Spotlight: Robotic Process Automation (RPA)  
What Tax needs to know now
We introduce you to **Tax Function of the Future – A Focus on Today**, our new series that spotlights topics that are relevant for Tax, with a focus on what Tax needs to do now to successfully operate in this increasingly complex tax and business environment.

The **Tax Function of the Future series** predicts challenges that Tax functions may face in the future and offer potential solutions. Prior papers presented insights on new legislative and regulatory challenges and the resulting impact on risk management; discussed the need for Tax to focus on data analytics and to play an integral role in broader Finance transformation initiatives; and highlighted the importance of enhancing income tax reporting processes. Most recently, our Focal Point on Tax Analytics examined a critical and rapidly emerging trend for Tax—the robust and expanded use of enterprise performance management (EPM), business intelligence (BI), and analytics tools and capabilities, referred to as “Tax Analytics”.

This spotlight on Robotic Process Automation (RPA) continues to explore the importance of technology in enabling Tax function processes, focusing on emerging trends in RPA and its impact on the Tax function. We explain what robotics entails and provide examples for practical application within Tax. In this paper, we highlight the benefits of RPA and why it is important for Tax functions to understand their technology landscape. Finally, we suggest workable actions that Tax should take now to get started on the journey to enhanced robotic process automation.

“And as we look to history to help us predict the future, we cannot deny that automation, in particular robotic process automation, is today’s version of outsourcing - unstoppable.”

— Frank Casale, Founder of the Institute of RPA
The emergence of smart robotic process automation changes the game:

**Intelligent Automation in the Digital Age**

On a continuum of advancements in intelligent digital automation, user interface (UI)-based robotics is maturing as a feasible solution to streamlining Finance and Tax processes that are still manual and time-consuming despite IT, plug-in, and other automation efforts.
What is Robotic Process Automation (RPA)?

RPA is a feature of intelligent process automation (IPA) that describes logic driven robots executing pre-programmed rules on mostly structured data. RPA takes productivity optimisation to the next level by redefining work and reassigning employees to execute higher-value activities. Process bots are capable of independently performing simple human-like functions such as interpreting, deciding, acting, and learning.

Robots...
- are computer coded software
- enable the automation of repetitive, rule-based processes
- mimic interactions of users
- work across functions and applications

Process Robot Capabilities
- Automated data entry
- Multi-system integration
- Repetitive tasks
- Process reconciliation
- Data validation/ Quality
- Processing simple business rules
### How does RPA work?

#### RPA – Key Features

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<tr>
<th>Technology-Agnostic</th>
<th>Non-Intrusive</th>
<th>Scalable and Traceable</th>
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<tr>
<td>RPA can work across legacy ERPs, mainframes, custom applications, desktop applications, and any other types of IT platforms.</td>
<td>RPA leverages other application software through the existing application’s interface; therefore, it is not technically integrated.</td>
<td>Staff can be trained to maintain, program and deploy robots.</td>
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<td>Any technology platform that can be utilised by a human can also be navigated by an RPA robot.</td>
<td>Since complex integration is not required, RPA programs can be launched in a matter of days or weeks, resulting in low cost of implementation and high return on investment.</td>
<td>Bots are subject to full audit with visibility to security access and modifications.</td>
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**How does RPA apply to tax?**

The future is now for Tax. Process robotics can apply in every area of the Tax function where manual, repeatable, and time-consuming processes are still in effect AND even if Tax has already implemented technology solutions for direct and indirect tax compliance and reporting.

RPA can perform activities related to the following direct or indirect tax functions:

**Examples of RPA Tax Opportunities**

<table>
<thead>
<tr>
<th>Gather relevant data</th>
<th>Review trial balance and convert data to tax-basis</th>
<th>Prepare returns</th>
<th>Account for taxes</th>
<th>Address tax inquiries</th>
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<tr>
<td>Export trial balance from ERP system</td>
<td>Review accounts to ensure consistency with prior year, note changes</td>
<td>Calculate book/tax differences</td>
<td>Assign tax basis accounts to related tax form lines</td>
<td>Book current tax accounting entries</td>
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<tr>
<td>Export trial balance detail needed to prepare tax return (e.g., M&amp;E)</td>
<td>Analyse account changes and evaluate potential tax impact</td>
<td>Apply book/tax differences to trial balance</td>
<td>Fill out tax returns by utilising tax return workbook</td>
<td>Calculate deferred taxes</td>
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<td>Export fixed asset subledger from appropriate system</td>
<td>Assign book basis accounts to tax basis account numbers (one-time)</td>
<td>Evaluate options for tax treatment of discrete tax code/transactions</td>
<td>Fill out remaining tax return line items and information fields</td>
<td>Review deferred tax calculations</td>
</tr>
<tr>
<td>Export industry/company-specific data, as needed</td>
<td>Map book basis accounts to tax basis account numbers</td>
<td>Calculate state apportionment and adjustments</td>
<td>Review tax returns</td>
<td>Book deferred tax accounting entries</td>
</tr>
<tr>
<td>Determine tax filing status of all entities (e.g., legal entity changes)</td>
<td>Reconcile intercompany transactions</td>
<td>Complete and review tax return workbooks</td>
<td>Submit tax returns and related payments</td>
<td>Respond to and close audit process</td>
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| Processes with Limited Automation Potential (<50% effort) | Processes with High Automation Potential (> 50% effort) |
RPA for income tax provision reporting?

RPA can facilitate the use of source financial systems in gathering the data needed for tax calculations and reporting. The following case study reflects how RPA can streamline a time-consuming income tax provision process:

RPA Case Study - Income Tax Provision

Background: ABC is a global consumer healthcare company with over 100 legal entities in multiple countries, US states, and foreign municipalities. ABC operates with various financial systems, trial balances, and charts of accounts. ABC’s financial results, including the income tax provision, are consolidated and reported by US Finance on a quarterly basis.

Issue: ABC uses income tax provision and compliance software for the year-end provision and tax return process; however, Tax relies on manual spreadsheets for interim provision calculations that require a quick turnaround. Due to disparate financial systems and processes, gathering and reconciling data is a manual, time-consuming process. ABC seeks to streamline its income tax provision process, improving completeness and quality of data that ultimately results in a more accurate income tax provision calculation.

PwC Solution: ABC engaged PwC to deploy RPA associated with the following provision processes:

1. Pull raw financial information from ERP systems
2. Clean up and reconcile accounts (e.g., intercompany)
3. Organise data by legal entity versus management reporting
4. Analyse account changes (accrual book/tax adjustments)
5. Flag significant account differences for follow-up investigation

Impact to ABC: As a result of robotic process enhancements, ABC was able to:

• Accelerate timing of the income tax provision, reducing manual effort by 10-25%
• Efficiently gather and manipulate financial information, creating legal entity accrual adjustments
• Improve accuracy due to increased visibility into accounts and significant impact
• Reduce the amount of staff time used to perform low-value work (data extraction and manipulation)
A closer look

**RPA for shared service centres?**

In our first Tax Function of the Future publication, we predicted that Tax functions will leverage shared service centres to manage the increasing volume of compliance-related activities at a lower cost.

In fact, we’ve found that Tax’s use of shared service centres for collection of data and performance of routine activities falls into the following three general scenarios:

1. Never used a shared service centre
2. Limited use for indirect (e.g., sales & use, VAT) and direct tax activities
3. Dissatisfaction with a shared service centre approach for Tax

**Managing organisational structure and risk**

There are various organisational structures and methods of aligning responsibilities pertaining to the data and activities needed to meet Tax requirements.

In some cases, Tax is heavily involved in all aspects of the function; however, gathering data and routine tax activities are sometimes the responsibility of another function, such as Finance, which may leverage shared service centres or centres of excellence. In cases where Tax is not directly involved, it is still critical for Tax to collaborate with other functions to ensure that the processes associated with tax-related activities are executed in a manner that minimises risk for the Tax function and the organisation overall.

With rapid advancements in technology, Tax should now look at or re-consider how RPA can effectively perform tasks that involve a high volume of transactions, repeatable manipulation of data, and communication with other enterprise systems efficiently—all at a much lower cost and minimal risk. RPA can be deployed within or without a shared service centre. The adjacent graphic displays examples of the direct and indirect tax activities that RPA can perform within the context of a shared service centre.

### Examples of RPA corporate tax return-related tasks:

- Populate tax returns with financial data
- Automated import of financial tax workbook into tax return forms (using tax return software)
- Complete non-financial tax return line items and information fields
- Execute work-flow processes for tax returns and initiate electronic estimated payments
- Gather and analyse high volumes of US state apportionment data (from payroll, fixed assets, and financial systems)

### Examples of RPA indirect (sales & use, VAT) tax return-related tasks:

- Interact with bolt-on indirect tax solutions and financial systems to complete high volumes of tax returns
- Auto-coding of invoices for tax
- Execute work-flow processes for tax returns and initiate electronic payments
- Gather transactional details and supporting invoices in response to multiple jurisdictions’ audit requests

**PwC prediction**

Most global tax preparatory compliance and reporting activities, including data collection and reconciliations, will be performed within the company’s shared service centre or will be co-sourced with a third party.
Summary of RPA benefits

RPA can have a significant impact on a Tax organisation as a result of its ability to reduce cost and re-direct focus on activities that create value and job satisfaction. Moreover, RPA technology is easy to deploy and works across all financial systems and processes.

**Financial**
- <50% of the cost of offshore processing
- Up to 80% cost reduction
- Rapid results achieved
- £0 spend on customising existing or new systems (ROI ~ 1-2 years)
- Reduce errors, and therefore the cost of fixing them

**Technological/Operational**
- No interface development
- Rapid implementation
- Scalable solutions
- Agile capability to respond to ever-changing business processes
- Improved process efficiency (~30% reduction of AHT)

**People**
- More time available for value-added activities
- Improved knowledge of internal Tax processes and exceptions
- High quality of output, less rework
- Decreased attrition rate
- Capability to do what operational teams otherwise would not
**How to get started now with RPA**

The journey to RPA innovation is not complex. It begins with the discovery of manual processes that are candidates for automation.

**Example of an RPA project approach**

1. **Executive kick-off**
   - **Initial process automation candidates**
   - **Quantify benefits and business case**
   - **Deploy**
   - **Continuous innovation**

2. **Diagnostic scan**
   - **Define the path forward**
   - **Roadmap to prioritise & achieve**

3. **Function lead workshop**
   - **Target opportunity**
   - **Focus the effort**
   - **Prove the value (PoV)**

**Simple bots**
- 1-2 weeks

**Complex bots**
- 2-4 weeks

**Smart bots**
- 4-8 weeks

**1 - 2 weeks**
- Prioritise opportunities
- Plan for deployment

**2 - 3 weeks**
- ½ day workshop
- Scan and prove in parallel
- Measure the results
For RPA, Tax needs to start with understanding its underlying processes because there is no benefit in applying robotics to a process that is broken. The technology is an enabler but not a comprehensive solution in itself. RPA is one of many tools that can be used to achieve operational excellence; therefore, if Tax defines the appropriate processes and gains efficiency, Tax is one step closer to creating high-performing teams that add real value.

Tip

“Using robots to perform tax related activities in our shared service centre has not only resulted in a better work product, but also less frustrated people in the Tax department.”

— Joe Chirichella, Becton Dickinson
To have a deeper conversation about how these issues and predictions may affect you and your business, please contact:

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