



How Retailers and their Tax Groups are Gaining an Edge

New automation strengthens the tax team's ability to support omnichannel capabilities, the customer experience, organizational resilience, and scalability



“Innovation gives retailers an edge.”

That’s the conclusion of a compelling World Retail Congress/BCG survey report. The research examines why top-performing retail companies invest more heavily in innovation and derive substantially higher returns (2X) on those investments compared to low-performing retailers.¹

This paper asserts that the statement’s reverse also holds true: *Edge gives retailers more opportunities to innovate and out-perform.*

We’re referring to the edge computing functionality within cloud-based tax automation engines (e.g., Vertex O Series Edge). Leading indirect tax groups leverage this type of solution to elevate their tax compliance and planning activities while supporting their retail organization’s strategic objectives.

Tax plays a crucial, though sometimes unsung, role in supporting omnichannel capabilities, enhancing the customer experience, bolstering organizational resilience, and helping the company scale when launching new offerings and entering new markets. At the same time, tax groups must execute their core responsibility – complying with tax laws and reporting requirements on a global scale – as accurately, cost-efficiently and flexibly as possible. This is no small challenge, given that tax rules, business models, product offerings, and customer expectations constantly change.

“Considering these developments, it is imperative for corporate tax departments to embrace both existing and emerging technologies,” according to an IDC report on tax management applications. “...The increasing complexity of global tax laws and the demand for more efficient tax management systems underscore the importance of leveraging technology in corporate tax departments.”²

To leverage the *right* technology solution, retail tax groups should:

- Monitor retail industry trends, threats and opportunities;
- Identify tax compliance challenges linked to those risks and the demands each variable places on tax automation solutions; and
- Understand the accuracy, cost-efficiency, data management, processing speed, scalability, maintenance and management benefits that edge-equipped tax automation solutions deliver.

Customers in Control, Retailers Responding

The current retail landscape is rife with opportunities and threats, which are evolving at an accelerating pace – and which interact with tax compliance activities in consequential ways.

Following the early 2020s surge in e-commerce and omnichannel adoption – along with pandemic-necessitated innovations (e.g., BOPIS, BORIS, leveraging physical stores as fulfillment centers, etc.) – customers are firmly in control, and retailers are responding. Besides maintaining a consistent experience across all channels, retailers are deploying apps with handy “store mode” settings, launching re-commerce offerings, refining service chatbots, advancing social commerce and retail media activities, and elevating the shopping experience with augmented reality offerings. Artificial intelligence (AI) also offers ample benefits to retailers, from enabling faster decision-making to optimizing product sourcing to improving store layout.

The pursuit of these advancements is complemented by forays into new geographies, new product lines, the integration of new (and increasingly digital) services with existing products, and business model reconfigurations. In recent years, native online retailers have opened physical store locations, further blurring the line between physical and digital channels.

As retail C-suites pounce on these opportunities, the stakes are high. Product and sales teams, e-commerce groups, IT, finance and accounting functions, and tax groups must work closely to orchestrate the enabling pieces of these strategic puzzles, and they must do so quickly. Delaying the launch of a new product line for a week, month or quarter – whether due to design flaws, clunky payment interfaces, or incorrect tax calculations – can result in substantial losses. Inconsistent tax calculations across different sales channels can degrade the customer experience and diminish customer lifetime value.

“Now more than ever, retailers are striving to simplify and centralize their tax processing reporting environment.”

Tim Allen, Senior Tax Technology Manager, DMA

As they strive to support omnichannel and growth initiatives, indirect tax groups confront the ever-present, ever-changing challenge of sustaining tax compliance in the face of:

- Record volumes of U.S. sales tax rates and rules changes³
- And an explosion of new fees – include environmental, airport, entertainment and retail delivery fees – enacted by state and local U.S. jurisdictions
- Changing marketplace facilitator rules
- The implementation of new e-invoicing and real-time reporting rules in the EU and other regions
- VAT complexity overseas

3 Leading Questions about Your Current Tax Technology

1. How adaptable is our tax automation architecture?

The most advanced tax automation gives retailers optionality – they can deploy the solution on-premises for maximum control, leverage the scalability of the cloud, or create a hybrid environment that balances cost and flexibility.

2. Can we deploy our solution where(ever) we need it?

Retailers need compliant transaction processing wherever those transactions occur, so tax automation should be able to be deployed to virtually any cloud or any location. Edge technology ensures deployment flexibility whether using public cloud, private cloud, or on-premise deployment architectures.

3. How configurable is our solution?

Near-infinite configuration possibilities increase performance, enhance reliability, ease business expansion, and reduce costs.

Tax Compliance Vulnerabilities

Addressing these compliance challenges requires indirect tax groups to marshal the right expertise, approaches and tools for task. When doing so, it helps to keep in mind that each step forward in tax automation provides additional layers of benefits whose positive impacts compound as the tax technology stack evolves and improves:

- A tax engine (e.g., Vertex O Series) centralizes and automates sales, use, and value added tax determination, improving tax accuracy and consistency across all sales channels (digital and in-person).
- Flexible cloud deployments, including hybrid options, enable retailers to easily and efficiently focus on positive tax outcomes supporting a single source of truth for business tax policy and transaction history regardless of where sales transactions take place.
- Edge computing capabilities, embedded in leading tax engines, move tax calculation closer to the point of need. This provides highly resilient and high-performing localized tax calculation endpoints that are designed to remain consistent with the central tax engine that is used to manage full tax configuration, audit records, compliance activities and data analysis.
- To these capabilities, Vertex O Series Edge adds self-updating endpoints, packaged deployment, and centralized, on-platform endpoint maintenance to fully complete the ease of orchestration and connection between the central system and tax calculation at the edge.

Selecting the optimal tax automation solution and configuration hinges on identifying pain points throughout the end-to-end compliance lifecycle. The following challenges – which relate to processes as well as to customer experience management and tax-adjacent processes – abound in most retail organizations:

- Inconsistent customer experiences across sales channels
- Inconsistent tax calculations and tax calculation errors across different sales channels
- Higher hardware and maintenance costs
- Redundant data entry and excessive tax data mapping
- Overreliance on manual processes
- An inability to quickly support new channels, payment mechanisms and product categories
- Delays in payment processing and invoicing
- Transaction processing latency, especially during daily or seasonal sales spikes
- A higher likelihood of in-store system downtime due to inconsistent and/or limited bandwidth.

When multiple challenges exist, retailers are often forced to make difficult choices (e.g., higher levels of performance over scalability, or lower maintenance costs over payment processing speed). There is an alternative to making these types of painful tradeoffs.

“Vertex O Series Edge adds self-updating endpoints, packaged deployment, and centralized, on-platform endpoint maintenance, fully completing the ease of orchestration and connection between the central system and tax calculation at the edge.”

Matt Thoman
Product Manager, Vertex

Innovation's Leading Edge

As part of its “Store of Tomorrow” research, Accenture analyzes how retailers can leverage distributed edge computing to fully integrate online and offline channels. “It’s clear that edge technology will be a core retail capability in the near future,” according to the report, which describes edge-driven improvements and innovations, such as: automated, real-time decision-making; personalized in-store product recommendations via interactive screens or smartphones; customized wayfinding, processes for reducing checkout times; and “dematerialized” shopping experiences.⁴

Edge computing provides similarly compelling improvements and innovations to tax compliance, including:

- **Offline resiliency:** Maximizing offline resiliency for in-store checkout keeps checkout lines moving without sacrificing omni-channel features or accuracy.
- **E-commerce performance improvements:** Creating high-performance and highly scalable checkout for e-commerce operations ensures your site keeps taking orders even during the highest traffic times.
- **On-time updates:** Installing proper remote cluster management on calculation endpoints ensures updates from the tax department make it to production checkout on time, and wherever you need to calculate tax.
- **Centralized control:** Centralized configuration and reporting for all local tax engines provides complete visibility and the ability to manage updates from a single location.
- **Enhanced security:** Controlling connectivity at every endpoint means sensitive processes can stay secure and continue to work without depending on connectivity.
- **Infrastructure integration ease:** There is no need for an organization to use its own orchestration tools.⁵
- **High-availability backups:** Creating high-availability backups allows critical back-office processes to finish on time without disruption.

Most of these benefits perform double duty in that they greatly reduce the IT time and effort previously required to support and manage tax technology solutions.

“Some of the larger e-commerce companies and retailers out there want even more containerization and additional ease of management. Edge satisfies both of these needs.”

Tim Allen, Senior Tax Technology Manager, DMA



Conclusion: Tax Compliance Wherever and Whenever

As retailers pioneer inventive ways to enhance the customer experience while eliminating the traditional boundaries between physical and digital channels, tax groups will need to stay in lock step.

Keeping pace requires tax compliance to be accurate, lightning fast, flexible scalable – qualities that are enabled by edge computing.

The retail industry of tomorrow will look dramatically different than it does today. However, the underlying mission of retail tax groups will remain consistent: supporting transactions – and the customer experience – wherever and whenever those interactions occur.

Contact Us

For more information, contact your Vertex representative or visit vertexinc.com.

About Vertex

Vertex 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 1,400 professionals and serves companies across the globe.

About DMA

DMA, a proudly employee-owned company, has been solving corporate tax challenges for its clients around the world since 1972 by minimizing their taxes, enhancing the efficiency of their tax administration through industry-leading technology solutions, and managing their tax compliance obligations. DMA boasts expertise with all major ERP and transaction tax software systems to help our clients implement new systems or update and realign what they already have to meet current business requirements. Whether our clients have a specific internal implementation issue to resolve or need comprehensive turnkey services, DMA's technical and tax teams are prepared to tackle their technology projects on time and on budget.

End Notes

¹ <https://www.bcg.com/publications/2024/innovation-edge-for-retail-leaders>.

² IDC, Worldwide Corporate Tax Management Applications Forecast, 2024-2028, doc # US51658824 , August 2024.

³ <https://www.vertexinc.com/resources/resource-library/record-year-us-sales-tax-rate-changes>.

⁴ <https://www.accenture.com/content/dam/accenture/final/a-com-migration/pdf/pdf-168/accenture-store-tomorrow-pov.pdf#zoom=40>.

⁵ <https://www.vertexinc.com/resources/resource-library/beyond-edge-introducing-edgelink>.

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