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Sales Tax Automation and the Cloud - An Evolving Story
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Learning Objectives

By the end of this session you should:

1. Understand the advantages of a hosted compliance solution

2. Learn some best practices in managing a premise to hosted transformation

3. Identify opportunities to utilize tax automation to optimize your compliance function and;

4. Gain insight into what our sales tax future may look like
Agenda

Current Market Trends
- Premise v. Cloud Tax Determination
- The Growing Importance of Data Analytics to the Tax Professional
- The Future of Sales Tax
Current Market Trends

- Globalization
- Mergers, acquisitions, spin-offs
- Cost reduction efforts
  - Streamlining
  - Centralization
  - Automation
- Legal and regulatory landscape
Current Market Trends: The Regulatory Landscape

- Governments are reacting and adapting to change
- Business models, technology, and economics are accelerating at a pace faster than tax law can adjust and the tax collection gap is growing:
  - U.S., estimated at 23.3bn*
  - Close to $160bn in the EU**
  - Italy cannot collect almost a third of its theoretical tax yield*

* NCSL Report – Nov, 14, 2014
** 2016 European Commission report - TAXUD/2015/CC/131
Current Market Trends: The Regulatory Landscape

- Governments are reacting and the pace and rate of change is making tax compliance a barrier to growth

What our Peers Tell Us
- I’ve been in tax for 30 years, and I’ve never seen in my professional life such evolution of tax at this pace, – Chief Tax Officer

What the Statistics Tell Us
- 55% of CFOs reported feeling "somewhat confident" in their compliance efforts, down steeply from 84% in 2014
- 45% of CFOs say increasing compliance costs are the #1 barrier to growth

Grant Thornton Bi-Annual CFO Survey
Current Market Trends: The Regulatory Landscape

What the Facts Tell Us

- Saskatchewan, CN announced a rate change in the late afternoon March 22, 2017 which was effective at 12:01 AM on March 23.

- Massachusetts Issued Directive 17-1 imposing a collection responsibility on remote sellers on April 3, 2017 with an effective date of July 1, 2017 but revoked it on June 30.
Current Market Trends: The Regulatory Landscape

2016 At a Glance
- 341,018 Tax Rule Changes in Sovos Determination Engine
- 296 Tax Returns Modified in filing solution
- 3,377 Tax Bills Tracked (never mind regulations, directives, court cases, letter rulings, and everything else)

Not only do we need to keep up – but we need to support organizational growth and contain costs – is this possible in the existing model?
Global Trends in Tax Technology

On-premise
► Behind firewall
► IT maintained

Hosted
► Secure datacenters
► Vendor maintained

US only
► Complex rules
► 9,000+ locals

Global deployment
► VAT complexities
► ERP impact

Local support
► Knowledge
► Manual work

Centralization
► Control
► Automation

Insource
► Knowledge
► Manual work

Outsource/Managed Service
► Cost reduction
► Non-core
Agenda

- The Regulatory Landscape
- Premise v. Cloud Tax Determination
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Premise v. Cloud Determination

- The tax function is evolving……..

15 Years Ago
- Steady but constant change
- Reactive to changing business needs

5 - 10 Years Ago
- Pace and rate of change starts to uptick to address tax gap
- Business focus on controlling costs and increasing efficiency
Premise v. Cloud Determination

Today
- Business and regulatory environment demands new (strategic) approach
- Growth cannot be impeded by compliance requirements
- Compliance tools need to accommodate constant and immediate change
- Manual processes replaced by robotics and other automation
- Accuracy remains critical

Cloud determination is ideal for this environment.....
Premise v. Cloud Determination

- Premise determination is good……..

**Tax Benefits**
- Removes rates, rules and configurations from ERP
- **Periodic** deployment of rates and rule changes by provider
- User Interface based access to understand nexus setup, rule mappings and test the configuration
- Changes and adjustments can be made by Tax – with controlled permissions

**Technical Concerns**
- Required technical infrastructure is substantial
- Upgrades/updates sole responsibility of client
Premise v. Cloud Determination

- Cloud determination is better……..

**Tax Benefits**
- **Real-time** deployment of rates and rule changes by provider, including “late breaking” changes.
- Easy integration to enhanced solutions
  - Managed service filing/remittance
  - Certificate management
  - Expanding from AR to AR and AP
Premise v. Cloud Determination

- Cloud determination is better....... 

Technical Benefits
- Reduce IT Resources, Overhead and Capital Investment
  - Hardware and software expenses avoided
  - Environment maintenance is provider’s responsibility
  - Patches managed by the provider
- Faster Support - provider has access to your setup
- Instant Scalability - no need to add new infrastructure to support growth
Premise v. Cloud Determination

General Benefits
- Access to the best technology – SaaS first is the model in many technology companies
- Upgrades/updates - SaaS users always on the latest version
- Ease of Implementation – for subsequent lines and business units
Premise v. Cloud Determination

Thinking of migrating…...its not as daunting as you might think.

- Explore provider experience and best practices
- Discuss migration tools
- Talk with provider’s references
- Providers incented to make migration as painless as possible
Premise v. Cloud Determination

- Migration presents an opportunity to deploy/reinvigorate some best practices
  - Review some items you may not have reviewed recently
    - Tax obligations/nexus
    - Product taxability mapping
    - Custom rules
  - Take advantage of training opportunities – is the staff you have now the staff you have then, are they familiar with the application
  - Consider if you are using the engine to fullest potential (e.g., A/P)
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Data Management Value Chain

Focus of many companies

Strategic focus for tax performance improvement

Focusing on the desired business/tax outcomes is critical to extract maximum value from tax technology
Managing Data

- How companies manage key functions
  - Data management
    - Data warehouse, data mart, data lake
      - What’s the difference?
      - Choosing the best option for sales and use tax
    - Data analytics
  - Exemption certificate management
  - Tax compliance
    - Determination
    - Tax calculation and reporting
## Data Terminology

### Structures for accessing data for decision making purposes

<table>
<thead>
<tr>
<th>Data Lake</th>
<th>Data Warehouse</th>
<th>Data Mart</th>
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</thead>
<tbody>
<tr>
<td>Unstructured repository containing data from disparate sources that can be used for a wide variety of sources</td>
<td>Enterprise-wide data compiled from other data sources organized specifically for the intended questions</td>
<td>A subset of a data warehouse tuned for a specific set of users or departments</td>
</tr>
<tr>
<td>• Provides for massive storage and processing power</td>
<td>• Highly transformed and structured</td>
<td>• Focused data organization for specific problem or business unit</td>
</tr>
<tr>
<td>• All data is retained</td>
<td>• Use is defined before loading into Enterprise Data Warehouse (EDW)</td>
<td>• Enables or provides for specific reporting</td>
</tr>
<tr>
<td>• Supports all data types (structured and unstructured)</td>
<td>• Sits within existing databases</td>
<td></td>
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</tbody>
</table>

### Data Lake
- CSV Data
- Excel Data
- Internal sources

### Data Warehouse
- SQL
- Oracle

### Data Mart
- Power BI
- XLSX
A Range of Analytics Techniques can be Utilized, Depending on the Nature of the Problem to be Solved

**Questions driving analysis**

- **What is the best outcome?**
- **What will happen next?**
- **What if those trends continue?**
- **Why is this happening?**
- **What is happening now?**
- **Where exactly is the problem?**
- **How many, how often, where?**
- **What happened?**

**Techniques used**

- **Monitoring and Descriptive Analytics**
  - Mining past and current data to report, visualize, and better understand WHAT has already happened after the fact or in real-time.

- **Predictive Analytics**
  - Leverages past data to understand the underlying relationships between data inputs and outputs to understand WHY something happened or to predict WHAT might happen in the future across various scenarios (with an acceptable level of reliability).

- **Prescriptive Analytics**
  - Determines WHICH decision and/or action will produce the most effective result against a specific set of objectives and constraints.

**Traditional Reporting and Analysis**
- Standard and ad-hoc reports illustrate past performance, drill downs and alerts, and provide additional information to specific questions.
Automation Opportunities for Sales and Use Tax Compliance

- Extracting SUT source data from systems
- Validating extracted data
- Running data analytics
- Performing repetitious formatting and data normalization tasks
- Performing high-volume, repetitious data entry tasks
- Collating data from multiple sources in differing formats
- Collating data elements from multiple sources for reconciliation
- Performing final quality review and signing
- Filing/mailing returns
- Saving SUT returns and working papers

High volume | Repetitive | Timing
The Big picture of Intelligent Automation

Definition: Robotic Process Automation (RPA)
Is the application of a cost-effective software that mimics human action and connects multiple fragmented systems together through automation without changing the current enterprise IT landscape.

Process automation enables organizations to automate existing high volume and/or complex, multi-step data handling actions and workflows to run autonomously without manpower. It captures and interprets existing applications, manipulates data, triggers responses and communicates with other digital systems.
The Virtual Robotic Workforce is Transforming How Organizations Move Data, Operate and Engage Customers

Robots link capabilities together to simplify, accelerate efficiency and provide flexibility

- Unwind legacy of people-based quick fixes
- Perform laborious and repetitive tasks reliably
- Scale up and down to match peak loads
- Emulate the best business user behavior
- Shift control toward the business and reduce reliance on IT to get things done
- Deliver ROI in weeks
Key Features of RPA

- **Low Risk**
  - Non-invasive technology
    - RPA can be overlaid on existing systems, allowing creation of a platform compatible with ongoing developments in sophisticated algorithms and machine-learning tools.

- **Accuracy**
  - The right result, decision or calculation the first time

- **Consistency**
  - Identical processes and tasks, eliminating output variations

- **Audit trail**
  - Fully maintained logs essential for compliance

- **Productivity**
  - Freed up human resources for higher value-added tasks

- **Right shoring**
  - Geographical independence without business case impact

- **Reliability**
  - No sick days, services are provided 24/7/365

- **Retention**
  - Shifts towards more stimulating tasks

- **Scalability**
  - Instant ramp up/down to match demand peaks and troughs
Process Automation Has Broad Scope and Quick Value

30%–40% of existing business process services are likely to be impacted by process automation

<table>
<thead>
<tr>
<th>Finance &amp; Accounting</th>
<th>Tax</th>
<th>Treasury</th>
<th>Supply chain</th>
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</thead>
<tbody>
<tr>
<td>• Sales order</td>
<td>• Preparing tax provision files</td>
<td>• Fx management</td>
<td>• Work order management</td>
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<tr>
<td>• Order to cash</td>
<td>• Scenario planning</td>
<td>• Liquidity management</td>
<td>• Demand and supply planning</td>
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<tr>
<td>• Collection</td>
<td>• Updating &amp; maintaining data</td>
<td>• Cash management</td>
<td>• Quote, invoice, and contract management</td>
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<tr>
<td>• Procure to pay</td>
<td>• Identifying &amp; maintaining tax payments</td>
<td>• Capital strategy</td>
<td>• Returns processing</td>
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<tr>
<td>• Incentive claim</td>
<td>• Tax SOX compliance</td>
<td>• Bank reconciliations</td>
<td>• Freight management</td>
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<tr>
<td>• Record to report</td>
<td>• Reconciling information</td>
<td>• Global economics</td>
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<tr>
<td>• Vendor set up</td>
<td>• Data transfer into tax returns</td>
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<tr>
<td>• Trend tracking</td>
<td>• E-filing</td>
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<tr>
<th>Human Resources</th>
<th>IT</th>
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<tr>
<td>• Payroll</td>
<td>• Installation</td>
<td></td>
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<tr>
<td>• Benefits administration</td>
<td>• FTP download, upload, and backup</td>
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<tr>
<td>• Pay slip management</td>
<td>• Server application and monitoring</td>
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<tr>
<td>• Collection</td>
<td>• Synchronizing, deleting, and emptying folders</td>
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<tr>
<td>• Procure to pay</td>
<td>• File management</td>
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<tr>
<td>• Time and attendance management</td>
<td>• Email processing</td>
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<tr>
<td>• Recruiting process</td>
<td>• Batch processing</td>
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<tr>
<td>• Onboarding</td>
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<tr>
<td>• Education and training</td>
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<tr>
<td>• Compliance reporting</td>
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Vendor Analysis

Vendors:
- Blueprism
- Automation Anywhere
- UiPath
- Others

Criteria:
- Automation functionality
- Ease of development - Pre-built commands and wizard driven interface
- Ease of deployment
- Exception handling
- Control Room and monitoring
- Security
- License Cost
- Event based Trigger
- Version Control
- Queue Management
- Logging And Reporting
- Record and Click functionality
- Browser Support
- Configuration
- Messaging
- Market Presence
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- The Future of Sales Tax
Governments are embracing technology:

- Tax Authorities know there is a lot of information available
- They are beginning to invest in technology that would allow them to process more information, more quickly
- The US isn’t at the leading edge – but we are starting to catch on…..

“States more and more are relying on data analytics, data metrics. At least half and perhaps more have built data warehouses where they can collect data from all sorts of different places and then match,” “So they can make inquiries against this data to find these areas of noncompliance. This is definitely an important direction for the states.

Gale Garriott, Federation of Tax Administrators as quoted by BNA
The Future of Sales Tax

The future is being written overseas....

- E-filing
- E-accounting
- E-ledger
- E-invoice

Complexity of Processes

Traditional → Paradigm Shift → Disruptive

Transactional Control by Tax Authorities
The Future of Sales Tax

E-Accounting

- Starting to see some of this in the US – auditors wanting raw transactional data – think SSTP Appendix F
- Globally – think of SAF-T which is an existing requirement in Portugal, Austria, Hungary, France, Poland, Lithuania, and Norway in 2018

SAF-T has been originally created by the OECD. The purpose of SAF-T is to conduct more efficient and effective tax inspections by enabling easier identification of the main areas of non-compliance in the tax reporting. According to the authorities in countries in which this solution has been already implemented, SAF-T brought significant benefits
The Future of Sales Tax

E-Ledger

- The US is not here yet
- The requirement to transmit transactional data to jurisdictions in near-real time has been a requirement in LATAM for years and is now becoming a reality in Europe – Spain SII

Effective July 1 - more than 62,000 Spanish businesses are now required to maintain electronic bookkeeping of Value Added Tax (VAT) ledgers (sales/purchases/intra-community supplies) that are declared to the tax authority in almost real-time (4 calendar days).
The Future of Sales Tax

E-Invoice/Pre-Clearance
- The US is not here yet – the real pioneer is Brazil
- The requirement to transmit proposed invoicing data before shipments and again upon its receipt

1. Supplier sends electronic invoice
2. Review and authorization by tax administration
3. Merchandise is dispatched / subject to police inspection en route
4. Customer receives goods
5. Customer validates invoice
6. Customer confirms receipt of goods
The Future of Sales Tax

What’s Next

- **January 1, 2018** – Norway slated to adopt SAF-T
- **July 1, 2018**: Hungary slated to adopt real time reporting requirement
- **2019** - Countries across the EU are adopting systems in support of directive 2014/55/EU which requires B2G e-invoicing
- Italy already looking to expand beyond pure B2G
Summary

- Technology has and continues to change how sales tax compliance and reporting is managed.
- Sales tax professionals don’t have to be technology experts but need to be informed and open to change in a technology driven tax world.
- Technology will enhance growth and development opportunities for tax professionals.
- Technology can create confidence in an ever-changing compliance environment.
Questions