

Data analytics and workforce strategies  
New insights for performance  
improvement and tax efficiency



Leading organizations today are shaping effective workforce strategies through the use of data analytics. They are enhancing performance and tax efficiencies by leveraging the insights derived from analytics to craft global talent, reward, and employment tax programs that add value across the business. This approach was the topic of a Deloitte **Dbriefs** webcast in which presenters reviewed opportunities to drive decision making and add greater impact to the business strategy of an organization by offering tips for using data analytics to identify, manage, and mitigate risks, and to achieve potential tax efficiencies.

**The basics — analytics defined**

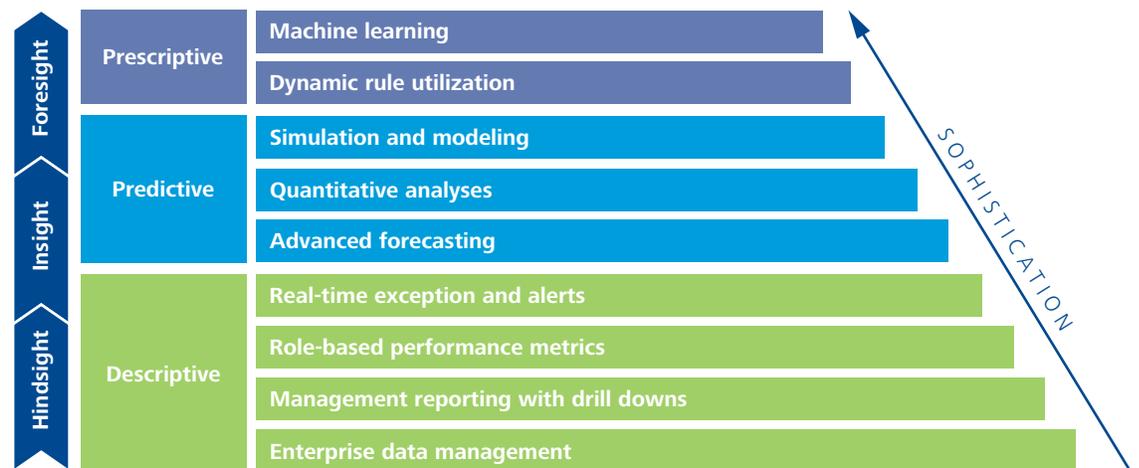
Put simply, analytics is the practice of deriving insights from data to make better fact-based decisions. Businesses today have access to such a wide array of analytics applications and capabilities, with varying levels of sophistication and potential benefit, so it is important to break down the basics. Figure 1 depicts a range of techniques leveraged to derive insights from data. These range from the most basic methods, “descriptive analytics,” which provide the foundation for turning data into information, to “predictive analytics” that provide advanced forecasts and the ability to model future results and outcomes, to the top-tier of analytics called “prescriptive analytics” that leverage

machine learning techniques and dynamic rule engines to both interpret data and recommend actions. In our view, descriptive analytics provides the ‘hindsight’ view of what happened, predictive analytics provides the ‘insight’ to current processing, while prescriptive analytics provides the ‘foresight’ view of what to anticipate and what to do next.

Analytics can fuel decision-making across many organizational domains (see Figure 2 on the next page). Some of the most common uses today include:

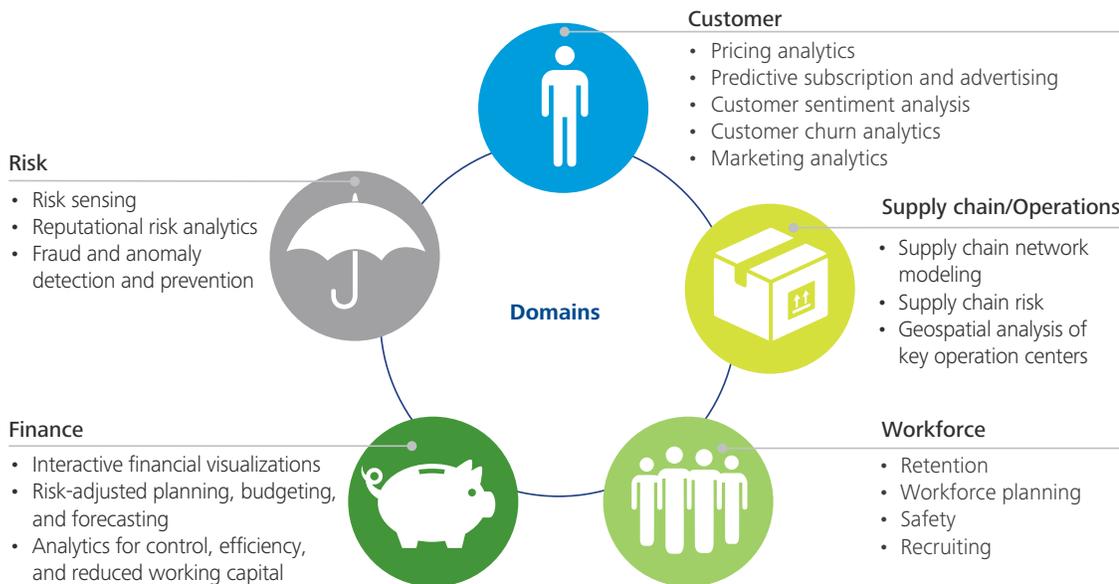
- Customer strategies — Pricing, predictive subscription and advertising, customer sentiment analysis, customer churn, and marketing.
- Supply chain/operations strategies — Supply chain network modeling and enhancement, supply chain risk, and geospatial analysis of key operation centers.
- Workforce strategies — Retention, workforce planning, safety, and recruiting.
- Finance strategies — Interactive financial visualizations; risk-adjusted planning, budgeting, and forecasting; and analytics for control, efficiency, and reducing working capital.
- Risk strategies — Risk sensing, reputational risk analysis, fraud, and anomaly detection and prevention.

**Figure 1: Analytics techniques**



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Figure 2: Analytics is being applied to create value across a range of domains



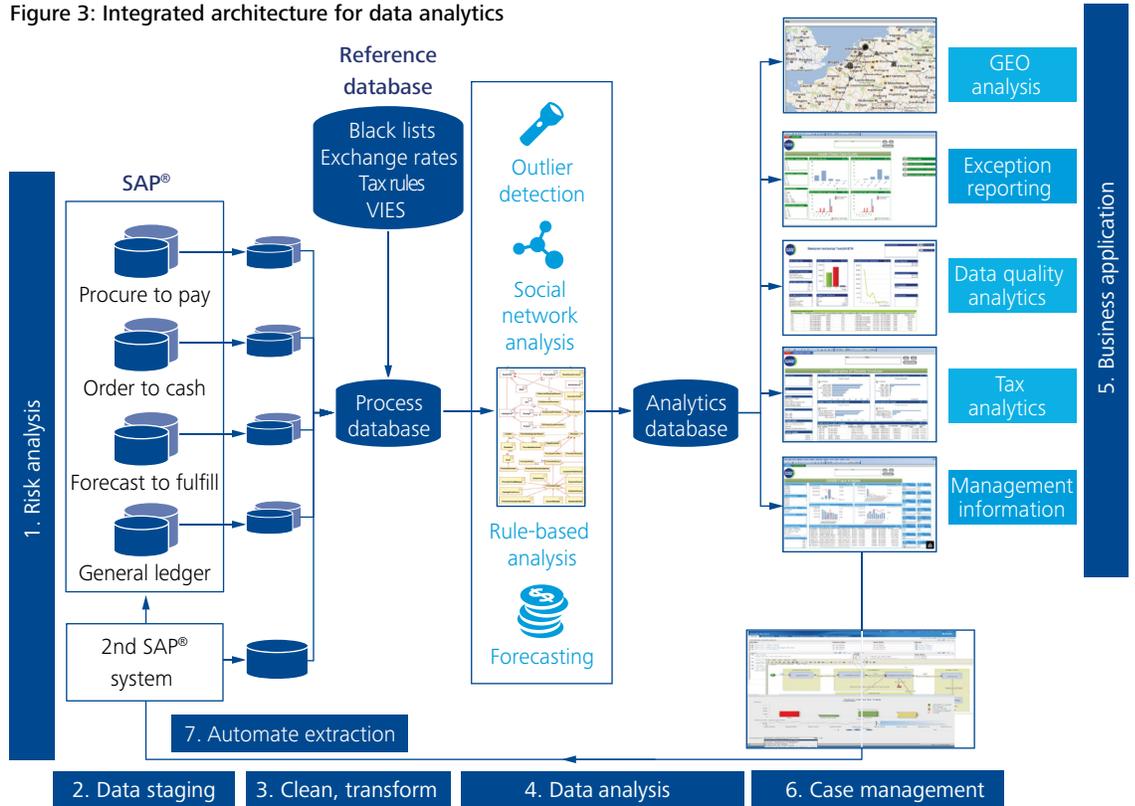
Today, many tax functions are utilizing data analytics in a number of areas. One common area of application is indirect taxes (i.e., value added, sales and use taxes, etc.), as abundant transactional data from enterprise resource planning (ERP) systems facilitates the use of analytics. Some tax organizations also use analytics to support transfer pricing decisions and tax-aligned supply chain planning.

But there is much more that tax departments can do to leverage analytics, and there are compelling reasons for doing so — particularly the rapidly evolving requirements for filing standard electronic data in many countries around the globe. Countries are changing the way they conduct audits based on this standard electronic data. In the UK, standard XBRL (eXtensible Business Reporting Language) filings were expanded in 2012. In Germany, standard electronic filing of tax basis balance sheets has been introduced. The Australian government assigns large businesses a risk rating derived from extending and enhancing data analytics and risk profiling techniques. The Brazilian government is one of the more progressive with respect to their use of electronic data, and they have already begun to phase out the process of filing corporate tax returns due to the large amounts of data that the country’s tax authorities already maintain.

This trend is not likely to slow down as governments seek to conduct audits and monitor compliance in much different and more efficient ways. Tax departments may benefit by approaching tax processes to conform to these data requirements not just as compliance exercises but as opportunities to establish new capabilities for producing greater insight that could create value for the organization.

Figure 3 on the next page illustrates how analytics can pull organizations closer together. Regardless of the function involved (tax or other), the foundation for effective analytics resides in a variety of structured and unstructured (such as social media) enterprise data sources, represented on the left side of the diagram. Once this data is aggregated, the process of developing queries or correlations can occur (middle of the diagram). The “magic” in analytics, though, is the visualization aspect — presenting views to the business user (one of which is tax, on the right side) in a way that enables users to identify opportunities or areas of concern with drill-down capabilities to more detailed information that allows additional testing or queries.

Figure 3: Integrated architecture for data analytics

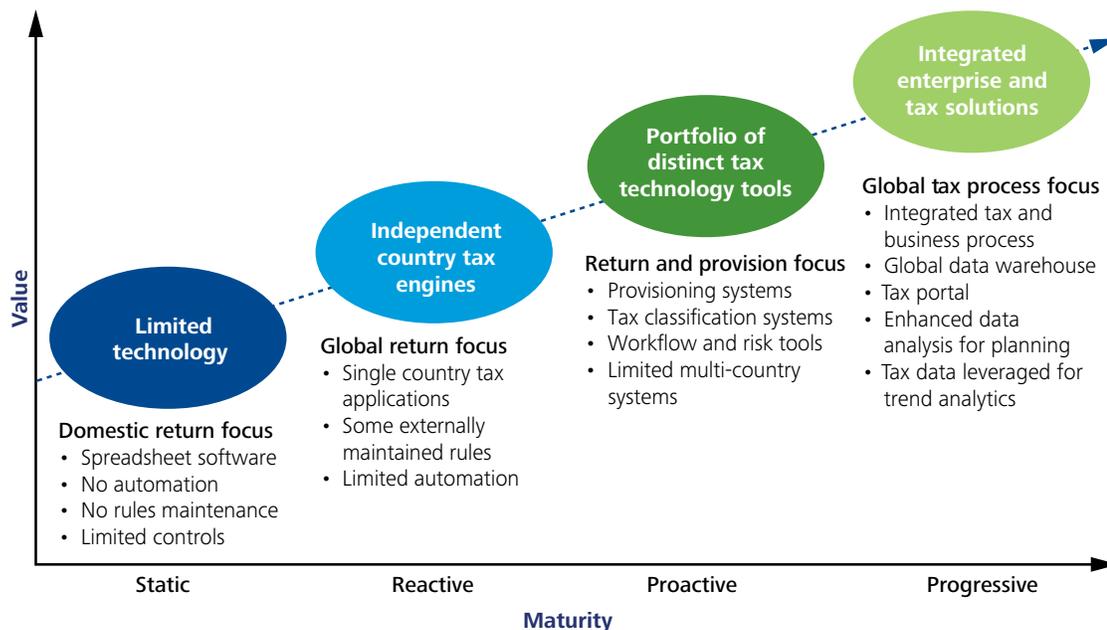


The key point here is this: Once data is staged, queries and visualization can be adapted to support specific user requirements. Many organizations already use third-party analytics tools in some capacity. Tax departments should look for opportunities to work closely with other organizational departments, such as human resources, marketing, accounting, and treasury to understand the analytics initiatives underway within the organization and take greater advantage of those existing efforts.

Figure 4 on the next page presents a useful framework for assessing tax technology maturity. The further to the right, the deeper the use of analytics and the greater the return — but also the greater the investment. Keep in mind that analytics may support tax operations at any stage on this continuum. Understanding where an organization falls on the spectrum helps frame the approach that a tax department should consider.

This, by the way, is also true of finance transformation initiatives, which may offer a distinct opportunity for tax departments to identify and tax sensitize data for downstream planning, reporting, and audit activities. As one of the largest data consumer inside any organization, the tax department has a vested interest in a project's success.

Figure 4: Tax technology maturity matrix



### Analytics in the world of global talent and mobility

Whether we're talking about tax or talent management, the challenges and requirements for leveraging analytics are the same. A cycle of four primary components can help in realizing the power of analytics, immediately and continuously over time:

- **Step 1: Issues** — What business problem(s) you are trying to solve?
- **Step 2: Facts** — What data can you leverage to understand the business and improve performance?
- **Step 3: Understanding** — What is currently happening or has happened related to your business, and why?
- **Step 4: Actions** — What should and will you do about it? And how will you build analytics into business processes going forward?

Step four is critical. Even the best analytics produce nothing good unless they drive decisions and actions that improve business performance. This is where analysis becomes power.

From Deloitte's research<sup>1</sup>, we know there is relevant context for solving talent issues through analytics — whether predicting employee performance or conducting advanced workforce planning. In a recent survey, 78 percent of large organizations (10,000+ employees) rated talent analytics as urgent or important and placed it among their top three most urgent trends. Forty-five percent of those organizations also rated themselves as "not ready" when assessing their ability to take on HR analytics. And only seven percent rated their analytics capabilities as "strong."

As the talent agenda moves from bottom-line impact to fostering top-line growth, its specific requirements will include innovation, expanded and enhanced products and services, participation in emerging markets, and acting as a global organization. Talent analytics offers a potential opportunity to aggregate traditional data sources (employee performance, rewards, profiles, histories, etc.) with operational data (financial performance, customer satisfaction, sales and growth, etc.), as well as non-traditional external data (social media, economic conditions, etc.) to derive new insights — and foresight — into workforce populations to create business value.

<sup>1</sup> Global Human Capital Trends 2014: Engaging the 21st century workforce, March 2014, [http://dupress.com/wp-content/uploads/2014/04/Global-HumanCapitalTrends\\_2014.pdf](http://dupress.com/wp-content/uploads/2014/04/Global-HumanCapitalTrends_2014.pdf)

**Organizational talent and capabilities.** One area of possible opportunity is in managing organizational talent and capabilities where analytics can enhance understanding of retention risks and success factors across the organization. For example, analysis may look at, among other things, employee behavior, such as vacation patterns or supervisor actions that work as performance “blockers” for high-potential employees beneath them. It may also include external data, such as local employment levels and conditions or even individuals’ external networks and experiences outside the organization. Aggregating and cleansing this data and evaluating variables enables development of analytical models that may provide a company with better predictive capabilities related to retention of high-potential employees and a better overall sense of the breadth of organizational talent and capabilities.

Analytics also can aid in aligning global HR initiatives; for example, assessing global reward practices through comparisons across markets and market pay practices to provide insights about how rewards may drive more effective talent acquisition and better performance from employees.

**Global mobility.** Global mobility is one topic at the forefront of today’s talent agenda. In previous paradigms, analytics would have looked at this area primarily from a cost and efficiency perspective. Today, global mobility as a contributor to the development of talent with global experience and perspectives is viewed as an enabler of top-line growth and key business strategies such as expansion into emerging markets. Figure 5 offers a framework for using analytics to understand the effectiveness of global mobility initiatives and, more importantly, develop insight and foresight to drive talent advantage and greater return on investment.

Figure 5: Analytics and global mobility, measuring effectiveness and return on investment

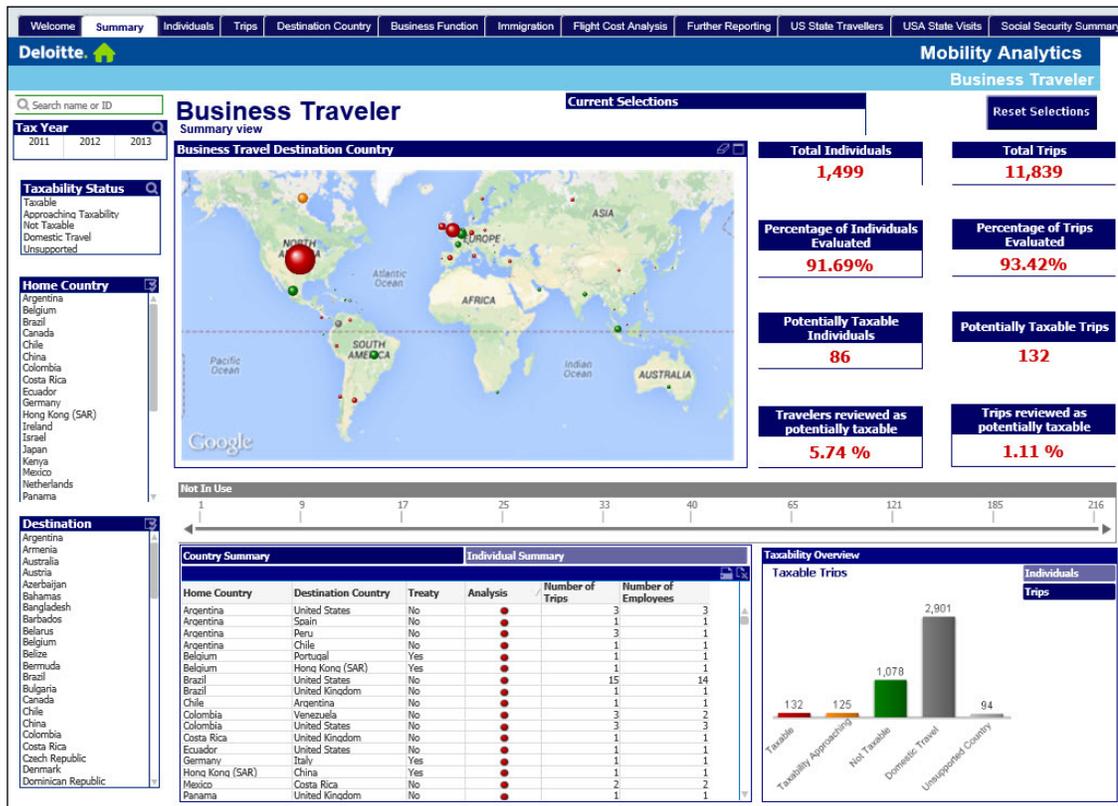
Global Mobility Analytics Framework					
		Measures	Hindsight	Insight	Foresight
		Examples			
Strategic alignment	Business	Measures the contribution made to the business, including growth and customer satisfaction	<ul style="list-style-type: none"> <li>Proportion of assignments meeting specific business goals</li> </ul>	<ul style="list-style-type: none"> <li>Increase or decrease by region, business, or sponsor</li> </ul>	<ul style="list-style-type: none"> <li>Attributes of successful candidates</li> </ul>
	Talent	Measures the impact of assignments on talent retention and performance management	<ul style="list-style-type: none"> <li>Retention of assignees two years post assignment</li> </ul>	<ul style="list-style-type: none"> <li>Availability of suitable roles and promotion opportunities post assignment</li> </ul>	<ul style="list-style-type: none"> <li>Career planning</li> <li>Attributes of successful assignments</li> </ul>
Effectiveness	Service	Measures the quality of mobility service delivery to company, business, and assignee	<ul style="list-style-type: none"> <li>Customer satisfaction</li> <li>Mobility responsiveness</li> </ul>	<ul style="list-style-type: none"> <li>Areas requiring attention to enhance satisfaction</li> <li>Impact of service on productivity</li> </ul>	<ul style="list-style-type: none"> <li>Interventions in individual assignments</li> </ul>
	Operational	Measures the efficiency of global mobility program administration, including the cost of internal and external administration resources	<ul style="list-style-type: none"> <li>Global mobility staff turnover rates</li> <li>Vendor performance against KPIs</li> </ul>	<ul style="list-style-type: none"> <li>How to improve retention</li> <li>KPIs impact overall program</li> </ul>	<ul style="list-style-type: none"> <li>Re-alignment or training of mobility personnel</li> </ul>
	Financial	Measures the cost of providing mobility related compensation and benefits to mobile employees under the global mobility program	<ul style="list-style-type: none"> <li>Total cost per assignment</li> <li>Relocation cost as part of total assignment cost</li> </ul>	<ul style="list-style-type: none"> <li>Accrued cost vs. actual</li> <li>Large number of vendors servicing program</li> </ul>	<ul style="list-style-type: none"> <li>Vendor service review</li> <li>Policy utilization</li> </ul>
	Process	Measures the extent to which mobility processes result in accuracy, timeliness, and efficiencies	<ul style="list-style-type: none"> <li>Number of inaccurate payments</li> <li>Number of days to complete cost projection</li> </ul>	<ul style="list-style-type: none"> <li>Where delays are occurring in the process</li> <li>Accuracy of assignment information provided</li> </ul>	<ul style="list-style-type: none"> <li>Implement regular status updates from vendors</li> </ul>

For each type of measure, the framework offers examples of analytics that provide hindsight, insight, and foresight. For example, talent analytics may look at retention two years after the end of an assignment (hindsight) and whether individuals are still high-potential leadership candidates within the organization. Even better, though, is the foresight that enables an organization to assign individuals to appropriate talent opportunities and to provide proper career planning activities upon their return from global deployment in order to continue their growth trajectory.

What about cost — is cost historically a driving factor around global mobility? This framework doesn't just look at the cost of assignments; it enhances understanding of the predictors of ability to manage costs and which policies will be more effective and potentially drive greater cost efficiency in deployments.

**Tax risks of global mobility.** Tax risk is a hot workforce analytics topic, relevant to business travelers both in the United States and globally. Data and analytics can provide organizations with better insight about their travelers, where they go, and the income they earn in various jurisdictions while traveling. Travel and expense records, corporate network log-in IDs, and other sources leave data footprints related to travel and can help organizations see and identify tax exposures associated with traveling workforces so that they can manage and mitigate those risks. Figure 6 illustrates an example of an analytics dashboard that aggregates this data into a view that enables management of global mobility tax risks.

Figure 6: Example of global mobility tax analytics dashboard



### Keys to success

Regardless of the talent application, there are several keys to a successful application of data analytics. First and foremost is the ability to establish the necessary cross-functional capabilities to produce relevant insight and foresight. That requires developing strong partnerships with IT and business operations. Furthermore, it is important to begin with the business challenges to be addressed and not with the data analysis — in other words, use problems to drive investigation, not the other way around.

Next, create positive impact through simple dashboards and interactive tools that may allow substantial discovery — as seen in Figure 6. Integrate the initiatives and projects required to address data-related issues, challenges, and opportunities into a common structure for managing progress and measuring value across the enterprise. A single, shared end-state architecture and data governance framework underpins delivery of improved access to high-quality information across the enterprise. If done right, this framework may enable people to begin understanding the problems and solutions, respond to issues dynamically, and take greater ownership in doing so.

Finally, it is important to continually revisit the business issue(s), the data, and the analysis. Priorities change, and there are always new and emerging data sources both inside and outside the organization. The corresponding analytics should also become a living, evolving program, and not a one-time event.

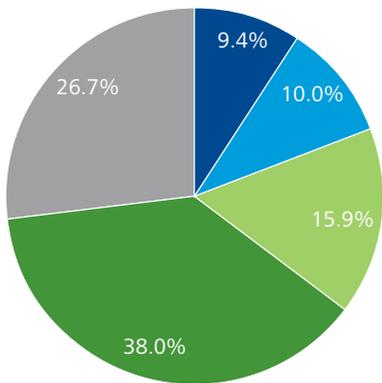


### Tax executives' perspectives about data analytics

Deloitte hosted a **Dbriefs** webcast to discuss how leading organizations are using data analytics to shape effective workforce strategies. More than 2,100 participants shared their own views through responses to polling questions posed during the webcast.

Analytics capabilities and tools are developing rapidly, but polling responses indicated that relatively few (9 percent) said they perceive no significant barriers on their path to applying data analytics. Thirty-eight percent reported that resources — people, capabilities, infrastructure — are the most significant barrier to applying analytics within their organizations. Others cited lack of clear definitions as the key barriers: for 16 percent that means clarity around application of analytics, and for 10 percent that means clarity around the business issues to be addressed.

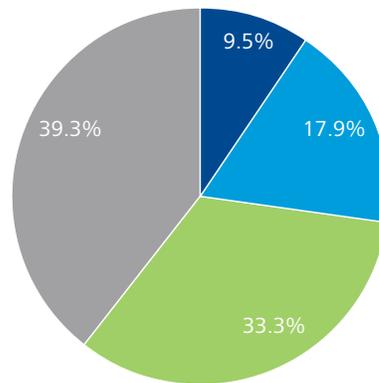
#### What do you see as the single most significant barrier to applying data analytics in your organization?



- No issues: We are well on our way
- Business issues not well defined
- Application of analytics not well enough defined
- Lack the necessary resources — people, capabilities, infrastructure — in the organization
- Unsure/not applicable

How do those barriers translate into current tax focus on data analytics? Again, just 10 percent of participants reported that their organizations are “extremely focused” on tax analytics and using core data to drive corporate effectiveness and strategy. About 18 percent said their company is “exploring” the use of tax data analytics but hasn’t produced tangible efforts to this point. One-third of participants said their organizations have “not embraced” tax data analytics to any great extent. Accordingly, there may be much to be gained for those tax functions that revisit their focus on data analytics — particularly given the significant volume of valuable data that already exists in corporate systems.

#### Which of the following best describes your company's tax focus around data analytics?

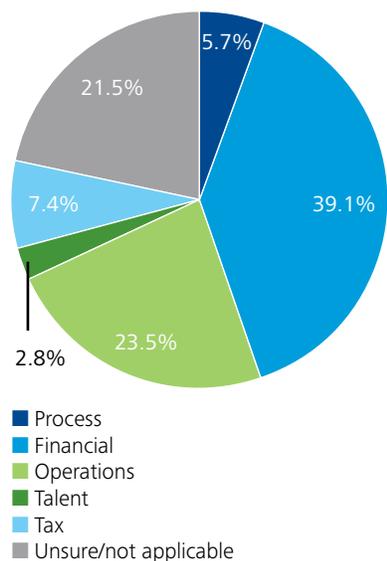


- Our company is extremely focused on tax analytics and using core data to drive our corporate effectiveness and strategy
- Our company is exploring the use of tax data analytics but I have not seen tangible efforts as of yet
- Our company has not embraced the use of tax data analytics to any great extent
- Unsure / not applicable

Source: Deloitte's Business Strategy & Tax Dbriefs webcast, "Data Analytics and Workforce Strategies: New Insights for Tax Efficiency and Performance Improvement," held on May 5, 2014. Polling results presented herein are solely the thoughts and opinions of survey participants and are not necessarily representative of the total population.

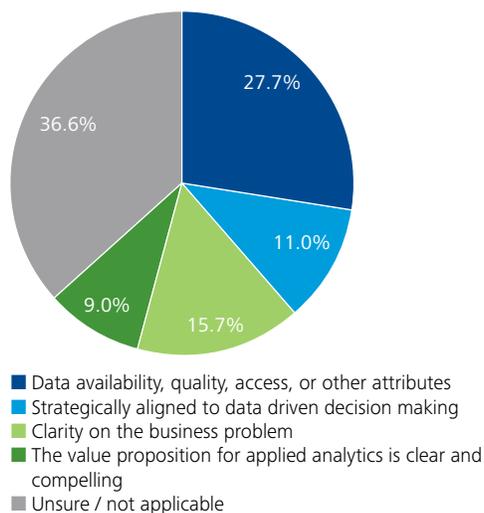
Analytics offers potential applications and benefits across the enterprise. Webcast participants said they perceive analytics as most readily applicable to financial (39 percent) and operations (24 percent) needs. Far fewer believed the areas ripest for analytics use are tax (7 percent), processes (6 percent), and talent management (3 percent).

**What area do you see analytics most readily being applied to in your organization?**



When it comes to applying analytics to solve “crunchy” questions, 28 percent of webcast participants cited data availability, access, or other attributes as their organizations’ most important assets. Another 16 percent cited clarity about the business problem being addressed. A further 11 percent said they believe the most important asset is strategic alignment to data-driven decision making.

**When applying analytics to solve your crunchy questions, what do you consider to be the greatest asset within your organization?**



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