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Tax Analytics: A New Era for Tax Planning & Compliance

Insight-driven Advantage

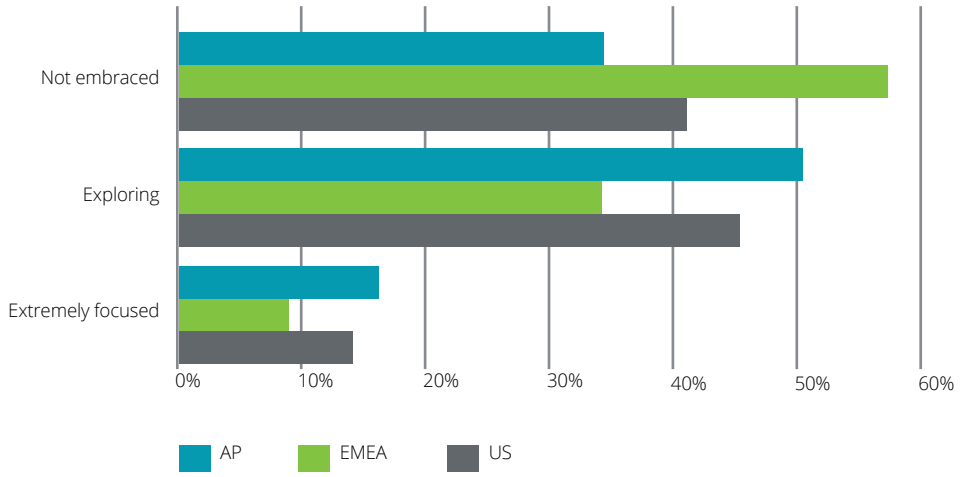
Introduction

Deloitte recently hosted regional Dbriefs webinars to discuss the hot topic of tax data analytics. The audience was polled on how far they have progressed with analytics, the challenges they face, and the ways they are using these very powerful tools. This paper looks at the results and tax and analytics from a variety of perspectives, including the first steps of many tax functions in adopting analytics, why analytics is relevant for tax, how the two interact, how taxpayers and tax authorities are already using analytics, and the importance of visualization in allowing users to interact with their data and communicate their findings.

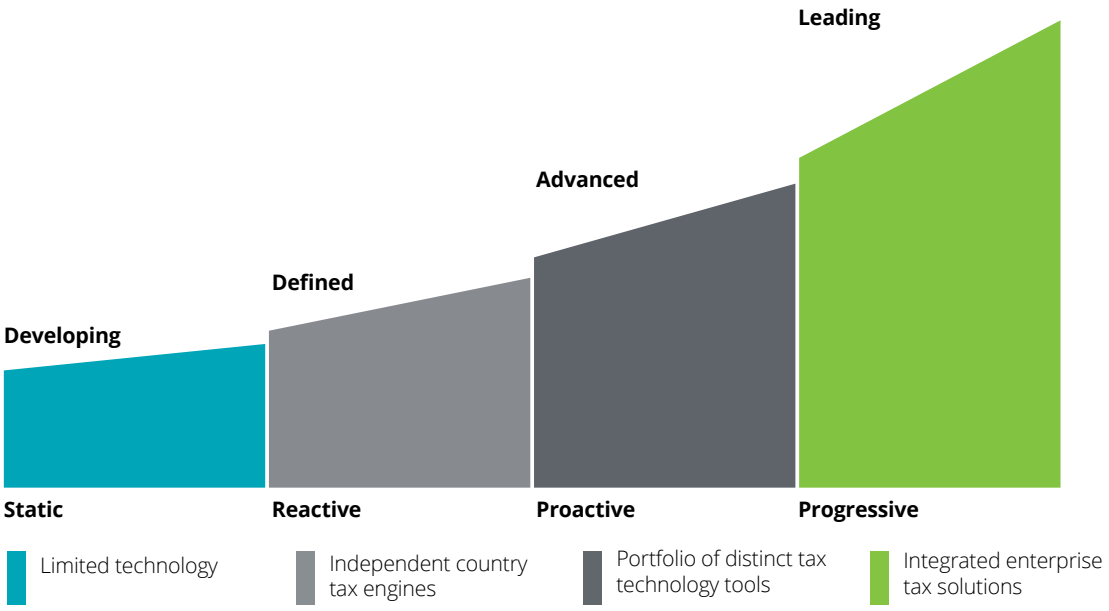
The tax function—an analytics late adopter

We asked our Dbriefs audience how they'd best describe their organizations.

Which of the following best describes your tax function's focus on data analytics?



As the chart suggests, tax has been a relatively late adopter of analytics. However, tax is now becoming a more progressive environment which integrates technology-enabled, group-wide tax processes, and feeds tax-sensitized data back into the business. Most tax functions today are in the Defined or Advanced sections of this curve: understanding where you are helps you plan how to move your tax function up the value chain.



The increasing sophistication of technology, internal expectations that tax should be both efficient and add value to the business, and governmental requirements for electronic data submission, are converging to force tax functions up this curve. Of those who are using analytics, the most popular area is direct tax, followed by transfer pricing and indirect tax. A small number have already started using analytics for BEPS, and this is expected to increase significantly as Country-by-Country Reporting comes on line.

There is an increasing urgency around transforming tax to elevate the function's capabilities to match other areas of the business that have already transformed. The goal of transformation is to elevate tax's focus from backward looking activities as a steward and an operator, to being a forward looking catalyst,strategist, and partner to the business.
In a transformed tax function, being a catalyst means executing the strategic and financial objectives of the organization to lead initiatives and work with the business on topics like supply chain and intellectual capital. As a strategist, tax contributes to the long-term strategic direction of the business. Analytics can help both the tax function and the company to become an Insight Driven Organization (IDO). By entrenching data, analysis and reasoning into the organization's decision-making processes, IDOs turn analytics into a core capability while promoting a culture of data-driven decision-making. As a result, organizations embed analytics across the entire organization and gain access to the analytical insights they need to tackle complex business problems.

Insight is typically obtained either by querying the data to understand how different aspects of the business affect tax outcomes, or modelling correlations in past data to understand what drives tax outcomes. It involves unlocking dormant value in the data.

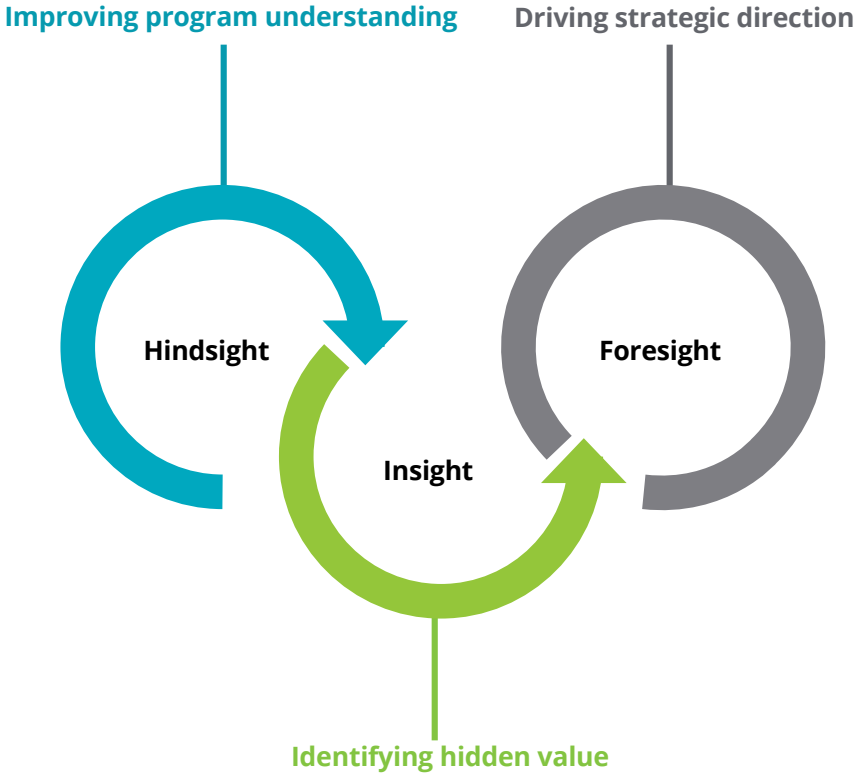
Tax is ripe for tax data analytics

Tax processes—such as regulatory reporting, transfer pricing, R&D credit claims, indirect tax compliance or tax accounting—are detailed and data intensive, as well as being iterative or repetitive which makes them prime candidates for tax data analytics. Once performed, presenting the results of tax data analytics in dashboards and other visuals allows tax technical experts to see their tax data in new ways, helping them find richer insights and make smarter decisions in real time. There are three main elements required to deliver effective tax dta analytics: large sets of data, tax technical knowledge, and of course, new technology.

The tax function is a significant consumer of data. Tax functions, and tax advisors, also produce data in the form of reports and compliance filings. As a result the tax data landscape can be extensive. Technical experts are able to apply business intelligence to this tax data, but this can't be done without new technology to manage these vast data sets, and apply analytic techniques and business intelligence, to make sense of the results. These are presented using visualization tools and new analytical algorithms to facilitate understanding and direct focus in a way spreadsheets never could, allowing users to interact with the data in real time and move easily between the macro and the micro levels.

As companies move up the analytics maturity scale—from hindsight through insight to foresight—the business impact and value increases. Hindsight provides real tangible value and helps tax to better understand the business by learning lessons from the past that are apparent in the data. Insight is typically obtained either by querying the data to understand how different aspects of the business affect tax outcomes, or modelling correlations in past data to understand what drives tax outcomes. It involves unlocking dormant value in the data. This could reveal the impact of tax policy changes, uncover attrition patterns within different employee demographics, or measure the value tax contributes to the business.

With good past data, statistical models can make future tax projections in the same way that marketing departments have done for years. However, foresight is the analytics endgame where data and predictive techniques come together to impact decision-making and the strategic direction of the business. Within the tax function, analytics moves practitioners from "what do I need to do" to "what do I need to know" and uses data-derived knowledge to drive actionable insights.



Change the mindset from
'What I need to do' to 'What I need to know'

How tax and data analytics intersect

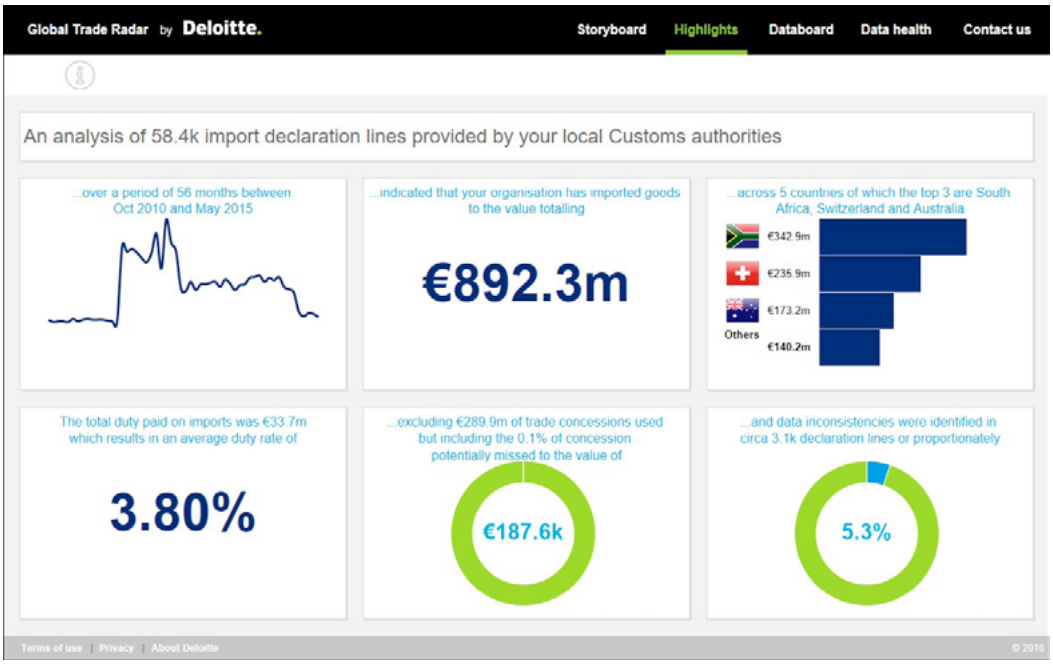
Data is the starting point of all tax processes and analytics tools help explain and explore that data in new ways. A real time relationship with data allows us to see things that we couldn't see before and answer questions that haven't been asked before. Managing data is a precursor to analytics and, as tax is one of the largest consumers of data, accessing and managing it is a significant challenge.

Given the importance of data, it is a positive sign that half of the Dbriefs audiences reported an improvement in their ability to access it. However, a lot of companies certainly have room for improvement. For those that do have access, they should be asking where that data comes from and in what form? Analytics uses a combination of internal data that might sit within the ERP solution and data that is external. Data can be classified as 'structured'—in a field or in tables—or 'unstructured' which would include data such as vendor invoices, tax legislation and other text documents. So far, many Tax organizations have applied analytics to internal, structured data to generate hindsight; for example, to check correct zero rating of exports. This could be enriched with external data such as downloads from the customs authorities, to provide independent validation that the ERP system is correctly applying the zero rate. The most complex area is using external, unstructured data from sources such as social media, but this area has not yet been deeply explored in most tax organizations.

When using analytics it is important to start with business objectives in mind, identify what you are trying to understand or predict, and establish which data assets are needed to answer the question. Starting the other way around—"let's have a look around the data and see what we find"—is not the right way to effectively use analytics to provide insights and identify risks, and can quickly become a time-consuming, expensive, and unproductive exercise.

Visualization and interaction

Visualization allows data to be explained and explored differently. For example, when reviewing a tax return, the user can quickly see the relationship between book income and tax income. Are the reasons immediately explicable, or is further investigation required? Is the book to tax divergence driven by temporary adjustments? Which are the most significant? Visualization helps to narrow the focus down to the issues that are driving the group's tax liability, be they exchange losses, depreciation calculations or intercompany transactions. Visualization is also a great communication tool to illustrate the as-is situation and allow scenario planning to illustrate the impact of business decisions.



Beyond helpful visualization, analytics allows users to interact immediately with underlying data. Strong visualization enables tax to better communicate with internal stakeholders including the CFO, the Chief Risk Officer and the Audit Committee. In the challenging area of Country-by-Country Reporting where complete data sets are—or will be—available in one place, visualization means users don't need to flip between different data sources or spreadsheets to understand how intercompany transactions are impacting the reports of different subsidiaries, or identify outliers in areas such as headcount expense as a percentage of revenue. Analytics goes beyond simple identification—one or two clicks can take the user from a macro view to specific transactions for investigation as needed.

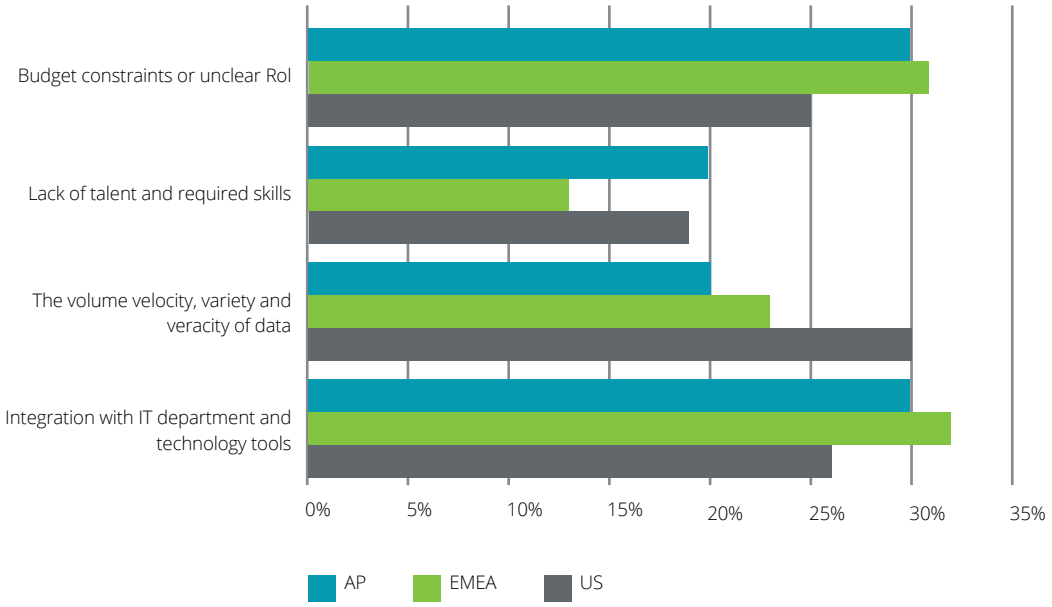
Securing the right resources

In order to progress on the analytics journey, companies need two key resources: infrastructure and people. The first is a tax data infrastructure that harmonizes and integrates tax data across the organization to arrive at one version of the tax truth, and allows tax data to be integrated with other types of financial, general or inventory data.

The other key resource is people who understand both tax law and analytics. As currently universities aren't producing enough of such graduates, some companies have found that one approach to developing in-house talent is to start with someone with a high level of quantitative data management skills and teach them the necessary tax knowledge to apply their expertise in the tax field.

We asked the Dbriefs audiences about the biggest challenges they face in executing an analytics strategy. Given the lack of tax data analytics graduates, it is perhaps surprising that the comparative scarcity of expertise is not seen as the most prominent challenge:

What is your organization's biggest challenge in executing an analytics strategy?



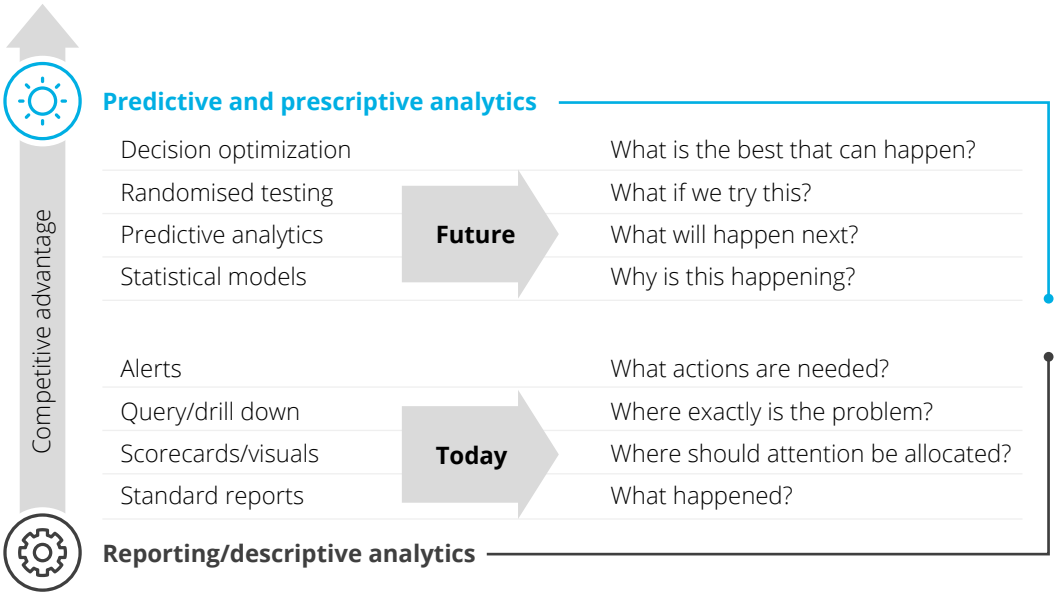
Budget constraints come up regularly not just in analytics but more broadly in building a business case for tax technology projects. To overcome such constraints the business case should focus on three areas: faster, better and more innovative is a strong basis for moving forward with tax data analytics. Faster means what it says, better relates to more fact-driven decisions with better insight into opportunities to manage the tax cost, cash tax, internal efficiencies, and the risk profile. More innovative is how the Head of Tax appears to stakeholders.

Use of analytics

The tax authorities in various countries are becoming increasingly imaginative in their use of data. They have been analyzing business transactions for their tax implications and will soon be performing analytics on Country-by-Country Reports to risk asses groups and direct tax audit effort accordingly. In this environment the tax function also needs similar skills and tools to engage the authorities on equal terms.

Where tax has used analytics, it has been to use reporting and descriptive analytics to produce standard reports, tax-oriented score cards and visuals. Organizations further ahead on the analytics journey use query and drill down capabilities, but even these are for hindsight purposes with little insight into what drives a company's tax situation. Where there is an understanding of what factors are correlated with what outcomes from a tax perspective, predictive analytics could use past data and statistical models to make projections about a company's future tax situation. Prescriptive analytics – which have yet to be much used in tax—will recommend what changes to make in the tax "eco system" to be more effective and efficient.

Analytics can help to answer many different questions for the tax function. From a compliance and reporting perspective, are major book-to-tax adjustments by jurisdiction trending in the appropriate direction given the overall business strategy? Is a strong push to reduce inventory levels reflected in the tax data? Analytics can help the business to visualise these answers, rather than the business having to ask each of its subsidiaries for the information. In provisioning, analytics can reveal monthly trends in book income, cash taxes and effective tax rates to help avoid surprises without waiting for information from elsewhere. In indirect tax, analytics can test every single transaction to determine, for example, if the appropriate level of transactions are classified as exempt from sales and use tax, or verify the timeliness of VAT credit applications.



Using predictive and prescriptive tax analytics is an emerging field as companies get a better understanding of what variables drive tax in key areas of the business. These drivers can be built into a model of the tax situation to predict and visualize the tax impact of different outcomes and between different units of the business over time.

Modelling and simulation allow the tax function to explore the implications of particular decisions such as equity or intra group financing, alternative options for the ownership of intellectual property or the decision for a branch office or incorporation of a legal entity. From an audit perspective it is possible to sample tax items or analyse all business transactions to understand the likelihood of errors and audit risk, and some organizations are seeing possibilities in the use of unstructured data. Cognitive technologies already do this and over time these advances are likely to replace much of the tax technical work currently performed by in-house and third party specialists.
In order to get started with data analytics, the tax, finance and IT functions need to work together to structure the data model using tax and other data from disparate sources, decide how far back to go and what types of analyses are desired or at least possible. Tax data analytics offers a wealth of opportunity to corporate groups that get to grips with the challenges and significant risk if they lack the same analytical fire power as the tax authorities to whom they report.

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For more information on how Tax Data Analytics can contribute to the transformation of your tax function and your ongoing compliance and reporting obligations, contact:

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