Tax Technology Consulting
Accelerating digital for today’s tax world
Why automation and data wrangling are so crucial

The US tax environment has changed significantly over the past few years. And with even more legislative changes around the corner, income tax compliance and provision processes are becoming more complex. Many tax departments are spending tremendous time and effort revamping their tax compliance processes.

More than ever, that time and effort needs to be data focused. By optimizing data sources, enabling automation, and leveraging data-wrangling tools, tax teams can streamline data collection, calculation, and reporting; and complete the tax life cycle efficiently and effectively.

It takes a next-generation tax department to keep up with today’s ever-changing demands. Typically, before any sophisticated dashboards can be presented, data needs to be centralized. It needs to be clean. And it needs to be consistent.

With a data blueprint in place, tax teams have a much better shot at staying ahead of changing requirements and rising expectations.
The challenges tax teams face

As regulatory requirements have become more complex, demands on modern tax departments have risen. Tax teams must navigate increasingly complex entity structures and intercompany transactions, combining data across databases and international borders. Ultimately, tax teams must review and analyze all this data to verify the accuracy of reporting.

To check all these boxes, many tax analysts spend most of their time on the leg work of gathering data from divergent sources, then compiling and manually processing it.

Data needed for tax calculations may reside in enterprise resource planning (ERP) systems, legal entity databases, fixed asset systems, and numerous other sources. If information changes in any of the multiple source documents after processing is underway, tax teams may face a substantial amount of rework to address, validate, and reconcile changes.

In addition to being inefficient, this data management effort often delays true value-added analysis—needed during close and reporting cycles defined by limited time and resources.

To manage the flow of data in real time, mitigate the risk of human error, and address resource constraints, tax teams need technologies that help create an effective global process that improves efficiency and accuracy throughout the tax reporting life cycle.
How automation and data wrangling can help

To reduce the time spent on calculations and validation between multiple sources, tax departments can choose one or more of the many tools available today for automation and data wrangling.

These technologies can be used to gather data from multiple sources, then clean and reformat it so that it can be efficiently analyzed and presented. Calculations that were once spread across various spreadsheets, software tools, and systems can be consolidated and centralized into a single database.

From this newly created database, a tax team can pull all the transaction data needed for a range of value-add compliance and reporting tasks:

- Unify compliance and provision data sources and calculation processes to optimize return-to-provision reconciliation and accelerate the compliance timeline by leveraging provision calculations.
- Validate automated adjustments from the trial balance either inside or outside of the tax software to mitigate user errors.
- Develop a global comparison spreadsheet to normalize and compare data between versions and years for all entities.
- Use machine learning to review thousands of intercompany transactional data points, automatically match and validate entries and focus management’s review on the few specific exceptions that exist.
- Translate, summarize, and transform raw data into useful analytics to help visualize year-over-year data and key schedules, and to facilitate tax return review. Compliance and provision workstreams can leverage the same data and calculation methods, streamlining return to provision and giving compliance a head start.
- Complement centralized data with proven data accelerators and templates—tools designed to integrate with tax software—to further integrate downstream calculations and allow for real-time review of data as updates are made.
- Build dashboard reports to track progress of preparation and signoff throughout the process to increase confidence in data and keep management informed of status.
- Convert XML data to a data table and validate against source data and workpapers to facilitate another aspect of review before sending to the IRS.
It’s time to rethink data management

In a fast-moving and ever-changing tax environment, data wrangling and automation tools integrated with existing software and workpapers provide powerful new ways to adapt and thrive. Organizations can quickly create their own standardized database and benefit from simplified analysis and calculations for tax processes.

Data is the foundation today’s tax departments are built on. Tax teams can strengthen that foundation with automation and data-wrangling technologies that allow people to focus on interpreting data, not just processing it. Automation of tax data can bring improved accuracy, efficiency, traceability, version control, and return-to-provision processes. Deliverables can be refreshed in real time. Teams have a one-stop shop for review. And accelerated timelines can allow for earlier filing.

It all adds up to accomplishing more with less effort. Less time on data validation. More time on data analysis. The end result? A confident tax department filing returns based on data that can be validated in real time across all entities.

Putting the possible into practice

Deloitte Tax Technology Consulting helps organizations design and manage their tax function and operating model through a tax technology ecosystem that aligns to their enterprise vision. Led by professionals with deep business, tax, and technology knowledge, we support tax teams to identify, design, implement, and maintain systems with the power to transform processes, governance, and risk assessment—bringing accuracy, transparency, and control to your tax function.
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