

Head2Head: Treasury and the Big Data Revolution

In this edition, Bruce and Jonathon discuss if and how treasury teams should be harnessing today's most advanced information technologies.

JTC: Bruce, you recently wrote about the role of technologies such as artificial intelligence and robotics in treasury management and working capital. I must admit I thought that was a bit far-fetched... Aren't these just buzzwords or do you really see a role for them in treasury?

BM: Jonathon, you know I don't use buzzwords. I think the whole digital revolution and the ability to access data—for instance, from your enterprise resource planning (ERP) system—and to bring that data into a central area and then disperse it as information, has improved dramatically.

JTC: I don't disagree with you; these technologies certainly have a role to play. But for me, the issue is that there's never just one ERP system.

BM: True, but the ability to store data today is very inexpensive compared to what it used to be. And the ability to take that data, turn it into useful information and send that information to people who can use it—that's revolutionary.

JTC: Sure—we can now take data and add context to it, and that helps us to make decisions. But that raises another issue. In my opinion, a core skill that many treasurers have is their ability to evaluate quantitative metrics with qualitative metrics. For example, how aggressive do I want to be with efficiency in terms of my cash collection cycle versus the cost of doing that?

BM: 'Decision support' is a term that's been used in previous conversations around data. I think what people are moving towards now are predictive analytics. Put simply, this means the ability to anticipate cause and effect within the organisation.

For working capital that means, if I do something over here, is that going to have an implication elsewhere in the working capital cycle? Or, where is my cash trapped within the operating cycle? Are there delays within production—or logistics? Should I hold more stock because I think more revenue will be generated by having proximity to market? By having this data in a form where it can be pushed back out to the business to be used, that's where we're getting more into big data and a predictive analytical capability.

JTC: To me, predictive and behavioural analytics can provide a framework for business intelligence too. They can even do modelling or scenario analysis. But you've always got to watch out for that black swan event—and that's where experience comes into play. So I think it's great that we have this landscape of information and the ability to use tools to evaluate lots of different choices, but there are limitations.

BM: You mention modelling, which is all about optimising the resources that you have to your desired end. This is one key area where we're seeing information and data being used more actively. But back to my earlier point about robotics and machine learning—there's a lot of excitement here too. In a working capital environment, it could mean cash application between an accounts receivable ledger versus a banking statement. Today you might have automated business rules that get to a 60% match. But at the next level, algorithms are starting to say, 'I'm seeing this event occur. It's occurred three times. I'm going to make that as a rule myself.' So, you get into machine learning, which is basically where software becomes semi-intelligent.

JTC: And when you start thinking about the treasurer with the CFO and the board of directors, there are even bigger decisions where such decision support might play a role. You can think about the company's overall position—your capital cycles, M&A and your investment cycles. I guess it isn't so far-fetched after all.

THE VERDICT

Treasury departments have always been able to access a lot of data. But until recently, most of it was relatively difficult to compile and analyse without extensive manual effort. Today's next-generation tools deliver the ability to pull information from emails, spreadsheets, PDF files and remote servers into centralised repositories, enabling efficient processing and analysis.

Key roles include decision support as well as greater automation of routine processes. Easy wins are often available from off-the-shelf banking solutions. But even basic programmes, such as automated reconciliation, can be made even more effective with the addition of machine learning.

Treasurers should also look for innovations in areas such as virtual bank accounts. Here, companies can reduce the total number of accounts needed to run their businesses while at the same time, access vast pools of cash flow data that can be used to better optimise their working capital.

The era of big data, business intelligence, AI and machine learning is here. It's time to embrace them in treasury.



Authors

Bruce Meuli

Treasury Solutions Executive
Global Transaction Services
Bank of America Merrill Lynch



Jonathon Traer-Clark

Head of Strategy
Global Transaction Services
Bank of America Merrill Lynch