CHALLENGES TO TREASURY TECHNOLOGY
ANALYSIS OF COMMON TECHNOLOGY PITFALLS AND HOW TO AVOID THEM

CRAIG JEFFERY
Managing Partner, Strategic Treasurer

PAUL GALLOWAY
Treasury Manager, American Equity Insurance

WHAT.
Discussion of key pitfalls faced by treasury when implementing or leveraging tech and how to avoid these issues.

WHEN.
Thursday, July 25, 2019
11:00 AM – 12:00 PM EST

WHERE.
Live online presentation. Replays at StrategicTreasurer.com

Presentation provided by Strategic Treasurer & American Equity Insurance.
ABOUT THE SPEAKERS.
GET TO KNOW TODAY’S SUBJECT MATTER EXPERTS.

CRAIG JEFFERY, CCM, FLMI

Craig Jeffery formed Strategic Treasurer LLC in 2004 to provide corporate, educational, and government entities direct access to comprehensive and current assistance with their treasury and financial process needs. His 30+ years of financial and treasury experience as a practitioner and as a consultant have uniquely qualified him to help organizations craft realistic goals and achieve significant benefits quickly.

PAUL GALLOWAY, CFA

Paul is a corporate finance executive with extensive experience in investment decision making, complex modeling, investment research and risk management in the banking, diversified financial services, agribusiness and utilities industries.

Most recently Paul joined American Equity Investment Life Insurance Company to head up their treasury operations function. Paul holds a B.S. from Iowa State University, an MBA in Finance from The University of Iowa, and holds the Chartered Financial Analyst (CFA) designation.
TOPICS OF DISCUSSION
WHAT AREAS OF TECHNOLOGY WILL WE BE FOCUSING ON?

CURRENT STATE OF TREASURY TECHNOLOGY
- How has treasury technology evolved into its current state?
- What are the leading solution types and client preferences?

TOP USAGE & ADOPTION CHALLENGES
- What are the most significant challenges treasurers face with technology use?
- What are the most significant implementation challenges?

HOW TO NAVIGATE TOP CHALLENGES
- What are the leading strategies for overcoming tech obstacles?
- How can treasury develop their tech infrastructure to avoid critical issues?

MANAGING INVESTMENTS IN TECHNOLOGY
- On a limited budget, how can treasury ensure that their technology is up-to-date and running smoothly?
- How can treasury win over key stakeholders for tech investments?

Q&A, TECHNOLOGY WRAP-UP
WHAT WILL YOU BRING BACK TO YOUR ORGANIZATION TO ENHANCE THE TREASURY TECHNOLOGY IN PLACE?
THE CURRENT STATE OF TREASURY TECH
A LOOK AT THE TECHNOLOGY SOLUTIONS LANDSCAPE

A Variety of Systems in Play
There are numerous systems, networks, and partners that organizations must account for when developing their technology stack. Each of these systems plays a unique role as part of the broader treasury / finance function; integration between internal systems is just as important as external connections.
THE CURRENT STATE OF TREASURY TECH

TREASURY TECHNOLOGY IN CONTEXT

TMS, Liquidity Portals, In-House Banking:
- Treasury Management System (TMS)
- In-House Bank & Pooling Systems
- Currency Trading Systems (FX)
- Risk, Debt, & Investment Systems
- Exposure Identification

Compliance Mgmt.:
- Control Systems
- Spreadsheet Databases
- Bank Administration
- Investment Compliance

Working Capital Mgmt.:
- Order-to-Collect (O2C)
- Order-to-Pay (O2P)
- Workflow Image Tech
- Letters of Credit Systems

Risk Management:

Treasury Visibility:

ADVANCED AUTOMATION:
- Artificial Intelligence (AI)
- Machine Learning (ML)
- Robotic Process Automation (RPA)
THE CURRENT STATE OF TREASURY TECH
A LOOK AT THE TECHNOLOGY SOLUTIONS LANDSCAPE

Excel & Bank Portals Lead the Way
Across both small and large firms, excel spreadsheets and bank portals are the most widely leveraged tools for managing treasury activity.

TMS / ERP Options
While a notable portion of large firms utilize a TMS or ERP for treasury, very few small firms do so. Aside from bank portals and excel, there is significant deviation between small and large firms regarding their technology use.

Excel
Bank Portal
TMS / TRMS
ERP
FX Trading Portal
MMF Portal
Reconciliation System
Payment Hub
Other

Data Source: 2018 Strategic Treasurer Rapid Research Technology Use Survey.
TOP USAGE & ADOPTION CHALLENGES
OVERVIEW OF TOP CHALLENGES

Q Corporates: What was the biggest challenge associated with your implementation? (expectation vs reality)

- **Taking Longer Than the Allotted Time Frame**
  - Expectation: 13%
  - Reality: 14%
  - 25%
  - *Just over 1 in 10 practitioners expected this to be their largest challenge, and the reality was consistent with expectations.*

- **Transitioning from the Old to the New Solution**
  - Expectation: 16%
  - Reality: 14%
  - 25%
  - *In circumstances where legacy or siloed technology is used extensively, the task of moving data and restructuring workflows can be a significant hurdle.*

- **Learning How to Use the Technology**
  - Expectation: 14%
  - Reality: 11%
  - 25%
  - *Learning how to use new technology can be a significant burden for treasurers already juggling multiple responsibilities or that have grown accustomed to an older program or interface.*

- **Bank Onboarding**
  - Expectation: 13%
  - Reality: 9%
  - 25%
  - *Due to lengthy and often delayed documentation and testing phases, bank onboarding can be one of the more frustrating steps of an implementation.*

- **Sticking to the Implementation Roadmap**
  - Expectation: 20%
  - Reality: 11%
  - 25%
  - *While delays to the overall project timeframe might occur, the challenge of sticking to the original project roadmap was not nearly as large of an obstacle in reality as practitioners expected.*

- **Effective Communication with the Vendor**
  - Expectation: 13%
  - Reality: 23%
  - 25%
  - *Communicating effectively with the technology vendor was the largest challenge for nearly 1 in 4 firms, almost double the number that anticipated this being the largest challenge ahead of time.*
TOP USAGE & ADOPTION CHALLENGES
A DEEPER DIVE: LEGACY ARCHITECTURES

SILOED SYSTEMS RESULT IN DELAYS, EXPOSURES, & ERRORS: Not only do manual processes and siloed systems result in significant delays and time constraints, but they also create additional security exposures and fraudulent threats. Siloed payment systems with unique sets of users, access rights, etc. each represent a point of vulnerability. Each manual step also introduces an additional layer where errors can occur; for organizations generating thousands of payments daily, exceptions almost always occur.
TOP USAGE & ADOPTION CHALLENGES
A DEEPER DIVE: OUTDATED MINDSETS

- Analytics: • Forecasting • Relationships • Scenarios • Models
- Information Reporting: • Static • Management • MBO / MBE
- System & Business Processes: • Visibility • TMS • Risks • Transactions • Payment Hubs • Reconciliations
- Internal & External Connectivity: SWIFT → Data Aggregators → Direct to Banks
- Data Architecture: • Extract • Store • Load • Transform • Access
TOP USAGE & ADOPTION CHALLENGES
A DEEPER DIVE: THE “ONE-SIZE-FITS-ALL” BELIEF

CORPORATES: Which TMS modules or services that you purchased are you no longer using because they are not working properly or are ineffective? (Select all that apply) *Only Top Choices Shown

- Forecasting / Liquidity Management: 21%
- Bank Account Management: 12%
- Hedge Accounting: 12%
- Risk Management: 12%
- Accounting / GL Support: 10%
- None: 48%

CORPORATES: How much of the available TMS functionality that you purchased are you using?

- <20%: 9%
- 21-40%: 9%
- 41-60%: 19%
- 61-80%: 22%
- 81-100%: 40%

AVOIDING UNNECESSARY OR INEFFECTIVE FUNCTIONALITY

Assuming that all treasury technology providers are the same, or that all functionalities operate in a similar fashion, leads to scenarios where modules are purchased that either do not function appropriately, or that go unused by treasury staff. This is the case for a surprising amount of treasury groups.

Data Source: 2017 Strategic Treasurer & TreasuryXpress Technology Use Survey
TOP USAGE & ADOPTION CHALLENGES
A DEEPER DIVE: AGGRESSIVE TIMELINES & ROADMAPS

Q Corporates: How long did the implementation process take?
(expectation vs reality)

14% of respondents were actively undergoing a TMS implementation at the time the survey was conducted. These implementations could be at any stage and may already have lasted for several months or years.

Nearly 2x more respondents expected their implementation to take less than 6 months compared to those whose implementations were actually completed in that time. While simple implementations can normally be completed in a few months, more sophisticated tech overhauls will almost always last longer.

Again, significantly more respondents expected their implementation to be completed within 6 months to one year compared to those whose implementations were actually completed in this timeframe. In Strategic Treasurer’s experience, many standard implementations, when managed properly, fall within this timeframe.

While only 9% of respondents expected their implementation to last between 1-2 years, the reality was that 3x as many implementations took this long. While it is not unusual for complex projects to take longer than one year, those lasting longer than 18 months are usually the result of poor planning or numerous unforeseen delays.

Only a small portion of implementations last longer than two years. As such, it is only projects that involve massive tech overhauls or those that have been poorly managed that take this long to complete. In these situations, the roadmap and project scope will almost certainly have been significantly altered to reflect changing circumstances, budget, or resources.

TOP USAGE & ADOPTION CHALLENGES

A DEEPER DIVE: LACK OF TRAINING & DODGING ASSISTANCE

LACK OF SYSTEM TRAINING

**SKIP DUE TO LACK OF TIME.** When attempting to manage a full implementation on top of existing responsibilities and daily operations, treasury teams may elect to forego extensive system training to save time.

**DEMOS, FACTSHEETS, & IN-PERSON TRAINING.** While most treasury teams will be provided with product factsheets and should have seen system demos during the RFP and proposal stages, in-person training is usually a staple of implementations.

**IMPROPER TRAINING IMPACTS ROI.** Data and numerous Strategic Treasurer projects have shown the importance of this in-person training; if practitioners aren’t properly trained on the new solution, ROI is virtually always impacted.

**UNFAMILIARITY RESULTS IN NEGLECT.** Groups that don’t understand the functionality they purchase or more likely to not use certain modules, make mistakes, or revert back to old processes and workflows. None of these options are ideal.

INEFFECTIVE ASSISTANCE

**SYSTEM DEMOS.** During the RFP process and as a team is deciding which modules or functions to implement, the availability of system demos is essential.

**PRODUCT FACTSHEETS & MANUALS.** For employees or executives that don’t have time to view extensive demos, the availability of written guides and product overviews are another helpful tool.

**IN-PERSON TRAINING.** Before a treasury group goes live with a new solution, in-person system training of core users is a pivotal step. This allows personnel to leverage experts to familiarize themselves with various workflows, interfaces, and functionalities.

**CUSTOMER SERVICE.** Once a system is live, any questions that personnel have will have to be funneled through customer service or a support manager. Ensuring the vendor has adequate staff to address these inquiries is important.
### COMMON PITFALLS

<table>
<thead>
<tr>
<th>Pitfall</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Outdated Mindset</strong></td>
<td>Leaning on usual suspects, relying on old information.</td>
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<tr>
<td><strong>Failure to Plan</strong></td>
<td>Architecture: structure, plumbing, then wiring.</td>
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<tr>
<td><strong>False Assumptions</strong></td>
<td>Not all solutions are the same. True of companies, too.</td>
</tr>
<tr>
<td><strong>Dodging Assistance</strong></td>
<td>Bootstrap vs outsource. Majoring on minors.</td>
</tr>
<tr>
<td><strong>Blind to Biases</strong></td>
<td>One throat to choke. Caveat emptor.</td>
</tr>
<tr>
<td><strong>Overly Aggressive</strong></td>
<td>Panic-driven. Scaling down for incomplete &quot;success&quot;.</td>
</tr>
<tr>
<td><strong>Equivocation</strong></td>
<td>Deep connectivity. Reconciliation.</td>
</tr>
<tr>
<td><strong>Short-Sightedness</strong></td>
<td>No plans for tomorrow. Rush to action.</td>
</tr>
<tr>
<td><strong>Handoff vs Process</strong></td>
<td>Eliminate or automate. Optimize the entire process.</td>
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</tbody>
</table>
TIPS FOR NAVIGATING TOP CHALLENGES
DEVELOPING A REALISTIC & COMPREHENSIVE ROADMAP

PRE-IMPLEMENTATION
01 Draft Roadmap & Specs
  » Design Plan & Requirements
  » Communicate Internally
  » Organize Resources
  » Project Approvals
02 Finalize Plan
  » Finalize Budget & Resources
  » Identify Required Functionalities & Workflows
  » Conduct RFP & Vendor Selection

IMPLEMENTATION
03 Confirm Roadmap & Blueprint
  » Project Kick-Off with Selected Vendor
  » System Development & Configuration
  » Documentation & Test Planning
04 Begin Installation/Crossover
  » Verify Bank Connectivity & System Integration
  » User Acceptance Testing (UAT)
  » User Training

POST-IMPLEMENTATION
05 Monitor & Refine System Use
  » Adjustments
  » Optimization
  » Follow-Up

Go-Live
  » Final Adjustments
  » Production Validation

Switch-Over
  » Warranty Period
  » System Switch-Over
TIPS FOR NAVIGATING TOP CHALLENGES

SETTING REALISTIC EXPECTATIONS

STRUCTURING AN IMPLEMENTATION ROADMAP & TIMELINE

• While the below timeline represents a simplified version, mapping out each of the specific implementation steps required, along with an expected timeline for completion, helps keep the project on track.

• It is important not to develop this timeline based off “best-case” standards, as this often results in the project falling off course and will require extensive revisions to the roadmap over time.
TIPS FOR NAVIGATING TOP CHALLENGES

WHO SHOULD YOU RELY ON TO MANAGE YOUR IMPLEMENTATION?

*In-House or External?*

- Deciding who will manage your implementation is a crucial step in the process. Depending on who is leading the project, the structure, point(s) of contact, costs, etc. will vary.

- The three primary options that organizations typically have include managing the project internally via IT and treasury staff, relying on the vendor’s customer support and project staff, or outsourcing project management to a consulting or advisory group.

- There are a unique set of pros and cons for each of these options, elaborated upon further in the graphic below.

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### TECH IMPLEMENTATION SERVICE OPTIONS

<table>
<thead>
<tr>
<th>Manage Internally</th>
<th>Rely on Vendor Support Staff</th>
<th>Outsource to a Consulting Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Cost-effective option, as it minimizes fees</td>
<td>✅ Many vendors maintain a group of project support</td>
<td>✅ These groups have typically already helped dozens</td>
</tr>
<tr>
<td>associated with hiring outside project managers.</td>
<td>staff and technical support staff to assist with</td>
<td>or hundreds of clients undergo similar implementations.</td>
</tr>
<tr>
<td>✅ Allows treasury and IT staff to familiarize</td>
<td>implementations. These services may come at</td>
<td>✅ Can provide dedicated level of attention to tasks</td>
</tr>
<tr>
<td>themselves with solution early on.</td>
<td>little-to-no extra cost for the client.</td>
<td>that client is unfamiliar with or does not have time</td>
</tr>
<tr>
<td>✗ Many organizations lack the experience or bandwidth</td>
<td>✗ Other vendors do not have adequate support staff,</td>
<td>✗ Additional costs associated with hiring third party</td>
</tr>
<tr>
<td>to manage an entire implementation on their own.</td>
<td>and some may be juggling dozens of</td>
<td>may be out of the realm of possibility for</td>
</tr>
<tr>
<td></td>
<td>implementations at once.</td>
<td>organizations with tight budgets.</td>
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<tr>
<td></td>
<td>✗ Effective communication with vendors was ranked</td>
<td></td>
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<tr>
<td></td>
<td>as the top challenge to implementations by those</td>
<td></td>
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<tr>
<td></td>
<td>who had undergone one in the past.</td>
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MANAGING INVESTMENTS IN TECHNOLOGY
SECURING INVESTMENTS IN TECH

HOW CAN TREASURY OVERCOME INTERNAL BARRIERS TO SECURE FUNDING FOR THEIR INITIATIVES?

<table>
<thead>
<tr>
<th>Include Other Stakeholders</th>
<th>Work to Overcome Shared Obstacles</th>
<th>Demonstrate Clear Value-Add</th>
<th>Build Your Reputation on Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>To help garner support for your project from executives and stakeholders, be proactive in engaging with other departments to identify ways in which the new project/solution will meet the requirements of accounting, IT, executives, etc., rather than only focusing on treasury operations.</td>
<td>As other departments demonstrate the inefficiencies that they experience, treasury needs to document these challenges and work to identify ways through which their project will address the issues.</td>
<td>Once the needs of other departments are understood, be proactive in demonstrating how the new solution will address these needs, such as providing enriched data for financial reports, streamlining workflows for updating ledgers and reconciling accounts, etc.</td>
<td>While it may be enticing for treasury to offer a “best-case” scenario to stakeholders in an attempt to increase support, these efforts can backfire if the project experiences significant setbacks or runs over budget.</td>
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TREASURY MUST BE STRATEGIC TO SECURE FUNDING

As treasury is viewed as a cost center internally and is rarely at the top of executive priorities for additional spend / budget, practitioners must learn to intertwine their needs / requirements with those of other stakeholders. Learning how their projects can aid other departments and clearly communicating the extent to which value will be added goes a long way in winning over other groups and getting projects approved.
PUTTING IT ALL TOGETHER
WHAT ARE THE KEY TAKEAWAYS OF THIS PRESENTATION FOR TREASURY?

<table>
<thead>
<tr>
<th>THE TECHNOLOGY LANDSCAPE IS IMMENSE &amp; COMPLEX</th>
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</thead>
<tbody>
<tr>
<td>▪ There are many categories of treasury technology and providers.</td>
</tr>
<tr>
<td>▪ Democratization of technology increases opportunities.</td>
</tr>
<tr>
<td>▪ Offerings are not fit for all companies.</td>
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<table>
<thead>
<tr>
<th>NEW TECHNOLOGIES ARE REVOLUTIONIZING THE SPACE</th>
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<tbody>
<tr>
<td>▪ New innovations including: RPA, ML and AI are causing major disruptions.</td>
</tr>
<tr>
<td>▪ Strong adoption is expected over the next five years.</td>
</tr>
<tr>
<td>▪ Must future-proof by establishing a modern technical architecture.</td>
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<table>
<thead>
<tr>
<th>TECHNOLOGY IMPLEMENTATIONS TAKE SERIOUS EFFORT</th>
</tr>
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<tbody>
<tr>
<td>▪ Major technology implementations will take some time.</td>
</tr>
<tr>
<td>▪ Being ‘aggressive’ can sometimes mean ‘highly unrealistic’</td>
</tr>
<tr>
<td>▪ Change management, connections and testing take serious dedication.</td>
</tr>
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<table>
<thead>
<tr>
<th>TAKING THE TIME TO DO IT RIGHT IS ALWAYS WORTH IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Failing to plan results in setbacks, and reduces your ROI.</td>
</tr>
<tr>
<td>▪ Treasury face pressure to deliver quickly. Must ensure the project is also implemented properly.</td>
</tr>
<tr>
<td>▪ Do the research, take the training, ask questions, and progress in stages.</td>
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</tbody>
</table>
LET’S CONNECT.
DON’T LET THE LEARNING END HERE...
CONTACT US WITH ANY FUTURE QUESTIONS.

Thank you for your interest in this presentation and for allowing us to support you in your professional development. Strategic Treasurer and our partners believe in the value of continued education and are committed to providing quality resources that keep you well informed.

STRATEGIC TREASURER
Craig A. Jeffery,
Managing Partner

Email: craig@strategictreasurer.com
Phone: +1 678.466.2222

AMERICAN EQUITY INSURANCE
Paul Galloway,
Treasury Manager

Email: pgalloway@american-equity.com
Phone: +1 515.273.3924

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