IBM

Finance

Putting technology behind the art of forecasting

Information Management

Cognos. software

Business forecasting lies at the heart of financial performance management. Timely, reliable forecasts of future revenues and expenses provide the foundation for strategic decision-making and help align an organization's operational tactics with its financial targets.

This critical need to see ahead–for crystal ball-like prognostication–leads some executives to consider forecasting more of an *art* than a *science*.

Yet while instinct and intuition will always play a part, new technology-based solutions are bringing greater accuracy and deeper meaning to business forecasts. They add a new layer of technical sophistication to forecasting, enabling the kind of continuously-updated rolling forecasts and complicated *what-if* projections that drive aggressive business planning. And they expand and streamline the methods of incorporating data and other input from throughout the organization.

In short, these powerful new tools–such as IBM Cognos® 8 Planning–are putting technology behind the art of business forecasting.

The stakes are high. ***Share price going down: The real cost of poor forecasting*** quotes a KPMG analysis that estimates a 6% average drop in share price when investors react to a significantly missed business forecast. Only 1 in 5 companies consistently issue effective forecasts, according to the study. But these companies achieve an average 12% greater growth in annual share price than the others.

Of course, forecasting is more than just achieving accurate numbers. Good numbers are essential in keeping Wall Street happy, yes. But as explained in ***Six rules for effective forecasting***, strategic decision-making within an organization is informed less by raw numbers and more by context, less by predicting future certainties than by analyzing competing probabilities. Respected futurist Paul Saffo, writing in *Harvard Business Review*, states that when forecasting for strategic planning purposes, executives must acknowledge that some things are, in fact, uncertain–and then plan around them.

The benefits of effective forecasting on things such as share price are obvious. But improved forecasting can affect other areas of a business as well. ***Customer perspective: How better forecasting improves customer service*** tells the story of Semler Services A/S, which handles servicing and repairs for a major European auto dealer. By feeding auto sales figures and projections into IBM Cognos 8 Planning, the company anticipates demand for its services so it can put repair shops and equipment where they will be most needed.

In this issue

Share price going down: The real cost of poor forecasting

Editor's note: The following is based on the recently released report, Forecasting with confidence: Insights from leading finance functions, *published by KPMG.*[1]

According to the findings of a recent global survey commissioned by KPMG, poor forecasting costs – on average – six percent of a company's share price when analysts and investors react to a significant mismatch between outlook guidance (based on company forecasts) and actual results.

In today's increasingly uncertain business environment, effective forecasting becomes even more vital.

Pressure from the credit crunch

The recent credit crunch and uncertainty about the impact of the fallout from the U.S. subprime mortgage crisis have increased pressure on all listed companies, putting them under immense pressure to inform the market of losses and quantify, where possible, the level of future uncertainty.

Put simply, poor forecasting costs money and jeopardizes investor and shareholder trust and limits business performance.

The market abhors a vacuum, so where guidance is not forthcoming it is making its own assumptions.

A renewed focus on the process

The credit crunch has also renewed the focus of analysts, regulators and the market on the robustness and quality of scenario analysis performed as part of the forecasting process.

There is a very simple explanation as to why companies are generally poor at forecasting. It is because they do not treat it seriously enough, seeing it as an art rather than a science. In fact it is a science – and failure to accept this can hit businesses hard.

> *All organizations use forecasts to predict and manage their future performance. But only one in five currently produce one that's reliable.*

[1] KPMG International commissioned the Economist Intelligence Unit to write *Forecasting with confidence: Insights from leading finance functions.* The report is based on a global survey of over 540 senior executives involved in the forecasting process, including 168 CFOs from a cross-section of industries .Fifty-nine percent of respondents were from organizations with over U.S. $1 billion in annual revenues and were drawn from a cross-section of industries. Survey results were supplemented by interviews with senior executives, academics, and experts in the field.

Good forecasters enjoy better performance

Executives in our survey estimated that poor forecasting can be equated to share price losses of around six percent over the last three years.

However, the real impact goes deeper than that. Accurate forecasting is at the heart of any performance management process as it provides the reliable foundations on which heavyweight strategic decisions can be made.

Companies that were "good" forecasters (i.e. which kept inaccuracies below the five percent mark) saw their share prices rise by 46 percent, over a third more than other, poorer forecasters who achieved a rise of 34 percent over a three-year period.

Technology only part of the fix

When looking for solutions to forecasting issues many finance directors or CFOs turn to technology.

Across the survey, over one-third of organizations identified their existing technology as a barrier to effective forecasting.

Nearly all organizations questioned in the survey still relied on spreadsheets as part of the forecasting process with a worrying 40 percent relying solely on spreadsheets.

The best way to maximize return on investment in technology is when it is part of a wider finance transformation program.

Simply implementing new technology within the forecasting process will not solve wider underlying data and process issues.

Forecasting to drive culture change

Forecasting needs to become a tool that is used to facilitate a process of change between the finance function and business heads within the organization.

Improving the frequency of forecasting to monthly rolling forecasts with full reviews quarterly will help to embed the process within organizations, especially if the discipline is also maintained to explain actual performance against forecast, both for over and under performance.

Six rules for effective forecasting

Be it the weather, the stock market, or next quarter's sales figures, the goal of any forecast is accuracy. Looking ahead, forecasters virtually always strive for numbers that are precisely on target.

But futurist Paul Saffo, writing in the Harvard Business Review, urges business forecasters to focus on "effective" rather than "accurate" forecasts.[1]

Forecasting, of course, is a discipline of likelihoods and probabilities. No one knows for sure what the future will bring. So the notion of "accurate" forecasting, Saffo argues, is a bit of an illusion.

The primary goal of forecasting then, is to "identify the full range of possibilities, not a limited set of illusory certainties."

Saffo observes that decision making in business ultimately relies upon intuition and judgment, and effective forecasting provides the "essential context that informs your intuition."

To make sure the context that the forecast provides is as helpful to your intuition as possible, and to avoid the trap of "illusory certainties," Saffo offers six "rules for effective forecasting."

Rule 1: Define a "cone of uncertainty"

The cone of uncertainty represents a range of possibilities that "extend out from a particular moment or event." Ideally, the process of creating this cone "broadens your understanding by revealing overlooked possibilities and exposing unexamined assumptions regarding hoped-for outcomes."

Rule 2: Look for the "S" curve

Look for an S-shaped pattern (flat-steep-flat) of change across time. New technology, for example, is typically adopted slowly at first, then gains rapidly in popularity, and then levels off.

An illustration is the growth of television. It was first introduced commercially in the 1930s. Yet it took 20 years of fairly flat growth before it reached the "inflection point" of very steep growth in the 1950s.

> *"Identify the full range of possibilities, not a limited set of illusory certainties."*
>
> *– Paul Saffo*

[1] Paul Saffo, "Six Rules for Effective Forecasting," *Harvard Business Review*, July/August 2007.

Rule 3: Embrace the things that don't fit

Pay attention to indicators that don't fit into "familiar boxes." They may be the early signs of an "industry-disrupting S curve just starting to gain momentum."

Digital photography, for example, didn't fit anywhere in the traditional film and film-developing industry. Yet digital photography revolutionized–and nearly killed–that industry.

> *"History doesn't repeat itself, but it does rhyme."*
>
> *– Mark Twain*

Rule 4: Hold strong opinions weakly

Don't ignore conflicting evidence and be ready to change course quickly if your strongly held belief is disproved. The remedy for an over-reliance on strong opinions is frequent forecasts that include new data.

> *Use analysis to chart trends, and planning to build "what-if" scenarios.*

Rule 5: Look back twice as far as you look forward

Look for historic parallels, and look well beyond the recent past. As Mark Twain said, "History doesn't repeat itself, but it does rhyme." Current trends may speed up or slow down, but they will rarely continue on unchanged.

Rule 6: Know when not to make a forecast

When market-changing or world-changing events occur, it may be best to withhold speculation on what will happen next. When the Internet burst on the scene in the late 1990s (after decades in the academic world) many forecasters said that the old economic rules no longer applied.

As it turned out, the death of the old economy was, to quote Mr. Twain again, "greatly exaggerated."

Good rules + good tools = effective forecasts

Some of the above rules for effective forecasting are best suited to the realm of macroeconomic and geopolitical events. But others apply equally well in the familiar context of daily business. And that is where performance management solutions come in.

Using analysis, for example, forecasters can chart the progress of industry trends and define the "cone of uncertainty" for whatever scenario needs to be considered.

Powerful planning tools for “what-if” scenarios can help forecasters distinguish the possible from the probable, the outliers from the likely.

And IBM Cognos solutions are specifically designed to enable best practices such as rolling forecasts, to make sure that today’s strong opinions don’t obscure the indicators of tomorrow’s altered business environment.

The upshot? You spend less time on the mechanics of forecasting, and more applying your intuition and judgment to the universe of likely outcomes.

Customer perspective: Why higher forecast accuracy means better customer service

The automobile industry is a notoriously difficult sector in which to operate.

High taxes and duties have put pressure on revenues from core services, and the industry has been forced to find new ways to ensure a stable income.

A focus on customer service

As a result, the sector is focusing on maintaining and developing superior customer relations, a core component of which is fast, effective automobile repairs and servicing.

But the servicing component of the industry has its challenges, too.

"A repair shop is very expensive to establish," explains Jens Kofoed, Business Management and Sales Director at Semler Services. "It means investing in costly mechanical and technical equipment, constructing lifts, and providing ongoing training for mechanics."

Complex repairs make heavy demands

As Kofoed points out, servicing today's high technology automobiles can be a complex task, with increasingly computerized cars making greater demands on both equipment and people. Adding to this servicing complexity is the shortage of good mechanics and the cyclical nature of automobile sales.

Good planning becomes not only essential, but very difficult.

"We knew that we would lose customers if the waiting times for service were too long," says Kofoed.

"At the same time it was difficult to expand our repair shop capacity without knowing what the demand for services would be. We needed to find a solution that could help forecast servicing demand based on automobile sales."

Move to IBM Cognos 8 Planning a "natural step"

Semler Services collaborated with Cognos (now part of IBM) to build a customized IBM Cognos 8 Planning solution that is both cost-effective and easy to implement. According to Kofoed, Cognos was the natural choice:

"A few years ago, we moved to the Adaytum planning system, which is today a part of Cognos. This freed us from a dependence on spreadsheets and put us in a position where we could observe our company's operations and finances on more than one level."

Semler Services A/S

Semler Services A/S is part of the Semler Group, one of the largest automobile importers and dealerships in Denmark. The Group imports and sells some of the world's best known brands of cars (Volkswagen, Audi, Seat, and Skoda). Semler Services A/S handles servicing, repairs, and administrative tasks for the Group, and offers a range of additional services to the industry.

- ***Geography:***
  Denmark
- ***Industry:***
  Automotive sales & servicing
- ***Information Needs***
  Standardized, driver-based planning; simulation options; effective KPI measurement; focus on revenue & cost
- ***Platform:***
  • Microsoft® Windows®
  • Microsoft SQL
- ***Solution:***
  • Cognos 8 Planning
- ***Benefits:***
  Rolling intelligent forecast of service demand and garage services; constant focus on revenue & profits; common understanding of the budget; used throughout the company, including HR, Sales & Finance

The move to IBM Cognos 8 Planning was a logical next step.

"Semler Services has used other business intelligence solutions in the past, but they turned out to be quite simply too expensive and inefficient to deal with the challenges that we needed to resolve," says Kofoed.

"With Cognos we've found a solution that serves as the framework for our forecasts. And we've been able to develop and adapt it in a relatively short time."

The benefits: accurate demand forecasting

Using their IBM Cognos 8 Planning solution, Semler Services is now able to use sales figures to forecast the quantity, type, and timing of demand for automobile servicing and other repair shop activities.

As a result, they can plan to have the right mix of skills and physical resources available to ensure the rapid, efficient service that builds strong and profitable customer relationships.

The IBM Cognos 8 Planning solution has given Semler a significant advantage over their competition. Ironically, this has led to a decision to sell the solution to their competitors.

As Kofoed explains, "When our competitors discover just how great our gains are using the solution, they will start to use similar solutions. By licensing our solution to our competitors we can set the standard in the industry and be the ones controlling developments in the area.

We will always be first to have the newest upgrade. In addition, using a common system for many companies will be to the benefit of the entire industry. The first new users have already started using the solution and are seeing significant advantages to it."

In the challenging automobile industry, Kofoed believes that good business intelligence might well mean the difference between success and failure. And he thinks that the Semler Services experience can be applied to other industries as well:

"Innovative thinking is a must in our industry, and I can easily envisage other sectors being able to learn from our positive experience with Cognos."

"With Cognos we've found a solution that serves as the framework for our forecasts. And we've been able to develop and adapt it in a relatively short time."

"By licensing our solution to our competitors we can set the standard in the industry and be the ones controlling developments in the area."

About IBM Cognos BI and Performance Management

IBM Cognos business intelligence (BI) and performance management solutions deliver world-leading enterprise planning, consolidation and BI software, support and services to help companies plan, understand and manage financial and operational performance. IBM Cognos solutions bring together technology, analytical applications, best practices, and a broad network of partners to give customers an open, adaptive and complete performance solution. Over 23,000 customers in more than 135 countries around the world choose IBM Cognos solutions.

For further information or to reach a representative: www.ibm.com/cognos

Request a call

To request a call or to ask a question, go to www.ibm.com/cognos/contactus. An IBM Cognos representative will respond to your enquiry within two business days.

IBM Canada
3755 Riverside Drive
Ottawa, ON, Canada K1G 4K9

Produced in Canada
May 2009

IML14150CAEN