



THE FORECASTER AS A KEY MEMBER OF THE STRATEGIC PLANNING TEAM

By: Robert Altabet

Management wants not accuracy but usefulness of forecasts as a decision tool ... causal models provide important insights into the business ... use company's terminology in presenting forecasts ... one number forecast is a must for having coordination among different functions.

As a forecaster, I may be just a bit biased, but I strongly believe that our unique skills, as professional forecasters or as managers with forecasting training and experience, enable us to be significant contributors to the strategic direction of our companies. I hope I can share a few lessons from my own experience that will help some of you step further into such a role. I was fortunate during my career to have had early exposure to forecasting as a strategic tool. Duracell, in the mid 1970s, was still a relatively small company, giving us all the opportunity to work on a wide variety of projects, well outside our functional specialization. As Duracell grew, I had the particular good fortune to be reporting to that rarest of Marketing Vice Presidents, one whose early career was also in forecasting and sales analysis. He helped me make that transition from being a master technician at forecasting sales to using forecasting as a tool for managing the business. His two favorite questions still resonate in my ears: "Is the news good or bad?" and "What would you do about it?"

ROLE OF FORECASTING SHIFTS LIKE A PENDULUM

During the last 25 years, I have seen forecasting from a variety of functional environments, ranging from finance, to distribution and logistics, to the world of marketing and sales. Forecasting plays a key role in all these functions. But its emphasis shifts back and forth like a pendulum, one time on one function, another time on another function, and then back again. The latest emphasis of forecasting has been in the areas of scheduling and logistics, renamed "Supply Chain Management." This goes back to the operations management issues that I saw when I entered the workforce in the early 1970s. This is certainly an important area, and comes, as did prior waves, from tidal shifts in computer capabilities that have enabled us to use techniques, which were once considered highly sophisticated and complex, efficiently and economically in a business operating environment.

These are, of course, valuable tools for business, and, during their implementation phase, will make noticeable contributions to a new, more efficient inventory and operating environment. But the operating departments are like a wheel that no one pays attention to until it squeaks. When things are running smoothly, the end customers and the departments with a customer focus do not pay attention to the intense work that goes into keeping things on track. But, in the midst of the intense work that is needed to integrate forecasting systems as a part of the weekly or even daily operating environment, the forecaster should not lose sight of the fact that he or she can make a significant contribution in strategic discussions also.

FORECASTS PROVIDE STRATEGIC DIRECTIONS

And, perhaps we can all be just a little selfish and career oriented. The movers and shakers of a company are those with responsibilities for change, for the new ideas in managing and implementing adjustments in strategic directions. For different companies, this may come from various departments ranging from sales, to marketing, to R&D, to Finance. But they all have a need for quantitative and forecasting skills. They rarely have training in forecasting. They know little of the mathematical tools at our disposal for understanding the business. While they are experienced and smart businessmen, sophisticated techniques can give them a glassy eye look. But they desperately need the insights available from a good forecast manager, the guidance that can tell them which business issues to focus on for the greatest effect. They need it with a translation to the normal argot of sales and marketing terminology such as competitive advantage and product portfolio management.

EVOLUTION OF FORECASTING AT DURACELL



Let me digress for a moment and talk about the evolution of forecasting at Duracell which may provide some guidance to others on how to balance the forecasting needs for an operating environment with the requirements for a strategic direction. Like many other companies, when I joined Duracell in 1974, there was no dedicated forecasting department. Forecasting was a sideline activity of departments that needed the input and had no forecasting department to turn to. The Marketing Department did its forecasting, with the work done by entry level Assistant Product Managers. The Logistics Department ran time series and exponential smoothing models to forecast for warehouse replenishment and production scheduling. These models were developed by operations researchers but were managed by lower level inventory coordinators, with little understanding of alternative techniques or approaches. Our Finance Department did a third forecast, guided more by corporate financial requirements than by any analysis of business trends or cause and effect relationships. None of these forecasts were linked. The Sales Department set quotas completely independently of other departments.

We made two important changes in 1979. First, we instituted a dedicated forecasting group. This did more to upgrade the quality of the forecast and its utility than anything else could have. A Conference Board study of forecasting accuracy in that same period highlighted a dedicated forecasting department as the single most important variable impacting forecast accuracy, well ahead of any methodological variables. The independence from other groups created a more professional and objective model. Skill training was truly focused on forecasting rather than numerous other skills required for a different primary function. The departmental status made forecasting a recognized contributor to the company's business discussions. Management recognized the independence of the forecast and the analysis behind it. The second step was a single number linked system for all forecast users in all departments. But one number system has its own pitfalls. For example, a conservative forecast may seem to make good sense to manage risk in planning financial goals. This may be difficult to reconcile with forecast whose objective is use in a sales quota system where stretch, hard to achieve targets can provide the motivation to the sales department to deliver a stronger sales result. But, having lived through both alternatives at more than one company, the cohesion and unity of response to issues with a single number system outweighs any other issues. When any one of us has a problem, we all share the same motivation to fix it, since we are all committed to the same plan. For any strategic overview, the forecaster is then speaking the same language to everyone in the company. As we look at the 1990s, Duracell has begun a new transition to manage the increased workloads that resulted from integration into the operating modes of a supply chain management project. While all forecast activity must continue to be linked and is managed by experienced forecast specialists, operating divisions now have a forecasting group that manages the regular marketing and sales updates and supports logistics, scheduling and budget management. But the long-term forecast view, which is adjusted in tandem with strategic shifts, is managed by a true strategic forecasting group. This restores their ability to focus on the long-term issues that would have been otherwise squeezed by time pressures. And we are now even bringing some of the benefits of our North American dedicated forecasting approach to our European businesses that could not previously justify dedicated forecast groups. With this strategic focus, our forecast team can look at long-term trends that affect our business such as new electronic technologies and can plan strategic market research to understand key variables that will affect us.

WHAT MANAGEMENT WANTS

What are the goals of a forecast? Accuracy? Accuracy with the right lead-time? Accuracy at the monthly level? At the SKU level? The operations team certainly wants all of those. The more accurate the forecast with more lead-time, the happier they are. That simplifies their job. And we certainly need to provide that, but management has other priorities as well. What does management want? Not accuracy, but usefulness; utility as a management and decision tool. They are not asking us to tell them what will happen, an answer that the operations folk would be quite happy with. They want to know what can happen and what they can do to change what will happen. They want you to give them control. Throughout history, great kings and generals have used seers to help see into the future. But we all know the "shoot the messenger" syndrome. We may have more scientific methods for prognosticating, and maybe we are even more accurate, but the people equation has not changed. We must go beyond delivering the news to be effective; we must deliver the commentary and make it actionable. My favorite example, of about three thousand years vintage, comes from the story of Joseph in the Bible. He forecasted Egypt's seven years of plenty to be followed by seven years of famine to Pharaoh, possibly the first historical record of a long-range economic forecast. He could easily have stopped right there; he had accomplished the mission set before him. As we now know, he was even accurate. But his step into the strategic planning team is what set him apart. He defined a problem, the risk of famine. He answered the question, "Is this news good or bad?" And most importantly, he offered solutions. He answered the second question, "What would you do about it?" He pointed out the opportunity for Pharaoh to profit from this by storing the crops from the good years and selling them when the years of poor crops would finally come. For Egypt, the famine never caused a problem because Joseph made a suggestion about what to do. These are



the steps that the forecaster must take to make the transition from technical advisor to being a key member of the strategic planning team.

CAUSAL MODELS PROVIDE INSIGHT INTO THE BUSINESS

So, how do we get there? Some key messages: getting close on the forecast may be good enough. Incomplete but timely forecasts are better than perfect but late forecasts. Insight on causation is better than accuracy. As forecasters we frequently look at trends in some sort of time series mode. These are tools that can often provide the basis for quite accurate forecasting. And in the short term, they may be better than many causal models, because we do not always understand the reasons why, and even when we do, the data may not be timely. Sometimes, even when we know the value of causal models, we are concerned about a host of technical issues. Missing data points, data quality and integrity issues are all good technical reasons for potentially flawed analyses. And, in a world of infinite time, I might wait for resolution of these concerns.

But business moves very quickly and decisions must be made whether the available information and analysis are complete or incomplete. If we, the forecasters, do not provide answers to those causative questions such as which variables really drive sales, management will make decisions without that information. The decisions will be based on back of the envelope analysis with less rigor than a forecaster could bring and less understanding of a dynamic market place. How often have you voiced the query, "Why would they do that, it did not work the last three times?" Product managers will keep on recycling old solutions if no one keeps a track of what happened when those solutions were used in the past. As such, we should maintain records of what we do. Learning from history, research and experiment should be built into the way we think.

I had one awakening over a dozen years ago when I told our Vice-president of Marketing that we should not change the forecast in spite of this glorious photographic battery marketing plan that had been put together. I explained that he could not expect "marketing magic" to change some very solid underlying trends. I may have been right, but it was clearly the wrong way to say it politically. What I should have been highlighting were the controllable and uncontrollable factors that could make a difference. In our case, at least for the short term, camera sales, camera features and technology and consumer photographic usage factors were in the uncontrollable category. Pricing, channels, distribution, advertising, merchandising and promotions were controllable. Analysis of the sensitivity of each of these variables led to some specific recommendations for influencing sales. The right focus turned out to be a merchandising effort rather than advertising or promotion. Merchandising may not be as exciting and sexy as an advertising program for a product manager who wants to advance to the big league products where advertising makes greater difference. The forecaster must provide the systematic analysis that can lead us to a right conclusion. I am not even fussy about the models, whether we identify key variables with linear multiple regression analyses, with or without dummy variables or with nonlinear models. In my experience, I have seen first class analysts come to the same conclusions from simple matrix and cross-tabular analysis as those who used sophisticated techniques.

And there is no single comprehensive model that works for everything, even within a single industry. The models and statistical tools may change from product line to product line, and may change over time as the market structure changes as a result of new product entries, new competitors and/or changing consumer behavior. We must be flexible enough to keep reinvestigating the answers. And we must be brave enough to offer solutions, not just to describe the results. We also make many assumptions about the market, about trends, or a host of other things. These ceteris paribus, all things being equal assumptions, are critical. These are necessary or else our models would be too complex, too incomprehensible and/or have autocorrelated variables. We would suffer from the "Moon Shot" problem, where a change of one degree could mean million of miles. Keep the models as simple as you can to solve the problem at hand; additional complexity will get you in trouble.

But do not lose sight of those assumptions. Chart them, both the explicit and the implicit ones. The explicit ones are usually easy. They come from the variables we have chosen not to use in the model for the sake of simplicity. The implicit ones are a bit harder, they come from understanding your frame of reference as well as "what everybody already knows." You and management need to monitor these assumptions for future impact. Sudden changes are the indicator that a model or an approach is in need of revision. The implicit assumptions can be a good input to generate some really "out of the box" thinking that can lead to radical changes in approach. For example, as noted earlier, camera technology and features were treated as an uncontrollable variable at one point. But in the early 1980s, Duracell began a program to work closely with the original equipment manufacturers (OEMs) of cameras to influence designs, rather than just sell product. We were able to



launch a new lithium photo battery that did not just deliver longer battery life, but rather provided faster recycle time for the flash. The ready light could come on in 4 to 5 seconds rather than 10 to 20 seconds. The discussions began with a review of implicit forecast assumptions that led someone to ask what we, Duracell, could do to take a greater control over the future of the battery category rather than to accept it as it is. Today, partnership with OEMs is a major part of our strategic platform.

SPEAK THEIR LANGUAGE WHEN PRESENTING

Finally, the presentation must be converted to terms that our top management can easily relate to and lead to buy in and acceptance. Save the impressive methodology for presentation at forecasting conferences. That may mean simplifying a model or abstracting only the key data. Once you know the answer, it can frequently be presented in a much simpler analytic framework. If more advertising is the key variable, present a chart showing only the relationship between advertisement and sales or advertisement and market share. Painful as it is when we have done good work that we might like to share, top management is usually not interested in the gory details or even the creative use of statistical techniques that got you there, no matter how proud you are of your work. Definitely turn your work into graphic presentations whenever you can, particularly when data show cause and effect relationship, not just the broad trends. Simple arrows, identifying the period when a variable changed will be more powerful than any review of the rigorous use of dummy variables that originally led you to that conclusion. Studies have shown that management is more likely to believe you with a presentation that used graphics. Speak their language of distribution, shares, and competitive advantage. Develop alternative scenarios with varying assumptions. It may be more work, but seeing the consequences on paper of a poor decision can be a more powerful motivator than just the positives of a good decision. Keep it brief. Whenever possible, get buy in to one idea at a time. Like everyone else, top managers need time to adjust to a change, especially if they had a hand in setting the original direction.

SUMMARY

As forecasters you have the knowledge and skills to be a part of the strategic planning team. In fact, you can move into top management if you want to. We cannot view forecasting as an end in itself, but as a tool for management for decision making. It is our compass during the fiscal year, telling us whether we are on or off course. It is also our sextant and charts telling us which star to steer by to stay on course, the course being your own company's mission. Remember that the ship's captain usually apprentices as a navigator using compass, sextant and charts. And you, the forecaster, can move into that top management role with the right attitude and career development.

You can begin this transition by developing a track record for useful insights and objective recommendations, for gently demonstrating in post audit mode the reliability of your forecasts. You advance by making forecasting a tool for key management decisions, and you win by making the recommendations that are grounded in logic and facts rather than in emotions and gut feelings. After a little while, your management team may begin to wonder how they ever did without you. ■

(This article is based on his speech given at the Strategic Forecasting: Planning & Budgeting Conference on August 24, 1998 in San Francisco.)

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