Indirect Tax Compliance in an Era of Big Data

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The evolution of Big Data is having a major impact on indirect taxation. Tax authorities are also making use of data as a tool to improve tax data gathering and collection. This article considers how a data-driven approach to indirect tax compliance may bring significant tax benefits to companies operating in this environment.

By now, it should be fairly clear that the evolution of Big Data is having a significant impact on the field of indirect taxation. Regular readers of this series—and keen observers—already recognize that data has changed the indirect tax landscape in three key ways:

- First, data has become a core asset of the 21st century business enterprise, creating opportunities for value-creating analytics as part of a top-down mandate within the modern business enterprise.
- Second, tax authorities increasingly understand the importance and availability of data and, as a result, are starting to require more of it, sooner than ever before.
- Third, tax authorities have recognized that innovation in the field of data and analytics has provided new tools to help close the tax gap, collect data and share it across borders, and improve the efficiency of the tax collection function.

With Big Data already driving major changes within the modern business enterprise and government, many indirect tax leaders and authorities are starting to turn their attention toward the practical implications that these trends may hold for today’s businesses. How, for example, can data be leveraged to improve compliance? How can analytics reduce the complexity of working across multiple jurisdictions? What does a “data-driven” indirect tax approach look like in practice?

I. An Overwhelming Burden

The tax world is far from simple. Indeed, it seems safe to say that it is one of the more heavily regulated environments. It could also be stated that the related tax legislation can be extremely complicated; it is playing catch up with new business models and the digital economy and the demand by governments to increase tax revenues without increasing tax rates.

Consider, for example, how the US Internal Revenue Code has evolved over its first 100 years. For that first federal-level tax law to pass in 1913, the United States Constitution first required an amendment to expressly permit the imposition of income taxes to support the general finances of the federal government. Together, the constitutional amendment and the text of the income tax legislation filled 27 pages; by contrast, the 2013 CCH Winter Edition of the United States Internal Revenue Code filled a vast 5,248 pages: and the CCH Standard Federal Tax Reporter tallied 73,954 loose-leaf pages in a 25-volume set of binders.

Similar examples that affect value added tax (“VAT”) and goods and services tax (“GST”) compliance are also evident around the world. In 2015, for example, the 28 Member States of the EU introduced new VAT rules for vendors (EU or non-EU) who provided telecommunications, broadcasting, and electronic services to final consumers residing in the EU.

Even though the new rules contain some “simplification” measures, they are still extremely complex: a non-EU business providing electronic services to U.K.
residents would need to read approximately 248 pages of legislation and guidance just to familiarize itself with the new provisions.6

Extrapolate that level of complexity to the other 27 EU Member States, and it is not difficult to imagine that the non-EU vendor would need to read thousands of pages of dense material to understand and evaluate the similarities and differences in the rules prescribed by other Member States. Such changes are spreading across the world; Korea is introducing new VAT rules applicable to digital services effective July 2015,7 Japan is implementing similar provisions for digital services in October 20158 and the Australian authorities announced their intention to tax imported services with effect from July 2017 in the 2015 Federal Budget released May 12, 2015.9

Given that more than 160 countries now employ some form of VAT/GST to raise revenues to help fund governmental budgetary needs, global business will find exponential complexity.10 In only two decades, the number of countries with a VAT/GST regime has tripled; and with that comes the complexity of compliance with hundreds of different tax systems.11

II. More Audits, More Often

As noted in the second article in this series, many tax authorities are already starting to think more clearly about how they might leverage data they receive to improve their ability to spot irregularities or potential underpayments. Experiences around the world show that many tax authorities are already using some form of analytics to sample taxpayer data quickly and effectively, develop risk profiles, and flag potential audit issues.12 The use of technology and data analytics is more widespread than is generally thought. A recent survey13 found that 19 of the 22 countries surveyed across the Americas, Asia Pacific, Middle East and Africa used these tools as part of their review and audit of business taxpayers.

Another trend is for tax authorities to require businesses to transfer transaction-based data as part of, or in advance of, the indirect tax reporting process. In light of this trend, it is becoming even more essential that businesses can vouch for the accuracy of the indirect tax decisions made by accounts payable and accounts receivables teams and that they get it right the first time. It goes without saying that nobody wants to be audited. Audits invariably lead to added business complexity, increased costs, increased demands on scarce resources, and potential relationship issues with tax authorities. And, not surprisingly, indirect tax managers and executives are keen to reduce the frequency and impact of tax audits on their business.

Yet as tax authorities become more sophisticated with their analytics capabilities, the reality is that—without a change in the way compliance is managed—businesses may well find that the complexity and frequency of tax audits increases. The specificity and detail of the audits themselves may, at the same time, become more intricate.

III. A Data-driven Approach

Against this backdrop, many corporate indirect tax leaders are beginning to explore ways to make better use of data to improve their indirect tax compliance. Many already collect all of the data they need to achieve significant improvements; yet few appear to understand how to translate that data into insights and ultimately convert these insights into value.

A data-driven approach to indirect tax compliance may deliver a wide range of potential tax and business benefits such as:

- **Identifying exceptions and potential challenges**: By looking across all of their indirect tax data, organizations can quickly start to identify areas, processes, or jurisdictions that create frequent compliance challenges and then work to remedy these issues at a more systemic level. Similarly, the ability to identify and manage exceptions in various markets allows businesses to help determine whether they are paying the right tax at the right time to remain compliant without overpaying.

- **Delivering a clear audit trail**: Those with a data-driven approach to indirect tax compliance should be well-equipped to find and present more quickly—with increased accuracy—data or compliance records required by tax authorities. More proactive organizations can use this capability to provide indirect tax authorities with audit files ahead of any anticipated action to reduce the potential for audits.

- **Uncovering new trends and issues**: A data-driven approach provides indirect tax leaders and executives with enhanced insight into overall trends in their compliance and—importantly—can help them identify when processes or data are at odds with the trends (such as a sudden drop in VAT payments in one market). These anomalies can again be analyzed and appropriate resolution steps taken either internally or with the appropriate tax authority.

- **Providing a unified view of compliance**: Modern visualization and analytics techniques allow organizations to achieve a “single view” of their compliance position across multiple markets and to understand where challenges and opportunities may occur. Given the rapid shifts in today’s business environment, this type of visibility and insight can lead to improved business decision-making and flexibility.

A. Putting Data First

While the tactical implementation of a data-driven approach to indirect tax compliance will vary depending on the organization, the markets in which it operates, and the business model, generally data-driven models work in the same way.

First, data is extracted from master data, finance and inventory management sources across the enterprise and—if necessary—fields are translated into a common architecture. Next, the data is validated against a series of tests which reflect the indirect tax principles and the unique circumstances of the organization. One set of such tests14 includes numerous accounts payables and accounts receivables tests that query every line of data to identify possible exceptions or errors.

The challenge then is to use that information to improve the compliance process. Clearly, not all exceptions identified will require full remediation;
organizations will need to have the right insight and capabilities to understand which exceptions need to be elevated and which simply require ongoing monitoring. The point is that the appropriate measures are taken—based on solid data—to reduce the potential for audits and improve overall compliance.

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B. Putting Misconceptions to Rest

In general, there are three main misconceptions about data-driven approaches to indirect compliance that often slow its adoption in many corporate businesses. The first is the belief that data needs to be consolidated before it can be used. Based on this misconception, many organizations have spent considerable time and resources struggling to bring all of their data into a massive data warehouse.

The reality is that today’s data management tools allow organizations to pull data from almost any source and then translate and combine it in a separate environment or platform. However, it must be noted that data veracity is key: those with unreliable master data will almost always find that their insights are equally unreliable or questionable.

Another misconception is that data-driven approaches to indirect tax compliance are expensive, complex, and disruptive to implement. Many finance and indirect tax departments are already using all their resources just to meet their business support, reporting and audit obligations; few have the time and resources to put toward identifying new problems.

Adopting a data-driven approach does not need to be complicated and it certainly does not need to be expensive. Indeed, there are a number of outsourced options that can deliver these services and analyze the resulting insights on a pay-for-use basis. For example, a platform may allow organizations to uncover insights for only a small period of time, a select market or a discrete business (the model used by KPMG member firms). Alternatively, it can be deployed full-time and worldwide to provide ongoing monitoring and analysis. In this manner, value can be achieved with reduced complexity and disruption and at a cost that meets the needs of the organization.

The third misconception is that a data-driven approach to indirect tax compliance should deliver immediate and dramatic savings, and therefore if costs or effort start to increase rather than decrease it is a sign of failure or lost investment.

But the reality is that—unlike many other “automation” initiatives—the focus of a data-driven compliance approach is to improve compliance and reduce cost in the longer term. A highly-successful approach could, therefore, increase the amount of time and effort put toward compliance in the short-term as issues are uncovered and remedied. It stands to reason that those with more fundamental compliance problems will need to do more work in order to improve their stance.

However, over the longer-term, experience suggests that savings do emerge. Improved compliance and monitoring can translate directly into fewer audits and, as a result, lower costs and reduced potential for fines or adjustments. Better data management can also lead to reduced costs when audits do occur as data is more readily available and accessible and therefore requires less manual intervention. This is why many tax authorities are incentivizing businesses to include data validation as part of their indirect tax governance, processes and controls: we use the term “incentivize” in the broadest sense as it ranges from co-funding indirect tax reviews to businesses having to vouch for their indirect tax governance in return for lower audit frequency and penalties.15

More proactive organizations can also use this data-driven approach to identify other value-generating business insights, particularly for areas such as accounts payable and accounts receivable. Targeted analysis can provide actionable insight resulting in tax recoveries, cash flow improvement and process cost reduction. Some may also use these insights to model the indirect tax cost of future growth plans, product launches or new supply chains.

C. Understanding the Cost of Data-driven Compliance

The question of whether—or how much—to outsource is always a critical decision for indirect tax leaders. Measuring the equation of value versus cost in today’s technology-driven environment is not always easy.

However, it is possible to see a number of interesting approaches emerging. At the March 2015 Summit on Business Intelligence & Analytics, Gartner analyst Neil Chandler delivered a session on measuring the business metrics of analytics efforts. Chandler recommended three calculations to help ascertain the success or failure of such data efforts, which were: (i) the total cost of ownership calculation; (ii) a cost-benefit analysis; and (iii) a return on investment computation. With respect to the total costs of ownership, Chandler observed that most businesses underestimate total costs of ownership.16

Under Chandler’s approach, both direct and indirect costs of ownership must be determined. Direct costs include data, software, hardware, and people costs; and each of those four categories contain one-time, recurring, and special costs that must be evaluated. For example, data costs must include: (i) one-time costs, such as integration and migration expenditures; (ii) recurring costs, such as archival, backup, and security costs; and (iii) special costs, such as data governance. Similar analysis of the other three categories of direct costs unveils a litany of expenses required to own and operate a technological environment. On top of direct costs, there are also indirect costs for such things as effort required to train the team on new processes, costs required to overcome resistance, and other costs.
We think Chandler’s framework—well-understood, thoroughly calculated, and vigorously applied—provides a compelling construct for the analysis of the full costs of indirect tax compliance. A number of the world’s largest organizations, particularly those operating in multiple jurisdictions and sectors, may find that it makes sense to build out their own internal capabilities further; that the reputational, compliance and financial benefits outweigh the costs.

From experience, many businesses that undertake this type of self-review are astonished to learn how much they are paying for their compliance function; and they often find that the identified benefits do not seem to justify the level of expenditure for the function. In such cases, certain companies have shown a proclivity in recent years to move quickly to outsource the function.

**IV. Driving Value from the Indirect Tax Compliance Function**

Outsourcing the indirect tax compliance function is about more than just cost-benefit ratios and returns. In today’s rapidly-evolving technology and tax environment, many are looking to combine their data-driven approach with targeted outsourcing in order to achieve wider benefits for the function and for the organization.

For many, outsourcing the indirect tax compliance function allows organizations—particularly those with leaner finance and tax functions—to access more recent technologies without having to invest new capital. Similarly, an outsourced function can often offer “leading practices” in compliance processes, and data management based on deeper experience and insight.

Many of those who have outsourced their indirect tax compliance function have found they have enjoyed wider business benefits such as increased efficiency, better decision-making, improved risk management, and a stronger focus on the core business. Larger, more complex organizations also see significant benefit from achieving tighter global control and improved visibility into their indirect tax compliance.

No matter what level of outsourcing is used, the overwhelming objective should be to “lock down” the compliance process so that internal resources can be better allocated to value-adding activities such as driving continuous improvement or uncovering insights from transactional data.

For those in the indirect tax function, this shift can have significant implications. Capabilities, skills and roles may quickly change and evolve. With this, perceptions of the function can also change, driving the function away from being a simple “cost center” and towards becoming a value-creation center.

**V. Conclusion**

As the complexity and risks of indirect tax compliance increase for organizations around the world, we believe that a data-driven approach to compliance will increasingly become key to success. Those that are able to properly evaluate their capabilities and create the right model and structure—leveraging outsourcing, shared services and internal models to drive greater efficiency and control—should find themselves well-positioned to reap the wider benefits of a more mature and focused indirect tax compliance function.

Clearly, technology will be a key consideration for organizations as they start to make this shift. In the next article in this series, Chris Downing, Partner, KPMG in the U.K. will take a deeper look at some of the big technology questions facing indirect compliance functions in the era of Big Data, and will provide some insight into future trends and emerging technologies to help support tax functions as they move towards a data-driven model.

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**NOTES**


3 Technically, direct taxes were allowed, but they were required to be apportioned among the states on the basis of the U.S. Census.

4 CCH, Fact Sheet, 100-Year Tax History: The Length and Legacy of Tax Law (2013).


6 248 pages were calculated as follows:
Council Regulation 967/2012 (amending 282/2011) 7 pages
Council Implementing Regulation 1042/2013 (amending 282/2011) 20 pages
Explanatory Notes to Council Implementing Regulation 1042/2013 92 pages
EU Commission Guide to the VAT Mini-One-Stop-Shop 31 pages
EU Commission Guidelines: Auditing under the MOSS 3 pages
Local In-Country Legislation (e.g., U.K. legislation) 61 pages
Local In-Country Guidance (e.g., U.K. HMRC’s MOSS Guidance & Q&A) 22 pages

7 See e.g., CCH, Global VAT News, South Korea Confirms Electronic Services VAT (May 21, 2015).

11 Id.
13 Survey conducted by KPMG’s Asia Pacific Indirect Tax Compliance Center of Excellence, called “Indirect Tax Regulatory Activity in New and Emerging Markets”, and presented at KPMG’s Global Indirect Tax Forum in 2014.
14 Tests carried out at KPMG’s Indirect Tax Compliance Center in Hungary: tests not only applicable to Hungary.
15 The Singapore Government provided co-funding for its GST Assisted Compliance Assurance Program and a waiver of penalties for non-fraudulent errors voluntarily disclosed. The co-funding was used up by June 30, 2014 but the waiver of penalties continues until March 31, 2019 for participants in the program. The co-funding approach was unique to Singapore but the self-review approach in return for none or lower penalties has been adopted across a number of countries.
16 Gartner Summits, Gartner Business Intelligence & Analytics Summit, March 30–April 1, 2015, Las Vegas, NV.