

A New Era in Cash Forecasting

Machine learning powers efficiency breakthroughs

Cash forecasting is meant to drive smarter business decisions in all economic climates. Amid the pandemic, it became even more critical for businesses to accurately assess and anticipate their future cash flows. Many finance teams—empowered by broader treasury digitization and technology breakthroughs—are now embracing new forecasting solutions that use machine learning to harness data and improve confidence.

To see how machine learning can help optimize cash, let's first take a look at some of the traditional barriers to forecasting success.

Cash forecasting challenges

1. Limited visibility—An accurate forecast requires access to all balances (including those held overseas and across different banking partners), pending transactions and invoices. While it may be easy to see each of these data points individually, the forecast will be incomplete and prone to variance unless they are aggregated and viewed holistically.

2. Lack of analytics—Many companies rely on spreadsheets or other homegrown processes that lack built-in analytics. Some companies simply roll forward prior balances and plug in pending payment runs or booked invoices, since they lack time or technology to analyze their historical data and project different economic scenarios.

3. Multiple bank relationships—Companies that keep funds at several institutions globally can be especially vulnerable to poor visibility and lack of analytics, since their forecasters must log in to numerous portals to capture data and aggregate it in one place. Often, access to balances and other cash flow information is owned by different individuals in each region, making it even more difficult to create a holistic cash forecast.

4. Manual effort—Addressing the three challenges outlined above requires a significant amount of manual labor. Cutting and pasting data from different systems can be inefficient, imprecise and prone to human error.

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What to look for in a forecasting solution

Given the growing emphasis on data science, and the proliferation of new cash forecasting solutions, businesses must closely examine several important factors.

What forecasting capabilities do you need?



- 1 Company level, subsidiary level, account level
- 2 By cash flow types, such as AP, AR and payroll
- 3 Integration with other systems, such as an ERP or TMS

Capabilities — Distinguishing between “needed” and “nice to have” functionality and features is critical to choosing the right provider. Start the evaluation process by creating a simple list and sticking to it.

Analytics — Every good forecasting tool comes with strong, built-in analytic tools. Even the most basic solutions should be capable of automatically performing scenario analysis and plugging in growth rates, trailing averages and other assumptions.

Data integration — Historical bank transactions, invoices and other working capital data — such as payroll and invoices — may all live in different systems. Strong forecasts are built on the ability to see all of this information in a central place where it’s easier to analyze.

Implementation — Implementation timelines can vary greatly, depending on capabilities, data integration requirements and connection options, such as API and file transmission. It’s essential to ask questions before signing the contract.

Ease of use — Simplicity is another must. Given the multifaceted demands on treasurers today, it’s impractical to attend weeks of training webinars or read hundred-page user manuals. The best solutions are intuitive and can be used right out of the box.

Cost — As with implementation timelines, cost can vary greatly. When calculating ROI, factor in ongoing maintenance fees and whether you will need additional implementation resources, in addition to the initial purchase price.

Machine learning helps bring data to life

Treasurers’ recent willingness to explore new solutions has coincided with the rise of machine learning technology, a type of artificial intelligence that can help eliminate forecasting guesswork, uncertainty and errors. Machine learning gets smarter

as it interacts with more data. When it comes to forecasting, the ability to automatically analyze more transactions over a longer time can help improve accuracy and reduce variance compared to older, less advanced tools like spreadsheets. Measurability is another area where machine learning can help. Good forecasting technology can help quantify variances and pinpoint exactly where a forecast has gone wrong.

Some common fears about machine learning are that it can overly complicate forecasts by amassing too much data and creating opacity. A solution like our CashPro® Forecasting can help. With CashPro Forecasting, our machine learning does all of the heavy lifting — freeing up treasury staff for other activities — and it’s integrated into CashPro so all of the relevant forecasting data — even from other banks — is collected in a single place. It also provides transparency, so clients can see how the models have performed historically for their accounts.

Data science powers cash optimization

While cash forecasting has traditionally been more art than science, machine learning is leading what’s next in treasury digitization, automation and data integration. It can help simplify daily routines for finance teams, and strengthen their ability to help their companies optimize cash going forward. Contact your Bank of America sales officer to learn more. We’re here to help.



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