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Presenters

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Discussion topics

1. Why automate tax?
2. The tax automation landscape
3. Quick start guide to tax automation
4. Where are others on the path to automation?
Tax functions are shifting from compliance to strategic business planning

Tax needs to deliver the traditional but essential functions more efficiently with an increased focus on business partnering. As an enterprise function, it needs to be an integrator of the total business view, providing insight and support to critical commercial decisions and actively managing the tax drivers of value to the overall business.

- **Reactive analysis and planning**
- **Manual controls**
- **Multiple levels of review**
- **Tax return-focused**
- **Manually intensive**
- **Spreadsheets and email**
- **Not integrated with tax systems**
- **Decentralized**

**Tax as a business partner**

- **Analytics and planning**
  - Data collection and manipulation 60%
  - Risk management 20%
  - Reporting 10%
- **Business partnership**
  - Analytics and planning 40%
  - Risk management 20%
  - Reporting 20%
- **Efficiency**
  - Data collection and manipulation 20%

**Realized benefits**

- Improved accuracy of tax forecasting of the effective tax rate (ETR) and cash tax payments
- Minimized tax exposures due to late or incomplete filings
- Improved reporting timeliness, accuracy and transparency
- Streamlined process through automation and better data
- Shift certain tax controls from a detective to a preventive focus
- Enhanced decision support to the business

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**Illustrative**

- **Tax today**
  - Analytics and planning 10%
  - Risk management 20%
  - Reporting 10%
- **Tax tomorrow**
  - Analytics-driven
  - Performance management
  - Forecasting
  - Business insights
  - Embedded system controls
  - Quality over quantity
  - Risk management
  - Tax life cycle-focused
  - Integrated systems and processes
  - Leverage shared services
Different types of automation for different purposes

Automation within a system
- Scripting
  - SAP, Excel, OneSource, Corptax

Manual activity required
- Robotic process automation
  - Blue Prism, Automation Anywhere, UiPath, WinAutomation

System to system
- Data integration
  - Informatica, SQL Server Integration Services, MS Power Query, Alteryx

Cognitive
MS Power Query demonstration
Converting reporting data into a format that can be used for other purposes

Business problem: System data exports into reporting formats. Transforming the data in the reports to a format that can be used for other purposes is time-intensive, prone to error and difficult to review.
Robotics in the tax function
What are the process triggers that signal specific functions where RPA could be beneficial and typical areas of application within various functions?

There is a set of “key tells” that provides guidance on where RPA will be a solution with strong capability to unlock value. (All criteria do not have to be fulfilled.)

- Data-intensive
- Repetitive in nature
- Rule-driven
- Electronic trigger to the process
- Has electronic start points and endpoints
- Involves manual calculation
- High error rates
- Sensitive content
- Can be performed out of office hours
- Complex IT landscape

Examples of support functions that involve processes with proven potential for RPA

<table>
<thead>
<tr>
<th>Finance</th>
<th>HR services</th>
<th>Supply chain</th>
<th>IT services</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record to report</td>
<td>Payroll</td>
<td>Work order management</td>
<td>Installation</td>
<td>Data collection and manipulation</td>
</tr>
<tr>
<td>Financial planning</td>
<td>Benefits admin</td>
<td>Demand and supply planning</td>
<td>FTP download, upload and backup</td>
<td>Supporting work paper development</td>
</tr>
<tr>
<td>Order to cash</td>
<td>Payslip management</td>
<td>Quote, invoice and contract management</td>
<td>Server application and monitoring</td>
<td>Input and uploading into tax tools</td>
</tr>
<tr>
<td>Collections</td>
<td>Time and attendance management</td>
<td>Synchronizing, deleting and emptying folders</td>
<td>Review and analysis</td>
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</tr>
<tr>
<td>Procure to pay</td>
<td>Recruiting process</td>
<td>Returns processing</td>
<td>File management</td>
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<tr>
<td>Incentive claim</td>
<td>Onboarding</td>
<td>Freight management</td>
<td>Email processing</td>
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<tr>
<td>Supply chain vendor setup</td>
<td>Education and training</td>
<td></td>
<td>Batch processing</td>
<td></td>
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<tr>
<td>Trend tracking</td>
<td>Compliance reporting</td>
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<td>Emailing and e-filing</td>
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</tbody>
</table>
## Sample of top tax process identified during an assessment workshop

<table>
<thead>
<tr>
<th>Tax function/process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indirect tax – sales and use</strong></td>
</tr>
<tr>
<td>► SUT – invoice extraction for audits</td>
</tr>
<tr>
<td>► SUT – completing exemption certificates and updating vendor tables</td>
</tr>
<tr>
<td>► SUT – tax coding verification and updating Vertex</td>
</tr>
<tr>
<td><strong>Tax accounting</strong></td>
</tr>
<tr>
<td>► US and Non-US uploading from SAP/HFM, formatting, reconciling and Fx conversion to OTP</td>
</tr>
<tr>
<td>► OTP reporting package – extracting completed provision data, reconciling to final accounts</td>
</tr>
<tr>
<td><strong>International compliance</strong></td>
</tr>
<tr>
<td>► Book to tax consolidated WPs; GL download and reconciliation for 5471s</td>
</tr>
<tr>
<td>► Quarterly foreign tax credit data gathering</td>
</tr>
<tr>
<td>► Preparation for audit readiness</td>
</tr>
<tr>
<td><strong>US income tax compliance</strong></td>
</tr>
<tr>
<td>► Upload documents/work papers to Tax Master/standardize naming conventions</td>
</tr>
<tr>
<td>► GL download and TB reconciliations</td>
</tr>
<tr>
<td>► Gathering state and local apportionment data, reconciliations and performing analytics</td>
</tr>
</tbody>
</table>
End-to-end property tax processing

Data Extraction
- Source data feeds
  - SAP
  - Appraisal firm websites
  - IHS
  - WellView
  - GasSearch
  - HANA (lease operating expenses)

Computations
- Allocation logic for RI, WI, ORI
- County property to cost center mapping
- County tax rates, by property type
- School district mapping
- Well information
- Railroad Comm #s

Reporting & Decision making
- Real-Time Reporting
  - Tax savings – Initial assessment vs. final taxable value
  - By property / owner tax paid (any receivables due)
  - Produce decline curves
  - Data feeds into SAP for bills
- Dashboarding
  - Well/county/state
  - Due date tracking
  - Notice tracking & doc mgmt.
  - Trend analyses and forecasts

Tax bills & estimated liability
- SAP

Government
- Microsoft SQL
- Microsoft Power BI & SharePoint

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- SAP
Case study
Tax provision reporting

The challenge
► Numerous tax provision reports generated from ONESOURCE Tax Provision (OTP) are used by the tax departments during the period close cycle.
► Data frequently changes, so the reports must be rerun. Delay in getting the reports to the department has an adverse effect on meeting the critical close cycle deadline.

Why automation
► During critical quarterly and annual close periods, tax professionals constantly need to run and format reports during the review of the provision, interim provision and estimated payment data.
► This is time-consuming, and the reports are prone to errors, if they are done manually.

What we did
► Used Blue Prism RPA tool to generate tax provision reports from ONESOURCE Tax Provision
► Followed the key steps below

Why automation
► During critical quarterly and annual close periods, tax professionals constantly need to run and format reports during the review of the provision, interim provision and estimated payment data.
► This is time-consuming, and the reports are prone to errors, if they are done manually.

What we did
► Used Blue Prism RPA tool to generate tax provision reports from ONESOURCE Tax Provision
► Followed the key steps below

Outcome
► Significant time savings, increased speed, accuracy and efficiency (less manual keying of data)
► More time spent on review and less time on preparation (better leverage of knowledge worker skills)
► Reduced labor cost
► Reduced human errors

Robot  Human

Link to video
Case study
Sales and use tax

The challenge
► A significant amount of time is required each month to review tax determinations, leaving little time for review and resulting in an approximate 40% error rate.

Why automation
► Mitigate compliance risk
► Reduce costs (i.e., decrease resources for manual processes)
► Increase time allocated to review
► Eliminate reverse audit fees
► Accelerate learning agility of tax talent

What we did
► Used Automation Anywhere to automate the download of the data, preparation of the review workbooks, download of invoices and preparation of exemption certificates
► Followed the steps below

Outcome
► Significant time savings
► A greater number of invoices downloaded – a comprehensive review, improving accuracy
► Automation of the exemption certificates and emails, resulting in additional refunds from vendors

Set up folders and workflow and download SAP data
Review invoices and pull additional ad hoc documentation
Prepare review workbook, including identification of erroneous tax codes; download invoices
Review emails and documentation and send emails
Populate exemption certificates and prepare vendor emails

Link to video

Robot Human
Case study
Fixed assets

The challenge
▶ Updating the tax fixed asset register to reflect current period activities and generate depreciation schedules. These updates include assigned tax attributes that are tedious, manual and time-consuming tasks. Delayed schedules have an adverse effect on meeting the critical reporting deadline.

Why automation
▶ A data robot can be programmed to take the critical work steps to confirm that the tax register is updated and error-free in a timely manner.

What we did
▶ Used Blue Prism RPA tool to prepare and load data into SAGE fixed assets and to prepare reports.
▶ Followed the steps below

Outcome
▶ Significant time savings, increased accuracy and efficiency (less manual keying of data), teams were able to spend more time on review and less time on preparation (better leverage of knowledge worker skills)
▶ Significant time and labor cost saved

Generate current period asset acquisition and retirement reports from SAP fixed asset module

Import additions, execute dispositions and generate tax reports

Combine and format depreciation reports and other tax forms and upload to SharePoint and notify user via email for review

Review tax depreciation schedules

Align SAP data and assign tax attributes using macro-enabled workbooks to create SAGE import map

Human

Robot

Link to video
A holistic IA “program” enables success and sustainability

“A couple of interns can create a demo bot in a few weeks” – but imagine having 100 to 1,000 bots or more in production in a few years.

The following six components and their subcomponents are critical to doing robotics right. Deploying this model will enable consistent execution and delivery as it scales enterprise wide. These steps are not sequential, but instead need to be addressed in parallel.

1 – Strategy and governance
- Program strategy
- Policies and standards
- Roles, responsibilities and structure
- Risk management
- Methodology and design authority
- Robotics asset management

2 – Process life cycle
- Process identification
- Process prioritization
- Automated process optimization
- Development and deployment
- Ongoing operations

3 – Value measurement
- Program progress measurement
- Operational and performance metrics
- Benefits measurement and reporting

4 – Alignment and change
- Skills development
- Stakeholder management
- Organization change management
- Communication

5 – Technology
- Vendor management
- Architecture and infrastructure
- Innovation and test lab
- Expert network
- Knowledge management

6 – Enterprise integration
- Business process management
- Transformation programs
- Risk and controls
- Security
- IT processes
Step 1: Opportunity assessment
IA opportunity prioritization, business case and road map

High-level process flows and data

Summarized view of IA opportunity

High-level business case

High-level initial plan for IA implementation
Step 1: Business case – common benefits of RPA

Defining your “purpose,” with specific goals, will drive how RPA is implemented and provide the tenacity to keep going when transformation gets difficult – and it usually will.

Benefits

Cost savings
- Processing costs reduced by up to 80%
- Allows team size to be reduced by 20% to 50%
- Fast payback period (~3 months to 6 months)
- Improved contract margins
- ~$10k to $12k annual license costs per bot vs. professional salary and benefit cost

Productivity boost
- Average handling time reduced by 40%
- Automated solution working 24/7
- Increased capacity to handle significantly higher transaction volume and scale as the organization grows
- Higher retention rate of best employees who can focus on more strategic tasks

Reduced business risk
- Controls are embedded into the platform
- Processes run in a pre-defined manner with a complete audit trail
- User permissions allow segregation of duties
- Noninvasive RPA technology can begin with simple rules-based tasks

Improved customer service
- Accurate processing – eliminating human error rate, increasing shared services performance
- Quickly scalable – allowing both short-term peaks and long-term needs to be serviced
- Workforce freed up for more value-added customer service tasks

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Accurate processing – eliminating human error rate, increasing shared services performance
- Quickly scalable – allowing both short-term peaks and long-term needs to be serviced
- Workforce freed up for more value-added customer service tasks
**Step 2: IA “pilots”**

Six- to eight-week agile implementations – “production ready,” taking automated feeds but not “deployed” until the CoE/control group is in place and the business users are trained

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobilization and environment setup</strong></td>
<td><strong>Design</strong></td>
<td><strong>Build and test</strong></td>
<td><strong>Prepare for production</strong></td>
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</tbody>
</table>

**Prepare production environment and future sprints**

**Weeks 1–2**
- Identify key stakeholders for design
- Gather existing process definition/flows for selected pilots
- Complete high-level process walkthrough and understanding of in-scope processes
- Confirm setup of test and development environments to build pilots (including access to relevant systems, e.g., SAP, Outlook)

**Weeks 3–6**
- Conduct detailed process walkthrough sessions, create process flow documentation and verify documentation with users
- Build and test pilot scenarios using tool installed in test environment and validate output with respective process associates
- Identify and configure exception scenarios in processes identified
- Validate as-is automated process (over multiple iterations) with respective process owners
- Refresh process flows based on initial process design and any modifications identified
- Finalize pilot output in test environment

**Weeks 7–8**
- Update process documentation and create demo of the automated processes
- Train users on new end-to-end process
- Support preparation of production environment
- Prioritize list of additional pilot automation opportunities

**Main deliverables**
- Summary pilot report, including evaluation and findings
- Process documentation and demo for selected case
- Configured pilot solution using agile methodology
Step 3: Selecting software
IA software tools are a diverse and continuously evolving market

- The landscape of RPA tools is rapidly developing.
- An innovative, high-growth technology: the marketplace will continue to change as it reaches maturity in the coming years.
- The software bots will grow increasingly smarter and more capable as artificial intelligence and machine learning become more mainstream.
- The ultimate winner will not necessarily be the company with the most sophisticated product.
- RPA costs are much less than most enterprise software purchases – assume approximately $10k to $12k/bot/year.
**Step 4: A Center of Excellence (CoE) accelerates success**

We recommend starting with a central model and moving to a federated model as you scale.

<table>
<thead>
<tr>
<th>CoE Role</th>
<th>Centralized</th>
<th>Partial Federation</th>
<th>Federated at Scale</th>
<th>Decentralized</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CoE Role</strong></td>
<td>Provides complete end-to-end solutions for automation capabilities</td>
<td>Provides enterprise framework in support of automation capabilities</td>
<td>Provides and measures the execution of strategies, policies, standards, processes and procedures</td>
<td>Acts as an informed stakeholder to facilitate strategy and consult on execution</td>
</tr>
<tr>
<td></td>
<td>Incubates skills and leading practices for development</td>
<td>Provides development for complex scenarios and teams new to automation</td>
<td>Allows the BUs to own and deploy RPA teams directly</td>
<td>Allows BUs to direct RPA efforts and deploy solutions quickly</td>
</tr>
<tr>
<td></td>
<td>Ensures strong governance and well-developed processes</td>
<td>Uses the CoE to expand capability, enforce leading practices and manage ongoing operations</td>
<td>Allows the central function the ability to focus more time on intelligent automation</td>
<td>Supports BU-driven culture</td>
</tr>
<tr>
<td></td>
<td>Allows for a factory model</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Benefit</strong></td>
<td>Requires an incubation period for learning and establishing the operating model</td>
<td>Requires time for federated teams to become familiar with RPA leading practices</td>
<td>Requires time to fully develop and additional investment from business unit for new roles</td>
<td>Does not provide an integrated environment and costs more long term</td>
</tr>
<tr>
<td></td>
<td>Does not emphasize BU control</td>
<td>Requires moderate success with a centralized model first</td>
<td>Requires moderate success with a partially federated model first</td>
<td>Does not ensure that leading practices are consistently leveraged</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
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<td></td>
<td>Creates additional risks and a lack of firm-wide transparency</td>
</tr>
</tbody>
</table>

Based on industry leading practices and the nature of RPA, it is recommended that a program be established and appropriately progress from a **centralized delivery center** to a **federated at scale** operating model.
Microsoft Power Query for Excel is an Excel add-in that enhances the self-service Business Intelligence experience in Excel by simplifying data discovery, access and collaboration.

**Microsoft Power Query for Excel 2010 or 2013**


**Data integration in Microsoft Excel**

Get and Transform is embedded in Excel 2016 on the Data ribbon
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