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ROLLING FORECASTS

What is this practice and how effective is it?

Rolling forecasts enable managers to anticipate short-term outcomes and therefore influence them. Forecasts are a quantum leap from annual budgets that act as a barrier to fast response. On the one hand, budgets and their periodic revisions focus on the forthcoming year-end; managers use them to take whatever action is required to achieve the agreed-on targets. On the other hand, rolling forecasts provide managers with a moving window of the future that will help them to make strategic decisions, manage cash flows, and set shareholder expectations. But there are many implementation pitfalls that can distort these forecasts and put managers in a worse position than before. We will examine these issues and provide some guidelines that enable managers to place rolling forecasts at the center of the management system.

Alternative names and related topics: rolling financial reforecasts; driver-based forecasting; continuous planning

Most organizations not only spend months preparing annual budgets, but also spend many more weeks and months revising the budget or preparing forecasts to give senior executives a view of the likely year-end position. Many organizations suffer from using limited forecasts that are geared to the fiscal year-end and aimed at helping managers to keep on track. Often known as “3+9,” “6+6,” and “9+3,” the first number represents months of actual results completed while the second number represents the months remaining until the accounting year-end. In some firms, this approach amounts to four budget recompilations per year and thus adds a huge extra burden to already hard-pressed finance staff. The forecasts are invariably confined to asking the question, “Are we on track to meet our targets and, if not, what action do we

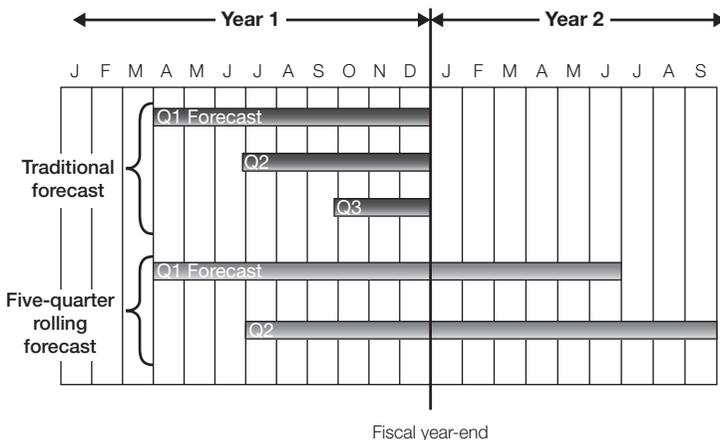
need to take?” The resulting action often ruptures carefully crafted strategies designed to create long-term value.

But using the rearview mirror of budgets and variances to manage performance when the market is changing so rapidly is a recipe for disaster. Managers need early warning of changes that affect their business, particularly if the changes spell trouble ahead. But most organizations are poor at forecasting. Not only do they have a lack of foresight, but they have an inherent fear of taking positions that go against the grain of conventional wisdom. At one global company, there were seventy-five levels of review and consolidation, and it took a huge amount of time and effort to produce a forecast. Such was the detail involved that one business unit alone spent 585 people days over eight weeks to produce a forecast that was immediately out of date. Not only do forecasts take too long, but also their quality leaves a lot to be desired.

Most managers know that their operations don't switch off on December 31 each year and start again on January 1. They deal with these problems by moving to monthly or, more commonly, quarterly *rolling forecasts* (see figure 33-1). Let's assume we are just approaching the end of quarter one. The management team gets the rough figures for that quarter and starts to review the next five quarters ahead. Four of those quarters are already in the previous forecast, so they just need updating. The team needs to add a further quarter, however. It should spend more time on the earlier quarters than the later ones, using as much relevant knowledge and business intelligence as it can gather. By definition, the fiscal year-end is always on the twelve- or eighteen-month rolling forecast radar screen.

FIGURE 33-1

A five-quarter rolling forecast



The more practice managers have at preparing forecasts, the better they become. But while adopting rolling forecasts is a major step forward, *how these forecasts are prepared* is crucial to success. Forecasts must be seen as a tool for strategic management and learning, not for control. Such a process must therefore be quick and impartial, and paint a moving picture of the factors that create financial outcomes. To be quick, the process must only focus on the key performance drivers and involve a few people. To be impartial, forecasts must

Bias is a major problem

Too many forecasts are prone to bias. Many companies, for example, rely far too heavily on the opinions of salespeople and managers, rather than use hard data. These opinions tend to distort results because people confuse targets (hope) with forecasts (reality). They also tend to produce forecasts for their own functions and mistrust forecasts from other areas, overestimate the effect of marketing campaigns and other revenue-management actions, and use forecasts that differ from those used in other parts of the company. For example, financial, manufacturing, and sales functions may produce forecasts independently, but none monitor the changes in the others' projections or revise their own to reflect these changes.

Researchers Rogelio Oliva and Noel Watson interviewed twenty-five people in the sales forecasting process at a California-based electronics firm. They found that the company's planning process had, historically, been driven largely by the sales function. Sales directors responsible for regional markets made initial forecasts, which they then passed on to operations and finance. The process was ad hoc, with important communication as likely to take place in hallways as in formal meetings. Armed with these forecasts, the finance department created plans and monitored results. Finance tended to pressure the sales team to hike up its forecasts so that the company could meet its financial goals. Meanwhile, because people in the operations group were generally skeptical of the forecasts from the sales team, they made their own forecasts to put the best light on potential inventory shortages for which they might be blamed. Similarly, the marketing director took the forecasts from sales and factored in the possible effects of promotions and other activities. This flawed system eventually contributed to an inventory write-off equaling about 10 percent of revenues and the recruitment of a new CEO and executive group.^a

^a Rogelio Oliva and Noel Watson, "Managing Functional Biases in Organizational Forecasts: A Case Study of Consensus Forecasting in Supply Chain Planning," working paper 07-024, Harvard Business School, Boston, 2007.

be an independent process disconnected from targets, performance evaluation, and rewards; only in this way will senior managers obtain unbiased forecasts that truly reflect what operating managers expect to happen. And to paint a moving picture of future financial outcomes, forecasts must constantly look a year or more ahead, thus giving managers time to influence the outcomes.

“Most organizations suffer because they can’t access the data they need quickly. Leading organizations use proprietary calculation engines that enable them to evaluate models and test assumptions in minutes. They avoid unproductive activities like tracking down numbers, fixing broken links, and debugging macros. They enable driver-based forecasting and the rapid recompilation of multidimensional models. They also go to great lengths to ensure that their forecasting models, together with key assumptions and algorithms, are consistent across the group. This is essential if multiple users are working on forecasts at the same time and sharing information.”¹ Companies that successfully implement a unified forecasting process can expect revenue gains of at least 10 percent, according to the Gartner Group.²

At one U.K. manufacturer, managers used to produce what was called a financial digest that was due on the eighth working day following the month-end. It was geared to explaining variances from budget and whether any further action was needed to meet the agreed-on year-end targets. While six-quarter rolling forecasts were part of this process, they were not taken seriously beyond the fiscal year-end. They were also the last thing to be done during the monthly closing process, and the finance people usually did the forecasts. In recent years, this has changed radically. The forecasting process is now the key management tool for managing the business at every level.

While the manufacturer still has an annual strategy formulation process in which it discusses the big issues, action planning is now a quarterly event. These quarterly business reviews together with supporting six-quarter rolling forecasts are completed around three weeks after the quarter end. The company has separated forecasts from targets and performance measurement, thus taking much of the bias out of the forecasting process. The annual financial plan is simply the four quarterly forecasts that fall within the fiscal year.

Another important element of the forecasting process is the monthly “flash” forecast. The manufacturer now prepares these forecasts in the middle of each month, when there is more time available, and looks to the end of the current month and a further two months ahead. So senior managers now receive monthly results and short-term forecasts for the following two months, the current quarter, and the full year, four working days prior to the month-end. Given that average organizations take six days to close the books, a further eleven days to finalize reports, and fifteen days (concurrently) to prepare forecasts, this is a real breakthrough in information management.

Rolling forecasts, if well prepared, form the backbone of a new and much more useful information system that connects all the pieces of the organization together and gives senior management a continuous picture of both the current position and the short-term outlook. In effect, they are the aggregate of business-as-usual forecasts (extrapolations of existing trends), all the action plans in progress, and all plans in the pipeline. In other words, forecasts should be baseline, plus anticipated events, with the effort being focused on events. An honest view has no bias, so managers should expect to see half of their forecasts on the high side of actual outcomes and half on the low side. The ideal forecast has clean data that enables managers to improve decision making. Forecasts must not be seen as commitments, otherwise bias and distortion—dirty data—will be inevitable. That’s why implementing rolling forecasts under the umbrella of fixed targets rarely works.

What is the performance potential of this practice?

- **To improve decision making.** A well-prepared forecast provides an excellent decision-making framework for management (e.g., deciding on how much capacity is needed).
- **To support regular strategic performance reviews by identifying future performance gaps.** Rolling forecasts enable managers to focus on the medium-term outlook and encourage managers to take actions that close gaps against peers or benchmarks rather than this year’s target.
- **To enable senior executives to manage performance expectations and avoid shock profit warnings.** With little future visibility, leaders are always vulnerable to the shock profit warning that is the nightmare scenario for any board of directors. With rolling forecasts that are quickly consolidated throughout the group, leaders can anticipate sharp changes in performance. Whether they are able to influence these swings is one question, but they should be in a better position to manage expectations and give the impression that they are in control of events rather than driven by them.

What actions do you need to take to maximize the potential of this practice?

ACTIONS TO AVOID

- ✘ **Understand that the purpose of forecasting is not to predict the future but to influence it.** The mistake that many organizations make is assuming that forecasts are about predicting and controlling future outcomes. The only certainty about a forecast is that it will be wrong. The only question is by how much. Narrowing that variation comes from learning, experience, and decent information systems. The purpose of a forecast is

not so much to provide an accurate view of the future but to provide some insights about how strategic options and future events will combine to produce the financial outcomes that you want.

- ✘ **Avoid linking forecasts to targets, measures, and rewards.** Most unbiased forecasts are not the ones leaders want to see. If you ask managers to forecast within a budget- or target-based system, don't be surprised when their forecasts magically meet the agreed-on budget or target. Managers know that their leaders don't want to be told bad news nor do they want to go to difficult meetings to explain why the new forecast is worse than the previous one. This is why forecasting needs to be divorced from target setting, measurement, and rewards. When Danish petrochemicals company Borealis implemented rolling forecasts, it found that accuracy improved when it separated forecasting from targets and rewards. The initial response of managers was to include—indeed inflate—their capital expenditure commitments, thinking it would influence their approval ratings, but when they realized that this had no effect—these investment decisions were taken over by a quarterly review committee—they gradually adjusted their forecasts to reflect a more realistic view of essential project expenditure.
- ✘ **Avoid turning forecasts into contracts and commitments.** For the same reasons as the previous point, you must avoid turning forecasts into contracts and commitments. This caveat not only applies explicitly but also implicitly; even if you don't intend such a result, managers may still interpret the forecast as a commitment to deliver the agreed-on outcomes.
- ✘ **Don't allow forecasts to be changed without consultation.** While higher-level management can challenge the assumptions on which a forecast is based, and therefore its outcomes, it cannot unilaterally change the forecast. Otherwise all credibility in the bottom-up process will evaporate.
- ✘ **Stop forecasting to the wall.** Rolling forecasts almost always roll beyond the fiscal year-end. Just updating the annual target and budget is *not* a rolling forecast.

ACTIONS TO TAKE

- ✓ **Base forecasts on rolling periods of twelve months or more.** The purpose of forecasts is to provide a more useful framework for decision making. So they should be done regularly and cover a period that enables leaders to effectively steer the business. Almost inevitably, rolling forecasts go past the next fiscal year-end, thus providing leaders with more visibility.

- ✓ **Make forecasts a light-touch process; base forecasts on a few key drivers, not masses of detail.** Most forecasts are recompilations of budgets. We've often heard managers complain, "These rolling forecasts are a great idea, but it means we are doing four full budgets a year. It's four times the workload. It is intolerable." Compiling forecasts from hundreds of lines of detail is the wrong approach. In most businesses, few numbers change much from period to period. It therefore makes more sense to focus on the key drivers of sales and costs. Many finance people believe that greater forecasting detail equals greater accuracy. But this is not rational. Given that each forecast is prone to error, the more forecasts you combine, the greater will be the error, as one mistaken assumption affects another. In other words, the distortion impact is exponential because errant assumptions have a multiplier effect. The experience at Borealis bears this out, as financial controller Thomas Boesen explains:

Just because forecasts include a thorough bottom-up approach including a review of all budget line items does not mean that the result will be greater accuracy. In fact, just the opposite is more likely to be the case. By concentrating on a few key variables such as orders, sales, costs, and capital, managers can project the major performance variables without imposing a heavy workload on participants. The essential point is that they can see the "big picture" and not get too involved in discussing the detail. You get a far better result from the minimum of effort, provided of course that forecasts are not caught up in the measurement process.³

- ✓ **Choose the right forecasting horizon.** The forecasting intervals and time taken should reflect the needs of the business. In a financial services business, for example, with no physical supply chain and inventories to manage, forecasts should take no longer than a few days. However, in a fast-changing, capital-intensive business, which uses forecasts to make key decisions about capacity requirements often involving significant capital sums, forecasts can take longer. There is no precise answer to the question of the length of the forecasting horizon. It depends on how long a company takes to make key decisions about operations, capacity, and capital spending. In other words, if the company takes two years to bring new facilities on stream, this might be a reasonable guide. In a fast-moving consumer products business, forecasting should reflect lead times. If the business takes three months to change supply contracts or adjust marketing programs, there is no point in preparing forecasts for less than this period. The horizon also depends on the speed of change. For an airline, changes are happening at lightning speed, and revising forecasts each

month would be advisable. In a public-sector organization, quarterly forecasts would be sufficient. Most leading organizations spend more time and effort on near-term periods and less on the long-term ones.

- ✓ **Recognize that forecasts are more accurate at higher levels of aggregation.** Some organization use risk-pooling techniques to reduce demand and supply risks. In the late 1990s, Cadillac changed its distribution strategy in Florida, one of its largest markets. Instead of allowing dealers to order the cars it assumed customers wanted, Cadillac sent only demonstration vehicles. When a customer placed an order, Cadillac delivered the car overnight from its distribution center. This enabled Cadillac to pool its demand forecasts from its Florida dealers, rather than respond to individual dealers' forecasts. The aggregate forecast was much more accurate than the individual dealers' forecasts and resulted in vastly improved customer service.⁴
- ✓ **Set common standards and rules.** Create clear methods of standardizing inputs to the sales-forecasting process. If all your salespeople adhere to the same rules in classifying opportunities, the forecast model is at least based on similar data standards each time it's run. Standardizing requires implementing rules for classifying sales opportunities. First, define the stages in your sales cycle. Then, define the type of progress required to move up a stage. Finally, assign probabilities of closure based on standard rules. In general, you should base inputs on facts rather than opinions.
- ✓ **Ensure that forecasting models are consistent and aligned.** Most forecasting processes use simple spreadsheets. While this is fine for small, local requirements, spreadsheets can cause problems when they need to be aggregated across and up the organization. In large organizations, different units use different assumptions, algorithms, and software, which makes it difficult to combine and consolidate forecasts. The IT industry is now offering sophisticated models to enable large organizations to prepare forecasts quickly and consolidate reports. Teams can build business rules and structures, then modify the model as their business evolves, easily accommodating changes such as added locations, new or discontinued product lines, or restructured cost centers. Many systems have powerful modeling capabilities that enable teams to flexibly devise, compare, and assess alternative business scenarios. Such systems allow teams to build models in days rather than months. They can import data definitions from other sources like ERP and general ledger systems. They also enable teams to build cross-functional models.
- ✓ **Reduce business lead times.** Forecasting what will happen tomorrow is much easier than what will happen in six or twelve months. So the shorter the lead time to introduce new products or strategies, the more

accurate and useful the forecasting process will be. Fast response is the real aim. Beyond Budgeting Round Table member chairman Steve Morlidge learned this at Unilever, where he moved from controller of the Best Foods Group to lead Unilever's implementation of Beyond Budgeting. "The only reason you forecast is because you can't react fast enough and if you're given a choice of improving your speed of reaction or improving your capacity to forecast, you should always choose speed of reaction. If you're a boxer, which would you prefer—better forecasts or faster reflexes? There's just no debate because any forecast by its nature is flawed. It's always going to be wrong. So if you can react more quickly, then that's the best option," notes Morlidge.⁵

- ✓ **Dovetail one forecasting cycle into another.** One manufacturer uses multiple interlocking cycles to build medium-term forecasts. One-month flash forecasts look one quarter ahead; quarterly rolling forecasts look one year ahead; one-year rolling forecasts look four years ahead, and an annual strategic planning process looks ten years ahead. One forecast dovetails into another like cogs in a wheel. These forecasts form the core

Spend the most time on the sales forecast

The basic building block of any forecast is the sales or income line. Most other variables are related to sales. But obtaining an unbiased sales forecast is no easy task. A well-prepared sales forecast should take account of marketing and promotion and new product launches. It should consider market share, production capacity, and competitive actions. And it should examine customer behavior patterns. Forecasts will also vary depending on the knowledge available. For example, in some businesses—such as those that work on government contracts—customers will enable managers to prepare reasonably accurate forecasts. Other businesses will give blanket sales orders that they will draw down as required. Companies that rely on only a few customers can ask those customers for an order forecast for the forthcoming period. This, together with some probability adjustment, should provide a reasonable forecast. Companies that make a wide range of standard products that are sold to large numbers of customers can use statistical forecasting methods to predict demand based on history and prevailing trends. However, companies geared to meeting exact customer needs have no such forecasting method available. Reading the competitive climate and good judgment are probably all that they can reasonably do.

information for the monthly meetings, the development programs, and the strategy reviews. Managers build competence in “sketching the future,” and within that future lie the opportunities and threats that traditional budget-driven processes fail to see until it’s too late.

- ✓ **Match the model to the requirement.** A model is a simplified representation of the world to use to form a prediction. There are three types of models. Statistical models extrapolate from history to generate a prediction, based on the assumption that “the future will be a continuation of the past.” This model is often used to forecast revenue lines, including consumer spending and product sales. Mathematical models attempt to understand and model the relationship between various elements of the business to produce a prediction. Many cost forecasts, of course, vary with revenues. Judgmental models are in the head of the person producing the forecast. Although forecasting based on judgment seems simplistic, human beings are capable of modeling in very sophisticated ways. The aim is to use the most appropriate model for each part of the forecast.
- ✓ **Use range forecasting.** Most organizations prepare forecasts on the basis of single-point estimates of future outcomes. The forecasts are usually simple extrapolations of existing trends. Executives often demand a number, which implies certainty in the forecast and invariably ends up being the average of past periods. The trouble is that averages are usually wrong. And averages added to averages are even more wrong, especially if other assumptions depend on them. Instead of aiming for a single-demand forecast that is invariably wrong, leading organizations forecast a range of potential outcomes. In this way, the organization becomes used to—and is better able to deal with—uncertain outcomes.
- ✓ **Allow for random variation, but eliminate bias.** The greatest forecasting challenge is to produce a forecast that is genuinely objective, that is, with no errors. Forecast error is made up of *variation* based on external volatility and *bias*, or consistent, internal systematic error. The problem is that many people confuse bias with variation. They can’t avoid variation. By definition, it is beyond anyone’s control. Variation is caused by, for example, volatile markets and unpredictable events and is almost impossible to correct. However, managers can estimate the degree of volatility and provide control or tolerance ranges that, if exceeded, will alert them to investigate whether there is bias in the system. Bias is the real enemy of effective forecasting and is endemic in many companies. The most common problem is second-guessing that can lead to shock profit warnings, as forecasts repeatedly tell senior executives what they want to hear rather than the unpleasant reality. Once a forecast becomes a target or a commitment, it ceases to be an effective forecast. That’s the nub of the

problem. Managers avoid attention if they provide forecasts that fit prevailing expectations. This, of course, means that they are less likely to be objective and give their best guess on forecast outcomes. In other words, the *system* drives chronic bias. Whether intended or not, the prevailing culture is one of providing forecasts that are treated as fixed targets or commitments. If these forecasts change, explanations are necessary and can sometimes lead to unpleasant confrontations. Needless to say, few managers want to go through this ordeal, at least not more than once a year. *The lesson is that implementing rolling forecasts within an existing regime of fixed targets often leads to spurious outcomes and a devalued process.*

- ✓ **Carry out postmortems on forecasts to learn how to improve their quality.** Managers should learn from their forecasting experience. Borealis always carries out postmortems on its forecasts. The purpose is not to attribute blame but to learn if forecast accuracy is improving and how to improve it further. Forecasting inaccuracy can be seen in the same light as process variability. Teams therefore need to better understand the causes of that variability and work to reduce them.
- ✓ **Transfer ownership to the frontline team.** Leading organizations are placing rolling forecasts at the center of their management processes. Managers prepare the forecasts first and foremost for themselves, rather than for corporate, because the forecasts enable them to take the right actions that influence future outcomes. If management and corporate needs align in this way, the data entering the forecasting process is likely to be unbiased and more useful.

Conclusions

A number of companies are adopting rolling forecasts in an effort to anticipate change, but most fail to reap the benefits because the forecasts are distorted by the gaming that invariably occurs when supervisors ask managers for their expected performance figures. If senior executives use forecasts to micromanage or demand immediate action, trust and confidence will rapidly evaporate. The only time they can fairly ask such questions is if forecasts show a significant change and managers have not explained the change beforehand. Managers should be responsible for dealing with problems and reflecting any corrective actions they have taken in their revised forecasts.

Effective forecasting only works in a culture underpinned by transparency and trust. If well implemented, rolling forecasts perform a number of useful roles. They help senior executives to manage shareholder expectations; they enable accountants to consolidate and manage cash requirements; and they help operational managers to make decisions. Fast strategic actions that either

create—or take advantage of—market opportunities or counter threats can thus be tested within a dynamic rolling planning and forecasting process.

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