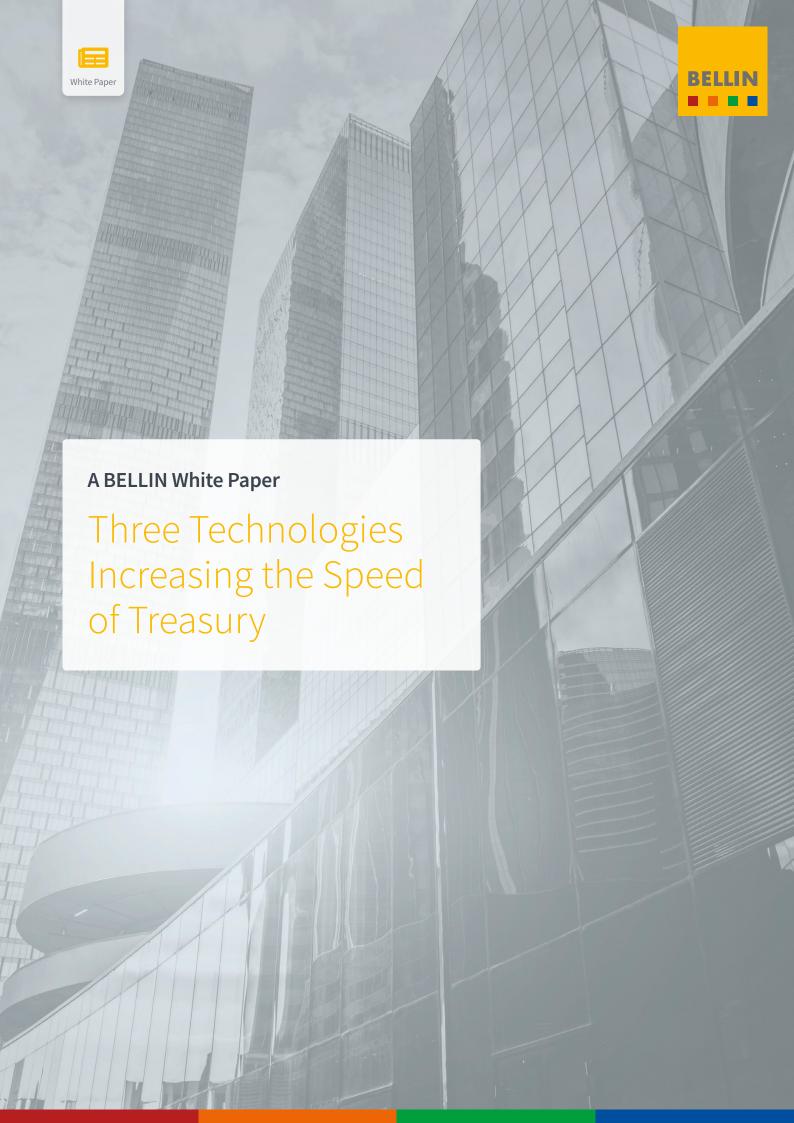


Three Technologies Increasing the Speed of Treasury

Bellin, as a multinational leader in corporate banking and treasury technology, has long been a respected source for knowledge in the European banking environment, but recently undertook an initiative to share a more U.S.-focused perspective on the deep institutional knowledge they've been providing to European firms since 1995.

Canright worked with Bellin to produce a white paper on recent trends and innovations in Treasury Management Systems, bringing in-depth research to bear with a focus on the digital revolution that has been transforming that space.

The paper was distributed as a downloadable PDF that required registration. The paper worked well as a way to engage current email list subscribers, performing better than usual on click-throughs to links in emails and average on social media.





Treasury Management Systems Today

Treasury managers need to be prepared to adapt to a rapidly-shifting technology landscape to compete in the modern business landscape. Innovations in financial technology are changing the shape of the industry and the systems and tools available to treasury departments. But taking advantage of these changes may require fundamental shifts in thinking.

As the technology that powers financial systems changes the dynamics between financial institutions, corporations, and the businesses and consumers they serve, the tools required by and available to treasury professionals are changing as well. In a white paper "Megatrends in Treasury, Money, and Banking," treasury consultant Anthony J. Carfang put it like this:

"Technology is enabling 'just-in-time money' which will redefine 'liquidity.'

Sweep accounts are now available at low cost to most savers and investors. Funds can be fully invested right up to the day they are needed. Thanks to fintech advances, funds can be drawn down at precisely the time they are needed."

It's a period of transition for many treasury managers. The 2019 bobsguide TMS survey reports that around 29% of organizations have had their current treasury systems for more than a decade, with many treasury departments still focusing on optimization: fitting new technologies into their existing infrastructure. The increasing adoption of new financial technologies, like application programming interfaces (APIs) and real-time payments is extending the ability to manage new data for analysis. This in turn is powering a shift toward sophisticated data analytics and visualization technologies, including artificial intelligence, that will be necessary to fully leverage the capabilities of an increasingly digital future, where decisions can be made using real-time data.

At the same time, new regulations since the 2008 financial crisis place continually greater compliance requirements on treasury managers. Given the global nature of many industries and corporations, the scope of financial regulation is not limited to its originating nation or region. The European Union's PSD2, for instance, with its focus on open banking and consumer choice, has had effects that stretch far beyond its regulatory bloc. Beyond that, as real-time payments become an increasingly larger part of the way companies are expected to operate, the pressure on treasury managers to adapt quickly has never been stronger.

Legacy systems, spreadsheets and paper documentation are no longer enough. The race for efficiency is on, and the most successful organizations will be those who can rise to meet the challenge.



Technology and Treasury Management

Technology is providing a greater amount of information to treasury professionals more quickly than at any other time. The types of information available is increasing as well. And so is the immediacy and reliability of information. This is a result of three primary technologies, all of which are seeing greater adoption in finance and banking:

- **1.** Application Programming Interfaces (APIs).
- 2. Real-Time Payments.
- 3. Data Analytics.

These technology trends are inter-related because they focus on the primary need any financial enterprise, including treasury departments, require to work better: data. Problems with data catch up to any organization quickly, whether it's the speed at which data moves into a system or the quality of the data used in an analysis. To help their organizations compete, treasury departments must keep pace with the banking, financing, and investing information that enabled them to maintain and predict the cash and liquidity needs of their organizations.

APIs

Optimizing the core infrastructure necessary to take full advantage of new financial technologies is no trivial task. Overhauling systems can be dramatically expensive, and institutional inertia can introduce more challenges than the cost in resources to fully switch over. Application programming interfaces have emerged as a useful tool in overcoming these hurdles and an important technology for treasury professionals to understand.

APIs provide a software connection for passing data from one program or service to another; they are a means by which information can move into and out of systems quickly and easily. They offer a simple solution via code to permit multiple applications to "talk" to one another, exchanging and collating useful data. APIs hide the complexity of this data exchange, making it possible for business and technology partners to focus their attention on building value-add capabilities. The increasingly common REST (or open) APIs relieve the complexities of data exchange by serving as a common standard means of connecting enterprises, financial institutions, financial technology firms, and regulatory organizations.



The move for banks to provide open API connections began with the regulatory changes mandated under PSD2, which emphasized consumer choice in payments providers and consumer ownership of data. Financial institutions were required to provide open access to consumer data to approved third parties, which provide payment services and data access to transaction and account data upon consumer approval. The transaction essentially takes place in real-time, where the consumer account is debited and the merchant account is credited, regardless of whether it's a financial institution or an intermediary making the transaction.

Even though it is unlikely that U.S. regulators will mandate open data and open banking as in Europe, the move toward consumer and business ownership of their data and the need to quickly build fast, secure, and reliable data connections favor these technologies, especially as consumer and businesses expect digital and mobile solutions.

Their adoption in financial services has accelerated over the past twelve months; and they do offer reduced friction to payment and reporting systems. No solution is a silver bullet, however, and widespread API integration is not the only solution to legacy problems. Indeed, PSD2 API access is restricted to SEPA single payments – this rules out bulk payments, FX payments, and the like.

Furthermore, while many banks today that connect to multiple channels are working on API solutions, standardizations between banks are far from complete. Without those standardization options – and many banks operating their own unique systems – the utility for corporate treasury remains limited. Change is coming, but APIs are not yet ready to stand toe-to-toe with established channels such as EBICS, H2H, or SWIFT.

"Indeed, consumers no longer think about the speed of business unless it's slow."



Real-Time Payments

Faster and real-time payments systems are coming online at an increasing pace. Real-time payments are part of the overall move to real-time systems from batch processing, which itself falls under terms like "digital transformation."

With new faster payments, companies hope to accelerate growth in new and innovative ways. Indeed, consumers no longer think about the speed of business unless it's slow. The tech giants have taught all consumers to expect packages, information, and entertainment to be right there, right now. And most of the real-time payments and alternative payments systems going online are designed for low-value, retail payments, reports McKinsey in its "2019 Global Payments Map." Businesses are expected to follow.

Even in the United States, a laggard in faster payments adoption, real-time systems are a reality. In 2017, The Clearing House (TCH) unveiled their real-time payments platform. More recently, the Federal Reserve has expressed their intent to create a similar platform through FedNow. The U.S. payments system is increasingly shifting towards a standard that will completely transform the industry.

For treasury managers, the real differentiator this change promises isn't just in speed, but in the enhanced data these transactions offer – enabling the context of payments to be included through requests for information and request for payment. With these advantages, however, come new challenges. Traditional payments process predictably, in batches at designated times across a five-day work week. Real-time payments are 24/7, 365 days a year, and with that speed comes a need for treasurers to be proactive in monitoring and managing risk.

"Almost all banks agree that there is significant risk to not moving forward with payments transformation, but few have progressed significantly at this point," according to an Aite Group study of global banks.

Constantly monitoring these payments can be burdensome, but through the adoption of new technologies – ERP systems that automatically monitor transaction data, alongside other products like SWIFT's Global Payments Innovation (gpi) – payment traceability and predictability can be markedly improved, helping with accurate liquidity assessments in the face of a real-time system.

RAPID REGULATORY CHANGES

One big driver of these changes to payments has been a rapidly-shifting regulatory landscape. Europe's PSD2 has changed how firms process payments and invoicing protocols. That impact stretches even beyond the regulatory bloc's borders, as regulators across the globe look at the possibilities of similar initiatives. In the United States, these European open banking principles are already seeing adoption independently as large financial institutions have created app stores that allow third party providers to put forward services.

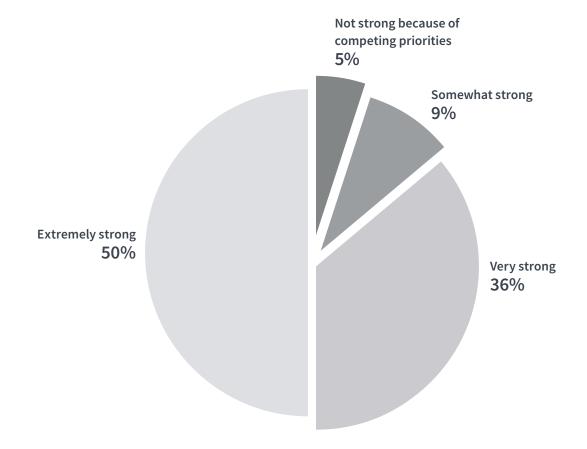


The shifts PSD2 has introduced aren't all positive, however; the shift to open banking and real-time payments has brought a major shift upwards in terms of regulatory hurdles to clear. It also sets a number of third party providers potentially in between banks and corporate treasury, which has a potential cost on service for treasury professionals used to working with their banks more directly.

Even more importantly, while there is promise for the future, today's reality has yet to catch up to the idea real-time payments presents. FedNow remains in the planning stages, and the existing clearing houses are each confined to their own infrastructure. As a result, none of them are prepared to meet the needs of global businesses: cross-border transfers are largely impossible.

Even for domestic business needs, real-time payments networks in the US are still new, and independent from long-existing networks like ACH. But their coverage is increasing, with 66% of U.S. banks anticipated to be participating in RTP systems by the end of 2020. "Almost all banks agree that there is significant risk to not moving forward with payments transformation, but few have progressed significantly at this point," according to an Aite Group study of global banks.

Q. How strong of a priority is payments transformation at your institution? (N=22) Source: Aite Group



Source: Aite Group, "The Payments Transformation Race: Criteria for Success"



At the same time, corporate finance professionals tend to be resistant to change. Budgets for internal technology, as opposed to customer-facing systems, tend to be leaner. The journey toward faster payments on the business side likely will be longer. Yet the efficiencies in cash flow and liquidity should put faster payments higher on the list of corporate financial professionals. Rather than move money into accounts days ahead of time, faster payments may allow more immediate "just in time" funding at a lower cost than wire transfers.

More innovations are still underway to adjust to the new reality. Virtual accounts, linking account details to physical bank accounts, are likely to become pervasive over the next few years, enabling companies to reference virtual account details to automate reconciliation and inter-company account posting. More sophisticated data analytics and machine learning will play a key role in enabling treasurers to keep up with – and excel – under the new platform.

Data Analytics for Reporting

As new technologies are adopted, treasurers have more data at their fingertips than ever before. But that breadth of available knowledge does not necessarily translate to real gains in awareness – the sheer volume can be too much for any person or team to analyze effectively and present clearly. This thirst for more information calls for stronger reporting tools within treasury systems. TMS-integrated reporting tools are changing the nature of the business for treasurers. These tools offer not only graphical analysis of data, but also can handle the significantly larger data sets that were previously impossible for companies to use with traditional spreadsheet analysis.

Graphical representation is one of the best ways for treasurers to analyze and comprehend data. Human recall for written information is only about 10% after three days; with data visualization, that number rockets to 65%. It also helps pare down that information to its most basic form, cutting away needless details and allowing for a simple representation of even terabytes of data.

And that kind of simplification is necessary when dealing with the volume of information that a modern TMS system can provide. Artificial Intelligence (AI) is poised through machine learning to use automated and ever-evolving instruction sets to swiftly organize and "understand" qualitative data sets, accelerating pattern recognition and enhancing decision-making.

These new reporting capabilities are critical, and major change for the industry – old ERP systems offered only rudimentary data, compiled only after extensive manual work.

The integration of reporting tools directly into TMS suites is a change for the industry. Historically, treasury had to rely on IT departments to support the integration of their data sources with other internal services, purchasing vast "data lakes" that were costly to maintain. The union of these tools into TMS infrastructure dramatically simplifies accessibility and reduces costs to achieve a new level of reporting and analysis.



Conclusions

Many treasuries are underutilized – set in reactive modes by processes that are ultimately inflexible. Ideally, treasury managers need a degree of autonomy with basic standards agreed upon by the organization.

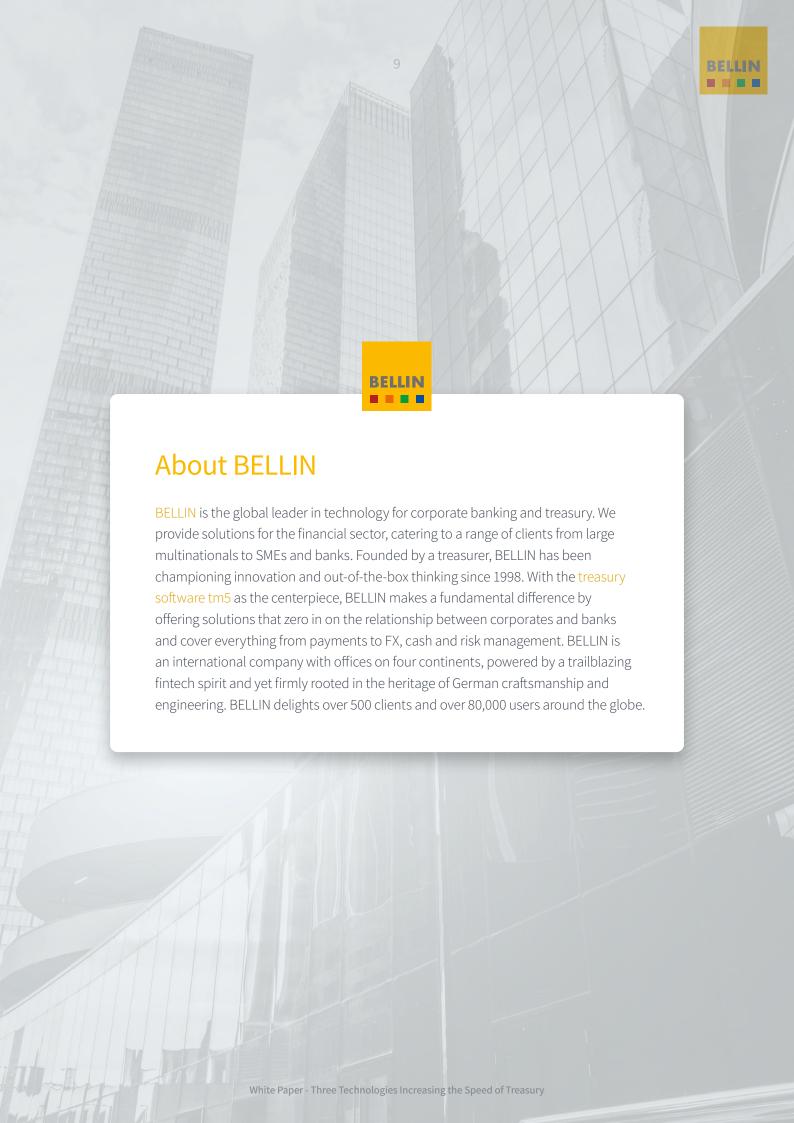
Treasury at its best is a strategic department, with a clear eye on the organization's broader needs. That advisory role must be empowered: not just in terms of being properly staffed with the human resources it needs to do the job well, but with the authority it needs to flex capital resources to the firm's needs. Individual analysts, all the way up to the CFO, present an influential vision on everything from operations, to risk management, to investing to provide their organization with a coherent and unified goal.

Modern treasury management requires not only adaptation to a rapidly-shifting technology landscape, but a fundamental shift in perspective. Repetitive operational tasks are increasingly being taken over by automation and AI. Shifts towards real-time not only in payments, but reporting, are further dramatically accelerating the pace of business. That represents a fundamental shift in the role of treasury, and an opportunity for savvy treasurers to make their mark in strategic development; bolder, long-reaching decision-making will soon be the core skill in the field.

The digital revolution is a complicating factor for treasury. Advanced technologies can help increase automation, transparency, and control, but they call on treasury managers to look for proactive solutions instead of reactive ones.

Knowing not only what's right for an organization, but critically, knowing just when these emerging technologies will be ready to meet corporate treasury's needs, will be the difference maker between tomorrow's businesses and those who get left behind. Adopting strong TMS solutions will empower treasurers in building stronger balance sheets for their organizations, and finding those small gains is critical to competing in today's business world.

Individual analysts, all the way up to the CFO, present an influential vision on everything from operations, to risk management, to investing to provide their organization with a coherent and unified goal.



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