent tax compliance.** Decision makers need to consider their ERP system, tax engine, data flows, training for domain experts. Implementation partners that will own the integration process and understand how it will impact tax automation accuracy across VAT determinations.
- **Build a long-term strategy for VAT and indirect tax.** Your ERP tax system may be sufficiently automated now for current chain workflows, but future needs for business model innovation could be challenged by legacy systems. CFA provides opportunity to think offensively regarding how to reallocate IT resources, typically reserved for VAT customizations in SAP ERP.