The Treasurer’s Blueprint for Transformation

What, Why and How to Lead Your Team to Success
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INTRODUCTION

A century ago, the technology we used on a daily basis today was inconceivable. A half-century ago, much of our modern technology was still a sci-fi dream, and even a decade ago, key innovations in use across the globe now weren't yet on the market.

Technology is now vital to treasury's operations. In the face of such rapid change and an ever-growing bulk of technological information, however, it can be overwhelming for the treasurer seeking to understand how to approach technology. After all the changes that have occurred, what is relevant today? What can we already see is changing, and how do we plan for the changes we can't anticipate? And perhaps most importantly, how are technological innovations altering the practice of treasury itself?

On the whole, the purpose of treasury technology is two-fold: freeing staff to focus more on their core competencies of strategically managing liquidity, working alongside other departments and advising the organization, and providing more precise data. Treasury teams of the future will use more technology, not less. Then again, that principle can be applied to any profession today.

Much of the information available through a quick internet search is either too surface-level to be of any use or unnecessarily technical for treasury’s purposes. The goal of this eBook is to discuss the pertinent details and lay the foundation for treasury professionals to understand the environment and evaluate their needs and solution structures more quickly and accurately.

Guiding Principles of Change

Change is a constant, and there is a certain pattern to how technology changes. Recognizing and anticipating this pattern can help organizations understand what is happening, when to anticipate a tipping point, and what to expect.

The pattern runs along these lines: Pressures and demands come from all sides. Expectations from accelerators and innovations drive more rapid technological development and improvements such as better security, increased efficiency and so on. This requires greater agility of development, and that in turn requires leveraging newer architecture that supports that nimbleness.
Increased Demands on Treasury

Technology is not the only thing that has changed over the years. Treasury’s role has expanded and deepened. The C-Suite has recognized the vital importance of the treasurer as a key advisor to the business, and as a result, more has been asked of the treasurer.

For various reasons including the accelerators listed in the next section, treasury is now expected to have real-time visibility across banks and accounts. They are expected to use that visibility to build accurate forecasts and develop agile strategic advice. Their risk management function has expanded to include monitoring risks such as inefficiency and fraud. These are only a few of the largest areas, but many more have slowly built up the weight treasury must shoulder.

While these increasing demands are a positive sign of high value being placed on treasury’s services and function, the demands are still difficult to meet. The difficulty is compounded by the fact that, although treasury departments are adding staff on a net basis, they are doing so quite slowly—certainly far more slowly than the demands are increasing (Strategic Treasurer market research). They must therefore find ways to scale up their operations and support organizational growth without equally scaling up their staff. How? Technology.

QUESTION: How large is your global treasury organization, including analysts?

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*Strategic Treasurer Market Research.
ACCELERATORS

Technology accelerates growth in many areas. Some of those areas create more needs, which technology then steps in again to solve. This creates a cycle of acceleration. Technology and its resulting growth are not, however, the only accelerators. In this section, we’ll discuss the major factors that accelerate digital innovation and adoption, from geopolitical events to regulations and many others.

Geopolitical Events

Significant events send ripple effects through nearly every area of life, including technology. Here are a few of the most recent and relevant:

9/11: In 2001, making payments by flying checks from one location to another abruptly became far less popular. This sudden disruption in payment processes catalyzed the digitization of checks using electronic check image processing services and ACH.

FINANCIAL CRISIS OF 2008/2009: Every economic disruption in the last fifty or so years has caused a surge in appreciation for risk management and visibility, but this financial crisis seems to have sparked a more permanent emphasis on risk management and visibility. Many turned to technology to strengthen their treasury departments in these areas.

COVID-19’S PERPETUAL WORK FROM HOME (WFH): The pandemic brought a sudden shift to remote work along with the disruption of supply chains, both of which accelerated the need for digital payment processes. Although the corporate world had been steadily shifting to digital processes for payments and many other tasks already, 2020 saw an estimated 2.5 times the expected adoption for a single year (Strategic Treasurer market research).
Regulation

Drivers of regulations impacting treasury and finance include fraud, other criminal activities, economic disruption and opening the door for further innovation (e.g., PSD2), and none of these drivers are decreasing. The compliance burden is heavy and growing, and the treasury community realizes that the growth won't stop anytime soon.

Compliance has a twofold acceleration of technological adoption. First, it adds to treasury's overall burden and increases their need for digital levers. Second, however, some of the regulations require security, visibility or other standards that are simply quite difficult or impossible to reach manually. PCI-DSS, for example, a security standard that applies to any company handling consumer credit card data, lays out specific technology requirements deemed necessary for protecting sensitive data.

Cybersecurity

The security regulations mentioned in the previous section have good reason to sound their alarms. Fraud continues to rise, morphing and adapting to bypass security measures, prompting security measures to increase and adapt in response.

The corporate response to these attacks requires assessing where automating a process could drive out vulnerabilities. Automated, digital payment processes reduce touchpoints and handoffs (a major source of vulnerability), allow for built-in and enforced controls and enable better visibility and monitoring. For these and many more reasons, higher levels of security can be achieved with a secure solution than with manual processes.

As a result, the need for tighter security has become a major driver for digital adoption in general. While treasury's role as the superintendent of payment security now requires their involvement in this adoption across multiple departments (AP, for example), treasury’s need to protect their own processes and properly monitor banking activities has become a significant driver for treasury technology in particular.

QUESTION: In the near future (1-2 years), I expect the following to be true of the regulatory environment:

- Large increase in regulations: 7%
- Increase in regulations: 45%
- Approximately the same level of regulations: 38%
- Decreased regulations: 3%
- Large decrease in regulations, regulatory relief: 0%
- Unsure: 8%

*Strategic Treasurer Market Research.
Workforce of the Future

Due to these and other accelerators, steady technological adoption has radically changed the face of treasury operations over time—and the changes are not slowing down. Treasury staff cannot stand still and continue with only manual processes indefinitely. In order to effectively meet the many demands placed on them in the current era, they will have to leverage technology, and in order to effectively leverage technology, they must reskill.

What skills will be required of treasury staff moving forward? This requires not only thought, but also action. The more treasury can actively learn about technology and develop technology skills now, the better they will be prepared for the changes coming. The workforce of the future is rapidly becoming the workforce of today.

Treasury staff cannot stand still and continue with only manual processes indefinitely. In order to effectively meet the many demands placed on them in the current era, they will have to leverage technology, and in order to effectively leverage technology, they must reskill.
Thus far, we have discussed “technology” in broad terms, but what are all of these innovations changing the daily operations of treasury? In this section, we’ll cover the major innovations and technological concepts that are impacting treasury and finance today and are expected to have an impact in the future. This will not be a deep-dive into the technical details of how these innovations work. Rather, the goal is to provide a foundation for understanding how these innovations play into the solutions available for treasury today.

### Big Data

Data is growing at a rate of 40% annually, meaning it doubles every two years (multiple sources). This is in large part thanks to elements such as the IoT that are constantly generating and collecting information. Fortunately, computer processing power is growing at a faster rate than data, giving businesses the opportunity to manage and even leverage their aptly named “Big Data.”

This, however, can be easier said than done. In order to be usable, the data must first be prepared for use, and then managed, stored and protected effectively, all of which become rather difficult when working with such massive quantities and disparate types and formats of information. These difficulties have sparked the development of various storage options over the years (see page 9 for a list of the major options currently).
Business Intelligence

Business intelligence (BI) tools aim at helping organizations harness their masses of data. By analyzing the data the company generates and collects over the course of its operations, BI tools offer insight into the workings of the company that can guide decisions and give a kind of feedback that would otherwise be nearly impossible to discover. For BI to be effective, however, the flow and storage of data must be set up thoughtfully and intentionally. Data must be accurate and accessible for the tools, meaning version control issues, data silos and inaccessible storage can all cripple BI’s effectiveness.

Computing Power & Instant Scalability

Thankfully, while data doubles every two years, processing power efficiency doubles every 18 months (Moore’s Law and its implications). This is what makes BI and the overall management of Big Data possible. In the future, quantum computing, using qubits instead of traditional bits, may play into computing power as well. The promise of quantum computing to accelerate computational capabilities is already occupying multiple companies’ and many governments’ focus.

Another aspect of modern computing is that businesses have access to instantly scalable processing power. In the past, running out of memory simply meant having to buy more. Now, with solutions architected for the web, companies frequently have the option to dial their processing power up and down as needed.
The Move to the Cloud

Digital tools and solutions have been in use in finance for decades, but most have seen both incremental changes in functionality and large-scale overhauls in hosting models.

**MODEL 1: INSTALLED & ON-PREMISES**

At the turn of the century, nearly all financial solutions were installed on the client’s own servers. These “on-premises” or “installed” solutions were groundbreaking, coming at the right time to free highly complex and multinational organizations from manual processes for the first time. At that point, however, only those large, high-revenue companies with sufficiently robust server setups, security and IT resources could host and maintain these solutions.

While installed remains the model of choice for some organizations today, suiting their needs well, these systems had to be upgraded regularly to maintain their value. Since these upgrades were not enforced, treasury teams often put them off until the backlog of updates was tantamount to a reimplementation. Even with faithful upgrading, these systems tended to face obsolescence eventually, and while installed still account for a sizable portion of the solutions in play today, many in finance view them as having a declining value over time. Other options needed to be developed in order to meet the needs and address the concerns of the full market.
MODEL 2: APPLICATION SERVICE PROVIDERS (ASP)

The ASP model involved a third-party host that housed the application and performed much of the maintenance. Unlike in the cloud-hosted model, ASP offered a single instance of the application rather than a multi-tenant approach. While it took an important step in exploring hosting options and seeking greater accessibility and flexibility for clients, upgrades were still not enforced, and declining value and obsolescence continued to plague systems in this model. While still a feasible alternative for some, ASP never gained as sizable a share of the market as either the installed model or the cloud model that followed it.

MODEL 3: CLOUD & SAAS

Software-as-a-service (SaaS) or cloud solutions took ASP’s concept of offsite hosting in a different direction. In this model, the solution is hosted in the cloud in a multi-tenant approach and is maintained by the vendor. Rather than purchasing the solution upfront, clients pay a subscription fee for continued use of the product, and updates are enforced.

After being viewed with some suspicion in the early 2000s, SaaS has earned the trust of many areas of the corporate world, with many in finance now seeing it as having value that remains stable or increases over time rather than diminishing. This shift in viewpoint occurred slowly but steadily, and as a rule, the “move to the cloud” has already happened—many are just now realizing it.

That said, some areas still show a preference for other models and are adopting to cloud hosting at different rates. While SaaS now holds the majority of the market share for treasury management systems (TMS), for example, installed solutions are still prevalent among enterprise resource planning (ERP) systems, and SaaS is seeing slow adoption there.

SMALLER COMPONENTS & APPS

While not a separate hosting model, it should be noted that there is an entire direction of technology moving toward smaller, more componentized parts or apps, and some of these parts are breathing new power into the invested technology stacks that exist at companies currently. In addition, these smaller components allow for faster development and improved business process resiliency.
APPLICATION PROGRAMMING INTERFACES

In parallel with the move to cloud, corporate technology is moving to more open, integrative architecture. Application programming interfaces (APIs) are an innovation that has seen high adoption in recent years as a way of reaching far deeper and more secure connection between systems.

APIs connect two different systems and relay information back and forth between them in a single, synchronous action. They allow users to request information from other systems without leaving the system they are currently working in. APIs have seen dramatic adoption in the consumer space—for example, the Uber app uses APIs to connect payment systems and maps, allowing users to see the location of their driver and pay for their ride, all without leaving the app.

The most common type of API used in the office of the CFO are bank APIs—they connect banks with your internal systems, like your ERP. Corporates can use bank APIs to connect to a stream of data from a single bank, or to connect to multiple data streams at a variety of banks. The list of available bank APIs is ever-growing, and leading banks are actively building their API offerings to gain a competitive edge and to adhere to new Open Banking regulations.

Some of the most common types of bank APIs today include:
- Balances
- Transactions
- Payment Initiation
- Payment Status
- Account Entitlements
- Trade Finance

A single bank API will provide information from just one bank and one type of data—just the Transactions API at JP Morgan, or just the Payment API from Standard Chartered, for example.

With a multi-bank API connection, visibility is expanded to all types of bank data from all your company’s banks, securely funneled directly into the internal system of your choice.
ROBOTIC PROCESS AUTOMATION (RPA)

- Bots programmed to perform specific workflows, decision trees, tolerance checks
- Perform repetitive tasks quickly and accurately
- Unable to “think for themselves” or adapt without human intervention

ROBOTIC PROCESS AUTOMATION

Although using a completely different mechanism, robotic process automation (RPA) also sees its most common financial use in creating a type of interface between systems. RPA involves the programming of bots that perform tasks such as handoffs between systems following the same steps as a human would. While RPAs require a certain amount of exception management and updating, and “true” automation is preferable, bots allow companies to “cheat” their way to automation when more direct options are unavailable.

Potentially the most common task treasury uses RPA for is downloading statements from bank portals at intervals and performing standard cleansing and management of the data, eliminating the manual handoff when other automation options are not yet available or accessible.

MACHINE LEARNING (ML)

- Can “learn” in a supervised arena
- Typically used for data mining and predictive analytics
- Able to decide and embark on appropriate course of action, but humans must define environment

MACHINE LEARNING

Often considered a subset of AI, machine learning (ML) uses programming where a specific method for reaching a goal is not specified. Instead, parameters are set, datasets are fed in, and the program is allowed to experiment and self-correct to reach its goal.

ML has seen remarkable success in various arenas from chess games to flight combat simulations and, of course, finance. It has proven adept at detecting patterns, anomalies and changes across increasing amounts of data, which addresses a vital need in today’s corporate environment (see the Big Data section above). Its specific uses in treasury include identifying anomalies for quality control and system issues, potential fraud and so on. Its uses will be discussed in more depth later in this eBook, but they are already extensive and by no means exhausted yet.

ARTIFICIAL INTELLIGENCE (AI)

- Machines thinking in a human-like manner
- Consumes masses of data and applies it to specific, pre-defined objective
- Identifies correlations or variables that would be difficult for humans to find

ARTIFICIAL INTELLIGENCE

While RPA involves technology that is programmed to mimic a human task, artificial intelligence (AI) involves technology that is programmed to mimic the human brain. While the exact definitions of AI and what all it encompasses vary somewhat from source to source, this general category of technology is progressing rapidly and is generally built into financial solutions to enhance analysis functionality or provide monitoring of various factors. For example, AI has proven to be highly effective at forecasting using all the details from receivables.
How do all the innovations discussed play into treasury? While technology has impacted treasury in countless ways, directly and indirectly, this section will break down the innovations used in treasury by the functions with which they assist.

**Connect Systems**

Treasury departments have a high need for robust connectivity. Externally, they need to connect to banks, market data providers, FX portals and networks. Internally, they need connections to ERPs, BI systems, and many other areas depending on the organization.

Historically, connectivity has come a long way. Teletype machines marked the first move away from mailed paper statements and written memos. Bank portals, which are still widely used today, came next. At this point, however, staff involvement was still necessary for downloading these statements and transferring them to Excel or the TMS. Host-to-host (H2H) connections, while not yet eliminating these manual handoffs, were the first innovation in technological connectivity. H2H connections, such as File Transfer Protocol (FTP), SFTP, and SWIFT were built to connect internal systems with banks. Although a vast improvement in efficiency, these direct lines require heavy setup and maintenance, have some vulnerability to fraud, and were designed for scheduled rather than instant connectivity.

While some types of treasury solutions still come with H2H connections to common sources, the bulk of treasury’s external connectivity has now switched to bank APIs. Following the European regulation PSD2, banks were required to make client data available to third parties as requested by clients. Bank APIs proved the easiest way to facilitate this connectivity, so the regulation proved a strong driver of API adoption in European banking and finance. As European adoption surged, demand for bank API connectivity has increased worldwide.
Prepare and Analyze Data

The historical method of moving data required a number of linear or sequential steps. Some of these steps involved getting the data, ensuring it’s accurate or complete and then packaging it for transport. With modern connectivity methods such as bank APIs, these steps are essentially eliminated, making data preparation a far easier task and in some cases eliminating it as a task entirely.

In terms of analyzing the data once received, AI, ML and bank APIs are raising the bar for speed and accuracy. These are power analysis tools that can cycle through options and systematically look for patterns the user designates. They can recognize what is normal and what varies from normal, drawing the latter to treasury’s attention.

With AI and ML applied to robust datasets, analysis tasks are not only far easier but also far more accurate than in the past. While this applies to many areas of analysis, cash forecasting is a specific area that is both a priority and often a pain point for treasury, making it a prime opportunity for technological tools. Forecasting and forecasting accuracy has become increasingly important and difficult to treasury, and many providers have been successfully addressing this need by building out forecasting functionality powered by AI and ML.

QUESTION: Through our TMS / TRMS vendor, we use APIs: (Select all that apply)

- For connecting to banks for information reporting: 56%
- For connecting to banks for payments: 37%
- To connect to information / data providers: 19%
- To connect to other best of breed providers for transaction management: 6%
- To connect to ERPs: 28%
- To connect to other BI tools (Power BI, Tableau, etc.): 13%
- None: 31%

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Track in Real-Time

The uses of bank APIs are extensive. In addition to straightforward connectivity uses, bank APIs enable instant tracking functionality for payments. While the list of things treasury might wish to track is fairly long and includes account signatories and many other important items, improved payments tracking is high on treasury’s wish list.

In the past, payments data has followed a linear process with feedback only received at the beginning and end or not at all. New innovations built on bank API functionality now allow treasury to look at the data through each step of the process in real-time, as it happens, gaining feedback on where the payment is at any given moment until it is confirmed accepted by the recipient, and exposing bank fees at each step along the way.

Not only is it convenient to know the locations of the payments, but it is also useful to see in real-time if something is going wrong. Traditionally, exceptions came at the end of a long, invisible process, requiring treasury to backtrack and research what had gone wrong after the fact and leading to substantially delayed payments. Bank APIs work with up-to-the-moment data, and this increased visibility now gives treasury the opportunity to discover issues and repair payments on the fly. Payments are remitted more quickly and with less work, benefitting both parties.

REPORT

What can be tracked can be reported on, so as tracking options become more robust, reporting and user accessibility options expand as well. Automation can bring the information to treasury in reports fed out daily or at other intervals, allowing for management by objective.

AI/ML can also identify anomalies and alert users of exceptions, allowing for management by exception. Alternatively, real-time tracking and bank APIs allow for self-service access to the information whenever users want it.

MONITOR

As criminals are constantly developing new ways of leveraging technology to steal money and data, the corporate world must constantly develop new ways of leveraging technology in defense. In addition to preventative measures such as tokenization, encryption and certificate exchange, all of which help prevent the wrong parties from accessing sensitive data in any meaningful manner, a growing area for defensive measures is monitoring.

Monitoring is another area where AI and ML have excelled. As discussed above, AI and ML are particularly adept at recognizing patterns

**QUESTION:** The following describes our practices or plans for the use of Machine Learning (ML) with cash forecasting: (Select all that apply)

- Use of TMS / TRMS vendor provided ML
  - Currently use: 51%
  - Plan to use: 37%
  - No plans to use: 11%

- Use of ML outside of the TMS / TRMS system
  - Currently use: 63%
  - Plan to use: 28%
  - No plans to use: 10%

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and identifying anomalies. This has proven quite helpful in monitoring elements such as user access or activity: a login in the middle of the night, for example, or viewing a certain number of files in rapid succession could depart from the norm in a manner that AI/ML could identify and flag as worth investigating.

Anomalous payments could also be identified, and some solutions include this type of monitoring coupled with interdiction, in which the solution forces a stop on the payment until further reviews are performed. Monitoring with interdiction has shown significant correlation to lower rates of fraud loss.

**TRANSACT**

There is a general movement toward faster, richer and better data and processes, and payments sit at the center of this movement. In addition to solutions that streamline and standardize payment processes, payment messaging formats and payment rails have seen significant changes due to recent technological developments.

The networks discussed in the connectivity section coupled with API connectivity or enriched formats such as XML have made great strides in increasing the efficiency of payment messaging. With enriched information, flexible formatting that rarely requires repair, and robust tracking features, newer payment messaging and visibility have improved significantly. This enriched information could be additional languages and extra data. While adoption of electronic payment solutions has been rapid, there has been some hesitation in the adoption of newer payment messaging formats, with a sustained preference for human-readable formats.

Meanwhile, new rails for payments themselves are raising the market’s expectations for speed. Real-Time Payments (RTP), FedNow, Same-Day ACH and others are allowing for more rapid transactions, typically with high levels of visibility and tracking. These rapid transaction rails also accelerate the need for real-time connectivity, as older, slower connectivity options become less tenable when working with faster payments.

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**QUESTION:** What type of anomalous or suspicious behavior is your system capable of identifying? (Select all that apply)

- Unauthorized users trying to access restricted system components: 68%
- Unusual changes to payment beneficiary information: 51%
- Unusual payment amounts: 47%
- Unusual payment volumes: 39%
- Unusual and high risk login: 37%
- Payments made outside of working hours: 27%
- Abnormal user-activity detected by machine learning: 20%
- Other: 3%

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MANAGE DATA

Big Data has brought not only the opportunity to learn from analyzing masses of data, but also the need to manage it. This includes the storage of data as discussed previously, as well as the standardization, normalization and association of the data, plus the identification and repair of problems.

Often, the data needing management lives within the underlying systems, which can make any changes difficult. This creates a need for data that can be repaired without a need to fix all these underlying systems. BI tools can be leveraged along with other datasets to help identify and repair problems in information in this isolated way, often based on elements such as associative tables or enriched datasets with geolocation. In addition, designing a tech stack with fewer disparate systems can simplify data management. Using tools that are embedded directly within a core system (ERP, etc.) is proving to be a highly efficient option for many companies.

THINKING PROMPT

What can we learn from the past?

As new technologies become available, the corporate and consumer markets begin adopting them in just one or two areas at first, but the adoption spreads as the technology proves itself and changes expectations. Often, however, large players selling older technology meet these innovations with resistance. The providers of legacy technology rely on their robust, tried-and-true functionality—but they often find themselves losing the battle to the newer players when it comes to flexibility, scalability and cost over time. In many cases, the older players must adopt the new technology themselves if they want to remain competitive in the evolving environment. Both providers and buyers should consider these trends as they assess the landscape around them and make decisions for their technology moving forward.

How do we change our behavior based on the changing technologies and applications we’ve discussed?

From the challenges of exploding data to the helpful decreases in the cost of technology, treasury teams all face a changing environment. The current situations and the exact impacts, however, vary from company to company. Take some time to consider your own department’s current behavior and actions in light of the changes happening in technology. Are there ways in which you need to adapt, and if so, how?
MINDSHIFT ELEMENTS

Clearly, the innovations and new tools available and in development require some consideration as treasury departments decide on what elements they need to adopt and when. However, there are some areas of technological shifts that require more fundamental adjustments. In this section, we will briefly consider a few of the shifts in mindset and approach that treasury needs to be aware of.

Power of Networks & Ecosystems

We begin with a fairly simple mindset shift: don’t underestimate networks and ecosystems. The corporate world is accustomed to favoring individual, free-standing solutions with robust functionality, but the connectivity achievable through modern innovations is making it necessary to adjust this calculus. Networks are made powerful by a mix of strong functionality and extensive participation, and as connectivity innovations such as bank APIs grow more prevalent and more calibrated, networks are becoming an increasingly central figure in the technological world.

The corporate world is accustomed to favoring individual, free-standing solutions with robust functionality, but the connectivity achievable through modern innovations is making it necessary to adjust this calculus.

Power of Data & Data Types

The power of data has already been referenced, but the mindset shift that accompanies it is worth considering in more depth. Between the overflowing data generated by the organization itself and the various market and other data that can be found or purchased for analysis, modern companies have an immense opportunity to gain insights. With the proper tools and some intentionality and creativity, Big Data can be harnessed, sifted through, selected and used to improve decision-making.
When considering what data to purchase and analyze for certain purposes, companies should consider the different types of data that are beginning to emerge and gain attention, notably “lag data” and “current data.” Much of the data traditionally considered valuable and worth analyzing—general financial performance data, for example—is lag data. This means that, while certainly indicative of performance in many ways, this data is not available until after the fact. In some cases, this “lag” means the data comes too late to meaningfully influence decisions in rapidly shifting environments.

In these cases, it’s important to have current data that shows what is happening rather than what has happened, and creativity is sometimes required to find it. From satellite imagery of parking lots potentially indicating higher market activity in a certain industry to Twitter mentions that could signal volatility in a stock before or as it is happening, organizations can benefit greatly from analyzing datasets that are not traditionally a point of focus.

Entire books have been written on this topic, but for now, simply consider that the corporate world is beginning to recognize the value of harnessing the varieties and masses of data available to them. Those who don’t wish to fall behind must also realize the power of data and adjust their thinking accordingly.

**Expanding Functionality and Componentization**

Another fundamental shift is occurring alongside some of those above. Vendors are offering increasing functionality through smaller and smaller modules or “micro-services.” This allows treasury teams to design a custom “Lego stack” of these super-specialized offerings to suit their specific needs, instead paying for a one-size-fits all platform. For organizations, this shift allows for continual development. While companies are used to entire version jumps or updates and to buying one large solution to serve a grouping of needs, this is shifting slowly but steadily toward an environment in which individual components create continually adapting layers of functionality.

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**THINKING PROMPT**

Change is constant. Do we drive by looking in our rearview mirror or by using GPS?

Real-time and current data are superior to lag data for many functions, although historical data certainly has its uses. Consider not only when your organization has an absolute need to know certain information, but also when it would be helpful. It may not be imperative that you know ahead of time what’s around the corner, but you might be able to optimize certain decisions if you do—and that optimization might make a significant difference in the long run.

Where can we find unique value or take advantage of multiple levers?

Networks, open ecosystems, data, BI tools, ML—we’ve discussed many levers that companies can use throughout this eBook. Which tools make sense for your organization given your specific pain points and goals? Which ones might give you an edge over competitors, or which tools could you leverage together?
PULLING THE NEW TECHNOLOGY TOGETHER

What Decisions Are Required?

In the face of so many options and a rapidly changing technological landscape, deciding what to adopt when is not easy.

As you and your team explore these questions, consider the following points and implications of the acceleration.

1. **What Does Our Technology Stack Need to Look Like?**
   Answering this question requires careful thought about your organization’s areas of intensity, pain points and goals. You and your team will have to explore your current technology stack, how that impacts your operations, and what you want to see change. For which functions do you need additional power and leverage?

2. **How Can We Bring Our Team Along?**
   Bringing your team along starts with listening. Find out the pain points and alternative perspectives among other departments and individuals in your organization. Discuss your organization’s overarching goals and talk together about what each group needs in order to support those goals properly. When you understand the full picture and the concerns of others involved, and when they know you understand, the conversations and decisions become much more productive and less deadlocked.

   When encountering resistance to change, consider piloting technology in just one area at first. This can be helpful in overcoming resistance, as you are able to develop a positive track record.
3. Is There a Way to Leverage What Is Being Done Across the Enterprise?
Organizations are continuing to move toward ERP systems, many of which are moving toward the cloud. This provides a key version of the financial truth of the organization and a repository of data and processes that will continue. Combined with the growth of data and the necessity for clean data that lives on (as it does in ERP systems), this leads to a significant opportunity for BI, trend identification, anomaly detection and analysis. The places where data is being stored become places where additional analysis is performed, patterns are detected, and models are run to help the organization become smarter and perform better.

Organizations must consider how to respond more rapidly from a data process standpoint. This requires different thinking and certain tools. Treasury and finance must keep an ear to the ground to ensure they know what the tool options are, whether there are new tools, how to go about acquiring those that are a good fit and how to gain facility with them over time.

In addition, treasury groups with access to a “transformation team” should be mindful of the leverage these teams can offer them. Transformation teams are massive allies and partners in helping treasury to bring about change, and they frequently have IT support and budget to contribute.

4. How Can You Shortcut Your Way to Visibility and Forecasting?
The same data is often used for different but related purposes in different parts of the organization. Having a data plan that leverages the data once across multiple functional activities reduces the reconciliation activity, helping with visibility across the cash conversion cycle. That visibility and abundance of data allows for creating different forecasts based on everything from high volume activities to large value items that are captured as part of the financial process within the ERP ecosystem.
5. **How Do We Consider Processes and Workflow?**
Currently, are your workflows and processes for data more like the telephone game, with data in multiple places and work needed to keep it normalized and synchronized? Or are they more like a central bulletin board, with data in common repositories that can be accessed and used without the inherent reconciliation and version control challenges? If your organization is currently experiencing the telephone game, how can you move towards the bulletin board?

6. **What Does Future-Proofing Look Like NOW?**
In order to effectively future-proof, you have to know where things are headed and make sure everything you build, connect, and do fits into that future model. While none of us can see the future, keeping abreast of what’s going on and of the rates of change is vital to understanding the upcoming environment.

Keep in mind the mindset shifts noted in this eBook, from componentization to networks and ecosystems, and consider those shifts in light of your organization’s individual needs and situation. Once you have a sufficient concept of the future state your organization needs, it’s simply a matter of ensuring that the organization is moving in that direction both technically and otherwise in all the changes that are made.
SUCCESS STORIES

Corporate Case Studies

CITRIX

THE CLIENT:

Multinational Software Company
8,400+ employees
Offices across U.S., Australia, India, Japan, Greece, United Kingdom

CHALLENGES:

- Time and effort required to maintain multiple online banking applications across banks and countries
- Slow and error-prone reconciliation
- Former solution was flagged by security audit

RESULTS

- Faster, automated day-to-day tasks via native multi-bank cash visibility inside their ERP
- Users can use their SAP single-sign-on (SSO) to view and manage all cash positions
- Immediate reconciliation on the same day as transactions
- Fully secure end-to-end payment solution

MAPLETREE

THE CLIENT:

Real Estate Development and Management
2,770+ employees
Offices across 13 markets in Asia-Pacific, Europe, the UK and the US

CHALLENGES:

- Lack of timely cash visibility as bank balance and transaction details were received at different times in different formats
- Different methods of communications for payment initiations with no single tracking mechanism
- Lack of scalable treasury solutions across countries and regions as the company grows

RESULTS

- Real-time cash management and payments across borders all visible and controlled in a single centralized location, 24/7
- Elimination of duplicative and erroneous data arising from manual process
- Can invest and deploy cash on a more timely basis with near real-time visibility
- Secure, scalable and cost-effective solution for both SAP and non-SAP platforms
ABOUT THE FIRMS

FinLync

FinLync is a privately held, global fintech company transforming the insights and functionality of corporate finance and treasury offices through its world-class products. FinLync’s ERP native apps and API connectivity empowers treasurers to optimize cash, make better, faster decisions, save time and reduce the resources needed to manage complex finance needs. FinLync’s largest clients include Fortune 500 and Fortune 2000 companies. The firm has employees from 18 different countries and offices in New York, Los Angeles and Singapore.

For more information, visit www.finlync.com

Strategic Treasurer

Strategic Treasurer was founded in 2004 by Craig Jeffery, a financial expert and trusted advisor to executive treasury teams since the early 1990s. Partners and associates of Strategic Treasurer span the US, the UK and continental Europe.

This team of experienced treasury specialists are widely recognized and respected leaders in treasury. Known for their expertise in treasury technology, risk management and working capital as well as other cash management and banking operations, they efficiently identify issues, creatively explore ideas and options and provide effective solutions and implementations for their valued clients.

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