Utilizing technology to expand tax capabilities: Get started by envisioning the future
Technology continues to be an innovation springboard for companies in the manufacturing industry, but shouldn’t it enable greater capabilities and efficiencies for their tax functions as well? Tax functions unfortunately are lagging behind their primary customer—the business—as well as their peers in the broader finance function with respect to the use of technology.

Tax continues to struggle with manual practices and ineffective utilization of new tax technology tools to gather, prepare, and analyze data. Waiting to adopt technology-enabled processes will likely perpetuate a tax function’s focus on shorter-term operations rather than a long-term strategic vision. An unfortunate consequence is the potential reduction in the quality and accuracy of financial reporting. In 2015, 12.8% of all restatements were tax-related, according to Audit Analytics—while there were no significant deviations over the past decade, last year was one of the higher percentages within this period.

Other impacts of not embracing technology-powered tools include:
- an increased risk of penalties and interest for inaccurately filed tax returns;
- a higher effective tax rate than industry peers;
- ineffective access to information to promptly defend positions upon audit; and
- an inability to serve various stakeholders, both internal and external.

Those organizations that adopt technology and strive for more efficient processes can free up resources for value-added activities such as information analytics, advanced business consulting, and broader tax planning. Real-time access and analysis of data can also favorably support major corporate events such as mergers and acquisitions. These capabilities can directly contribute to the bottom line and strategic vision of the company.

These 2016 survey results of manufacturing tax executives are consistent with the results of a similar survey that PwC and MAPI conducted in 2013. Although this year’s survey results show some slight improvement with respect to the industry’s use of tax technology, the bottom line is that tax functions overall have made little progress toward integrating technology into their operations in a meaningful way. As a result, there is a growing gap between the capabilities of the broader finance function and tax.

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1. Audit Analytics—Restatement issue analysis: Tax/Expense/Benefit/Deferral as a % of all restatements. Data as of August 2016.
So why aren't tax functions more aggressively seeking improvement, given increasing tax department budgets, the availability of new technology-enabled solutions, and elevated reporting risks associated with BEPS, EU state aid, and other ‘fair share’ initiatives? A common hurdle is determining how to take that first step. Envisioning the future and evaluating what capabilities tax must have over the next 5 to 8 years are critical. Moreover, aligning these initiatives with imperatives of the broader organization, particularly finance, can bolster the business case for tax function transformation.

Transformation of the tax function should not be treated as a special project. Rather, it should be an ongoing process undertaken by all members of the tax team and the broader finance function, resembling an annual process more than a one-time special event. This roadmap for change may span several years, but the resulting efficiency and functionality gains can be long-lasting, enabling the tax function to be viewed as a strategic business asset rather than principally a compliance center.

PwC and the Manufacturers Alliance for Productivity and Innovation (MAPI) recently collaborated on a survey of manufacturing companies to evaluate their tax function and determine:

- how they are positioned with respect to leading tax technology practices;
- where they stand in terms of adopting and enabling tax technology initiatives;
- what operational challenges they are facing;
- their satisfaction with existing technology; and
- where they stand with respect to developing a tax technology strategy.
The growing importance of technology for tax functions

Megatrends impacting organizations
Global megatrends are changing the business world, with implications for tax. Demographic shifts in population, accelerating globalization, shifts in global economic powers, and the need for operational optimization are occurring, as is the dawn of technological breakthroughs that are permeating many aspects of our lives. The impact to tax functions will vary but there are some correlating trends that are prompting tax functions to reevaluate their operations:

- governments are requiring much greater transparency as they compete for business, resulting in greater compliance burdens;
- the shift to developing countries is increasing tax risk and complexity; and
- new technology capabilities for all areas and processes within tax are arising, as well as the emergence of more vendors developing technology-enabled tools.

Notwithstanding these changes, staffing levels for the tax function are holding steady or falling while adequately addressing compliance obligations consumes more time. The pool of tax staff is more decentralized with growing skill gaps, most notably with the increasing need for technology-based knowledge.

Country-by-country reporting (CbCR) and other transparency initiatives are creating an extraordinarily complex and challenging global tax environment. These initiatives will enable jurisdictions to share greater amounts of detailed tax information with each other. It also is projected that the majority of jurisdictions are likely to implement technology systems and data mining capabilities to conduct a truly global reconciliation and related audits.
How will technology enable the tax function of the future?

The rapidly evolving global tax landscape requires tax to rely more heavily on technology and automation with an increased focus on efficiency and tax risk management. Senior tax executives need to take a critical look at their ability to meet the obligations that lie ahead over the next several years and evaluate whether they are effectively using technology to do so. Most tax functions will need to strengthen their capabilities — relating to data, people, processes, and technology — to address these and other challenges.

Over the next 3 to 5 years, we predict that tax departments will begin to:

• receive all information in a ‘tax-ready format’ from either their enterprise-wide financial systems or dedicated tax data hubs which will be developed internally, licensed from third-party vendors, or accessed through co-sourcing arrangements;
• prioritize data security to address concerns over confidential information being inadvertently released or shared publicly;
• use their enterprise-wide financial systems to prepare tax calculations (e.g., income tax accounting and indirect taxes), thereby replacing spreadsheets and traditional tax technology solutions; and
• rely on professional data analysis tools to assist in the decision-making process in areas such as risk detection, opportunity identification, projections and scenario planning, and overall business support.

90% of global CEOs are changing how they use technology to deliver on wider stakeholder expectations, according to PwC’s 19th Annual Global CEO Survey. A recent 2016 survey of US CEOs also confirms their continuing investment in technology as the most direct path to meaningful innovation and operational efficiency.
**Survey results: What tax technology trends are we seeing across surveyed companies?**

**How surveyed companies view the current state of their tax function...**

<table>
<thead>
<tr>
<th>Tax technology strategy</th>
<th>Deficiencies and material weaknesses</th>
<th>Budgeting for technology investments</th>
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<tbody>
<tr>
<td>74%</td>
<td>16%</td>
<td>94%</td>
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</table>

- **74%** of the companies (down from 77% in 2013) do not have a tax technology strategy in place, or any plans to develop one.

**PwC prediction over the next 3 to 5 years:** Creating a tax technology strategy will become a greater business imperative for tax functions. Those that currently do not have such a strategy will likely begin to develop one in conjunction with their internal IT function as a starting point.

- **16%** of the companies indicated that they have experienced either a significant deficiency or material weakness related to tax in the last three years. A majority of these companies said that enhanced technology or data would have helped them avoid this situation.

**PwC believes** that independent financial statement auditors will likely be spending an increasing amount of time reviewing the effectiveness of a company’s use of technology with respect to income tax accounting controls and processes.

- **94%** of the companies reported that investment in technology accounts for less than 25% of their tax budgets. The tax budgets for about 42% of surveyed companies increased this year. However, spending on tax technology remains stubbornly low.

**PwC prediction over the next 3 to 5 years:** Tax department budgets are expected to increase or remain the same.
**Dedicated tax provision and compliance software**

Dedicated tax provision and compliance software continue to be the dominant tax reporting tools, with compliance software more prevalent than provision software. There is an increased level of automation within the provision process and those using software are generally satisfied; however, a significant level of manual processes and lack of integration still exist.

Companies are still using spreadsheets to support their provision process 56%

Companies have an automated tax accrual process 35%

Companies use manual process 35%

Companies use month-end process 30%

Only 30% of the participants believe that the provision process is integrated with the compliance process. This means that there still is a great deal of opportunity to integrate these processes.

**Finance transformations: Tax sensitizing data and leveraging ERP systems**

53% of the companies have undertaken a finance and/or tax transformation, with an additional 15% exploring the benefits of such an initiative. In addition, fewer than 50% of the respondents were involved in defining the requirements for their enterprise resource planning (ERP) implementations.

These transformation efforts are a core driver of efficiency for tax and can improve the effectiveness of the tax provision and compliance process. Transformation initiatives should be a collaborative effort to expand efficiencies for tax. Companies should take steps to ensure that they do not miss out on opportunities to leverage transformation efforts to enhance tax operations.

**Data management**

33% of the companies believe that they are effectively leveraging their ERP systems to accumulate ‘tax sensitive’ data.

**PwC prediction over the next 3 to 5 years:** With increased business complexity driving the need for better data consolidation, it is projected that 60% of tax functions will receive all information in a tax-ready format from their enterprise-wide accounting system and 40% will centralize substantially all of their source and output data into a tax-specific data hub.
## How surveyed companies view the current state of their tax function... (continued)

### Dedicated technology role in tax

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>73%</td>
<td>of the companies (down from 75% in 2013) do not have a dedicated tax technology role within their organization.</td>
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**PwC prediction:** Establishing this role will become a key element to success given that competitive and regulatory pressures are requiring virtual teams of tax professionals proficient in technology and data analysis. There are many benefits for doing so—most notably, this person will develop a more in-depth knowledge base and serve as a champion for tax technology and transformation strategies.

### Workflow and document management

<table>
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<tr>
<th>Percentage</th>
<th>Description</th>
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<tr>
<td>77%</td>
<td>of the companies currently do not utilize workflow technology and many still use shared drives (89%) and email (36%) for document management. With little change from the 2013 survey, most respondents see this as a top area to address.</td>
</tr>
</tbody>
</table>

**PwC prediction over the next 3 to 5 years:** A projected 66% of tax functions will use automated workflow, document management, and collaboration tools because internal and external stakeholders are demanding better resource utilization.

### Use of outsourcing and shared service centers

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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<tbody>
<tr>
<td>57%</td>
<td>Companies outsourcing their non-US direct tax compliance</td>
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<tr>
<td>36%</td>
<td>Companies outsourcing their non-US indirect tax compliance</td>
</tr>
<tr>
<td>32%</td>
<td>Companies outsourcing their US indirect tax compliance</td>
</tr>
<tr>
<td>27%</td>
<td>Companies outsourcing their US direct tax compliance</td>
</tr>
<tr>
<td>42%</td>
<td>Companies utilizing shared service centers</td>
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**PwC prediction over the next 3 to 5 years:** An emerging trend is the transformation of global tax preparatory compliance and reporting. PwC projects that 75% of these tasks will be outsourced or performed in a shared service center. Technology plays a key role for this change—as technology improves, the risks of outsourcing can be reduced and the scope of what is outsourced can expand.
Intercompany transactions

While 57% of the companies have configured their ERP systems to account for a significant percentage of intercompany transactions (an improvement over 2013), a majority still rely on manual processes to deploy their transfer pricing strategies.

Use of analytical tools and time spent on tax analysis

Most companies are not leveraging analytic tools and are spending less than 30% of their time analyzing tax data. In addition, only 15% of respondents utilize business intelligence (BI) tools on a frequent basis, with 57% reporting no current use of such tools.
Primary areas companies want to improve

Companies ranked tax process, financial process, and the use of technology highest in terms of areas of improvement for their tax functions.

Overall effectiveness

79% of the companies felt that better use of technology and data would significantly improve the effectiveness of their tax functions.

As an example, a majority of respondents believe that more focus on the management of ‘tax sensitive’ data would improve the effectiveness of tax provision and compliance software.

Top five technology areas

Survey results point to five technology areas that most positively impact tax:

- data integration and ERP;
- data hub and data mart applications;
- reporting and forecasting tools;
- workflow; and
- document management.

Leveraging technology to comply with BEPS-related requirements

Tax functions must prepare now for CbCR and other transparency initiatives under BEPS. Most notably, they must be able to reconcile information between external consolidated financial, tax, and local statutory reporting. However, a majority of the companies have not started working on their CbCR compliance.

- 32% of respondents have developed a CbCR strategy.
- 28% of respondents identified a technology platform to assist with CbCR.
- 87% of respondents have not amended their transfer pricing policies and procedures to comply with CbCR.
Getting started: Practical steps toward implementation

Manufacturing companies understand the need for important change within the tax function. They may envision the broader finance function and other teams within the organization embracing new technology-enabled approaches. However, senior tax executives may have difficulty finding time to evaluate how such change is going to occur, how to quantify and justify its cost, and how it will be implemented without impacting the tax function’s day-to-day operations.

Overcoming these barriers can be difficult but, in this case, change comes with opportunity. Tax functions can greatly enhance their capabilities to support the overall business and the broader finance team by developing enhanced analytical abilities, quicker financial statement-related processes, and greater real-time insights.

Look to the future: Creating a vision for the tax ‘brand’

A critical first step for transformational change is for senior tax executives to define the tax ‘brand”—their vision for a tax function that not only completes compliance obligations in a timely manner but also contributes to the strategic thinking of the organization.

A leading tax function achieves a high level of results across all of its deliverables, consistently delivers strong reporting results, and regularly satisfies key tax scorecard metrics. While these metrics will vary depending upon the specific organization, examples could include:

- top quartile effective tax rate (ETR);
- accurate forecasting and predictability of large cash tax payments;
- no financial reporting surprises and a proactive relationship with the audit firm;
- relevant, real-time data provided quickly to the C-suite and business teams using automated tools;
- seat at the table with finance and operations and active on strategic legislative matters;
- accelerated tax compliance filer with limited, insignificant return versus provision adjustments;
- effective department with efficient operating budget and highly skilled team; and
- good corporate citizen.

More sophisticated tax functions should reevaluate their processes so that they have the available time, resources, and technology-enabled capabilities to:

- run provision calculations throughout the year with improved connectivity with the compliance process;
- perform real-time data analysis around tax accounting, planning, and compliance;
- provide valuable insights in the decision-making process in various areas such as risk detection, opportunity identification, projections, and scenario planning;
- pursue enhanced relationships or early review and guidance from tax authorities due to robust compliance processes which can result in reduced risk ratings and greater upfront tax certainty; and
- take a more proactive approach with respect to tax audits and disputes by having ongoing strategic risk assessments using real-time information.

Leading tax functions should consider a future state ecosystem that has an integrated platform to enhance productivity, improve data quality, and reduce risk through constant information flow between tax, finance, and third parties. The future state ecosystem also should enable tax sensitized ERP and financial reporting systems to collaborate with tax data management and analytics, tax accounting, and BI tools to produce a variety of deliverables. These include ETR/cash tax forecasting, tax provisions, tax returns, uncertain tax positions, book-tax reconciliations, tax planning and forecasting, and tax ready reports. An enhanced technology platform can also allow tax functions to provide the business with real-time advice on the after-tax impact of operational decisions, industry trends, and business operating model changes.
Developing a roadmap to reach the desired operating model

The vision for the tax ‘brand’ provides the target goal for the tax function. While continuous improvement to the tax function may not necessarily have an ending point, senior tax executives should determine their desired operating model that supports this brand.

The model needs to satisfy stakeholder needs (e.g., the business, broader finance team, and tax authorities). For example, does the operating model take into account:

- **Business alignment:** Is tax aligned with the finance operating model and/or the business?
- **Scope and deliverables:** What are the tax function’s primary responsibilities?
- **Interdependency management:** Is tax proactive? Is it in regular contact with its stakeholders?
- **Delivery method:** How does tax execute? Is it leveraging finance shared services, offshoring, and/or co-sourcing?
- **Geography:** Where does tax sit? Is it with finance and/or the business?

Tax functions need to begin with an honest and candid assessment of where they are today — their capabilities, efficiency, participation in strategic decisions, and perception within the organization. In order to evolve to their desired future state or ecosystem, they need to create a roadmap of steps and actions for change which likely would result in a multi-year plan for implementation.

Many of the companies surveyed are struggling to develop an overall tax technology strategy. Creating a 5- to 8-year technology roadmap can be a practical first step toward transformation. A tax technology strategy takes into account the desired future processes and tax function organizational value drivers while leveraging existing tax and finance technologies. It also should reflect tax and finance’s business priorities as well as near-, mid-, and long-term horizons.

When outlining the practical steps within the roadmap, companies should keep in mind where the actions fall along the value and risk scale. Most of the tax function’s focus should be on maximizing value with high-risk issues and opportunities while utilizing technology and shared services to deliver low-value and low-risk services and deliverables.
Consider the intersection of leading versus practical approaches

Senior tax executives should think creatively about technology-enabled approaches, as the 'market leading' scenario or system may or may not be necessary to implement immediately to reach their future goals. They should focus on the 'sweet spot' that propels positive change but, for example, fits within their current budgets. Consider the following examples:

<table>
<thead>
<tr>
<th>Technology deployment relates to...</th>
<th>Interim, practical compromises</th>
<th>Leading approach</th>
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<tbody>
<tr>
<td><strong>Enterprise systems</strong></td>
<td>Data feeds from ERP systems exist, but some manual data manipulation is required</td>
<td>ERP system data feeds automatically into downstream tax application</td>
</tr>
<tr>
<td><strong>Tax data hubs</strong></td>
<td>Most data is centralized, but some manual data manipulation in Excel is required</td>
<td>Centralized data in a ‘tax ready’ format automatically feeds into tax applications</td>
</tr>
<tr>
<td><strong>BI tools and analytics</strong></td>
<td>Spreadsheets are utilized to produce dashboard reporting, but with a phased-in plan to adopt certain tools</td>
<td>BI and analytics tools are utilized for enhanced reporting, visualizations, and predictive analytics</td>
</tr>
<tr>
<td><strong>Tax applications</strong></td>
<td>Tax applications are utilized, but manual intervention is still required until a later phase of implementation occurs</td>
<td>Automated tax adjustments occur within the tax application with minimal manual work required</td>
</tr>
<tr>
<td><strong>Tax operations management</strong></td>
<td>Documents are stored in shared drives and workflow is managed via a spreadsheet tracking document</td>
<td>Documents are stored and managed in a central repository and automated workflow for tax processes is enabled</td>
</tr>
</tbody>
</table>
Aligning the strategy and roadmap to broader organizational priorities

Senior tax executives should ensure that their roadmap is consistently aligned with the organization's culture, environment, and priorities. Industry and regulatory trends likely may top the company’s priority list and thus are key elements to be taken into account as early as possible. Consider the following areas of focus that are specific to the global manufacturing industry:

Reduction in operating costs
Finance often delegates operating cost reduction initiatives to its sub-functions including tax. These cost cutting efforts can be a driving factor for the development of the tax function’s technology roadmap.

Actions to consider
Tax may automate manual or redundant tax processes to reduce headcount or reallocate resources to higher value, greater risk activities. Tax could also consider offshoring specific lower value tasks to foreign finance groups to reduce costs and enable tax resources to focus on more strategic activities.

Tax functions also may want to review what cost reduction efforts their broader finance organizations are pursuing and explore bolt-on opportunities within existing finance capabilities.

Actions to consider
Leveraging shared services centers to perform certain tax compliance and provision processes is a leading practice for cost reduction by tax. Finance functions frequently have already implemented shared service centers. Tax could leverage these infrastructure and technology investments previously made by the organization.

Merger and acquisition activity
We are seeing significant merger and acquisition activity in the manufacturing industry. The consolidation of companies means the merging of tax functions, providing an opportunity to evaluate the use of tax technology in the surviving company. Likewise, manufacturing companies are spinning off components of their existing business requiring the new company to establish a tax function from scratch. These major corporate events can provide a clean slate on which to build a technology-enhanced tax function from the ground up that is focused on business alignment and value-add.

Supply chain review and planning
Many companies are reevaluating specific links within their global supply chain to attain greater functionality and efficiency. The tax function can do the same.

Actions to consider
Tax should review its current approaches for transfer pricing compliance, as an automated approach could yield lower risk and better real-time insight. In addition, tax should analyze how finance shared services resources can be utilized to improve efficiency and effectiveness.
The companies surveyed understand the importance of creating strategies around tax technology and pursuing related initiatives, but in some cases appear to struggle to develop a business case for investment in these areas. Tax technology investments will help ensure that the tax function is ready for current and future challenges and will play an integral role in transforming tax into a strategic business partner within the organization. Aligning tax technology strategy with finance imperatives can help create the required momentum to make practical first steps toward transformation.

Getting started can be difficult, but senior tax executives need to overcome any barriers and envision the future. Once a vision and roadmap are in place, the journey can begin and the benefits can be enjoyed for years and even decades to come.

Risk surrounding legal entity accounting has been elevated given the CbCR requirements previously discussed. Tax executives should:

- ensure that legal entity accounting is being properly performed throughout the supply chain to enable accurate global tax compliance and reporting; and
- review their current processes and consider how standardization and technology-enabled approaches could help increase the rigor around these tasks which can potentially result in fewer errors and reduced risk.

Companies are considering the cost of customs and duties when evaluating their supply chain economics.

**Actions to consider**

The tax function should consider technology-enabled solutions for tracking these costs and resulting compliance obligations while also enabling more real-time access to data. This activity is another candidate for finance shared services.
To have a deeper conversation about how subjects covered in this report may affect your business, please contact:

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Our thanks to the members of MAPI’s tax council who participated in this survey.

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**About the research survey:**  
The survey findings in this report were generated by MAPI on behalf of PwC in an online survey of 75 US manufacturing professionals in 2016.