Welcome to our latest report on indirect taxes — Managing indirect tax data: gaining insight and control in the digital age.

In recent years, tax has made front-page news around the world, and the tax affairs of popular household brands are being scrutinized as never before. Although much of the focus up until now has been on direct taxes, companies' indirect tax affairs have also come under the spotlight.

Even though tax authorities, company shareholders and heads of tax are likely to have differing views on this matter, they are all likely to agree on one point: tax reporting requirements will only be more stringent going forward. Tax transparency — making a company's tax data visible within the organization and to external stakeholders — is on the radar of many in-house tax departments, and the topic is increasingly attracting wider attention.

Dealing with data is the key to tax transparency and to effective indirect tax management. But the variety of indirect tax data required by different jurisdictions and the sheer quantity of relevant data now generated by large organizations can present logistical issues for effectively collecting, storing and analyzing it.

In this report, we consider some of the challenges that multinational companies' tax, trade and finance departments typically face in managing indirect taxes, including large quantities of complex transactional data, and we outline some of the management approaches and technology tools that can help them achieve their goals.

I hope you enjoy reading this report and that you find the comments and insights we include useful for your business. Please feel free to share it with others in your organization. If you would like to discuss any of the themes raised and how they may apply to your operations, please contact me or one of the EY Indirect Tax professionals listed in the Contacts section.

Philip Robinson
Global Director – Indirect Tax
+ 41 58 286 3197
philip.robinson@ch.ey.com
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive summary</td>
<td>2</td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>Part I</td>
<td>8</td>
</tr>
<tr>
<td>Tax and customs administrations: using data to improve compliance and collection</td>
<td></td>
</tr>
<tr>
<td>The indirect tax landscape</td>
<td>10</td>
</tr>
<tr>
<td>Taxpayer relationships</td>
<td>16</td>
</tr>
<tr>
<td>Part II</td>
<td>26</td>
</tr>
<tr>
<td>Enterprise intelligence tools: managing indirect taxes</td>
<td></td>
</tr>
<tr>
<td>Business drivers in the tax life cycle</td>
<td>28</td>
</tr>
<tr>
<td>Managing VAT/GST data – end-to-end reporting</td>
<td>32</td>
</tr>
<tr>
<td>Invoicing and archiving in the digital age</td>
<td>38</td>
</tr>
<tr>
<td>Dashboards helping drive tax data</td>
<td>42</td>
</tr>
<tr>
<td>Diagnostic tools and data analytics</td>
<td>48</td>
</tr>
<tr>
<td>Part III</td>
<td>52</td>
</tr>
<tr>
<td>Global trade: how high performers are harnessing technology</td>
<td></td>
</tr>
<tr>
<td>Big data and global trade</td>
<td>54</td>
</tr>
<tr>
<td>Part IV</td>
<td>60</td>
</tr>
<tr>
<td>Managing indirect tax data to align operations, compliance and strategy</td>
<td></td>
</tr>
<tr>
<td>The indirect tax management framework</td>
<td>62</td>
</tr>
</tbody>
</table>

### Contacts

**To accompany this report**

*EY global survey: VAT/GST electronic filing and data extraction*

In 2013, we conducted a survey of EY Indirect Tax professionals in 86 countries about electronic filing and data requirements in their countries. You can access this report at [www.ey.com](http://www.ey.com).
Executive summary

Dealing with indirect tax data is the key to effective indirect tax management. But the variety of indirect tax data required by different jurisdictions and the sheer quantity of relevant data now generated by large organizations can present a range of logistical issues. In this report, we consider some of the challenges that multinational companies’ tax, trade and finance departments typically face in managing indirect taxes, including large quantities of complex transactional data, and we outline some of the management approaches and technology tools that can help them achieve their goals.

The drive for better indirect tax data

Having accurate global indirect tax data – and examining it critically – has never been more important. What is driving this trend? How can companies use technology to gain more visibility of their indirect tax position? How can they manage indirect taxes and associated costs more effectively? And why is this issue “front of mind” for today’s global companies?

External drivers

Governments are increasingly relying on indirect taxes – such as value-added tax (VAT), goods and services tax (GST), sales and use taxes, and customs and excise duties – to meet their budgetary needs. VAT rates have increased worldwide in recent years, and new indirect taxes are being introduced in many countries for sectors such as banking and energy. At the same time, the “fair tax” debate has put companies’ tax affairs firmly in the media spotlight, drawing intense scrutiny not only from tax administrations, but also from regulators, investors and even the public.

In response, tax and customs administrations are focusing more than ever on full compliance and using risk analytical tools to target their resources to tackle tax leakage and tax avoidance. They are requesting more information about companies’ transactions and where and with whom they do business. They are sharing more information with one another and comparing data from different businesses. They are doing more with the information they collect, using data analytic programs to detect errors, analyze transactions and carry out risk-based audits. And they are also expecting taxpayers to take full responsibility for adopting suitable systems and maintaining adequate control.
Internal drivers

Businesses around the world are under pressure to improve financial performance. And they are increasingly aware of the intense scrutiny they face from a range of internal and external stakeholders. In the process, they are asking more of their tax and finance functions, challenging them to reduce risks and meet the company's obligations more effectively, using limited resources. These functions are being asked to go beyond tax compliance – not just contributing to companies' financial performance by reducing costs, facilitating processes and improving cash flow, but also actively participating in strategic decision processes to provide financial and nonfinancial impact analyses.

At the same time, corporate models are changing. Increasingly, multinational companies are standardizing processes across entities and jurisdictions. They are rationalizing structures and consolidating technology platforms and reporting systems. Until recently, most multinational companies organized their indirect tax compliance on a country-by-country basis, with little centralized coordination or oversight. It is now common for centralized indirect tax functions to submit returns for multiple jurisdictions – for example, using shared service centers (SSCs). However, there is little harmonization in the information requested or the format for submission, which can make it difficult for centralized compliance functions to meet these demands.

Gaining visibility over the financial impact of indirect tax-related obligations, risks and opportunities is an important step to establishing an effective indirect tax strategy. It is often a precursor to building a business case for allocating resources and for making decisions about outsourcing and investments in technology.

There are additional challenges for many companies in relation to customs and trade compliance (including import duties and taxes), which is often outside the scope of the tax department, often managed by third parties (such as forwarders or brokers) and where the taxes paid or saved are rarely visible in the company's commercial records and accounts.
Executive summary

Technology enablers
As corporations centralize their tax, legal and finance functions to reduce costs and increase efficiency, they are increasingly turning to technology to help them manage and measure tax performance. In the past, gaining global visibility on indirect tax data was difficult for most global companies to achieve because of the large number of relevant transactions and processes. However, in recent years, advanced technologies, such as the internet and mobile phone applications, have changed the indirect tax landscape. Increasingly, indirect tax obligations are completed, filed and managed using technology tools; they increase accuracy, reduce processing times and costs, and raise visibility over the underlying transactions.

Improvements in managing data can be achieved quickly through simple enterprise intelligence (EI) tools. Mobile EI applications for smartphones and tablet devices are now readily available in large numbers. For example, data warehouse source feeds can be used for a real-time refresh of the information when the warehouse is updated.

High-performing global traders focus on data
Customs and trade compliance and costs are often outside the scope of the traditional tax and finance function. However, trade compliance is critical to companies whose business is dependent on the international flow of materials and goods. The “trade function” within such companies, wherever it sits, is responsible for maintaining key trade master data (tariff classification, country of origin, etc.); for managing any third parties, such as customs brokers, that make customs declarations for the company; and for ensuring that all exports and imports are correctly declared to the customs authorities.

Trade data accuracy and improved trade processes further operational agility, which is a key characteristic of high-performing companies. It does so by improving supply chain speed and reliability and by enabling accelerated response times, allowing companies to adapt flexibly to fast changing circumstances.

The trade functions of high-performing companies rightly see their role as business critical, adding significant value through improved efficiency and operating cost reduction. These leading-edge companies are actively looking for new ways to use big data to improve international trade processes, uncover cost reduction opportunities and manage relationships. They rely on strong global or regional trade compliance controls and also involve IT resources as a part of the core trade team or effectively collaborate with IT departments, for example, to strengthen master data management, improve customs process efficiencies and derive increased customs duty savings through more effective use of trade agreement and customs regimes and concessions.

Through timely collection and meaningful analysis, data can be used to quickly move away from traditional reactive support roles to more proactive and strategic players within the organization that can improve trade processes and metrics, manage trade barriers, and reduce transactional costs. Flexibility and speed of response are clearly impacted in a positive manner, and significant opportunities arise for customs duty savings. This is particularly the case with data-intensive exercises such as free trade agreement optimization.
Data is essential for an effective management framework

Multinational companies are increasingly adopting a robust indirect tax management framework that rests on three aspects of indirect taxes: operational, compliance and strategic. However, it is still common for each of these aspects to be isolated and managed in a vacuum.

The challenge of big data is also its opportunity. Harnessing the power of the information they hold, companies can dig deeper into their indirect tax profile and uncover hidden costs, risks and opportunities. Through effective harvesting and analysis of indirect tax data, however, management can bridge the gap between operations, compliance and strategy by gaining visibility, control and insight.

Managing indirect tax data is — and will continue to be — the key to aligning indirect taxes to the strategic goals of the business.

“Nice to have” today but “must-have” tomorrow?

As tax and customs administrations around the world develop their data analytic capabilities, it is crucial for taxpayers to do the same. Although many have started to invest in better indirect tax systems and standardized, automated processes, many more must still make progress in this area. And corporate management must begin to take indirect tax data needs seriously. Unless taxpayers use the same types of tools as tax auditors, they are at a disadvantage in the tax audit process and they are vulnerable to the consequences of unknown risks. But, currently, this seems to be an area where corporations are lagging behind governments.

The “wish list” for indirect tax technology — even in large companies — still often includes having more visibility, stability and certainty around basic data and processes. Several of the tax executives we interviewed for this report also mentioned wanting to have access to the same type of data analysis software used by tax auditors to identify errors and opportunities. Currently, this type of software remains on the wish list of many tax and trade departments. But as tax authorities continue increase their use of data analytic tools, what is a “nice to have” today is likely to become a “must-have” tomorrow!
Introduction
What is big data?

In just the last few years, the term “big data” has become a hot topic in companies and tax administrations around the world. Big data is the enormous amount of electronic information being produced every minute through a variety of channels. Sources include bank transactions, financial and market reports, orders and invoicing, surveys, customer data, online activities, and even weather or traffic reports. According to some estimates, the amount of data that now floods the Internet every second is equivalent to the data stored on the entire Internet 20 years ago.

Three important attributes define big data:

- **Volume**: It consists of very large data sets.
- **Velocity**: It is being produced at a tremendous speed by the growing digitization of society.
- **Variety**: It contains data from many possible sources, including structured and unstructured.

The sheer volume, variety and velocity at which data becomes available present technological challenges in securing, storing and tracking it. But companies that can do so effectively and efficiently stand to uncover valuable relationships between seemingly unrelated large and complex data sources.

Enterprise intelligence: making sense of business data

Enterprise intelligence is how companies manage and exploit big data. Using information helps businesses sharpen their performance, differentiate their offerings, identify new revenue and innovation opportunities, minimize their exposure to risk, improve organizational efficiency, and facilitate the uncertainty of a volatile global economy.

Properly utilizing the information they store and matching it from different sources is fast becoming a competitive differentiator for forward-leaning companies. A car manufacturer, for example, might develop an on-site customer buying experience at its dealerships that resembles the online shopping experience. Through intelligent integration and exploitation of available customer and market information, the manufacturer can provide a personalized customer experience that helps not only clinch the sale but can also lead to higher levels of brand loyalty and predictability of customer buying behavior.

Tax reporting begins and ends with data

Advances in technology and globalization are changing the way we do business in every sector and in every part of the world. As global trade proliferates, so does the data collected and reported by taxpayers and tax administrations. Data is the starting point and the end deliverable of every tax task. If companies do not seize the challenge to manage their tax data effectively, tax and customs administrations will! Tax administrations are becoming smarter, faster and more efficient at using data analytic tools to obtain, analyze and assess underpaid tax and duty amounts. In-depth reviews that once took from three months to two years to complete can now be done on a data-driven basis in a matter of weeks.

Until recently, too few companies have been able to meet the “big data” challenge in their own tax data management and response times. Even now, too many taxpayers are still very reactive, and this data is analyzed and consolidated predominantly as and when the tax administration performs a tax audit. But the trend is changing.

Increasingly, tax management is driven by key performance indicators linked to the company’s overall strategy. Tax and trade functions need to protect companies from risk, but they are also being asked to contribute to profitable performance. As companies begin to outsource tax compliance and run their own data warehousing and dashboarding solutions, their analysis of tax and trade data is becoming much more proactive. And as companies use data analysis tools more effectively, and their understanding improves, processes become more streamlined, response times fall, opportunities increase and the number of unpleasant tax surprises drops considerably!
Part I

Tax and customs administrations: using data to improve compliance and collection
Tax and customs authorities in all parts of the world are using technology and data analysis tools to help them collect and protect tax revenues. By gathering more information and using it more effectively, they are better able to target risky taxpayers and transactions. Data extraction is also helping them perform “smarter” tax audits to identify underpayments and systemic weaknesses. They are also looking to encourage taxpayers to take compliance seriously – not only by increasing audit activity and the penalties for noncompliance but also by rewarding taxpayers who can demonstrate their systems are compliant.
The indirect tax landscape

The rise of indirect taxes

Indirect taxes have become increasingly important as a source of government revenues in many countries since the start of the world economic downturn in 2009. In particular, VAT/GST rates have risen in many parts of the world. The upward rate trend has been particularly strong in the EU, where between 2008 and 2013 the average EU standard rate increased from around 19.5% to more than 21%. Increases have also been seen in other developed markets, including Switzerland and Japan. At the same time, indirect taxes continue to play a strong role in rapid-growth markets, with new VAT/GSTs piloted or announced in China, India and Malaysia.

Excise duty rates have also steadily increased on alcohol, fuel and tobacco in many countries, and new indirect taxes have been introduced, aimed at influencing consumer behavior and improving the environment — for example, taxes applied to sugary snacks, fatty foods, waste materials and carbon emissions.

Although the efforts of organizations such as the World Trade Organization (WTO) and a growing network of free trade agreements have led to a reduction in customs duty rates, customs duties still pay a very significant role in meeting countries’ budgetary needs and in protecting local industry. In many emerging economies, such as China, India and Russia, duties contribute a higher percentage of overall tax revenues than in many developed markets.

Focusing on enforcement and taxpayer compliance

The increased reliance on indirect taxes as a source of government revenues is also focusing more attention on the need for tax administrations to close the “VAT/GST gap” by combating fraud and encouraging full compliance. The “VAT/GST gap” is the difference between the total VAT/GST revenue that a government could collect in theory and the amount of revenue actually collected.

The potential size of the “VAT/GST” and the importance of collecting the full amount of revenue due can be illustrated by the UK. In December 2013, the country’s tax administration (HMRC) estimated the “VAT gap” for FY 2012–13 to be almost £13 billion, or 11.4% of the total VAT due. In the same month, the UK Chancellor of the Exchequer, George Osborne, announced that HMRC would be exempted from the proposed government spending cuts, and he set out a package of measures to tackle tax avoidance, tax evasion, fraud and error, which he claimed would raise more than £9 billion over the succeeding five years.

Taking a different approach, the Zimbabwe Revenue Authority (ZIMRA) has hosted Taxpayer Appreciation Days since 2011 to honor taxpayers who “consistently meet their tax obligations on time and with minimum intervention from the Revenue Authority.” The authority has stated that the purpose of the days is “to recognize the quintessential role that tax revenue plays in Zimbabwe's economy.”

Collecting more taxpayer data

Tax and customs authorities are collecting more data than ever before from VAT/GST payers and importers about their transactions. Increasingly, they expect taxpayers to gather detailed information about customers and suppliers over and above the data they would collect for commercial purposes. In some cases, this information may be collected by the administration during an audit; but, increasingly, taxpayers are expected to report it automatically.

In late 2013, to accompany this report, we conducted a survey of EY professionals in 86 jurisdictions about the types of VAT/GST information requested by tax administrations and how the information must be supplied. Our survey indicates that:

- Roughly half the countries surveyed (44 out of 86) require VAT/GST payers to submit additional reports to the tax administration other than periodic filings (e.g., lists of customers and suppliers).
- In 23 countries VAT/GST payers must provide information about their individual transactions to the tax administration.
- In 16 countries VAT/GST payers must submit individual tax invoices to the tax administration.

“The culture within the firm is of very tight control over operating errors. In Tax we have to identify what our key risks are and try to determine what kind of financial liabilities might arise as part of the firm’s overall approach to risk. Our goal is to ensure we don’t breach the policies that we’ve agreed with our Risk and Quantitative Analysis team in relation to tax filings. That drives a lot of care and attention.”

The EMEA Tax Managing Director of a global asset management company

---

Collecting data more efficiently

Increasingly, tax administrations are collecting indirect tax data and information about transactions electronically, allowing them to collect and analyze it more quickly and more effectively. Our survey indicates:

- VAT/GST payers can currently submit their periodic VAT/GST returns electronically (through e-filing) in 66 countries of the 86 surveyed.
- VAT/GST payers can pay VAT/GST balances electronically in 75.

E-filing of returns and electronic payments can help to improve efficiency and reduce processing time and costs for tax administrations and VAT/GST payers alike; therefore, it seems likely that more countries will adopt these measures in the future. However, in some emerging markets, although electronic payment and submission is obligatory, taxpayers may experience practical difficulties in complying with these demands in areas where power outages are common. Also, the ease of electronic data submission may encourage tax administrations to reduce the submission period for periodic VAT returns or to request more transactional information. Either of these measures could increase the compliance burden for VAT/GST payers.

Doing more with taxpayer data

In addition to collecting more information, indirect tax authorities are doing more with the information they collect.

Exchanging information

Tax and customs administrations are exchanging more information with other government departments and across borders to carry out joint risk assessments and compare taxpayers’ declarations. This is leading them to challenge more transactions, deductions and even business models.

In Peru,4 for example, the customs authorities have recently paid more attention to companies’ transfer pricing reports and have used this information to challenge duty valuations for related-party imports. When a transfer pricing report concludes that the local margin on the distribution of goods is above the comparable range, the authorities have interpreted this finding as a “red flag” that the declared customs value could be lower than it should have been, since the company made more profit on local sales than others in the same industry. The burden of proof is on the importer, so it must provide extensive documentation and analysis if it is to support the values used.

Data analysis and risk-based tax audits

Tax administrations are increasing their use of software tools to detect indirect tax errors and weaknesses in taxpayers’ ERP systems and control. Our survey5 of 86 countries conducted to accompany this report indicates that data analysis in some form is widespread, with 69 countries reporting that the tax administration uses data extracted electronically from taxpayers’ systems to carry out VAT/GST audits. This trend also seems likely to increase with the growing availability of data analytic software and the focus on VAT/GST compliance by tax administrations.

---


5 Global survey: VAT and GST electronic filing and data extraction, EYGM Limited, 2014 (available at www.ey.com/indirecttaxdata)
“In Europe the tax authorities are increasing the VAT reporting requirements. At the European Union level they say they are trying to make things simpler for business. We hear all the discussion about the single EU VAT form, for example. The aim of that is to simplify VAT reporting for business, but then we have more and more of these detailed data requests from individual EU countries. So it’s a bit of a contradiction!”

_The European Head of Indirect Tax in a global IT company_
The compliance balancing act

A tax leader in a global manufacturing company talks about indirect tax compliance and the company’s relationship with tax authorities around the world:

Tax audits are always tricky. Even if you think you’ve stayed on top of law changes and business changes and you have a company culture of compliance and doing the right thing, there’s always something you may have overlooked. There may be a change in the business that the team didn’t pick up on, or a rapidly enacted law change, which wasn’t reflected timely enough in your compliance processes. The consequence is something which isn’t 100% compliant, and with the intensity of tax audits nowadays whatever is out there is bound to surface! It’s hard to prove good intention, and 99% compliance is frowned upon.

In response, we’ve tightened up our systems’ infrastructure and compliance processes, and we constantly review and improve them. Manual “workarounds” or using spreadsheets just don’t cut it any longer. You need to improve the quality of your filings, and you have to have a more efficient filing process as well to deal with the increasing volume of compliance – so that means more automation, better capture of data and more resilient processes. It’s a tough balance to manage “doing the compliance” and “improving the compliance” at the same time, and it needs constant attention as we strive for full compliance.

But not all contacts with tax authorities are confrontational. There are regimes around the world that offer “carrots” such as light-touch audit treatment – for example, where a company invests time in regular face-to-face meetings and develops a more transparent relationship with the tax authorities. In theory that’s great and a better way of working! But it’s not always practical to invest the time and resources to do that in every country, so we have to prioritize the most important countries for our business. That doesn’t mean we are less compliant or desire to be opaque in the other countries, it’s just that there are only so many carrots one can eat with the team at one’s disposal!
Acquisitions pose challenges for VAT accounting

XY Group was formed about 10 years ago as a result of a merger between two global companies. Since the merger, the group has continued to grow rapidly through a series of acquisitions. The group’s Head of Tax and Head of Indirect Tax talk about how they meet some of the VAT reporting risks that frequent acquisitions can pose:

We have acquired one, two or even three big companies a year in the last couple of years, and that can cause issues for our ERP system and for VAT accounting. We try to get each company on the same platform, but the speed of acquisitions means there is often a backlog in getting the systems up to speed in the new businesses.

Even prior to getting onto the same ERP platform we are looking where the risks could be. We want to quantify where the risk is from the past from a tax perspective, from an audit perspective, from a VAT perspective, see what the possible risks are in the product flows and the invoice flows. Do the goods and invoices flow correctly? What were the systems and processes like?

We use a two-pronged approach. In the first phase we get directly involved with the people involved in the acquisition. One of the business drivers for an acquisition is often to support productivity by creating synergies. So one of the people directly involved in the deal is our “transportation guru” who informs us about product flows, the transport companies that will be used and so on – that gives us a great view on what the transactions will be with counterparties. Once we have a very good view of the actual flows you can do your due diligence. You can start comparing what the potential issues may be from a VAT perspective and for tax reporting.

We look at the tax reporting for the new company – whether it’s a good structure, whether the system is meeting its obligations and so on. And of course when you look at a new company, there may be things you don’t like but there may be things you can learn from. From the number of acquisitions we’ve done, we’ve had the opportunity of seeing how lots of different businesses are set up and approach these issues. That’s given us quite a good overview, and it has helped us to develop our approach.
Expecting taxpayers to use technology

Tax and customs administrations are not only using more technology to collect and analyze data. Increasingly, they are expecting taxpayers and importers to do the same. Electronic data submission is one concrete example of this trend. In Luxembourg, the VAT authorities now expect businesses that make VAT-exempt supplies to use analytical accounting to identify how much input VAT they can recover on costs (based, for example, on floor space or headcount) rather than relying on a simple calculation based on taxable and exempt turnover.

Will VAT/GST payers and importers/exporters increasingly be expected to use technology to help them achieve full compliance? In the Netherlands and the UK, the tax administrations have long set out their expectations that corporate management should take VAT compliance seriously. Will they assume that companies should analyze their indirect tax transactions more effectively if they can — and that failing to do so is “reckless” and should be a red flag for risk? This attitude may not yet seem widespread among tax administrations around the world, but it is likely to increase. In Australia, for example, the tax administration has already sent a clear message that it expects large companies to manage GST effectively and that it expects them to use technology to manage processes and identify issues.

Taxpayers respond to the challenge

As we have seen, tax and customs administrations around the world are moving swiftly into the digital age. In particular, they are using data analytic tools to extract and examine large amounts of taxpayer information. They are using these tools not only to audit individual companies but also to create industry sector benchmarks that can help pinpoint anomalies and trends. And, as with many digital trends, these techniques are spreading fast!

How should taxpayers respond? We interviewed a number of tax executives in global companies for this report about how they use indirect tax technology and what they would ideally like to have. They all expressed the view that, as tax administrations are developing capabilities in this area, it is crucial for taxpayers to do the same. They felt that without having adequate indirect tax technology, they are at a disadvantage; they feel vulnerable to the consequences of unknown risks and they are concerned that they are not using their resources as effectively as they could be. But, currently, this seems to be an area where corporations are lagging behind governments.

Although many companies have started to invest in better indirect tax systems and standardized, automated processes, many more are still relying on manual “workarounds” and spreadsheets to complete their declarations. Yet tax and trade functions often struggle to make the business case for investment in indirect tax technology, as it is often seen simply as an overhead cost rather than as a vital contributor to reducing risk and improving operational efficiency.

The indirect tax technology “wish list” even in large companies still often includes having more visibility, stability and certainty around basic indirect tax data and processes. Several of the tax executives we interviewed for this report also mentioned wanting to have access to the same type of data analysis software used by tax auditors to identify errors and opportunities. Currently, this type of software remains on the wish list of many tax and trade departments. But can this situation continue? As tax authorities increase their use of advanced software tools and the intensity of their data-led audits, companies will need to respond. In-house audits and health checks are already becoming more common and many indirect tax functions are now looking to introduce ongoing monitoring as part of routine processes. So, what is a “nice to have” today, is likely to become a “must have” tomorrow!

“The tax authorities often assume that if you’re an IT company, your IT systems must be flexible – that with one push of the button, you have everything to go. And that’s definitely not the case. A rate change can shut down billing for days if we don’t have enough notice.”

_The Head of Indirect Tax for Europe in a global company_
Sergio Fontenelle

What is the function of the body you are responsible for, and how is it organized and structured to run its activities?

Pedro Meneguetti

I have been a tax auditor at the State Revenue Services for 28 years now, currently as an Assistant Secretary for the Minas Gerais State Finance Office.

The Minas Gerais State Finance Office contains the highest hierarchical level, which is the staff of the Finance Officer. This structure is subdivided in two sub-offices: the State Revenue Services, which is focused on tax management, and the State Treasury, which is engaged into the financial management and public spending.

The Assistant Secretary’s role also involves acting as the immediate Deputy Finance Officer, which includes participating in the management of the State revenues and expenditure. I support the State Finance Officer to effectively control public spending to meet government policies, and I analyze and monitor credit operations.

On the tax administration side, the State Finance Officer appointed me as a leader of the decision-making process in the tax policy realm, supporting and proposing measures to the Government of the State of Minas Gerais to formulate tax and fiscal policies across the state and across Brazil.

Sergio Fontenelle

Do you agree that there is a trend for tax authorities to share more information with other authorities, including different levels of the Government? If so, could you please give us examples?

Pedro Meneguetti

I fully agree! That trend is a real fact nowadays. As far as tax authorities are concerned, I believe that sharing information should no longer be seen as a legal power, but as an obligation.

At present, the State Finance Office is party to agreements to share information with a number of bodies, at various government levels. Countless joint associations and agreements have been entered into, such as the agreement with the Brazilian IRS (tax administration) involving the exchange of information and provision of the database of taxpayers’ income tax returns; with the National Department of Mineral Production (DNPM) to exchange information and data on exploitation and treatment of Brazil’s mineral production; and with municipalities of the State of Minas Gerais to cross-check local property tax (IPTU) data and the municipal systems for real estate valuation, in order to enhance the state estate and gift tax (ITCD) levy.

Also, with under specific legislation, information is provided by debit and credit card companies, which through data cross-checking has helped us to determine the value of transactions undertaken by state VAT (ICMS) taxpayers. We also share information and experience with regulators, namely the Brazilian Drug Administration office (ANVISA), and the National Oil Agency (ANP), among others. They all contribute to sweeping efforts to control and inspect significant economic segments, and they have high social appeal. But I would like to add that all these agreements and obligations meet the legal provisions and precepts of tax confidentiality.
Sergio Fontenelle
What is the goal set by the Government to collect indirect taxes? What are the main barriers to meeting these goals?

Pedro Meneguetti
First of all, with regard to indirect taxes levied on goods and services, I should point out that in Brazil they are collected at three government levels, i.e. federal, state and local. Therefore, my comments always focus on ICMS, which is a state tax levied on goods in general and communication and transportation services.

The State Government’s annual budget should be based on its own revenues and transfers from the Federal Government. Although the states more often than not disagree with the amounts passed on by the Federal Government, they have not been able to intervene.

In the light of these budgetary needs, the State Finance Office has been focusing its actions on a consistent management model. We have designed an annual plan that sets stretching goals aimed mainly at intensifying our tax control and eventually we aim to recover and expand tax and non-tax revenues, besides having goals to increase the Government’s investment capacity. These goals are based on an overall economic analysis, historical data from recent years, discussions and trends toward political and tax reform, besides a number of other factors.

The main barriers to putting the planning into practice come from national and international economic changes. An example was the global crisis in 2008 which deeply affected revenues in the State of Minas Gerais. Another example is when the Federal Government established the tax relief on industrialized products tax (IPI) and income tax (IR) for major appliances and for the automotive industry. That deeply eroded the revenues of states and municipalities in Brazil, and it was reflected in the amounts passed on to us, besides reducing the taxation base for ICMS. Also the tax framework that we operate in, consisting of legislation for 26 Brazilian states plus the Federal District, broadens the tangled web of tax laws, not to mention the possible benefits that may be granted by the states as a result of the so-called “tax war.” These factors are all barriers to meeting our revenue goals!

Sergio Fontenelle
How often are indirect taxes audited?

Pedro Meneguetti
The population of ICMS taxpayers in the State of Minas Gerais is very large, with nearly 700,000 active taxpayers on the roll. Economic segments, groups of taxpayers and specific taxpayers are selected to build up the portfolios of taxpayers to be audited based on certain indicators and our departmental plans.

Planning also includes identifying the best way to approach audits and the frequency of audits, since in some segments the tax work involves large data amounts and cross-checking information using the various tools and audit techniques currently at the auditor’s disposal.

I should also say that the complexity of some industry segments and the significance of their revenue results require ongoing monitoring.

Sergio Fontenelle
How does the Government select taxpayers for audit (e.g., through a continuous program, through risk assessments, through information from other bodies, based on information obtained by other companies, etc.)?

Pedro Meneguetti
Taxpayers are selected through a series of techniques and the intensive use of economic and fiscal information. We have analytical intelligence tools which allow us to segment taxpayers according to their characteristics and their structure and according to the level of tax issue requiring corrective action. The sources of information are multiple, and they are not restricted to the data supplied by the taxpayers themselves, but they also extend to information shared by other external bodies, e.g., the Brazilian IRS, city halls, the commercial registry and so on.
Sergio Fontenelle
Does a specific department deal with large indirect taxpayers?

Pedro Meneguetti
There is no specific large taxpayer department at the Minas Gerais State Finance Office, but there are teams specializing in large taxpayers in all the regional units. Taxpayers are structured into economic segments, and on the basis of economic and fiscal indicators and other external data taxpayers are selected and classified in view of different types of approach to fiscal control. Large taxpayers are monitored on an ongoing basis, besides being often subjected to in-depth audits whenever an indication of a deviation is detected.

Sergio Fontenelle
Do auditors use any tools to look into data which identifies errors/risks in indirect tax returns?

Pedro Meneguetti
Yes, in recent years the Minas Gerais State Finance Office has made great strides in the organization, treatment and use of fiscal information. One of the initiatives consisted of organizing a large, single database to extract information from the various electronic sources – e-invoice (NF-e), e-waybill (CT-e), digital tax bookkeeping (EFD), etc. – to allow us to expand and streamline the flow of fiscal cross-checks. Also, in a project internally named i-Fisco, the State Finance Office has recently deployed an analytical intelligence tool that leverages the use of information for decision making.

Sergio Fontenelle
Could you explain how indirect taxpayers electronically report the details of their transactions? And why taxpayers are required to perform this procedure?

Pedro Meneguetti
The same law which establishes the obligation to pay the tax also sets out supplementary obligations aimed at determining that the payment is correct. Therefore, taxpayers are required to provide information about their activities by law. When an NF-e or CT-e is issued, the taxpayer already starts providing this information, which is promptly put into the tax authorities' databases. The taxpayer issues the document, sends it to the database of the tax authorities, and it is then given an e-proof of authorization. Once this authorization is given, the document is valid until a given date. In addition to the NF-e and the CT-e, the taxpayer files some other statements, such as the ICMS calculation statement, which reports the whole tax calculation for the month, and the digital tax bookkeeping, which has superseded the former tax registers for incoming goods, outgoing goods, calculation, etc.

Sergio Fontenelle
Do the auditors use data analysis tools to identify errors/risks or to support tax audits? How does the government intend to maximize the use of the technology to make audit even more efficient?

Pedro Meneguetti
The Minas Gerais State Finance Office is in a transition period regarding our “fiscal control” model (that is, our management model and related inspection methodologies). This applies also in connection with the adoption of new technologies and the new scope of the information in electronic format.

In 2004, we kicked off the project for modernizing the State Revenue Service, including a specific initiative seeking fiscal control. Accordingly, robust investments were made in our technology infrastructure (hardware, software and network connection resources), management structure, work and development methods, and technical training. Two of these initiatives were based on having electronic economic and fiscal information. The investments allowed us to deploy a new layout in fiscal control management at the state level, incorporating a specialized fiscal intelligence unit, a digital audit laboratory and regional digital audit cells. At the same time, we revised and updated our road maps and fiscal audit techniques, consolidating the contents into a Tax Audit Manual (MAF).
One of our most significant recent investments involves building an extensive electronic database of taxpayer information (statements, payments, e-invoices, credit card transactions, among other things) integrated into GIFT (the economic, fiscal and tax information management system). Another has been the consolidation of the i-Fisco project, which has advanced tools and uses high-end techniques related to analytical intelligence and to find and produce strategic information.

This transition process is bringing a new era for the tax auditor, where his or her raw material — that is, economic and fiscal information — is solely in electronic format. This is why we are revising our paradigms and discussing, planning and structuring a new fiscal control model, a model based solely on the digital tax audit. The complexity of this new scenario, whether in connection with the volume or the variety of information and formats, requires a new methodological approach. It is clear to us that the results achieved by our auditors up until now can no longer be built on our current work methods. An extensive set of new components will redesign the “new digital audit” to allow the auditor to ask: What? Why? Where? When? Who? We are building a new work standard, based on the integration and intensive use of the new technologies to respond to these challenges.

**Sergio Fontenelle**

Does the Government expect taxpayers to use technology to control their compliance with their indirect tax obligations (e.g., determination of rates and statistics)? Do e-taxpayers expect more accurate and assertive audits, since more tools are available?

**Pedro Meneguetti**

The deployment of digital tax documents and the use of analytical platforms represent an important change in paradigm for the tax authorities to act and in the relationship with the taxpayer. Data obtained and processed from these documents will provide the tax authorities with a level of direct and detailed knowledge of the economic and fiscal reality for each economic sector, collection regime and region that we have not seen up until now.

This scenario suggests there will be more stringent audit controls, but actually it really just supplements the guidelines that the tax authorities of the State of Minas Gerais have been pursuing for nearly two decades — that is, to promote taxation focused on the characteristics of the taxpayers’ economic activities. The tax authorities are basically interested in a taxpayer being able to keep an appropriate and equal tax payment capacity in relation to its economic capacity. Increased collection depends on the economic growth of the state and therefore the increase in each taxpayer’s business.

To date, this guideline has been adopted through sectoral monitoring of taxpayers and various studies. Digital information and the new potential for design provide the tax authorities with insight into the dynamics of each business and allow us to run structured analyzes on the economic reality of each sector. Therefore, taxpayers may expect the tax authorities to enhance our actions to support the growth of economic activity, which allows the authority to become an important partner in expanding business as it is aware of turnover, commercial flows, and purchase and sale profiles of each sector. Accordingly, in relationship to the entities representing the business community, the tax authorities of the State of Minas Gerais will play an important role not only in increasing development, but also in securing equitable taxation in a truly competitive business environment.

**Sergio Fontenelle**

Does the Government believe that taxpayers who meet their tax obligations should be rewarded in some way?

**Pedro Meneguetti**

The protection of public revenues is an initiative which should bring together government and society. Raising awareness of the social and economic functions of tax should be shared among all citizens, which actually brings business owners and administrators into the loop together. Fair collection and the social application of public funds are the best reward that taxpayers and society should seek.
Sergio Fontenelle
Among the Government metrics, is there a correlation between the corporate governance level and sustainability actions undertaken by companies and the quantitative aspect (calculation base and rate) of indirect taxes?

Pedro Meneguetti
The State of Minas Gerais understands that companies are our partners and customers – as the driving force of the state activity is through tax collection. For this partnership to come into being, the State studies and works in association with economic segments to set rules on the actual payment of taxes due. As an example, we may cite the various margins of added value set for economic sectors taxed at the beginning of the production chain, agreed with the representatives of each economic sector.

Sergio Fontenelle
What measures does the Government adopt (or intend to adopt) to efficiently identify and charge indirect taxes on activity carried on in cyberspace?

Pedro Meneguetti
Currently, the state VAT (ICMS) related to electronic commerce is fully due to the state of origin whenever the counterparty to the transaction is an end consumer (as set out in paragraph 2, article 155 of the Federal Constitution). Taxation is distributed among the respective states only when the counterparty is an ICMS taxpayer. Brazil’s Senate is presently evaluating Proposed Constitutional Amendment No. 197/2012, which establishes tax sharing in all cases. While this measure is pending approval, the State of Minas Gerais has been making efforts to attract e-commerce companies into the state.

Another point to be considered is taxing international sales in cyberspace, such as software sold on the internet. In this case taxation will depend on a complex study of the case, since this problem affects other countries. Solutions implemented in the countries where the VAT is centralized at federal level might be used in Brazil, preserving our tax individuality vis-à-vis the tangled web we have of 27 ICMS legislations conflicting with thousands of service tax (ISS) legislations.

Sergio Fontenelle
Thank you so much for sharing your insights with us. Do you have anything you’d like to add?

Pedro Meneguetti
Yes, thank you! Finally, I would like to say I understand that voluntary compliance with tax obligations and the perception of risks by taxpayers is associated with the baseline mission of the tax administration. Taxpayers should have a perception of the risk involved in decision-making to comply with tax standards in view of the enhanced IT control through mandatory filing of statements and electronic documents. Concurrent with this point is the receipt of information shared with various government bodies, obligatory information from credit card companies and the bank system organized into a single database which allows cross-checks of information and analyzes of deviations found.
Insight

Improving indirect tax systems

A tax leader in a global manufacturing company talks about ongoing efforts to use technology to improve the organization’s indirect tax performance:

I’m a senior tax leader with some responsibility for tax systems and processes. I’m not a “techie person,” but I have a career behind me in respecting compliance, and I recognize the ever-increasing need for technology in managing a company’s tax obligations. A growing part of my role is to develop a tax systems strategy and bring tax, systems and IT people together to ensure we are tax compliant now and into the future.

The realization

We have a core ERP platform for our financials, but we’ve noticed over the years it doesn’t meet all of our tax reporting needs – and no matter how hard our IT team works we never have enough budget or resources as a company to maintain our ERP or adapt it to keep us compliant. It never quite meets the needs of our business and the laws we need to observe in running that business, so we resort to spreadsheets and manual calculations to finish the job.

We’re serious about compliance, and we look very closely at what our requirements are for our tax filings, both for direct and for indirect tax. We look at the information that’s coming out of our systems, and we try to identify areas to improve data capture at source using that ERP platform. There are a range of larger projects which we’re looking at, core pieces of our ERP system infrastructure to build out to a standardized global platform, and we try to make sure that we’ve got the tax functionality included. We also have some smaller projects looking at country-specific changes in response to local legislation.

Increasingly, it seems that there’s no way to avoid specialist tax software to complement the core ERP, a core platform for accounting and a complementary add-on to meet the complexity of tax needs plus provide agility to deal with a rapidly changing tax environment.

Our compliance journey

Our first need was to improve our control of our compliance. We’re a big company with lots of filings and a dispersed team. It was hard to know where we were with our compliance at any point in time. So the starting point was to implement a workflow/calendar tool, which allowed us to see whether we were making filings and payments on time and so on. It gives us visibility right down to the level of individual team members carrying out specific compliance tasks. As a result, we saw that in some cases we were struggling to meet our deadlines or we were filing late or at the last minute. And that was an indication that there was an underlying problem there. With improved visibility we were more in control.

Improving the quality

Then we started to look at country-specific requirements. We realized that we had some challenges in the way that we were doing some of our tax determination. Our ERP system wasn’t quite meeting our requirements and wasn’t flexible enough. So we looked at various outsource software providers, and we decided to bolt a tax engine onto our core ERP system. That has really improved our tax determination, but we still have gaps that we need to fill with an offline calculation, which means there’s further opportunity to automate.
Working across the organization and keeping an eye on the bigger picture

One of the changes I've seen in recent years is around the profile of the in-house team. Going back a number of years, we didn't have many people who were exclusively focusing on indirect tax systems. Where we did have those people, they were buried in pockets in the organization and there was no cohesion to their efforts. What we've tried to do is bring them together as one team. And with that, we've done a lot of cross-training and development, but we've also tried to put in place a strategy for the way that we're approaching software and tax systems.

Together with our finance and other functional colleagues we're looking at our end state, and we are trying to assess the gaps in the organization and in our systems and processes. And then, as we seek to address and fill one of the gaps, we do that taking into account the broader software footprint. What we were doing a couple of years ago was trying to address a problem without seeing how it would impact on other areas. That often creates problems and costs more over the longer term and is really a sticking plaster approach.

Future plans

I'd like us to make more use of our bolt on tax determination software. Currently, it is only active where we face our external customers; we have to get that right, as no business will be successful if it creates issues for its customers. As for the rest, well, we need to get that right too, but the same level of investment isn't there, and we rely on people, process and spreadsheets without much automation. I'd like to see deeper automation and tax determination software brought to bear right across all of our intercompany charges, including supply chain and intercompany recharges. On our purchase side, we do use our ERP system to do indirect tax validation, but there's further opportunity. The technology is there, but it takes time and resources to implement it correctly.

Making the business case

In making the case for tax systems projects, we look to benchmark with other companies and understand their experiences, both before they addressed their problems — the bad experiences — but also with how things are working after a software implementation. Bad-news tax stories in the press also help make a case — unfortunately, sometimes they are too close to home! I think the challenge is to reframe the discussion so that investing in tax systems is not just about the cost. As we invest in trading in a country, part of the ticket to entry has to be investing in the systems and processes to ensure compliance. If we want to trade and there's good business opportunity, then we need to invest in the infrastructure we need to be respectful of the law and be compliant. That needs to be a fundamental part of the business plan! At the same time governments need to be mindful of the cost of compliance — what I mean is, not make it too costly to do business.
Part II

Enterprise intelligence tools: managing indirect taxes
In today’s business environment, companies are finding ways to gain value from information in a smart and intelligent way by analyzing data to produce actionable information.

In this section of the report, we look at some of the wide range of enterprise intelligence applications that can be used to manage indirect tax data. They include dash-boarding and workflow tools, heat maps, exception reports, and in-depth diagnostic programs. In effect, these tools present the “solution” to the “problems” of big data. A large number of tools are available, ranging greatly in complexity and cost, and they may employ standardized or customized software, and may use in-house technology or draw on third party resources. They also range from single-user desktop applications to platforms that draw on information from multiple ERP systems, entities and geographies.

How can businesses identify which diagnostic tools are available, and what they should use to help them analyze the information they collect and bring its value to bear on business decisions?
The indirect tax life cycle

Indirect tax, trade and finance functions are tasked with managing indirect taxes across the whole business. These demands can create risks and opportunities in each phase of the indirect tax life cycle: compliance, accounting, planning and controversy. Advances in technology can help companies manage indirect taxes more effectively by helping them make sense of large amounts of information, identify underlying issues and plan for future change in each of these phases. Figure 1 indicates the type of indirect tax management issues that arise at each stage of the indirect tax life cycle and how technology can help to address them.

---

**Figure 1: The tax life cycle – indirect tax technology needs**

**Planning**
- VAT cash optimization
- FTA optimization
- Partial exemption analysis
- “Future state” supply chain analysis
- Legislative change analysis

**Tax accounting**
- AP/AR data analysis
- Cash flow analysis

**Compliance**
- Improve data quality
- Workflow management tools (dashboards, etc.)
- Manage outsourced service providers
- Tax code generation

**Controversy**
- Improve relationship with tax administration
- Digital audit preparedness
- Audit defense
- Litigation support
Process mapping helps a bank improve its purchase-to-pay processes

A European bank was facing VAT issues following the implementation of new accounting software, resulting in tax coding errors and inconsistencies in VAT recovery and the application of the reverse charge. Staff changes and dispersed knowledge made it hard to pinpoint where and how the errors were arising. The bank's tax department staff had insufficient confidence and knowledge of the new system to work out a plan to improve the VAT processes. And, although the bank's procurement function had prepared detailed purchase-to-pay process flows, none of the documents mentioned VAT.

The bank undertook a detailed data analytic review of its purchase-to-pay VAT processes. The analysis identified a range of VAT issues and their root causes. It indicated that errors mainly occurred because:

- The tax department did not have full ownership and understanding of the tax setup in the bank’s systems.
- The system did not provide any exception reports to help the tax department identify incorrect postings in a timely manner or make sense of them.
- AP clerks who had system access rights were manually overriding tax codes incorrectly.

Following a detailed report, the bank was able to enhance its automatic controls in its procure-to-pay system, improve its processes and create exception reports to help identify potential errors. This freed up valuable time for the in-house tax team to concentrate on the preparation and review of the VAT returns. In addition, significant VAT savings were realized by identifying incorrect applications of the reverse-charge mechanism.
Identifying the drivers

So how do companies decide which EI tools they should use to help them manage their indirect tax obligations and analyze their data? Considerations include the task(s) to be managed, the level of potential risk or opportunity, the cost, the number of users, how well the application meets the organization's overall needs, the impact on existing operations and involvement of other corporate functions.

Each organization has its own unique business drivers and goals — and its own unique indirect tax risks and opportunities. Some companies may be concerned about reputational risk or underlying issues, and they may choose to allocate resources to full compliance; others may be focused on growth and how indirect tax savings can support business expansion. In choosing an EI platform to deploy, companies need to consider two factors:

1. What does the person authorizing the budget want?
2. What is possible within the application?

Some common drivers include wanting to:

- Have visibility over the numbers and underlying issues
- Support “best in class” in VAT compliance
- Improve operational effectiveness
- Correct and prevent errors
- Do things faster and better
- Improve consistency
- Allocate resources more effectively
- Centralize VAT/GST reporting
- Do more in-house
- Support outsourcing
- Establish effective export controls
- Identify duty savings
- Improve VAT/GST cash flow
- Support complex partial exemption calculations
- Improve tax administration relationships

Have you thought about ...

- How much control and visibility do you have over the key indirect tax numbers, cash flows and metrics?
- Do you have all the information you need? Are there any gaps?
- What are your goals for indirect tax? Are you meeting or exceeding them?
- Are you paying the right amount? How do you know?
- Are you missing savings or cash flow opportunities?
- What is it costing you to finance indirect taxes?
- Are you using your resources effectively?
- What should you focus on in-house? What should you outsource?
- What would be the impact of any changes?
- Could technology help?
Figure 2: Indirect tax technology drivers

**Visibility**
- I need global visibility.
- I know what’s happening in Europe, but I’ve no idea about Asia-Pac or Latin America.
- I just need to know things are on track.
- We’ve no idea how much customs duty we pay!
- Brokers handle all our customs declarations.
- I’m responsible for the returns, but I don’t feel confident signing them.
- I’m not sure we have all the export controls we need.
- We’ve just merged with X and their systems don’t speak to ours.

**Costs**
- We are looking for cash.
- VAT may be hurting our cash flow.
- Our returns take too long to prepare.
- We’re spending too much time on compliance tasks and not enough on VAT strategy.
- We’re spending a lot on duty.

**Tax administration**
- The tax authorities say we owe millions – we don’t agree, but we don’t know how to dispute it.
- We’d like to improve our relationship with the tax administration.
- We want to be seen as “best in class” for VAT compliance.
- The tax administration is now requesting real-time data.
- There’s a new VAT report – I’m not sure our systems can provide the information.

**Risk**
- I think we may have VAT risks, but I don’t know where to look for them.
- I know we have indirect tax issues, but I don’t know what to do about them.
- We’ve outsourced our AP to X.
- We’re about to have a VAT audit – I’m worried about what they might find.
- We had an audit in company X, and they found some issues – I’m worried the problem may be more widespread.

Source: EY
Tax transparency – shining a light on indirect tax affairs

More companies are interested in providing good-quality information about their indirect tax affairs than ever before — not only to tax administrations, but also to the wider stakeholder groups. In part, this change has come from the additional scrutiny that many organizations are facing about their tax affairs and the need to communicate with a wider audience. Multinational companies not only need to ensure that they pay the right amount of indirect tax, they need to be able to demonstrate that they have done so.

So just how easy is it for organizations to deliver the level of global visibility that will keep governments, the media, their shareholders and the general public informed and happy? In this section of the report we look at the obligations VAT/GST payers face and how technology can help them manage their data more effectively.

VAT/GST reports

VAT/GST payers are expected to provide a wide range of information to tax administrations around the world, including data about their domestic sales and purchases, imports and exports of goods and services, and acquisitions and disposals of capital goods. This information must be timely, accurate and complete, and providing it is one of the single biggest challenges that in-house indirect tax functions face.

Large taxpayers in most countries account for and pay VAT/GST balances monthly, generally within one month from the period end. Many tax administrations also ask for additional information about taxpayer’s activities monthly. Information may include lists of customers and suppliers and invoices issued and received, details of partial exemption adjustments, and statistical reports related to international trade.

Monthly reporting means that VAT/GST payers must report transactions and make payments effectively in “real time.” Any errors or omissions present a real risk of triggering tax audits, assessments and severe financial penalties, but indirect tax directors often have little opportunity in practice to investigate and resolve issues before these reports are submitted. These factors put great pressure on VAT/GST accounting systems, requiring companies to adopt robust, efficient processes and effective oversight.

VAT/GST data requests and electronic submission

The survey we conducted to accompany this report details the type of additional information that VAT/GST payers must provide in 86 countries and how the information must be submitted to the tax administration. It indicates that most tax administrations (76 of the 86 countries surveyed) now allow — or require — VAT/GST payers to provide information electronically. In some countries, such as China and Brazil, electronic submission does not just apply to periodic returns or information reports; VAT/GST payers must submit electronic details of their individual transactions using data exchange protocols specified by the tax administration.
Internal controls improve the reputation of the tax department

A European railway company was facing a VAT audit in 2013. In agreement with the tax administration, a VAT audit plan was put into place, and as a result missed VAT opportunities and potential VAT exposures were identified and remedied.

The company’s tax department carried out the audit by:

• Undertaking detailed “transaction level” reconciliations of VAT filings with the financial statements
• Running a variety of inconsistency checks on manual entries
• Examining accounts payable and accounts receivable transactions in detail
• Performing a number of other detailed checks

Using data analytic and visualization tools, the company’s tax team has helped to:

• Quantify opportunities and exposures
• Provide an in-depth analysis of root causes for each finding
• Prioritize remediation steps
• Improve indirect tax controls and monitoring going forward

The exercise has increased the maturity of the indirect tax function and brought a number of ongoing benefits. Following a detailed report and meetings with the tax administration, continuing VAT audit steps were agreed, thus increasing the company’s future audit readiness levels. The company has remediated past errors, identified untapped opportunities and adopted tighter controls for the future. These measures have improved the company’s relationship with the revenue authority, thus enhancing and supporting its reputation as a compliant taxpayer.
Centralized VAT/GST reporting functions

In the past, many multinational companies adopted a "decentralized approach" to indirect tax reporting, with each country (and sometimes each company) completing and submitting VAT/GST reports independently. However, in recent years, many multinationals have undertaken wide-reaching finance transformation projects that have resulted in them centralizing key finance and reporting functions in global or regional shared services centers (SSCs).

Increasingly, multinationals are using in-house or outsourced SSCs to manage and meet their indirect tax compliance obligations. The benefits of centralization include economies of scale, reduced resource needs, improved and standardized processes, and the opportunity to concentrate specialist knowledge and capabilities in a center of excellence.

However, the VAT/GST reporting deadlines and the specific information requested by tax administrations can vary greatly between countries, even among Member States in the EU that have agreed to harmonize aspects of their VAT systems. Indirect tax functions must accumulate, evaluate and submit all the relevant information to satisfy these demands as efficiently and as cost effectively as possible. But the range of information requested by different countries can make it difficult to standardize and centralize reporting processes. Most companies need to build in an element of local input or oversight, perhaps combining centralized return preparation with in-country review and sign-off.

The end-to-end process

An effective VAT/GST function must be able to identify and control all the relevant data needed for accurate reporting throughout the end-to-end process, from basic information about suppliers, customers and transactions through to completion of the VAT/GST return and the financial impact of VAT/GST (see Figure 3).

A snapshot of VAT/GST reporting in 86 countries

- 75 countries – electronic payment of VAT balances
- 66 countries – electronic filing for periodic VAT returns
- 44 countries – additional reports required (e.g., lists of customers and suppliers)
- 38 countries – annual VAT/GST returns in addition to periodic returns
- 28 countries – intra-EU trade reports in addition to periodic returns
- 23 countries – information about individual transactions submitted regularly
- 16 countries – details of individual tax invoices submitted regularly

8 Global survey: VAT and GST electronic filing and data extraction, EYGM Limited, 2014 (available at www.ey.com/indirecttaxdata)
“As an asset management company, the VAT liability of our supplies is quite interesting. It’s pretty complex. A key focus in accounts receivable is, how do we set up new client accounts so that we charge the right output VAT? If you talk to the relationship teams, it’s clear that invoicing is a key relationship touch point, so when a client gets an invoice for our services, it’s essential that it’s right.”

*The EMEA Tax Managing Director of a global asset management company*
Sources of VAT/GST data

So where does all this information come from? The easy answer would be the ERP system, but that only tells part of the story. Figure 4 outlines the ERP modules that typically contribute information that is needed for VAT/GST reporting. All sales and purchase processes must be fully mapped and understood to ensure that VAT/GST reports are accurate and complete.

One of the biggest challenges in meeting indirect tax reporting obligations is that these taxes have an impact on a variety of corporate functions, including the tax, legal and finance departments; logistics; supply chain; real estate; and operations. Knowledge, information and vital documents needed to identify risks and opportunities and to complete reports are likely to be located in a number of different parts of the organization. The necessary data may potentially be located in different companies and countries as well as in different ERP systems or stand-alone add-ins.
Figure 4: ERP modules that provide VAT/GST data

Source: EY

Gaining insight and control in the digital age
The spread of electronic documents

All over the world, businesses are looking to change how they issue, store and receive invoices in the digital age. Many companies have already digitized their invoice flows and are adopting electronic invoicing and archiving solutions. This is not surprising, given the large amounts of data generated by purchase and sales processes, the speed and efficiency of using electronic processes, and the cost and inconvenience of processing and storing paper documents.

A survey of CFOs conducted in May 20129 reported that 35% were applying e-invoicing and an additional 35% expected to start by mid-2014. Strikingly, 40% of respondents believed paper invoices will disappear by 2020.

Benefits of electronic invoicing

In contrast to paper invoices, e-invoices provide billing and payment data in an electronic format via the internet or other electronic communication channels. Therefore, moving to e-invoicing can create substantial benefits for all trading partners. Examples include:

- Cost savings in the delivery of the invoice (reduced printing and postal costs)
- Improved cash flow (shorter invoice delivery delays lead to faster payments, and reduced AP processing times speed up input tax recovery)
- Increased efficiency in handling questions for reprints or invoice disputes
- Substantial cost savings through increased automation and standardization of sales invoices and more efficient processing of incoming invoices without human intervention

Case studies: e-invoicing cost savings

- A multinational courier company eliminated over a third of the 18 million paper invoices it sends out annually, thus saving approximately 2,400 trees and 600 tons of CO2 each year.
- A major software company reduced its European AP headcount by 36% by moving 70% of its suppliers onto e-invoicing.
- An international consumer goods company saved around €200,000 a month by streamlining and centralizing its intercompany invoicing.

However, although the number of companies adopting electronic invoicing is definitely increasing, their use is still limited in comparison to the number of paper invoices sent each year. The rate of adoption of electronic invoicing seems to have been slowed down by technical complexity, security risks and operational constraints, as well as by legal uncertainty, particularly for cross-border transactions. And one of the major barriers in many parts of the world has been the alignment of local VAT/GST invoicing legislation with advances in technology.

Replacing IT systems throws up data storage issues

VAT data retention can pose significant problems for large companies, especially when old IT systems are replaced by new ones. A Head of Tax and Head of Indirect Taxes for a global manufacturing group talk about an ongoing project they are undertaking in Europe, following the implementation of a new ERP system:

We are doing a project right now to look at the VAT legislation in the various countries in Europe to understand what our data retention requirements are – what types of documents must we keep and for how long, what can the tax authorities ask to see from our systems, and what are the consequences if we can’t meet their expectations? The trigger is that we are implementing a new ERP system, and we need to know what to do about our historic data and tax authority access to our old systems. We need to make sure that we are in compliance since tax audits in this area are becoming more and more severe. If they can find a reason to give you penalty, they will!

Data retention periods
In terms of how long we should store data, we do have a company policy, but the directions are really US-driven. In the US we have a data retention period of six years, but that’s not adequate for most of the European countries where we operate. Even in Europe there are big differences between countries. Some countries say we have to keep certain documents for 12 years and others say one year is enough.

Types of data that must be retained and ease of access
The other difficulty, is how much data do we have to retain, and what data is relevant? For instance, do we need to keep picking and packing notes? Shipping notes? Or just invoices? Most crucially, do we need to keep certain data files? What format do we need for our stored data? And if a country can ask for old data files, do we need to keep our old ERP system running in some way alongside our new system to give them access?

Cost implications
And then you have to consider the business aspects. What does it cost to retain that data? Where are you physically going to keep it? And what do we do with a system that we are replacing? Do we keep the license? Do we keep the software? And, of course, what is the penalty or the consequence of not having certain data stored for 10 years or available to the tax administration? Is the penalty based on turnover? Is the penalty based on each document? All those factors have an impact. So although we call it a VAT data retention project, it’s all-encompassing, really; systems, documents and processes.
Electronic invoicing and VAT/GST

Advances in technology and changes in indirect tax legislation are having a major impact on the detailed rules for VAT/GST tax invoices. The tax invoice is the basic document in most VAT/GST systems; it is the crucial proof of the value and tax charged on transactions. Suppliers must ensure their sales invoices comply with all the provisions in the domestic VAT/GST legislation of the country of sale, customers need valid VAT/GST invoices to support claims for input VAT deductions, and tax administrations rely on these documents to perform their audits and cross-check transactions.

Understandably, most countries' VAT/GST legislation contains detailed provisions around the information that invoices must contain and when and how they must be issued, recorded and stored. Thus, one of the main issues for many companies in adopting e-invoicing commercially is, will these documents satisfy the demands of tax administrations for VAT/GST?

Trends in electronic invoicing and storage for VAT/GST

In some parts of the world, such as the EU, governments have taken action to increase adoption of e-invoicing for VAT/GST and to allow for virtual storage, such as in a data warehouse or in the cloud. It is good to learn that policy-makers have taken steps in the right direction and removed some of the hurdles for businesses, but there is still some way to go. Currently, the rules for electronic invoicing and archiving vary between countries, and not all have kept pace with advances in technology.

As more countries allow – or impose – electronic invoicing, VAT/GST payers and their systems must keep pace with these new requirements. Companies must ensure that any scanning, e-invoicing or e-archiving solution is fully VAT/GST compliant – and that the underlying processes are fully under control – if they are to benefit fully from the cost saving and process improvements that e-invoicing can offer.

As with many aspects of VAT/GST obligations, different countries are at different stages in allowing or imposing e-invoicing, and they are applying different rules (see next page). In September 2013, we conducted a global survey of EY Indirect Tax professionals in 86 countries and asked them about e-invoicing, electronic submission of invoices to the tax administration and electronic storage.

According to our survey:

- Electronic invoicing is currently permitted for VAT/GST invoices in 72 countries surveyed.
- Document retention periods vary greatly between countries, with most countries (72 out of 86) expecting VAT/GST payers to retain information for five years or longer. In 26 of these countries, documents may need to be retained for 10 years or longer.
- Only four countries surveyed do not allow VAT/GST payers to store tax data electronically, although in 25 countries, VAT/GST payers must obtain specific permission to use electronic storage.
- Centralized storage of VAT/GST records (e.g., in a data warehouse) is permitted in 61 countries (although VAT/GST payers must request specific permission to use offshore storage in 20 countries).

In summary, most tax administrations support electronic invoicing and archiving and more seem likely to do so in the future, including offshore storage of documents, as these practices spread commercially and administrations become more comfortable with the reliability and security of electronic data. It is also to be hoped that more countries will harmonize rules and align their policies for data retention.
Country spotlights

Argentina
Large taxpayers are subject to mandatory electronic invoicing. In addition, effective 18 December 2013, the scope of activities subject to mandatory electronic invoicing was extended to cover a wide range of areas, including research and development; professional, consultancy and technical services; construction; real estate agency and brokerage services; the supply of natural gas, electricity, water and sewerage by utility companies; and rental of transport machinery and household items.

Brazil
In recent years, the Brazilian Government has gone further than many countries in applying new technology to VAT reporting. The Electronic Invoice Project (NF-e) is an initiative aimed at implementing a national invoicing model for electronic invoices containing a digital signature to guarantee their authenticity. It also aims to make all the related procedures easier for issuers and to facilitate the inspection of tax documents by the Brazilian tax administration. Under the process, the NF-e is transmitted via the internet to the State Treasury, which validates it and sends it back to the company for issue.

Chile
On 4 April 2013, the Government sent a bill to Congress introducing amendments to the electronic invoicing rules. This bill is expected to become law shortly and includes a provision making electronic invoicing mandatory (with a two-year transition period for this rule to be complied with).

European Union
In its strategy for 2020, the European Commission stated that electronic invoicing should become the primary method of invoicing in the EU in the future. The Commission believed that all Member States needed to revise existing burdens and barriers to uptake of the technology, since it can help businesses reduce costs and be more competitive. The second EU Directive on VAT invoicing was adopted on 13 July 2010, and its provisions had to be applied by all Member States from 1 January 2013.

The focus for businesses is to guarantee these items has shifted to internal business controls, and it is more important than ever that businesses can prove that they are in control of the entire invoicing and archiving process.

Mexico
On 15 July 2013, the Mexican tax administration issued a press release indicating that, effective from 2014, taxpayers with a turnover exceeding MXN250,000 a year must issue electronic invoices. In addition, the administration mentioned that any taxpayer (regardless of turnover) may issue electronic invoices, if they choose to do so.

Russia
Russia introduced amendments to the tax code in July 2010 to allow electronic invoicing, but this provision was not effectively implemented until May 2012. The exchange of VAT invoices in electronic format is generally likely to bring a number of advantages for Russian VAT payers, including improving VAT cash flow, reducing costs (on workflow management and administration), improving management control of VAT invoicing and allowing VAT invoices to be issued more quickly and easily. However, despite these benefits, implementing e-invoicing should be considered very carefully because it may also create a risk of the customer’s VAT recovery being challenged.
Dashboards helping drive tax data

At-a-glance data management

The requirements for global visibility for indirect tax performance have never been greater. In-house indirect tax functions need to manage multiple data sets and provide global tax directors, CFOs and other stakeholders with real-time reports about compliance returns, supply chains and costs in local and distant territories.

Frequently, these demands fall on small teams with reporting responsibilities for multiple entities, countries and regions. The head of indirect tax needs to ensure the organization’s people, processes and technology are coordinated and working as efficiently as possible. As we have seen, real-time indirect tax reporting presents particular challenges for multinationals, arising from the high volume of transactions; the frequency, number and complexity of VAT/GST reports; and the potentially severe consequences of noncompliance.

Improved mobile dashboarding capabilities can help. They enable “at a glance” updates over key performance indicators across the whole spectrum of tax management, including effective tax rates, tax provisions, compliance status, revenue authority penalties and liabilities. Continuous monitoring of dashboard indicators can help to ensure all processes and policies are adhered to and improvements can be made.

Why use a dashboard?

A car’s dashboard provides the driver with a wealth of information about the current state of the car, the journey, the time, the temperature, the need to refuel and more, all “at a glance” and all in real time. The dashboard has to display all this information to the driver in such a way that it does not distract from his or her main purpose (driving the car) while still providing updates on all areas deemed important. Dashboards designed for indirect tax reporting purposes act in the same way. These mobile business applications focus on delivering information to the recipients in a manner that is easy to digest and has meaning for them.

Designing a tax dashboard

An at-a-glance dashboard could cover an array of tax reporting responsibilities in multiple jurisdictions using tracking and monitoring solutions to ensure everything goes in on time, accurately and without issue and to allow the organization to challenge assessments and defend its policies. Such data might include:

- Tax attributes
- Key finance numbers (e.g., sales and profits)
- Tax assets and liabilities
- Effective tax rates
- Tax losses and net operating losses
- Actual compared with plan
- Tax policies and procedures
- Documentation (e.g., control procedures, internal audit and transfer pricing)
- Controls and visibility (e.g., tax audits, transfer pricing, historical trends)
- Tax planning risks
- Methodology and criteria for decision making (e.g., organizational structure and form, future plans, tax drivers)
Figure 5: Indirect tax analytics and reporting

- **Static report**
  - Highly detailed
  - Rigid standard reports
  - Available through mobile/tablet applications
  - Customizable (static) reports

- **Flexible reports**
  - Real-time refresh
  - Available through mobile/tablet applications
  - Flexible and interactive reports
  - Links to all other reporting and compliance systems

- **PDF reports**

- **Static reports**

- **Flexible reports**

- **Real-time updates**

- **Everything at touch-of-a-button?**

Source: EY
Questions to consider in designing a dashboard function can include:

- Could existing reporting technology be utilized rather than buying new?
- Are there data repositories available to draw information from?
- Could existing database platforms (such as SAP/Oracle/SQL) be exploited to provide the level of detail required for tax reporting purposes?
- Does the organization use tablet technology? Does it want to?
- How can spreadsheet macros be used as a start for dashboard reporting?
- Could manual templates be used for data gathering?
- Do tax data warehouses exist? What level of detail is information stored?
- Do finance data warehouses exist for management accounting purposes? Could information in them be utilized for other purposes?

With multiple elements required for total oversight, there is likely to be no easy way to display the information clearly on a single page. However, visualization tools, smart navigation, multiple links, tabs and drill-down functionality can improve the user experience. For example, it is possible to configure dashboards based on chosen criteria; for example, to go from global views to local views and then to detailed heat maps within the local views where potential tax risks exist. From the heat map it is possible to view the underlying source data sets.

Depending on the company’s existing IT infrastructure, and the availability of data, many of the elements required for effective dashboarding may already exist in-house or they may be acquired easily.
A focus on technology and management improve compliance performance

AM Inc. is a global asset management company. Its EMEA Head of Tax and its Global Head of Indirect Tax, both based in the UK, talk about how the company improved its VAT compliance processes through better indirect tax management and the use of appropriate technology.

A number of factors have reduced the time it takes us to complete and verify our UK VAT return compared with a couple of years ago. Previously, compliance for VAT was done in London. We had a relatively small team within Tax with responsibility for compliance and structural maintenance, planning and so forth. We have migrated our finance function to a UK Finance Shared Services center and created a global finance hub there.

Dedicated finance function
With EY’s help, we have now created a Tax Compliance and accounting team outside of Tax. We have created carefully designed processes between Tax and Compliance and reporting, with service line agreements and proper procedures and so forth. Under the control of a very competent head of function, we have hired high-quality people whose jobs are about controls, process automation, repeatability, eliminating spreadsheets and hard-coding things into better systems. Their job is not just to get the VAT return out but to ensure that the systems behind it are working properly.

We’ve harnessed a tremendous amount of benefit from that. Now Tax can get on with doing what we do best, which is thinking about things strategically, understanding where the leakage is, working at how to change things, planning, dealing with errors, all of the kinds of things that add real value. And the accounting and reporting side can be dealt with by people who are much better at doing that than we would be.

Adopting technology
We have invested lots of work and time in the financial reports that come out of the systems, setting up data fields and automated systems. We have software to run our partial exemption method in real time. And we use VAT logic within AP to channel invoices correctly within our systems. If an AP clerk wants to deviate from the path that the VAT logic software is trying to send them down, they can’t do that unilaterally; it has to be then approved by somebody higher in the AP chain. And the VAT logic process is training our AP input staff so that they understand broadly what we’re trying to achieve. That has really helped to reduce errors.

We would also like to use a data analysis tool that we could run over a number of returns and look for trends. That will help us identify areas where errors are happening. It would help us identify where we need to focus our attention.
What is indirect tax data analytics?

Information has an impact on business performance and decision-making. But what information is relevant, and how should it be interpreted and used? Enterprise intelligence (EI) can help an organization optimize its performance by identifying relevant information, analyzing it in such a way that produces insights and allowing the organization to act upon these insights.

Indirect tax analytics is a wide term used to describe the identification and analysis of indirect tax issues through data interrogation. Approaches may range from one-off reports for specific issues to custom-made tools developed for in-house use by companies to continuous monitoring by third-party providers.

As we have discussed in this report, the complexity of indirect tax reporting means that many — and possibly most — multinational companies have significant indirect tax exposures. At the same time, many are becoming aware of the cost of indirect taxes — including high duty rates, unclaimed input VAT/GST, penalties and the costs of financing indirect tax payments. Tax and customs administrations are also becoming more active and more sophisticated in their methods of auditing large companies’ indirect tax affairs.

But, until recently, most companies have not been able to identify the major indirect tax risks they carry, nor have they been in a position to optimize their working capital and cash flow on a global basis. Many are now turning to technology to diagnose underlying issues and weaknesses in indirect tax reporting and to identify opportunities to improve performance. The service delivery models may be broadly categorized as follows:

- Analytics as an outsourced one-off service — the company provides data to a third-party service provider to analyze and report back findings for a one-off project or specific purpose.
- Analytics as an ongoing outsourced service — the company provides data on a regular basis to a third party and gets the results back online.
- Analytics as in-house software — the company buys or commissions software to use in-house, often supported by a third-party service provider for the implementation or design.

Gaining valuable insights and boosting financial performance

Although many indirect tax directors or trade functions may have an intuition that their company’s performance could improve in these areas, it can be difficult to demonstrate these facts to corporate management and to implement the operational and strategic changes needed to deliver results. Having the numbers and being able to pinpoint the exact savings and geographies where improvements can be made can make all the difference.

Analyzing indirect tax data can do more than manage compliance processes. It can allow companies to adopt a comprehensive, end-to-end methodology that enables identification of indirect tax risks on a global basis with a high level of assurance. Multinationals can receive valuable insights into where their organizations might be at risk globally, including the root causes of the inefficiencies.
"The way we're organized for indirect tax compliance varies around the globe, and it's in a constant state of evolution. In working with EY, we want more than just an outsourcing arrangement. We want to leverage their different skills and expertise to help us transform the way we do compliance. We each bring something different and valuable to the table and the combination can deliver impressive results. “

A tax leader in a global manufacturing company
Driving better decisions

Identifying and correcting the underlying causes for VAT/GST errors and process failures and continuous monitoring help eliminate unpleasant surprises. An integrated approach can allow management to take back control of indirect taxes and be better prepared to face future VAT/GST or customs audits or to challenge assessments.

While companies may have a strong focus on indirect tax risk management, an integrated approach to managing and analyzing VAT/GST and customs data can also present significant opportunities to boost the bottom line. For example, EI tools can help companies identify, quantify and realize cash tax savings and opportunities to improve working capital and cash flow.

Equally importantly, data analysis can help companies look into the future as well as into the past. By bringing together information from a range of corporate functions and external sources, EI tools can help to model the impact of planned or possible changes in indirect tax legislation or in corporate structure or activities. They can simulate “what if” scenarios and identify where risks or opportunities could arise and where future resources should be focused.

It is this “crystal ball” element of analysis tools that can make them so valuable in allowing indirect tax data to inform business decisions. For example, a multinational manufacturer may want to know whether it could save duty by changing where it sources raw materials. A retailer may want to know whether a 1% VAT rate rise can be passed onto customers across all its product ranges. A telecommunications company may want to know what impact the many VAT/GST changes in the EU and around the world on digital services could have on its operations. The results can provide important planning data that will allow the company to identify its obligations and resource needs ahead of time and adjust its processes, contracts and pricing appropriately. The results may even influence the company’s strategy.

Source: EY

Figure 7: Data analysis drives better decisions

Source: EY
In assessing this data, the company will generally need to bring together knowledge and information related both to current and future indirect tax legislation and commercial considerations. This information may come from a number of sources, and some of it may not be readily available. It will need to consider a number of factors including, for example, its corporate structure, its supply chain, what free trade agreements apply, where the company does business now, expansion plans, who its customers are, where they reside, the current VAT/GST treatment of its activities and the likely or possible future VAT/GST treatment.

The information and its sources will be different for every business – as will the decisions that the information allows the company to make. But to obtain and evaluate the important data, the company is likely to need to draw on external as well as internal resources, and it will need to involve a range of parties. The more accurate and complete the data the better the forecasting is likely to be. But it will also be important to be able to manage the volume of detail and compare the correct data sets to reveal insights – and to be able to present the findings in a way that enlightens rather than confuses, so that commercial decisions can be made.

### Examples of indirect tax data analytic projects

<table>
<thead>
<tr>
<th>Indirect tax data analysis project</th>
<th>Examples of scope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal audit support</td>
<td>- Assisting internal tax function for audit support</td>
</tr>
<tr>
<td></td>
<td>- Focusing internal audit teams</td>
</tr>
<tr>
<td>Transactional analytics</td>
<td>- AP/AR transactional-line-level analysis</td>
</tr>
<tr>
<td></td>
<td>- Tax coding and posting error detection</td>
</tr>
<tr>
<td></td>
<td>- One-off solution or embedded solution</td>
</tr>
<tr>
<td></td>
<td>- Analytics reviews for US sales and use taxes</td>
</tr>
<tr>
<td>Indirect tax reporting</td>
<td>- Enhancements to existing VAT/GST return spread sheets</td>
</tr>
<tr>
<td></td>
<td>- Control checks and tests</td>
</tr>
<tr>
<td></td>
<td>- Implementation of new reporting solutions</td>
</tr>
<tr>
<td>Risk analysis and monitoring</td>
<td>- VAT/GST tracker</td>
</tr>
<tr>
<td></td>
<td>- Risk analysis and heat maps</td>
</tr>
<tr>
<td></td>
<td>- Transaction profile trend monitoring</td>
</tr>
<tr>
<td></td>
<td>- Analytics reviews for US sales and use taxes</td>
</tr>
<tr>
<td>Custom-made targeted analytics</td>
<td>- Pricing and margin modeling for new indirect taxes</td>
</tr>
<tr>
<td></td>
<td>- Transactional keyword analysis</td>
</tr>
<tr>
<td></td>
<td>- Tax coding logic review</td>
</tr>
<tr>
<td>Supply chain analysis</td>
<td>- Supply chain mapping using transactional line level data</td>
</tr>
<tr>
<td></td>
<td>- Analysis of actual tax treatment against expected</td>
</tr>
<tr>
<td></td>
<td>- Analytics reviews for US sales and use taxes</td>
</tr>
<tr>
<td>Indirect tax metrics and KPIs</td>
<td>- Dashboard of key indirect tax numbers and metrics</td>
</tr>
<tr>
<td></td>
<td>- Trends analysis</td>
</tr>
<tr>
<td>Global Trade</td>
<td>- Tariff classification and trade master data management</td>
</tr>
<tr>
<td></td>
<td>- Customs duty and trade cost reduction and rationalization</td>
</tr>
<tr>
<td></td>
<td>- Other analytics services within global trade</td>
</tr>
</tbody>
</table>
Part III

Global trade: how high performers are harnessing technology
High-performing global companies have always focused on the competitive advantages that can be derived from global sourcing, manufacturing and distribution efficiencies. This means that their businesses are critically dependent on their ability to import and export in compliance with the rules of each country and to actively manage the associated transportation, customs process and related costs.

Effective management of international trade and associated processes is an essential factor in achieving high performance. This is especially true where a company’s strategy depends on international expansion. Operational agility assumes exporting and importing goods without delays. Cost competition means optimizing trade preferences and facilitating the movement of goods to lower landed costs. Managing trade data effectively is crucial to achieving these goals.
Big data and global trade

Customs declarations and duties

Customs declarations must generally be filed with each cross-border shipment of product. Each declaration contains multiple data elements, each necessary for customs to process the shipment and allow the supply chain to operate without impediment.

Customs duties can also apply to each and every importation. Unlike VAT/GST, duty costs are normally non-recoverable. But there is significant scope to reduce customs duty rates and exemptions if a company can meet the special qualification and compliance conditions. For example, if a trade agreement exists between the country of origin and the country of importation, a reduced (“preferential”) duty rate may be available, provided the products meet specified “rules of origin” designed to ensure that sufficient value is added in the trade agreement territory. Similarly, reductions may apply if there is a special customs regime in the importing country where the imported goods will be re-exported in the same state or after further manufacture or use.

Many companies are also experiencing significant shifts in terms of increased reliance on low-cost sourcing and manufacturing as well as differential growth rates between mature versus emerging consumer markets. Changes to commercial or direct tax arrangements in response to market pressures can also have a knock-on effect on customs and import duty costs, e.g., where they affect the transfer price and/or “added value” criteria required to get the benefit of reduced duty rates under trade agreement.

With data required for every shipment, and additional data required to support duty preference claims and special regimes, a strong process is highly automated. Trade management software has become quite commonplace, enabling global traders to effectively report to customs administrations, and meet recordkeeping requirements.

Big data is changing global trade

At a recent EY Global Trade Symposium, one of the trade function leaders who attended commented: “Big data is changing the way we do our jobs, the information we have to make decisions, and the way we interact with internal and external stakeholders.”

High-performing trade functions are actively looking for new opportunities to use trade data to improve processes, uncover opportunities and manage relationships. The benefits sought go well beyond the standard benefits of trade management software. Timely collection and meaningful analysis of data can be used to quickly improve upstream processes. Resulting opportunities are considerable when data is used to facilitate more reliable trade processes, manage trade barriers and reduce transactional costs. Flexibility and speed of response are clearly impacted in a positive manner.

Insight

Customs audit identifies process improvements

CD Ltd. is a multinational IT company. The leader of the tax operations team for Europe explains how tax and customs audits can influence changes in systems and processes:

Some of the IT changes we have identified for indirect tax have come out of internal and external audits. For example, during one tax audit in the Czech Republic, we were asked to provide CMR (transport) documents for around 40,000 invoices. Generally it's not a problem to get a CMR document out of the system, but if you have to get them for 40,000 invoices, then it is a challenge, particularly if you have a limited time frame.

One of the key issues that we faced was that we had no common reference number between our internal financial records for intercompany invoices and our customs documents. So it was a very manual process to identify the tracking numbers we needed, and it took us a huge amount of time to extract the documents. After the audit, we undertook an IT project to improve our data and to add the tracking number to both AR and the import certificate invoice reports. So we have those numbers available for reporting now, and if we ever have to face a similar process on order requests, we can respond better and more quickly.
Using technology to enable trade processes and identify opportunities

Turning big data into meaningful and useful information has never been more important. Technology can help companies improve the accuracy of trade data, uncover cost-saving opportunities and accelerate response and delivery times, thus allowing them to better respond to business needs in a more predictable, agile and cost-competitive manner.

Technology-focused resources

For many companies, technology support is increasingly becoming a core skill set of the trade department, including:

- Automating trade flows and documents, connecting trade compliance automation to business workflows and improving processes
- Implementing global trade systems and keeping trade platforms updated
- Standardizing data sets
- Translating trade needs to IT
- Conducting business analytics on transactional data
- Creating business intelligence dashboards

Analytics

Trade is data intensive, with each transaction requiring multiple pieces of data to move a product across borders. Consequently, compiling and analyzing trade data that is already collected, albeit by different parties for different purposes, can have a powerful impact on performance improvement for trade processes and beyond.

Analyzing transactional data can determine root causes of process inefficiencies, compliance errors, supply chain delays or missed opportunities. As a result, upstream processes can be improved, leading to enhanced trade compliance, process efficiency and lower cost of reporting. But data does not remain static. Recognizing the potential impact of data analytics, companies can expect the use of trade data analysis tools to evolve and expand into complex planning scenarios, such as optimizing free trade agreement benefits.

As mentioned above, free trade agreements are conditioned on meeting rules of origin, which are different for every free trade agreement, and are product specific. With over 350 free trade agreements in force, managing this diverse set of rules can be a significant challenge. Moreover, the same product may be potentially subject to a number of rules, but may only be able to meet some. For example, a manufacturer in Mexico has the opportunity to make products eligible for free trade with the United States (under NAFTA), the European Union, and Japan. But each of these Mexican free trade agreements has very different rules of origin, and a component part sourced in the US may help the finished product originate under the NAFTA rules, but will not generally help the product qualify for EU or Japan free trade preferences. A company often has to consider the ultimate qualification of a product for a free trade agreement when making sourcing decisions for the product components, and there may well be trade-offs. Optimizing these sourcing models is substantially enabled by strong data analytics.

One of the major challenges for developing trade data analytics is that there is no single source that has complete global data. Data may come from internal systems or from a variety of external sources, such as customs brokers, suppliers or governments. This, of course, adds the additional step of organizing data collection in a manner that allows for consistent application.
Master data accountability

Because trade data is collected for varying business purposes, data inaccuracy is a major concern. Many companies invest a great deal in master data cleanup before their data can be analyzed. However, this analysis often proves worthwhile. It can indicate where underlying issues arise and point to the path to correction at the proper point and location within corporate processes.

In addition, trade data can be used for a variety of business purposes beyond the needs of the trade department. When data is being used by other parts of the organization, it may be more accurate as it may be verified by multiple departments. Similarly, companies may leverage existing trade systems to benefit other groups and look for data sources from other systems. For example, many companies adopt formal requirements for customs brokers to use certain master data provided by the company, and for brokers to provide electronic transactional-level data to be used by the company for analytics.

With the increased importance of multiple sources and uses of data comes the increased need for discipline around the process. For example, formal protocols may be needed for data elements and formats so that data received from third parties is compatible with the company's systems.
Funding automation

The high reliance of many leading companies on technology, coupled with the regular need to rely on different solutions, makes funding an ongoing and significant challenge. The 2012 Globalization Survey noted that corporate leadership expected technology investment to increase markedly in the following 12 months. However, although trade executives may have a budget for technology, funding for new projects will often require a clear business case.

For this reason, trade functions often collaborate with other corporate functions to meet their IT needs, entering, for example, into collaborative efforts to gather data from third parties. This collaborative approach can provide efficiencies, improve responsiveness and visibility, and reduce overall costs by harnessing shared funding.

Often the emphasis on how technology will enable a business initiative is a big driver toward funding. Therefore, it is important to expand the business case beyond the direct return on investment to the trade department to demonstrate the wider business gains. For example, expansion into new markets may be a driver for an import solution and better protection against hacking may be a driver for adopting solution supporting deemed export compliance.

Trade teams using technology to conduct business

Technology has changed how many trade functions operate on a day-to-day basis — but it may also pose some challenges.

Mobility solutions

On the one hand, mobility solutions, such as the ability to access information and communicate decisions with smartphone applications, have made it more convenient to address issues quickly. On the other, this can also create challenges of appropriate control and documentation.

Social media

Social media websites have proliferated in recent years, including blogs and message boards hosted by trade organizations that offer information and advice. These means can be an effective way to recruit specialist staff, gain up-to-date information and share insights around technical topics. However, not all sources are authoritative, and information provided through these sources may be inaccurate and misleading. Many companies are starting to adopt protocols to guide the use of technology in their processes and communications both internally and externally so that they benefit from the advantages of social media while minimizing the risks.

Cloud storage

Companies are increasingly storing trade data in the cloud. Care should be taken to establish how cloud storage might impact information subject to export controls. The key is determining where the data resides, how safely it is stored and who has access to it.

“When trade technology can be explained in terms of business enablement, it becomes part of the fabric of the business.”

A participant at our recent EY Trade Symposium
Technology tools for indirect taxes

The Head of Indirect Tax for a manufacturing company talks about the technology that currently helps him manage VAT/GST and customs data — and the tools he would like in the future:

I am responsible for our indirect taxes, including our systems, processes, filings and planning. What would I say are the best technology tools that I currently have that help me in my role? From a VAT perspective, it’s the comprehensive third-party add-on that we use to manage our VAT compliance. That’s really a gain. It allows us to have visibility and consistency across our businesses, despite the fact that we are not all operating on the same ERP platform.

From a customs perspective, it’s our new software that provides integration points between different systems. It deals with free trade agreements and keeps track of our classifications through the SKU database, and it feeds into and interacts with our ERP system. And then the solicitation regarding our supply declarations is also going to be automated. So those items facilitate our trade processes and save time. They also give us oversight.

What technology tools would I like to have? Well, the latest version of our ERP system would be nice! But maybe more than that, a unified ERP system would certainly help. The other big thing would be data analysis software. You download your data into the software, and it can do all kinds of tax applications. Some tax authorities are using it for auditing tax data files, and we would really like to run it ourselves.
Part IV

Managing indirect tax data to align operations, compliance and strategy
The increased focus on indirect tax from both internal and external stakeholders makes it more important than ever to manage these taxes proactively, within the parameters of an indirect tax management framework. This framework rests on the recognition that there are three aspects of indirect taxes to manage: operational, compliance and strategic. It is common for each of these aspects to be isolated and considered in a vacuum. But the effective collection, processing and analysis of indirect tax data can bring them all together.
Operational aspects include transaction processing, data capture and indirect tax procedures. How do the systems process indirect taxes at the transactional level? What is the accounting treatment applied on individual transactions? Are they being processed correctly and deriving accurate outcomes? How is that data being rolled up into accounts in the financial statements? What procedures and internal controls are in place to ensure accurate processing of transactions and data?

For VAT/GST, processing is undertaken on a daily basis by various departments, such as AR, AP, accounting and tax, and within IT systems on transactions that are subject to the tax. Frequently, in-house staff responsible for the transactional processing may have limited knowledge about the appropriate technical treatment and consequently rely on the system determination. However, accuracy of systems processing is frequently called into question when it becomes clear the determination logic and tax coding assignments to transactions have been followed the same way for years without a review.

For global trade, customs declarations are the core documents. They must be lodged for each and every cross-border shipment and thus can number in the hundreds, thousands or even hundreds of thousands depending on the level of trade activity and frequency of shipments. It is also important to note that a single customs declaration may be composed of many commercial invoice transaction lines, or even multiple invoices, that also increase the amount of data to be declared.

As transactional data traverses throughout the various IT systems, it is critical to understand exactly how it is processed into outcomes and where. Many IT systems are not up to the challenge of delivering accurate VAT/GST or duty numbers or preparing submission-ready returns without significant additional work or manual intervention. For example, errors in the setup of master data, incorrect assignment of tax codes, or the gap between internal and external tax systems may not be properly reconciled. If a company is relying on incorrect base data, the financial statements and returns may be riddled with inaccuracies. In turn, this could give rise to tax risk and potential liabilities that may lead to adjusting entries in the accounts.

Compliance
Timely and accurate completion of a company’s indirect tax compliance obligations is paramount. VAT/GST returns must be submitted on a monthly, quarterly or annual basis, while customs declarations must be correct on every single cross-border shipment. In some countries, multiple returns may need to be completed and filed within very tight deadlines. Considerations include: From what sources is the relevant data being gathered? How are the declarations/returns being prepared and by whom? Are they using the correct data and procedures for reporting and calculating tax payable?

To accurately complete VAT/GST returns, it is essential to connect the daily transactional-level processing in the IT systems with the summarized data and outcomes typically used to prepare the returns. The more connected the operational and compliance activities, the more efficient the return preparation process.

For customs declarations, each customs authority has an authorized format for filing the data fields required in a customs declaration, and these can vary by country. The underlying information is typically transmitted electronically from a third-party customs broker from its system. As a result, comparing the actual customs declarations made with the source data the company thought was being declared can be a surprisingly difficult task.
Strategic

Finally, we suggest that the indirect tax and trade functions must elevate their focus to strategic matters. Taxpayers have little choice but to continue concentrating on the day-to-day aspects of indirect tax reporting, since these continue to occur as the business operates. But operations and compliance should be aligned to overall corporate goals to ensure indirect taxes are managed effectively within a structured framework.

Key considerations include: Who has oversight and responsibility for the function? How are continuous improvements to systems, processes and controls being accomplished? How is technology being used to uncover risks, identify potential opportunities and streamline procedures? How are insights being gained to allow indirect taxes to be viewed and managed strategically?

“We have sales and marketing companies in 130 countries and we also have depots of spare parts all over the world and lots of cross-border sales and intercompany transactions. My team has to be alert to all the VAT changes happening around the world and we need to stay close to the business to make sure things are being captured properly. In an organization such as ours that is quite a task!”

The Director for International Indirect Tax in a US multinational
Corporate cooperation improves compliance

Indirect tax performance depends on different functions within a company working together. The leader of the tax operations team for Europe in a global IT company discusses how he supports the European indirect tax team:

Tax is basically an internal client for my team, which focuses on operations. We support the tax function with any kind of systems changes, and we provide audit support. Tax informs us about upcoming VAT legislation changes — with as much notice as possible. And then my team, together with people from IT, creates a plan to implement the changes. That usually involves various systems changes, process changes, training to users and so forth.

We also initiate VAT projects in my team sometimes — maybe projects from the operations or process teams that we take back to the tax function to look at. Also, I collect issues that we detect as part of our support activities; for example, I may say, “We have to control VAT IDs in X country,” and then we work on submitting the necessary projects.

If there is a business project that affects VAT, the tax team is responsible for reporting on the VAT law implications, but we need to decide whether it’s also feasible from the systems point of view and how much involvement we will need from IT. So our two teams really need to understand each other and work together.
Data is the key

If indirect tax and trade functions are to move toward strategic management, it is essential to “bridge the gap” between the operational aspects of transactional processing and the compliance work on return preparation. Doing so will allow these functions to concentrate on higher-value strategic activities. But it is extremely difficult to manage what you don’t know. It is also hard to make a case for investment in resources, processes or technology without hard information. Visibility and information are crucial to effective management of indirect taxes — and to getting these issues onto the agenda of corporate management.

But the challenge of big data is also its opportunity. Harnessing the power of the information they hold, companies can dig deeper into their indirect tax profile and uncover hidden costs, risks and opportunities that were previously undetected. Managing indirect tax data is — and will continue to be — the key to aligning indirect taxes to the strategic goals of the business.

Figure 8: Indirect tax management framework

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Compliance</th>
<th>Operational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced resources</td>
<td>Formal procedures to process and compile returns</td>
<td>Various systems used to capture data</td>
</tr>
<tr>
<td>Opportunity and risk reviews</td>
<td>Gathering of relevant systems and manual data</td>
<td>Transactional processing occurring in the system</td>
</tr>
<tr>
<td>Systems and technology improvement</td>
<td>Preparation of indirect tax returns</td>
<td>Different departments responsible for part transaction processing</td>
</tr>
<tr>
<td>Data analytics and diagnostics</td>
<td>Review and finalize returns before submission</td>
<td>Tax codes and transaction alignment</td>
</tr>
<tr>
<td>Implementation of planning or cost-saving ideas</td>
<td>Maintenance of return records and files</td>
<td>Accounting for VAT</td>
</tr>
</tbody>
</table>
Contacts

Global Director – Indirect Tax

Philip Robinson
+ 41 58 286 3197
philip.robinson@ch.ey.com

VAT/GST

Americas

Jeffrey N. Saviano
+ 1 212 773 0780 (New York)
+ 1 617 375 3702 (Boston)
jeffrey.saviano@ey.com

Jean-Hugues Chabot
+ 1 514 874 4345
jean-hugues.chabot@ca.ey.com

Gijsbert Bulk
+ 31 88 407 11 75
gijsbert.bulk@nl.ey.com

Robert Smith
+ 86 21 2228 2328
robert.smith@cn.ey.com

Asia-Pacific

William M. Methenitis
+ 1 214 969 8585
william.methenitis@ey.com

Global Trade

Americas

Europe, Middle East, India and Africa (EMEIA)

Neil Byrne
+ 353 1 221 2370
neil.byrne@ie.ey.com

Asia-Pacific

Robert Smith
+ 86 21 2228 2328
robert.smith@cn.ey.com
Indirect tax data and analytics contacts

Americas

Karen Christie
+ 1 212 773 5552
karen.christie@ey.com

Ronnie Dassen
+ 1 212 773 6458
ronnie.dassen@ey.com

Anne Freden
+ 1 415 894 8732
anne.freden@ey.com

Corin Hobbs
+ 1 408 947 6808
corin.hobbs@ey.com

Michael Leightman
+ 1 713 750 1335
michael.leightman@ey.com

Faranak Naghavi
+ 1 202 327 8033
faranak.naghavi@ey.com

Kristine Price Dozier
+ 1 212 773 2662
kristine.price@ey.com

Jeffrey York
+ 1 612 371 6737
jeffrey.york@ey.com

Europe, Middle East, India and Africa (EMEIA)

Gwenaelle Bernier
+ 33 2 5117 5031
gwenaelle.bernier@ey-avocats.com

Charles Brayne
+ 44 207 951 6337
cbrayne@uk.ey.com

Folkert Gaarlandt
+ 27 1 1772 5220
folkert.gaarlandt@za.ey.com

Colm Halpin
+ 353 1 2212 377
colm.halpin@ie.ey.com

Adrian Hextall
+ 44 207 951 1642
ahextall@uk.ey.com

Hans Roekaerts
+ 44 207 951 0959
hroekaerts@uk.ey.com

John Sloot
+ 31 88 40 70426
john.sloot@nl.ey.com

Edwin van Loon
+ 31 88 40 71883
edwin.van.loon@nl.ey.com

Asia-Pacific

Aaron Bromley
+ 60 3 7495 8314
aaron.bromley@my.ey.com

Marc Bunch
+ 61 2 9248 5553
marc.bunch@au.ey.com

Andrew Cavenor
+ 61 2 8295 6243
andrew.cavenor@au.ey.com

Mark Tafft
+ 61 2 8295 6987
mark.tafft@au.ey.com

Gaining insight and control in the digital age
About EY
EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

About EY's Indirect Tax services
Indirect taxes, ranging from VAT and customs duties to environmental levies, affect the supply chain and the financial system. They pose unique challenges to multi-national tax functions, since they must be managed accurately and in real time. These often invisible taxes can have significant impacts – on cash flow, absolute costs and risk exposures.

Thanks to our network of dedicated Indirect Tax professionals, who share knowledge and ideas, we can provide a seamless, consistent service throughout the world and deal effectively with cross-border issues. These include advising on the VAT treatment of new and complex transactions and supplies and helping resolve classification or other disputes and issues with the authorities.

We provide assistance in identifying risk areas and sustainable planning opportunities for indirect taxes throughout the tax lifecycle. We provide you with effective processes to help improve your day-to-day reporting for indirect tax, reducing attribution errors, reducing costs and ensuring indirect taxes are handled correctly.

We can support full or partial VAT compliance outsourcing, help identify the right partial exemption method and review accounting systems. Our customs and international trade team help you manage customs declarations, audit and review product classifications and evaluate import/export documentation. Our globally integrated teams give you the perspective and support you need to manage indirect taxes effectively.

© 2014 EYGM Limited.
All Rights Reserved.
EYG no. DL0931

ED none

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

The views of third parties set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made.

ey.com