GOING WITH THE CASH FLOW

THE IMPORTANCE OF EFFECTIVE CASH FORECASTING SHOULD NOT BE UNDERESTIMATED, SAYS **MIKE GALLANIS** OF TREASURY STRATEGIES. HERE ARE HIS FINDINGS.

Effective cashflow forecasting is one of the most daunting and arduous responsibilities that today's financial managers face; it is also one of the most important. When developing an effective forecasting process there are three key considerations financial managers should keep in mind:

- why do forecasting processes often fail?;
- how can these pitfalls best be avoided?; and
- what are the critical success factors for an effective cash forecasting process?

UNDERSTANDING THE KEY AREAS OF FAILURE

Year after year, Treasury Strategies' Corporate Treasury Survey confirms that most companies are unsatisfied with their cashflow forecasting process. In fact, fewer than half of all companies surveyed in 2003 found that the accuracy of their forecasts fell within acceptable parameters. While forecasting difficulties may be attributed to many factors, a few key areas are typically at fault.

- **Lack of proper resources.** Many companies lack the proper resources to effectively address forecasting. Often, the resources assigned to create and manage a forecasting process lack sufficient experience or training; a position exacerbated by the fact that forecasting is frequently an incremental responsibility for these employees or contractors.
- **Inaccurate or insufficient cashflow data.** Cashflow data deficiencies usually result from decentralised, multi-faceted processes or business structures. In these situations, it is rare that any one individual truly understands all of the key inflows and outflows that shape a company's cash position. More often, this knowledge is spread throughout the organisation. The complexity of cash management and banking structures can also be a hindrance to forecasting, as these processes produce meandering, multi-step cashflows that are rarely understood. Data deficiencies may also be the result of ineffective, disjointed, or manual systems. Companies that lack automated, integrated financial systems will often lack the robust data repositories necessary to support effective cash forecasting.
- **Forecasting process design.** Design flaws may relate to any of the fundamental elements in the forecasting process – data collection, methodology, variance analysis, or reporting. For example, forecasting processes may not have an effective means to collect accurate and timely cashflow data. Some firms utilise ineffective forecasting methodologies that are inconsistent with forecast objectives. Others have weak variance analysis capabilities that effectively limit the firm's ability to understand the cause of the variances. Finally, there are times at which the forecast is well designed, but the reporting mechanisms fail to meet the needs of the users. While there may be a host of other factors that contribute to the failure of a cash forecasting process, the root of the problem can usually be traced back to one of these fundamental areas, as we will explore.

CRITICAL SUCCESS FACTORS

Cash forecasting has existed, in some form or other, since the beginning of organised commerce. The ability to ascertain the amount of cash available at a specific point in time is essential for effective financial decision-making. The most successful forecasting processes incorporate four key features:

- a solid data collection process;
- the correct methodology for the application and goals of the organisation;
- a process to analyse variances and utilise the findings to refine the forecast; and
- effective reporting mechanisms.

EFFECTIVE DATA COLLECTION. As evinced by the adage 'garbage in, garbage out', access to the right data is paramount to an effective forecasting process. When developing a forecasting model, it is important to understand the quality, and quantity, of available data within your firm.

This data must be considered from several perspectives: it must be reliable, available and in sufficient quantity to support the selected forecast methodology.

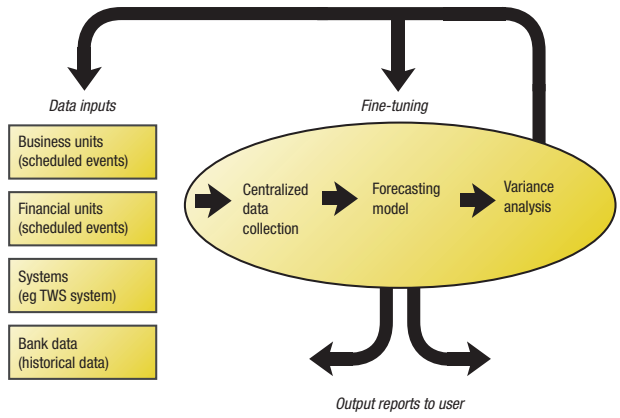
The process used to collect the data is as important as the data itself and can take several forms. These range from PC spreadsheets, manually populated with the various cashflow data required for forecasting, to elaborate enterprise resource planning systems (ERPs), which download specific data to the forecasting model.

Some of the most effective data collection tools are associated with treasury workstation technology. These systems import bank BAI data that reflects all transactions on a company's bank accounts. The data is then sorted and catalogued by the system before it is retained in a data repository for later use. The degree of automation these systems offer make them incredibly effective cashflow forecasting tools.

SELECTING THE RIGHT FORECASTING METHODOLOGY. Simply stated, the methodology used will serve as the cornerstone of the forecasting process. Three cash forecasting methods commonly used today include: balance sheet forecasts; statistical models; and receipts and disbursement forecasts. Each method has its own strengths and weaknesses that lend it to specific applications or situations.

- **Balance sheet forecast.** With a balance sheet forecast, specific line items are projected through the use of financial ratios, budgetary estimates, and other historical information. Results are presented in the same line item structure as a balance sheet. This approach facilitates effective actual-to-forecast variance analysis, is fairly easy to use and simple to understand. Unfortunately, this method only reflects periodic point-in-time projections of cash that typically correspond to financial statement presentation dates. Furthermore, this method represents a projection of 'book cash' (the cash level as reflected in the ledger), rather than 'bank cash' (the result of float, timing and accrual accounting practices).
- **Statistical models.** Many different statistical techniques are available for forecasting applications and run the gamut of complexity, from simple averaging techniques, to multiple linear regression techniques and probabilistic models. The most common statistical technique used in forecasting is regression analysis, a process that relies on independent variables to predict the dependent variable 'cash'. Statistical techniques can be used to accurately project bank or book cash for any term – daily, weekly or monthly – but requires an intermediate knowledge of statistics from both the forecaster and the forecast recipients.

FIGURE 1
OPTIMAL CASH FORECASTING PROCESS



- **Receipts and disbursements.** The receipts and disbursements forecasting approach focuses on categorising and scheduling individual disaggregated cashflows that comprise the change in an organisation's net cash position. When viewed in aggregate, cashflows represent a myriad of activity, including: large inflows and outflows; some small inflows and outflows; some that were unanticipated; and some that were well anticipated. The receipts and disbursements forecasting approach splits these flows and schedules them by category in their expected order of occurrence to project bank cash for any period of time. Treasury Strategies' research has determined that 90% of firms that prepare cash forecasts use this methodology.

THE FORECAST REFINEMENT PROCESS. A critical component of any cash forecasting process is the mechanism used to validate projections against actual results, understand the current variances and determine how the forecast can be improved to minimise variances in future iterations. Several techniques are available that range from basic to complex in their approach.

One of the simpler methods is known as basic forecast-to-actual reconciliation. Forecast line items that represent specific inflows and outflows are compared with the related 'actual' figures, and the resources most knowledgeable of the actual flows are asked to help explain the variances that occur, such as special payment terms were offered, a real estate closing did not occur and the like.

Some firms choose to apply more statistical methods to measure aggregate forecast variances, such as mean squared error (MSE) or mean absolute deviation (MAD); a process that quantifies the variance between actual and forecasted data points. A key benefit of these techniques is their ability to provide aggregate statistics that measure the improvement or decay in the accuracy of the entire forecast model.

REPORTING. It is best to develop different types of reports to meet the needs of different users, such as senior management, operations, or control functions. The needs of most users differ and it would not be unusual if one requires a report that denotes changes in the company's liquidity, while another may be interested in specific cash inflows or outflows. *Figure 1* illustrates all of the key elements of a sound forecasting process.

While the development of effective cash forecasting requires an investment of time and resources, a well-designed process has significant benefits. Reliable cash forecasting can serve as an effective tool to support cash positions, provide an early warning signal regarding liquidity concerns, and to enhance debt and investment management decisions. To expedite the forecast design and implementation process, avoid project pitfalls, and quickly realise benefits, it is advisable to seek the help of experienced external resources.

The development and maintenance of an effective forecasting process is within the grasp of any company willing to follow certain fundamental steps. Regardless of the approach, methodology or tool, the most difficult step in the process is the first. While other portions of the project have their own unique challenges, they become much more manageable once a solid foundation is created and, as the process continues, its direction becomes more and more evident.

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