Giant Leaps Forward

Evolving Smart Treasury into Real Time

By **Tom Alford**, Deputy Editor
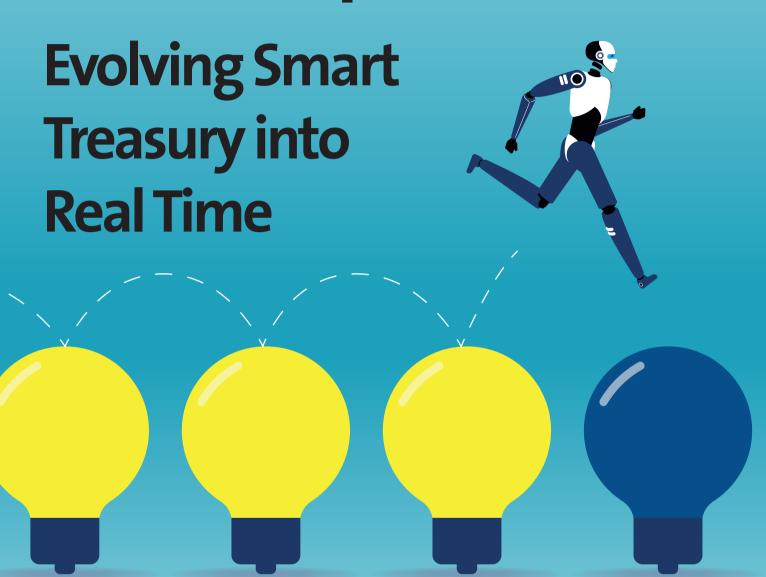
The enablement and adoption of smart treasury techniques is an essential first step towards the transition to real-time operations says Citi's Dr Duncan Cole, Principal and Digital Journeys Head, Treasury Advisory Group, and Joseph Vasen, Principal, Treasury Advisory Group, Treasury and Trade Solutions.

As 2020 has progressed, the themes of treasury resilience and digitisation have risen further up the agenda. It's no longer prudent to think solely in terms of point solutions: the trading and economic environment dictates that organisations intent on staying ahead should be building out their longer-term digital strategy, placing controlled resilience in the driving seat.

For Dr Duncan Cole, Principal and Digital Journeys Head, Treasury Advisory Group, Citi, preparing for and using intelligent analytics, in a way that augments human decision-making, takes treasury far beyond the current appetite for robotic process automation (RPA), into a realm where real-time algorithmic decision-making offers treasury the pathway to offer enhanced business value.

The bedrock of such a seemingly giant leap forward is robust and accurate data. By structuring the organisation around the best possible information, not only can decisions become more effective but they can also become more timely.

The first step on this path, notes Joseph Vasen, Principal, Treasury Advisory Group, Treasury and Trade Solutions, Citi, is to perfect the data model and strategy. Only then can the panoply of technologies that support digitisation be deployed effectively. It's a 'smart' approach: a business that removes data errors while adding intellectual agility thereby increases its balance sheet strength, its capacity for growth and, ultimately, its resilience.

Among the exciting new wave of smart technologies that become feasible in the data-first environment, prescriptive analytics – in which specialist software offers its human counterparts 'best next-step' recommendations – is now on the horizon.

For Cole, smart developments of this nature must be embraced if true real time is to become a reality. And why would treasurers want this? Because when all the activities that can be automated are working well in the background and real time is obtainable, treasury can begin truly focusing on adding value for the whole organisation supporting and enabling the broader corporate objectives through insightful analytics.

Smart moves

In practical terms, in the case of forecasting for example, treasurers may have been operating on a monthly basis. In stressed times, weekly or daily output may now be necessary. It is not possible to execute to this tight timeline with the same or fewer people, says Cole.

Treasuries therefore should consider moving beyond simple spreadsheet analyses. Algorithmic forecasting is coming, and pattern recognition software presents the best opportunity to understand how the business is positioned in what is now a rapidly changing and stressed environment.

In light of this, embracing 'smart' treasury increasingly makes sense. "It's about organisations transitioning from people-dependent processes, to process automation and predictive and prescriptive analytics," explains Cole.

Here he is advocating the concept of intelligent, self-directed automation – or smart robotics – where RPA is boosted by machine learning. This is no longer about rules-based software that simply repeats a process at great speed; it is about constantly monitoring events and past actions, identifying minutely changing patterns, and then operationalising prescriptive analytics to enable machine-led real-time decision-making.

Essentially, an algorithm scans multiple data sources applicable to a hedging or investing option, for example, and on the basis of its findings, suggests the best response in that precise context. This, notes Vasen, "really is moving beyond principles-based decision-making into the next phase of intelligent treasury".

Starting points

The gap between spreadsheet-based operations and smart treasury seems huge and in terms of performance, it is. But it's not an insurmountable difference. There are three logical next steps, says Cole. The first is to form that bedrock of good data that is representative of and can deliver relevant insight over the financial risk of the commercial business. If nothing else, this leads to better forecasting, better visibility over cash positions, and an understanding of currency exposures.

Step two is to digitally couple robust data with the risk appetite of the organisation, as articulated in treasury policy. The understanding of future positions and risk exposures from step one can now be actioned according to policy. This requires technology that can take that cash position or risk exposure, apply algorithmic analysis and learning in the context of policy, and make best next-step suggestions.

As trust in those recommendations is built over time, the third step is to facilitate execution of best next steps on behalf of treasury. This is the difficult one: just as the thought of pilotless aircraft makes many travellers nervous, even though it is entirely possible, the idea that a computer can trade with corporate cash is yet to get the green light, even though algorithmic trading has been possible for several years. "We're looking at a three-to-five-year time horizon for experiments to take hold, demonstrate the value and trust to be established," comments Cole.

It is a journey – and before starting out it will be necessary to clarify what data should be made good, and what the expectations of it are. This is part of what Vasen refers to as setting the "data vision and mindset", where questions about data acquisition, storage, and usage remain front and centre throughout. Overall project success demands wholesale buy-in to this vision, and Vasen believes that treasury should "own its own data", enabling direct access to every element it needs to function at its peak.

Next, Cole urges treasurers to think about the end-vision and the problem that needs to be solved, and then consider how it will be solved, not the other way round. It's important, he warns, "not to be led by the technology". Indeed, technology is a means to an end, not an end in itself.

Project success often stems from starting small. Rather than taking on the digitisation of the entire enterprise, try taking on bite-sized deliverable chunks to deliver

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quick wins. "Learn from it," says Cole. "Experiment as you go, get the skills right in your treasury, collaborate with, and from time to time re-evaluate, your technology and banking partners – and always keep the end-vision in mind."

Changing mindsets

Placing data management at the heart of treasury is not a means of changing what treasury is. It is about adding to the skill set of the treasurer in a way that makes the function a vital part of the resilience of the whole business. But for Cole, if embracing digital thinking is not culturally accepted and driven from the top down "then it will be very hard to move forward with meaningful success".

It requires investment in time and resources in people to bring the skills of all stakeholders up to speed to meet this undertaking successfully, says Vasen. Although for many this means seeing examples of how the process can work 'in the flesh', from his own observations, when this happens most quickly grasp the nature of the challenge and what it can mean for the business: increased revenue opportunities; increased efficiencies and lower operating expenses; and improved risk management.

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at the nexus of organisational change. With organisational resilience as the reward, individual treasurers can begin leveraging their position as an influencer in new ways. Treasurers have always had this opportunity, notes Cole, but now he feels that "there is a lot more technology and data, offering more insights faster, helping support the growth agenda". Building resilience for future nimbleness and agility to not only manage through the next challenge but also differentiate from those that do not prepare.

Vasen, as a former client-side treasury professional, he knows first-hand that treasury has always been the centrepiece of corporate order-to-cash and procure-to-pay cycles. With visibility over the balance sheet, he feels that there is now "a tremendous opportunity to extend treasury's role as influencer", shifting organisational thinking "beyond the horizon".

Approaching real time

As both Cole and Vasen have stated, adoption of smart treasury is an essential component of any real-time launchpad. At the core of this model, intelligent automation provides the necessary structure for the convergence of real-time payments, liquidity management, and information reporting.

Of course, the value of real-time operations is dependent on the business model. Companies with a direct consumer relationship, where online collections are immediate, will have real time as an embedded process. Indeed, notes Vasen, operating on a 24/7 basis means having this data structure is critically important. "A company with a leading-edge real-time payments model but a banking system that cannot keep up with its rapid payments data presents a liquidity issue."

However, for some B2B providers, end-of-day may be sufficiently real time. "Real time is about accelerating processes, but although faster information and the ability to process in-bound cash more effectively may be beneficial for all, not every company requires the ability or indeed wishes to execute every decision and action in real time," observes Cole.

Options open

The ideal methodology is therefore for process and system changes to be positioned in such a way that optionality is built in. This is as much about future-proofing as it is about accessing currently relevant aspects of real time.

Treasury may feel it does not need real-time liquidity data, but if one of its major buyers wishes to start paying in real time, and wants to be able to free-up credit capacity to take more product, the sales operations will unquestionably be keen to know that real-time reporting systems are in place to enable this. Understanding how best to position treasury regarding real time thus comes from engaging with the rest of business, says Vasen.

Similarly, being up to speed when actively pursuing the right smart and real-time pathways needs a collaborative approach too. Treasurers should be leveraging the expertise of banks and technology providers to gain an understanding of the opportunities, and accomplish the most appropriate outcomes for their specific needs and objectives, explains Cole.

The optimal, context-based solution will only come from having this collective conversation. But as treasury evolves from smart to real-time operations, its true value-adding pursuits begin. At this point, the entire organisation should anticipate a giant leap forward. ■

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