

Making a Difference at Weyerhaeuser

By Lynn O. Michaelis*

The economics function at Weyerhaeuser combines marketing and economic research, with 95 percent of the time spent on industry-specific issues. Nearly 80 percent of the department's budget is charged back to the company's diverse businesses. Consequently, customer focus and responsiveness are crucial to success. The role of the group is to provide insights into industry conditions and longer-term trends. The group is looked upon as an objective source of information on a likely set of industry events, with much emphasis on effective communication, especially graphic communications. This approach has changed materially in the past decade; emphasis used to be more on macro forecasting with a staff about double the present size.

THE FUNCTION I manage at Weyerhaeuser is called the Marketing and Economic Research group or M&ER. The group has been operational at the company for nearly thirty years. The composition, size and emphasis of the group have changed dramatically during that period. At one point the group was made up of forty people, about equally split between economists and market researchers. At that point in time, the group had three economists completely focused on macroeconomic or demographic issues. We also subscribed to about every major macroeconomic service. The budget for the department was carried at the corporate level within the corporate planning area.

Today, the function is composed of only fourteen

*Lynn O. Michaelis is Director of Marketing and Economic Research at Weyerhaeuser Company, Tacoma, WA. He also is a Fellow and a past president of NABE.

people. About half of the group is economists or market research professionals, while the other half provide technical support (such as graphics and data base management). The group spends nearly 95 percent of its time engaged in industry-specific issues (microeconomics or market research). There is no full time macro economist and we do not subscribe to any U.S. macro service. The only service we buy outside concerns international developments. Occasionally an outside service is engaged when there is a particular decision that needs additional specialized help.

The other major change is budget support. Nearly 80 percent of the department's budget is charged back to the businesses. The only budget carried at the corporate level is to cover those activities that are truly done for the senior management or for the board of directors. Individuals from the group will occasionally be asked to devote four to six months to a special project that is sponsored by senior management.

The move to charge the businesses for the group's service predates my tenure as manager. M&ER was the first staff group in the company to do this. Initially the move to charge the business for the group's time was a tactic to broaden the support the group. This way the group would not be completely eliminated in one of those routine cyclic events that happen in corporations, i.e., cut overhead when earnings decline. Although the tactic has not made the group immune from budget cuts, the charge back kept us alive in the late 1980s. In one of the more serious overhead reviews in 1989, a senior manager did move to eliminate all his budget support. This undercut our ability to continue supporting his entire division. Rather than have that happen, the businesses increased their budget support.

The biggest benefit of the charge-back system has been in how our group operates. Rather than just being oriented to the needs of the Top Dog, we feel the need to be responsive to the entire organization. Customer focus and responsiveness are crucial elements of our group's value system.

We meet with each of our major clients every year to review what the group has accomplished and what

the priorities for the next year should be. A customer satisfaction survey is conducted every year, asking how we did on both routine support services and any special projects. If a concern is raised, I get in touch with the client to discuss the reason for the concern and what actions they suggest be taken to correct the problem. Fortunately, this does not happen frequently.

THE MISSION AND VALUES OF THE DEPARTMENT

During the past ten years, the group has reshaped its mission and product offerings. As noted earlier, macroeconomics is not a major event any more. We have come to accept that no one can forecast the future with perfect precision. We don't even try to see if we can get a GDP forecast that is 0.3 percent more accurate than consensus. A small difference in GDP growth would not affect a business decision. Besides, as will be seen in the examples below, our biggest impact has been on those decisions that require longer-term trend input. Our role is to provide insights about the industry conditions that will allow the company's business management to make the best decisions possible. Rather than forecast, the role is more oriented to helping the business think about the future with assumptions, facts and data.

Achieving that mission is not easy. The business management has to believe that the insights provided are worth acting on. Building credibility with the management team is essential. To do this, each analyst in the group develops a client relationship with one or two businesses. The analyst then specializes in that business or industry. For instance, one of the area managers has a Ph.D. in forest economics. He specializes in timber management, timber values and other raw material issues in the United States and the world.

Another major task is to be viewed by the business and the senior management teams as a completely objective source on a likely set of events for the industry. Our analysis is never compromised to support a major capital project that the business believes it needs. This will be illustrated in an example below. Unlike an outside consultant on the industry who might meet a client's desired needs, as responsible corporate managers we have the same goal as the business management: generate good returns on the shareholders' investments.

Finally, we must constantly be finding better ways to develop those insights, to think about the future or to communicate effectively to insure the correct actions are taken. Failure to communicate the work effectively means nothing is done. Even worse, the wrong thing is done in spite of what analysis suggests. One of the reasons graphics support is such a big part

of the group's activity is communication. Graphic display of history or relationships is the most effective way to build understanding and conviction. For some reason, R bar squared or a Durbin-Watson statistic just don't cut it.

Thus, the values of our group are very simple. We believe that objective and rigorous analysis is essential to a sound business decision process. When our analysis leads to a point of view about the future, we insist on finding ways to be heard by the business leaders. It is also important to make clear how we arrived at a point of view, what the assumptions were and where the primary risks are.

TRACKING YOUR IMPACT

The constant pressure to justify our budget (in some cases defending why staff even exists in a line organization) has forced me to keep track of those instances where we clearly made a difference. It is easier to track the impact on the special projects than it is on our routine work. Part of the budget with each business is to cover routine quarterly or annual reviews to support the normal planning process. The business agrees on a retainer to cover these activities. Any outside consulting services for data or other industry information are imbedded in this "core" budget.

These quarterly or annual industry review sessions are very proactive. A base case view of the general economy, the demand side for the major markets and a probable supply situation is developed along with a price outlook for key variables. Each business team has a chance to review and add additional input on key assumptions or industry developments. The sessions are meant to encourage dialogue on pricing strategies, inventory targets, investment priorities or competitor activities. For instance, a special inventory model was developed for the Pulp and Fine Paper Businesses to evaluate the potential price risk at any point in time. They have found it useful for both pricing strategies and downtime planning.

These review sessions are particularly important to the M&ER analysts as well. First, they can find out what the business is concerned about. Second, they usually learn something as well. Input from the sales and production people keeps us current on how the industry is changing and where to look for the next "surprise."

The place where we have made our biggest contribution is in the area of special studies. We usually initiate these when we feel there is a major new trend emerging. In some cases a senior executive who feels uncomfortable with the business view has triggered them. Special projects allow us to use economic theory to assess what might happen if historic relationships don't hold. Economic training allows us to see things when history is *not* the only guide to the future.

A few examples will illustrate several ways in which M&ER has made a difference. As you will see, most of our big impact efforts had nothing to do with a great forecast of GDP or with having built a great econometric model. In almost every case, the impact was made because of the economic framework that was used and how effectively the results of the analysis were communicated to the business group.

EXAMPLE #1: THE INFEASIBLE SOLUTION

In the 1990-91 period, it became very clear to us that the federal government was in effect going to eliminate the harvest of timber from public lands in the western states in order to protect the Spotted Owl and to respond to environmentalist pressures. We began to address the issue by asking how high lumber prices would have to go to clear the impending shortage. After that we had to determine which products or producing geographies would benefit from the rise in prices. Because there had never been such a draconian cut in public timbers supply, an historic situation was not available to build a model.

To answer the first question on price, a literature search was conducted. What is the price elasticity of commodity products? What other industries had experienced large supply shocks and how high did prices go? Most studies put the long-term price elasticity for commodities around 0.2 percent. The combined effect of the supply restriction and growth in trend demand would create about a 10 percent gap between potential demand and likely supply in the year 1994. (The situation was called the "Infeasible Solution," because there did not appear to be enough timber to produce the lumber required to support the next housing recovery in 1993-94.) We concluded that lumber prices would have to go up at least 50 percent from 1980 levels to clear the market.

We then built a linear programming model of the lumber and plywood industries to simulate shadow prices to estimate likely regional margins and supply responses. Mill margins had to remain negative in the Western United States to force closure. Mill margins in the Southern United States and Canada were expected to (and did) explode. Finally, we concluded the timber values would rise sharply in both the West and the South, because timber was the constraining factor.

Our communication task was not easy. With hindsight, this task might appear to be easy. But remember this industry had been depressed for twelve years. Lumber prices in the mid-1980s had reached levels in real terms that were close to the levels of the 1930s. A jump of 50 percent in prices seemed unlikely, as much as they wanted to believe us. After twelve months of reviews with several levels of management, they started to believe us. One decision was reached to purchase over \$100 million worth of southern timber

for conversion over the 1993-94 period. The southern lumber business earned a 40 percent return on that investment. On several occasions they have given us credit for helping to make that happen.

EXAMPLE #2: EXCESS DE-INK PULP CAPACITY

In 1994, the paper industry (everyone, not just Weyerhaeuser) had convinced themselves that – unless they could increase the content of a paper sheet to about 20 percent recycled fiber, they would not be in business after 1997. This triggered a project at one of our complexes to install what is called a de-ink digester. The cost was \$70-100 million. The initial investment analysis concluded that the project would earn the company a 17 percent return on investment (ROI).

In several settings, we had raised serious objections to the assumptions being used by the project team. M&ER were asked by the senior management team to take an independent look at the assumptions used in the financials. A team was pulled together, including people from our R&D organization, our recycling business and the paper business. It was important to establish not where the industry had been, but where it was likely to be in 1997 and beyond. Because the entire industry had the same future belief about the need for recycled content, a bunch of digesters were being built. Our first effort was to evaluate whether there was enough raw materials to feed all the new digesters. The team concluded that the price of the raw material (office waste) for feeding these digesters would skyrocket. Also, because so much capacity was coming on, it was essential to believe that people, especially those that just want commodity paper grades, would pay a premium for that recycled paper content.

In the final decision meeting with the new senior vice president of our Pulp, Paper and Packaging Division, the key bet was made very clear. To get a 17 percent ROI you had to believe that you could get a 3 percent higher price for paper with 25 percent recycled fiber content when compared to paper made with 100 percent wood fiber. He concluded we couldn't and killed the project. As it turned out, the industry has not gone to 25 percent content, because very few customers (not even the government with mandates) wanted to pay the premium for recycled content. Those who did invest in the de-ink digesters were very sorry they had. Today, a de-ink line will sell for 40 percent of the investment cost.

EXAMPLE #3: ADDING THE SCENARIO APPROACH TO THE TOOL KIT

Recently the group has encouraged the use of Scenario Approach – another way to think about the future and develop strategy accordingly. The space allocated for this article does not allow me to describe

the process in detail. What we mean by the Scenario Approach is a very time and analytically intensive process that can take up to six months to complete. It is *not* the high, low and middle trajectory scenarios. Recently, we convinced our Western Timberland and Western Lumber businesses to adopt the approach to assess our future strategy options relative to Japan.

The Japan market is crucial to our western wood products business. The outlook is extremely uncertain, however, based on the changing market demands and the demographic trends in Japan. By forcing the management team to immerse themselves in the outlook process, they became committed to constructing several strategic responses to some different future plausible states. If we had given them a forecast of one of the scenarios developed, they would have dismissed it as impossible. After spending the time, the business came to see how tough the market might become.

As a result of this process, our management had already developed several strategic responses to a tough market in Japan. They were able to act quickly last year when the market collapsed. On several occasions, they have complimented us for initiating the effort.

A REALITY CHECK

Clearly, I chose a few examples that put the group's role in the best possible light. There have been times where our analysis proved correct, but the business had chosen to ignore it. Similarly, there have been a few times when our analysis led to the wrong decision. Fortunately, there have not been many, and usually the key assumptions supporting the analytic framework proved to be wrong. Also, by introducing innovative approaches to thinking about the future, such as the scenario approach, we have defused the notion that we *know* the future.

Outlooks are conditional. They depend on assumptions and relationships. The economy is constantly changing, and a relationship modeled for the 1980s may not work in the late 1990s. Our key decisionmakers respect the honesty and objectivity we bring to the discussion about the future. They also have come to accept that an honest "I don't know" is better than a poorly founded answer.

STILL AT RISK

Like any staff organization in a manufacturing

business, our group is always under scrutiny. Not only do we hear, "What have you done for us lately," but we have to fight the simplistic way some managers like to make decisions. There are those managers that have little patience for hearing why we arrived at a certain outlook. "Just give me the numbers," is still heard.

Also, changes in key management, especially those hired outside the company, can create challenges because they might opt to cut our budget before they even get to know what we contribute. "I did not have this function at company X, so why do I need them here. Besides, aren't economists just those muddled-headed folks that can't agree on anything?" This actually happened. Fortunately, there were several people in his organization that had worked with us for years and valued our input. Our budget was kept afloat by working closely with those people to maintain a budget and contact with that business. Recently, that manager left the company and the new vice president was one of those supporters during the dark days of being outcasts.

CONCLUDING COMMENTS

There are a number of other instances where our group has made a difference. However, one of the trickier tasks is making sure people remember when you made a difference. If you live by forecasts alone, the task is very difficult. I learned early was that one missed forecast can cancel ten right ones. People remember when you are wrong, but for some reason have a hard time recalling when you are right. There are subtle – and they had better be subtle – ways to remind people of the times you helped make a better decision.

Subtlety is crucial. Business managers are paid to make the decisions. Our role is to play an integral part of the decision process. When staff groups start to act like they are the primary reason for a certain outcome, then their future could also be in doubt. Because of our close working relationship with the business management team, they are usually our best spokesmen on where we have made a difference. It is because of that relationship and our impact on their decisions that the group exists today. Economics and economic training are a crucial part of strategy development and project return assessment, but it is not always easy demonstrating that fact.