



The state tax function and emerging technologies: Now is the time

By Andy Gold and Steve Ceglarek,
Deloitte Tax LLP

Reproduced with permission from Daily Tax Report: State, DTRS 3/28/17, 10/19/2017. Copyright © 2017 by The Bureau of National Affairs, Inc. (800-372-1033) <http://www.bna.com>

Tax Policy

Information Technology is changing business. In this article, Deloitte Tax LLP's Andrew Gold discusses three disruptive technologies, and how state tax executives can derive significant benefits from them.

The State Tax Function and Emerging Technologies: Now Is the Time



BY ANDREW GOLD AND STEVE CEGLAREK

Information technology has brought many changes to finance, accounting, and tax operations in the decades since enterprise resource planning (ERP) systems first appeared. For the most part, IT-driven innovation and transformation have found their champions and have driven value into the finance and accounting functions. Now is the time for tax and more specifically, the state tax function to capitalize on potentially game-changing technology.

Recognizing the integral and growing role taxes play in strategic business and financial decisions, many corporate and finance leaders are seeking tax departments' involvement in executing the enterprise agenda and utilizing technology's potential benefits. Tax executives generally, and those responsible for state taxes specifically, are being encouraged to become more strategic, do more with less, and bring more tax insights to their business stakeholders from ever-growing volumes of corporate data.

It is a favorable time for state tax executives to investigate and act on these imperatives. Current emerging technologies have the potential to improve operating efficiency and uncover new insights that can drive fact-based decision-making and change the value tax brings to the company's bottom line. Three disruptive technologies in particular are worth a look: robotic process automation (RPA), cognitive computing, and big data platforms.

State tax executives can benefit significantly from learning about the capabilities of these technologies and developing compelling use cases for where and how the tools can mitigate risk in reporting, provide more accurate tax calculations, and reduce or stabilize costs throughout the compliance, provision, and planning processes. Now is the time for the state tax function to not only take part in broader strategic discussions about emerging technology, but instead be ready with rich use cases for prototyping and demonstrating the value these new capabilities can bring.

RPA – Engine of Efficiency

RPA is the use of software routines or agents to automate discrete, repeatable, high-volume processes. It can be used to automate work performed within a single application or across multiple applications. Leading companies are applying software robotics across entire sets of end-to-end processes or sub-processes, and automating repeatable, complex steps from data capture to reporting.

Consider the indirect tax compliance process, for example. Compliance with US sales and use tax regimes typically involves high volumes of data, often on a monthly basis. Data extraction and reconciliation, as well as population of work papers and software fields, are often done manually. These sub-processes are con-

sidered routine, repetitive, administrative tasks – a target-rich environment for RPA. By automating much, if not all, of this time-consuming work, state tax personnel can shift their focus to analyzing the data for insights about company spending, issues with overpayment or underpayment of taxes, identification of duplicate payments, and opportunities to refine compliance processes.

In many instances, companies are implementing RPA applications in conjunction with data analytics or visualization tools that provide a summary of items processed and anomalies that were found during the running of the process. In most tax departments, that time gained is invaluable, and the anomalies found are important to catch before taxes are paid.

Cognitive Technologies – Diverse Applications

Cognitive systems capable of communicating, learning, and decision-making can extend the power of information technology for tasks traditionally performed by humans. Today, when on-demand streaming video services recommend a purchase, cognitive technology is doing the work. Cognitive tools can be applied to operations that involve routine tasks and the ability to teach a computer a body of knowledge.

Again, indirect tax is one of those areas rich with opportunities. For example, “smart OCR” (optical character recognition) technologies can automate the conversion of content from source documents (either hard copy or electronic) into digital data for analysis and processing. With this “translation” capability, the state tax function can speed the process of identifying relevant tax data points from tens of thousands of transactions to help surface potential overpayments, underpayments, and duplicate payments that plague many indirect tax compliance programs.

Machine learning can play a role here, too, with humans rapidly “teaching” the software to identify repeatable patterns and draw conclusions about the taxability of business transactions. As more transactions are fed into the cognitive system and more tax determinations are corrected, the increasingly well-trained platform becomes both fast and accurate in its ability to review transactions and make taxability decisions.

On the horizon are even more exciting uses of cognitive tools, such as applying their predictive capabilities to areas like indirect tax. This could help tax departments move away from historic, backward-looking reviews of indirect tax-related transactions to a future where the technology can anticipate overpayments or underpayments – and remediate them – *before they actually occur*.

Big Data Tools – The Ability to Dig Deep

Tax organizations are challenged to gather, maintain, and archive data for many uses. In state income apportionment, for example, the state tax function often extracts data from multiple source systems to assemble transaction-level detail, analyze it, and determine where transactions occur or customers are located.

Big data tools can help meet these demands by automatically accessing, combining, processing, and analyzing large volumes of disparate data, both structured and unstructured. They can also give state tax functions more granular details than previously possible, as well as speeding and improving scenario planning.

Today’s visualization tools, including dashboards, interactive tables and charts, and heat maps, give tax departments a new ability to consume and make sense of big data. These tools aid both data analysis and the communication of resulting insights more effectively to non-tax stakeholders across a company. Given the volume of data across often multiple legal entities and divisions doing business in various jurisdictions over many years, visualization technology tools are particularly well suited for state and local tax analysis. They enable tax professionals to surface anomalies, trends, and potential opportunities by interacting with their data in new, more proactive ways.

As the ERP vendors and data management tools advance in capability, in-memory computing is becoming a driving force behind empowering a company’s data. The days of managing and juggling data models and tax planning scenarios through the use of spreadsheets are being transformed into well-designed, big data enabled, visualizations that provide more accurate insight into tax.

Setting the Stage for Success

The impact of RPA, cognitive, and big data on tax is real and growing, so now is an excellent time for state tax executives to act.

However, deploying powerful new technology tools is not easy, and it is not the day-to-day work of tax professionals. Before state tax executives can utilize the power of these tools, they need to have a foundational understanding of the technology capabilities as well as the organization’s level of commitment to investing in these technologies to drive transformation.

Finance and accounting, as well as IT, can help state tax executives gain such awareness, making the state tax function ready to contribute to the organization’s effort to bring these technologies to life in tax. By being proactive and learning about the power these emerging technologies, state tax executives can position their department to be one of the leaders in bringing tangible benefits through the identification and execution of specific state tax use cases in areas ripe for leveraging technology.

As used in this document, “Deloitte” means Deloitte Tax LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of our legal structure. Certain services may not be available to attest clients under the rules and regulations of public accounting.

This article does not constitute tax, legal, or other advice from Deloitte LLP, which assumes no responsibility regarding assessing or advising the reader about tax, legal, or other consequences arising from the reader’s particular situation.

Copyright © 2017 Deloitte Tax LLP. All rights reserved.

Andy leads technology and innovation for the Multistate Tax Services practice, responsible for steering multistate tax technology & data analytics strategy and transforming

the ways in which Deloitte Tax and its clients address state and local tax needs through data, technology, and analytics. Andy is also a member of Deloitte's Corporate Development team, focusing on growth through alliances and transactions. He has more than 28 years of experience and most recently led the West region's Multistate Tax Services practice, as well as Deloitte's Multistate Tax Services Compliance practice nationally. Steve Ceglarek is a Principal in the Tax Management Consulting (TMC) group of Deloitte Tax. He has over 30 years of experience in Tax, Tax Technology, and Tax Process Redesign. Steve is currently TMC's

Strategy and Innovation Leader, where he is responsible for identifying and driving new and disruptive technologies into the firm's service offerings. Steve obtained his Bachelor's degree in Accounting from Northwestern Illinois University. Steve is trained in all of the major income tax software products and is well known for his project management, client care, tax software product development, cross-product integration, and team building skills.
