



Building a Better Cash Forecasting Toolkit

Without effective forecasting, companies are essentially flying blind into the future. We look at the role of new technology evolving to help tackle this challenge.

While much of the finance function has digitised in recent years it's fair to assume that most cash forecasting activity, even in very large corporates, is still spreadsheet-based. The spreadsheet is often the default tool for many planning, forecasting and data modelling activities due to the fact it is available to everyone and used for so many other activities as the aggregation point for data from a host of different systems. As Conor Deegan, CEO of cash forecasting provider CashAnalytics, says, "a spreadsheet is the easy choice".

However, despite that easy familiarity, inevitably with spreadsheets, the cash forecasting process is often manually-intensive and time-consuming. And not only are they difficult to scale for a growing business, they can also be error-prone. As Paul Smithwood, Director of Product Development, Data & AI, Bank of America, notes, errors that are not detected can lead a company to believe it has materially more or less cash than expected. If that company then makes decisions based on

those erroneous numbers, at best finding the offending cell is like looking for the proverbial needle in a haystack, at worst it can prove costly.

While some power-users will have set up macros (which come with their own issues) to automate parts of the process, generally it would be fair to ask, why not just get something better?

In Deegan's experience, the reason many companies don't evolve past the spreadsheet is that the other systems they may look to help manage the forecasting process – such as enterprise resource planning (ERP) and treasury management

By **Tom Alford**, Deputy Editor

systems (TMS) – are designed for completely different types of activities, “and aren’t fit for the purpose of anything other than basic forecasting.” The case study in box 1 illustrates this point.

Smithwood comments: “I see a lot of clients looking up future-dated invoices or payment runs and just plugging estimated receipt dates and values directly into the forecast, or making basic calculations from a rolling average from the last couple of weeks of cash flow, and that is their forecast.” Clearly forecasting needs a better vision of the future.

New vision

Enhanced technology is perfectly positioned to support cash forecasting in three key areas, notes Deegan. First, in the

collection, management and manipulation of the data required to start the process.

“In the majority of the projects we have worked on, the time spent on ‘cash forecasting’ prior to the implementation of CashAnalytics was often more about low-value manual activities rather than true forecasting or analysis,” he comments. “Technology can take this work off the table and quite quickly solve most of the base-level operational problems experienced.”

Second, technology can transform the process of actually creating the forecast itself. Deegan comments: “The data collected from other systems and sources is just the starting point. The assumptions and adjustments made can transform this raw data into meaningful cash forecast data.”

He continues: “In spreadsheets, activities such as analysing customer payment



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BOX 1 CASE STUDY: FLEXIBLE FRIEND

Flex Group is a diverse multinational technological manufacturer. It has over 100 manufacturing and service sites across 30 countries. Revenues in 2020 were over \$24bn. Alongside its financial planning and accounting (FP&A) 13-week rolling forecast, executed quarterly, sits its weekly treasury forecast.

The main difference between the two, explains Anita Bubna, Senior Director Treasury, Flex Group, is that to achieve the necessary visibility of cash, the treasury report has to be “super-granular and more accurate”.

However, the challenge is gathering accurate, real time, granular data from several source systems that house the information on collections and payments for the forecasts and statements from banks to show actuals.

In an ideal world, data must be captured globally by currency and bank account from different systems. Although running a treasury management system (TMS), Bubna says it does not offer the level of flexibility needed for its own forecasting approach. Uploading large amounts of forecasting data from multiple systems is, she admits, sometimes “beyond the system’s capabilities”. For a business such as Flex that uses a mix of factoring, supply chain finance and asset-backed securitisation, insight into its collections process can be complex, she says.

With no clear means of capturing the source of specific receivables (nor where anomalies may exist) – and with pressure on forecasting accuracy and timeliness increasing – Flex’s multiple source systems, constrained data handling capacity and limited aggregation, granularity and analysis, led Bubna to seek a better solution.

As a formally trained software and systems developer, she was under no illusion that a quick fix was likely. “Don’t think that simply by moving from a spreadsheet to a new system that all your problems will be solved,” she cautions. “From my experience, even today’s systems tend to be fairly rigid.”

Any incoming system had to have the flexibility and granularity to meet Flex’s well-defined requirements. Unable to find the right

platform on the market, a different tack was necessary. “At Flex, we are now working on a system – a one-stop-solution – to aggregate all data from source systems and adjust the forecast dynamically as the source data changes,” she reports.

This project is based around a strategic partnership between Flex, a trade finance and working capital asset platform vendor, and a blockchain-based digital asset servicing platform provider.

To help the process, while Flex’s TMS already consumes statement data, either through SWIFT or host-to-host connectivity, Bubna has ensured bank application programming interfaces (APIs) are being deployed wherever possible to leverage the benefits of real-time updates when generating forecasts.

The vision here is that by enabling Flex’s customers, suppliers and partners to connect (using APIs or standard connectivity) on to the same platform, a procure-to-pay and order-to-cash view is created in one place. This makes the platform more like an eco-system, says Bubna. With all stakeholders on the same platform, related data can easily be validated by counterparties. Should a dispute on collections or payments arise, the collaborative and accessible nature of the platform – and “the same version of the truth for all” – will help rapid resolution.

With 30 countries to cover, the platform roll-out started with a small number of entities, customers and API-ready banks. With obvious benefits across the board, the team is now scaling up. Live data exchanges with customers, suppliers and banks will soon be augmented with data feeds from other partners, such as supplier finance programme providers, to further enhance Flex’s cash forecasting capabilities.

Once the data volumes and quality are at a sufficient level, advanced tools such as machine learning will be introduced, says Bubna. “We have all the building blocks ready so this part should be relatively straightforward – and frankly it’s the fun part of the whole exercise.” With considerable success under her belt to date, she adds that she is willing to discuss the project in depth with other treasurers.

behaviour, and using this learning to adjust current invoice data to give a more realistic view of cash collection timing, is very difficult. So are other forecasting tasks such as transforming budgets and business forecasts into cash forecasts. Both can be greatly simplified using technology that is specifically built for cash forecasting, as opposed to generalist tech.”

The third main area of support is where targeted technology enriches the analysis and reporting on the data. For example, how easy is it to carry out even quite simple actual-versus-forecast analysis in a spreadsheet, or drill down to transaction level of detail through a consolidated spreadsheet report? It can be done, notes Deegan, just not easily. “This type of analysis is a by-product of using a technology solution to support forecasting activity.”

Definition

But is there a danger that, as forecasting complexity increases (through, for example, the adoption of tools capable of intricate modelling), treasuries risk so-called ‘analysis paralysis’? “With every process using large amounts of data, this is always a risk; there’s always more you feel you can do,” Smithwood notes.

It’s important to accept that, with so many variables and unknowns, a cash forecast can never be 100% accurate.

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Indeed, he says while it’s prudent to try to improve forecasting accuracy, “it should only be to the point where the business is comfortable, from a risk standpoint, with its range of results”.

For Deegan, forecasting objectives, together with reporting and analysis output must be very clearly defined upfront. “While access to more analysis is never a bad thing, analysing the wrong thing, or not knowing what to do or how to interpret the output, is always a bad thing,” he cautions. “Analysis paralysis is simply a poor use of the technology, not a fault of the solution itself.”

Wider appeal

Assuming the correct setup and procedures are in place, two of the most important impacts of better cash forecasting, whether driven by

technology or not, are a reduction in reliance on external funding sources, and improvements in working capital. Both are achieved through the more efficient use of cash flow within the normal business cycle.

However, says Smithwood, cash forecasts have many stakeholders – including various subsidiaries, and functions such as procurement, collections, AP/AR, tax and payroll – with treasury usually extracting forecast data from each. Often these functions believe there is little benefit derived from what’s required of them, even seeing it as an imposition by treasury.

But, warns Smithwood, without buy-in from these stakeholders, treasury cannot do its job effectively, and the whole company suffers as a result. He suggests gaining CFO-level support to create incentives for these teams to acknowledge



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BOX 2 CASE STUDY: SEEDS OF CHANGE

It may come as a surprise, but not every company has embedded cashflow forecasting into its procedures. Interim treasurer and treasury consultant, Erik Teiken, has been working with a small, Netherlands-based seed production company that has had no formal forecasting process at all. The only point at which it had cash visibility over its c.€300m revenues was when month-end bank statements were delivered.

With operations spread across 30 entities located across the world – many in emerging territories such as Guatemala and Vietnam – accessing its cash has been a constant issue. Indeed, unable to access cash on a regular basis in many of its outposts, the company has been forced to source liquidity from its Dutch banking partners. With expensive R&D part of its cost-base, it found many drivers for action.

With Teiken's guidance, it is now seeking to control its cash, and limit fraud. Part of the overarching solution is the implementation of a TMS. A key selection criteria here is functionality to facilitate qualitative cashflow forecasting.

To kick off the project, first Teiken undertook a close analysis of existing processes and business drivers. His research found many points of concern, including a revelation that every single entity had its own local bank.

In addition to running an RFP for the TMS, he therefore instigated one for primary banking too. With the aim of consolidating “an impossible to manage” 55 local-bank relationships down to three or four global providers, he anticipates significant bank fee savings along

the way. More importantly, with cash management finally centralised, lack of local forecasting knowledge ceases to be a problem.

Teiken has already proposed some interim cash forecasting templates, but ultimately the aim is to exploit the capabilities of the new TMS. Vendor presentations to date have revealed at least one weaker offering in this respect, he reports. Although that system has flexibility, “it takes more effort to achieve the same results”.

A specialist forecasting system vendor is also being considered. Its system is able to drill down into the general ledger, extracting and classifying data for forecasting. “That it would present a powerful opportunity to leverage both automation and machine learning to gain considerably more insight from payments analysis,” notes Teiken. With the three TMS vendors unable to compete at this level, he has proposed that the company adopt a best-of-breed tactic, adding the specialist system to the shopping list.

With selections finalised, implementation will be rolled out in stages, Teiken having proposed a project roadmap. A region-by-region and module-by-module approach will be adopted. With straight-through processing favoured wherever possible, primary bank connections to the TMS, preferably using APIs, will be the priority. Payments and cash position data, and then activities such as netting, will follow.

Once the fundamentals are in place, a limited set of local banking relationships will be connected, with automation underpinning the whole centrally-managed cashflow forecasting process. As Teiken comments, “it will be a major step forward”.

the value of their own input.

Some of the best forecasting processes he's seen incorporate specific KPIs, measuring, for example, the accuracy of each stakeholder's own forecast data, with results being reported up to the CFO. By escalating that data, in simplified form – perhaps through a dashboard – a clear view of the strengths and weaknesses of each forecast is delivered.

Next level

Due to the variety and depth of activities that ultimately feed into cash forecasting, the tools used to support it will also need to possess a depth and variety of functionality to truly take the process to the next level.

Banks hold the majority of data that their corporate clients use to forecast. They should be making it as easy as possible to

access this data to aid cash forecasting.

“Rather than forcing our clients to manually extract data and try to manage the process in Excel, we have built a forecasting solution called CashPro Forecasting that sits within our online banking portal that automatically connects to that data,” explains Smithwood. But clearly some clients want to push the boundaries, and for these, he says embedded analytics such as machine learning (ML), are a consideration.

With more bank and fintech providers delivering these advanced technologies, typically as a cloud service, the valuable information they can offer is increasingly attainable by smaller firms, says Smithwood. As might be expected, the quality and efficacy of software varies, and full evaluation of any new tool, comparing output to actuals, is advisable.

To initiate a programme of technological improvement, pragmatism is essential. As a simple guide to action:

- Define forecasting goals, including how far out it needs to go to be useful.
- Critically assess what data is really needed to support these goals.
- Clinically differentiate between essential and nice-to-have system capabilities.

While some specialised forecasting tools may not be appropriate for all companies, there is a clear case for most to move beyond the limitations of the spreadsheet. Indeed, where complexity and risk is rising, every finance professional can now choose to base their decisions not on the output of generic risk-laden software, but on insight derived from solutions optimised for their own unique needs. ■

To find out more on this topic, please see the infographic which accompanies this article:

<https://treasury-management.com/companies/bank-of-america/infographics/the-dos-and-donts-of-cash-forecasting/>