Improving the way organizations run through participative planning and management.
Magicians have their code of secrecy about telling the audience how they do their work, but not so with the best-run companies in the United States. Companies that apply for the prestigious Malcolm Baldrige National Quality Award not only agree to open their company to a thorough investigation by teams of examiners, but if they receive an award recipient, they must share their leadership and management strategies, practices, and results with the nation.

The first place this sharing happens is at the annual, three-day, Quest For Excellence Conference, in Washington, D.C. This is the official conference of the Malcolm Baldrige National Quality Award. The leadership of all of the new winning companies make presentations about their leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management, and business results. Ample time is also scheduled for questions and informal conversation with conference attendees. Quest For Excellence X was held February 8-11, 1998. It drew 1,600 people, a 14% increase from last year, and the largest attendance ever.

The Quest For Excellence X Conference began with keynote addresses from the Secretary of Commerce, William Daley, and C. William Verity, who was Secretary of Commerce when the Baldrige Award was authorized by Congress in 1987. The following are excerpts from their talks:

Hon. William Daley, Secretary of Commerce—The Baldrige guidelines are perfect tools for helping all of our companies compete into the next century. There’s still a misconception that this award is about Total Quality Management. That is not true. It’s about total performance improvement: sharpening the focus on customer satisfaction; building on diversity and the talent of our engaged workforce; putting a high premium on innovation; long term planning; continuous learning; and most important, achieving outstanding business results. In short, this is a road map for success in any business.

So ... get the criteria ... do not stop there ... apply for the award. All companies that apply receive somewhere from 300 to 1000 hours of review. Small companies must take note. At least six business experts will be involved, and there will be a 50 page feedback report. We are all convinced that the Baldrige Award, and its state and local counterparts, is having an impact on all of the companies that take a serious look at this program.

Our nation has regained its place as the world’s most productive economy, and the world’s most competitive economy. It also has led to changes in our government, believe it or not. Under the leadership of Vice President Gore, the Federal Government has begun a serious reinvention. Like the Baldrige winners, Federal employees have done a very good job of increasing their output, and the quality of the services which we provide to our customers.

C. William Verity, U.S. Commerce Secretary in 1987–1989 when the Baldrige Award was started, is also a former businessman—President and CEO of Armco, and a former Chairman of the Board of the U.S. Chamber of Commerce. He talked about the beginning of the Baldrige Awards program:

C. William Verity— I had no idea what someone could achieve [as U.S. Secretary of
Commerce] in a two year period, so I thought the thing to do is to invite the former Secretaries of Commerce to come to Washington for a half a day and tell me what to do. Six of them came. After we talked for some time, they said: "Look, you’re from industry, the one thing you could do in which you would have a lot of support, is quality. The problem with America, at the moment, is we’re producing shoddy products and we ought to be producing the best quality in the world, and maybe there’s some way to get quality on the front burner."

Well that really took with me because that gave me a purpose that I could understand. And so I thought, now how do you get this started? So I began to search around and I found out that I was late coming to this show. NIST had already started to work on the Baldrige Award, and all I had to do was just to lead the charge and everything would happen.

I hope all of you who are not in the program will apply, because it will do more for your company or your organization, whatever it might be, than anything you’ve done.

The Secretary’s hope— that more companies will get into the program— is being realized. Over the past ten years, 648 firms have applied for the Award: 277 large manufacturers, 123 large service businesses, and 248 small businesses. Of those, 131 scored high enough on the application to receive site visits by examiner teams: this included 67 large manufacturers, 36 large service companies, and 28 small businesses. Of those who received site visits, 31 did well enough to win the Baldrige National Quality Award: 15 large manufacturers, 8 large service companies, and 8 small business. Interest in the Baldrige Award criteria remains high, with between 100,000 and 150,000 criteria booklets requested annually.

In addition, state and local quality awards programs, based on Baldrige criteria, are growing in number. In 1991, three years after the start of the Baldrige Awards, there were eight state award programs. In 1997 there were 40. The number of requests for state criteria booklets has grown dramatically from 4,625 in 1991, to 84,886 in 1997. Award applications have increased from 111 in 1991, to 1,078 in 1997. The number of examiners to conduct site visits has expanded significantly, too. In 1991 there were 296; in 1997 there were 2,705. Moreover, there are 13 local quality award programs, and three state senate productivity award programs.

Internationally, more than 25 quality award programs have been established. Most of these have been operating only for the past several years, and many of them are based on the Baldrige criteria. (For information about the European Quality Award, see the article by Klaus Zink on page 33 of this issue.)

**The Malcolm Baldrige National Quality Award Recipients**

1997—Merrill Lynch Credit Corp., Solectron Corp., 3M Dental Products Division, and Xerox Business Services
1996—ADAC Labs, Custom Research Inc., Dana Commercial Credit Corp., and Trident Precision Manufacturing
1994—AT&T Consumer Communications Services, GTE Directories Corp., and Wainwright Industries Inc.
1993—Eastman Chemical Co. and Ames Rubber Corp.
1991—Solectron Corp., Zytec Corp., and Marlow Industries
1989—Milliken & Company and Xerox Corp. Business Products and Systems
For the fourth year in a row, the fictitious Baldrige Index has outperformed the Standard & Poor’s 500 by almost 3:1, says the Commerce Department’s National Institute of Standards and Technology (NIST).

The Baldrige Index is made up of publicly-traded U.S. companies that have received the Malcolm Baldrige National Quality Award during the years 1988–1996. “While stock market performance is only one indicator of business success, this study demonstrates that a quality approach to running a business can be financially profitable and can lead to increased productivity, satisfied employees and customers, and a competitive advantage,” said Harry Hertz, director of the NIST Baldrige National Quality Program.

In the fourth study of its kind, NIST “invested” a hypothetical $1,000 in each of the six whole company winners of the Baldrige Award, in the year they applied for the award—ADAC Laboratories, Eastman Chemical Company, Federal Express Corporation, Motorola, Inc., Sotelectron Corporation, and Zytec Corporation (as of 12/29/97, Zytec merged with Computer Products and formed Artesyn Technologies).

The investments were tracked from the first business day in April of the year the companies won the Baldrige Award (or the date they began public trading, if it is later) to December 1, 1997. NIST found that the group of six whole company winners outperformed the S&P 500 by more than 2.7:1, achieving a 394.5% return on investment compared to a 146.9% return for the S&P 500.

### 1988–1996 Publicly-Traded, Whole Company Award Recipients

<table>
<thead>
<tr>
<th></th>
<th>$ invested</th>
<th>Value 12/1/97</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Six Whole Company</td>
<td>$6,000</td>
<td>$29,671.64</td>
<td>394.5%</td>
</tr>
<tr>
<td>Winners</td>
<td>$6,000</td>
<td>$14,813.73</td>
<td>146.9%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>$6,000</td>
<td>$14,813.73</td>
<td>146.9%</td>
</tr>
</tbody>
</table>

NIST also tracked a similar hypothetical investment in a group made up of the six whole company Baldrige Award winners and the parent companies of 12 subsidiary winners. The 12 subsidiary winners are: Armstrong World Industries, Inc., Building Products Operations; AT&T Consumer Communication Services (now part of the Consumer Markets Division of AT&T); AT&T Network Systems, Transmission Systems Business Unit (now part of Lucent Technologies, Inc., Network Systems); AT&T Universal Card Services; Cadillac Motor Car Company (subunit of General...
Mortons; Corning Inc., Telecommunications Products Division; Dana Commercial Credit Corporation; GTE Directories Corporation; IBM Rochester, AS/400 Division; Texas Instruments Incorporated, Defense Systems & Electronics Group (now part of Raytheon Systems Company); Westinghouse Electric Corporation, Commercial Nuclear Fuel Division; Xerox Corporation, Business Products & Systems. This group of 18 companies outperformed the S&P 500 by 2.4:1, a 362.3% return on investment compared to a 148.3% return for the S&P 500.

### 1988–1996 Publicly-Traded Winners

<table>
<thead>
<tr>
<th>$ invested</th>
<th>Value 12/1/97</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 Publicly-Traded Winners</td>
<td>$7,496.54</td>
<td>$34,653.41</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>$7,496.54</td>
<td>$18,613.28</td>
</tr>
</tbody>
</table>

The methodology for this group was that $1,000 was invested in each whole company, and for subsidiaries the sum invested was $1,000 multiplied by the percent of the whole company's employee base the subunit represented at the time of the application. The same total dollar amount was invested in the S&P 500 on the same day. If a subunit was sold to another parent company, or if a company divested, it was the subunit whose progress was followed, not the parent company's. The value of the original stock at the time of the sale was determined and that dollar amount was reinvested in the new parent company. Adjusting for stock splits, the value on December 1, 1997 was calculated.

NIST also conducted a similar investment study for the 37 publicly-traded companies receiving site visits (not including the winners) as part of the Baldrige Award application process. That group outperformed the S&P 500 by approximately 35%, achieving a 157.6% return on investment compared to a 116.4% return for the S&P 500. (Names of applicant companies are confidential.)

### 1990-1996 Publicly-Traded, Site-Visited Non-Winning Applicants

<table>
<thead>
<tr>
<th>$ invested</th>
<th>Value 12/1/97</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>37 Non-Winner Site Visited Applicants</td>
<td>$10,967.70</td>
<td>$28,253.07</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>$10,967.70</td>
<td>$23,733.91</td>
</tr>
</tbody>
</table>

For Further Information
Malcolm Baldrige National Quality Award Office
A537 Administration Building, National Institute of Science and Technology
Gaithersburg, MD 20899-0001
Custom Research Inc.
Malcolm Baldrige National Quality Award Winner, 1996

Introduction

Custom Research Inc. (CRI) is a privately-owned marketing research company with approximately 100 full-time employees. Research services include new product evaluations, package studies, product tests, new product volume simulations, and market structure studies. CRI also works to measure and improve the customer satisfaction of its clients. CRI does about 400 of these projects in a year, and each of them stands alone, with its own unique business objectives and requirements.

Most of CRI’s people work directly on client’s projects as members of account teams. These teams are cross-functional, client-centered, and goal-directed. Account team members share full responsibility for every step in a research project. This culture of empowerment has existed since CRI was founded in 1974. The key to empowerment—and to the company’s success at delighting clients, improving processes, and achieving financial goals—is the development of its people.

Survey research is a $4 billion industry split among some 3,000 firms. CRI ranks 36th in size, with revenues in excess of $21 million. Its headquarters are in Minneapolis with client service offices in San Francisco and New York.

How this article is organized

The purpose of this article is to present a brief overview of the organizational leadership and management practices of CRI. The content is based on the Malcolm Baldrige National Quality Award Criteria. The organization of the article is in six parts:

- Part 1. Leadership
- Part 2. Strategic Planning and Information & Analysis
- Part 3. Human Resource Development and Management
- Part 4. Process Management and Business Results
- Part 5. Customer Focus and Satisfaction
Leaders are never satisfied

Judy Corson—Leaders have stars in their eyes. They think anything is possible. Leaders are never satisfied. Because of that they drive the process of continuous improvement.

When we started our company in 1974 it was unusual to have a woman CEO. I’d get interviewed a lot and people would ask: “Why have you been successful Judy?” I had never thought about it before, but it dawned on me that the one thing that really made me successful is that I was never satisfied. In the life of the company, we encountered different challenges and opportunities at different phases of the firm’s development. So, no matter how successful we became, there was always room for improvement.

I think we always had an instinctual feeling about excellence. This is why quality should be like breathing—you just do it! When I began to write the overview section of our first Baldrige Criteria, I faced the monumental task of summarizing everything about our company in four pages. I knew this was a key section for Examiners, so I felt a lot of pressure to make that overview the best I could.

I thought about it for weeks, and then I sat down at my computer. It dawned on me, while looking at the blank screen that day, that quality procedures had been part of our culture since the day we started our company. (Like breathing, you don’t think about it, you just do it.) Having thought about it, I could say: Leaders develop the framework of the business system and make excellence part of the company culture.

As our company grew and matured, we started writing down our beliefs about running our company. The first attempt at this, in 1977, was the development of the principles of our business. These principles fall into three areas: our clients, our staff, and our company. We still follow those principles today. We then asked a group of people in our company to develop a list of values that they felt we lived by. That happened in 1983, and the eight values they developed were adopted wholeheartedly by us, and are used today in everything we do. The first value is integrity, and the second is quality. (See Appendix for a list of principles and values.)

Later we developed our surprise and delight goals for our client partners, as a way to exceed their expectations (see star above). That was years before the Baldrige Award was even thought about. Our belief system and our culture evolved as our company grew and matured. Long after we are gone, excellence will continue to be a part of our culture. Like a star, it will always be there.
Case Study

Custom Research Inc. Malcolm Baldrige National Quality Award Winner, 1996

Because we're a small company of about 100 people, we encourage close interaction every day. Jeff and I like to say we're no further than 80 feet from anyone in the company, or an e-mail or video conference away from our branch offices. Again, the stars are there all the time; leaders have to be there all the time too.

The most important thing a leader can do is to model the behavior that they want others to follow. We don't have secretaries at CRI, for example. This means we have always answered our own phone, made our own copies, handled our own travel arrangements, and done our own word-processing. If we wanted others to follow suit, I realized that I had to lead by example and do these things too. This is the opposite paradigm of many company leaders who opt for perks when they get to the top.

Right from the beginning, a leader sets the tone. We've always done what it takes to get business done. I happen to be a stickler for cleanliness and neatness. Early on we made it clear that everyone had to clean up after themselves to keep our company looking great, and always look professional and buttoned up. Good enough was never part of our culture.

Because we have a strong culture based on an explicit set of beliefs, people can predict how I'll respond to something. I used to think being predictable was a bad thing, but I realized over the years that predictability, based on a solid set of values and principles, leads to trust. People trust you when they know how you're going to react to something.

We have an unusual leadership organization in that we don't have a CEO — we have two partners who have a 50/50 relationship. Our partnership is built on mutual respect for each other's abilities. Jeff and I, together with our two executive vice presidents, make up our Steering Committee. No one person can possibly have all the attributes of a perfect leader, but between the four of us, with complementary skills, we have everything it takes to run a successful company.

The concept of the Lone Ranger needs to die and be buried. Contrary to popular belief, good decisions can be made by committee. Our small, four-person Steering Committee is proof that it can be done. Our leadership organization is not a text book one, but we are proof that you can have a different way to manage and lead, and be successful too.

Because we don't have a formal hierarchy and organization chart, we have never
Leaders give their power to others

had an approval processes about how things get done for our clients. No matter what the expense, people just go ahead and do it.

Other leaders and innovators in our company are our managers. Every one at our company is either responsible for getting business, or doing business. These managers are the ones who understand the work well enough to improve processes and change the way business is done. They are a core of our company's excellence.

Jeffrey Pope—A leader's job is also to select people who can become the working leaders. Once you have the right people, you can give power away. I like to say that our job as leaders is to select the right people, then get out of their way. Once the right people are in place, manage by fact. One way to do this is to measure all parts of the business. Like an astronomer looking at the stars, facts are the charts that help you see the true picture. We measure the many but focus on a few. We track over 100 things while actively managing against only a subset of those measures.

From the start of the company, everyone at CRI has kept a daily time-sheet. This provided a basis for good financial data from the start. Then in the mid 1980s we turned our attention to external measures and started asking for client satisfaction feedback on every project. We've continually improved this process, and today have a one-page letter that asks our clients to check one box, telling us whether they got what they expected or not. We get about 80 percent of these forms returned to us every year.

Understand client expectations

A member of our Steering Committee interviews each new client when we start working with them. In addition, the four members of the Steering Committee conduct an annual telephone survey every summer with key people at each of our top 34 client companies.

Conduct employee surveys on regular basis

Judy and I meet with every manager twice a year and get a summary of their performance discussions with each person they're responsible for. This simple process keeps us in touch with every single person.

The tone that comes from your ethics and quality

The overall umbrella of leadership is the ethical and quality tone that you set. We're proof that a successful and profitable business can also be based on the highest ethical and quality values. Those values are like the stars we navigate by. On a few occasions, we declined to propose on projects which we felt weren't consistent with our values. We've even resigned accounts where the working relationship was tearing up our people. Those decisions send a message to every one in the company that values are more important than money.

We've always tried to care about people's lives as a whole. When we started CRI in
1974 Judy and I were both in our early 30s. But we were still the oldest people in the company. We started a profit sharing retirement system for every employee one year after the founding of the company. That’s not something most 30-year-olds are thinking about. We now have almost $9 million in trust for our people.

We followed the same belief in community outreach. Judy has been a United Way volunteer for 33 years, and last year was the general chairman for the whole Minneapolis United Way. That’s a pretty big job for a person from a small company. We’ve even gotten together a team of 30 people at CRI to paint the outside of an entire house in one afternoon on behalf of a United Way agency. All this sends a message to our people that we place importance on volunteering and community involvement.

Value your reputation

Last, but certainly not least, value your reputation above all else. We believe our reputation, as a company and as leaders, is the sum of all of our ethical and value-based decisions. So, it’s important to us that our CRI associates, clients, suppliers, and community, feel good about their association with CRI. All this might sound pretty serious, but we believe CRI is world class in fun and hoopla as well. To be a true leader, we believe you have to lead in fun, too! And we try to do that.

All of our leadership best practices can be summarized in our leadership system (see Figure 1). It starts with our leadership vision of never being satisfied. It continues with consistently communicating, and informing. We give power to our people to plan and align resources on behalf of their clients, and we use fact-based feedback to learn and improve. The cycle continues; it’s a never ending journey.

Figure 1. CRI’s Leadership System
Part 2. Strategic Planning and Information Analysis

Jan Elsesser — Good information feeds the planning process and helps us make better decisions. There are four key points that summarize CRI’s approach to these two sections: (1) Build around key business drivers. (2) Focus on a few critical things. (3) Let the people own it. (4) Communicate them widely.

I’ll first address strategic planning, one of the areas where the Baldrige process helped us the most. I must confess that for a long time I really hated planning time at CRI. It wasn’t very organized or focused, and we crammed it into a couple of months and sort of equated it with budgeting. We have come a long way and the following key principles are a big part of the improvements that we have made.

1. Developing the Five Key Drivers

We use our star icon for a lot of things. The star shown on the first page of this article, with five key drivers focused around the centerpiece goal of surprising and delighting our client-partners, summarizes our business system. In strategic planning, we look at our long-term vision and see how it fits with these key drivers. Our annual goals are developed to support that long-term vision. Each of the annual goals has to address a key driver. That assures appropriate emphasis to the things that are important to our success.

We use an affinity diagram exercise to determine our key drivers, first with our Steering Committee and then our strategic planning group. We posed four questions: A. What factors are most critical to our success? B. What are the key factors that we feel differentiate us from our competition? C. What do we do well now that will help propel us into the future? D. What elements must we do well or risk failure?

In the affinity exercise we found a huge amount of commonality and we were able to agree on five key drivers: people, processes, requirements, relationships, and results. One of the best things about this exercise is that it got us talking about what’s important for our business. Our drivers, in turn, bring great focus to our planning process. We address things that are most crucial to our business, short-term and long-term.

2. Keeping Our Annual Goals to a Single Page

We believe that a company, a work group, or an individual can’t really concentrate on too much at once. We want everyone in the company to know and share and feel that they are a part of our goals. Keeping it to one page makes it easy to communicate and easy to remember. We’d rather have a few goals and do a great job on them, than have pages of goals that never get met. Once in awhile we don’t accomplish a goal and carry it over for another year. So be it. But we make about 90 percent of the goals that we set for ourselves in one given year.

3. The People Own It

Strategic planning works for us because our people really own it. They are active participants in the process, not bystanders. We use it to fix processes, not blame, and we make it a useful tool, not a burden. At the very beginning of the process we go to our people. They are the best source of information about the issues, challenges, and opportunities that we should be considering in our planning process because they’re our
Strategic planning and information analysis should be intertwined, continued

direct link to the customer. We hold several discussion sessions, some of them pretty lively, to get their input for our planning group. And we also look at a lot of other information around those five key drivers. We develop and refine the long-term goals first. We review the key business drivers and then develop that annual one page of goals that is going to support the long-term.

4. Communicate Broadly

At this point the vision and the goals are communicated to everyone at CRI so they all understand were we are headed, and then it's in the hands of the people. Goals are prepared in the individual work units, and ultimately, this rolls to individuals for their own goals and action plans. The work groups can get pretty creative, and our planning sessions can be pretty unusual. I happen to know that one team did a part of their planning at a local amusement park. They came up with some really great goals and plans. One of their goals is to provide more insightful analysis for a client of theirs by being more knowledgeable about this client's product categories. Turns out to be a real challenge because this client has a lot of them. So each team member is going to own a couple of categories and they're developing a resource center with information on the clients' products and positioning, the competitions product, the market trends and so on. The whole team then uses this in planning, reports, and projects and analysis for this client. They took what could have been a huge task and made it a manageable goal by unchunking it.

Planning matrices like the one in Figure 2 are used by all areas so that we're sure all of their goals are aligned with the company's goals and with our key business drivers. We also have detail for the action plans— who's going to do what, by when, and how we know if we did it.

**Figure 2. Align Through Planning Matrices**

|------------------------------------------------------------|-----------------------------------------------|------------------------------|-----------------------------------------------|-----------------------------------------------|----------------------------------------------|------------------------------------------|

Part of this process involves information and analysis— are we already collecting the information that we need to assess our progress against our goals or do we have to add some measures to our information system in order to know? By the way, the concepts in this matrix and some of the other planning things that we use are borrowed from the Zytec Company, a previous Baldrige winner from Minnesota. We looked at their processes and adapted some of them for use at CRI.
The final step in our planning process is a half-day company-wide meeting in which the company's goals are reviewed and every team presents its goals. Nearly everybody gets into the act, including people who are not usually presenters. It's a very inspiring meeting and it builds tremendous buy-in to making the goals. So from being a source of information at the start of the process to presenting your goals to everyone at the company-wide meeting, our people really own this process. Everyone knows where we are going and how we plan to get there. But do our people know where we are today? They sure do, and that brings me to information and analysis.

**Information and Analysis**

This is essentially the business that CRI is in. After all, marketing research is collecting information and analyzing it for clients so they can make better business decisions. We believe in management by fact and we use a lot of information to make good decisions for our business, too. Good information is used in the strategic planning process to help us to decide where to go in the future but it also helps us day-to-day to let us know where we are right now and to see if we are making progress towards our goals.

In this information and analysis area, we followed the same four-point guideline that we used in strategic planning: 1. Build around key business drivers. 2. Focus on a few critical things. 3. Communicate them widely. 4. Let the people own it.

**1. Build Around Key Business Drivers**

We began by building our information system around our key business drivers. We collect and analyze a wide variety of information with several sources for each driver. If something is a key driver for our business then we need good reliable and current information about it. Many of the types of information that we collect and analyze are very familiar to you: client satisfaction information, employee surveys, turnover data, company financial information—all things that you probably look at in your own business. Something a little more unusual and a real challenge is the measurement of internal processes in a professional services business. When we first applied for the Baldrige we didn’t know a lot about processes—we had them but we didn’t know it. And one of the key reasons it was a challenge for us is that we couldn’t grab something off an assembly line and measure it. We aren’t a transaction-based business, and the traditional measurement tools just didn’t seem to apply. In fact, we weren’t so sure that we could measure internal processes in a service business like ours. But guess what? The Baldrige process isn’t very forgiving about that. You do have to measure. So we had to get creative. First, we had to get smarter about our processes and we started out by articulating them. Then we looked at our clients’ core requirements. For example, one of them is accuracy. Then we just went about generating ideas for the information we could collect within our own various processes to address that accuracy requirement. And if we couldn’t actually use a scale or calipers to measure, we could at least self-report because we know if we did it right or not. So that became our measurement. We now have over 100 things in our measurement system that tell us how we’re doing on our projects.
2. Focus On a Few Critical Things

Next we focused on the measures that are critical and communicated them widely. We categorized our measures to isolate the key things; some are what we call potentially fatal areas, things that can blow a project. For example, in our business leaving the lead question out of a questionnaire would be a fatal error. Other things aren’t so crucial; they might be aesthetic error, an efficiency error, things that we see internally and they work. They’re just not pretty or as efficient as they might be. We also created a quality index. This index rates the importance of each item that we measure and lets us see how we are doing over all. We review our system annually, adding measures when we need to; and we’re not afraid to drop things that don’t help us drive our business.

3. Communicate them widely

The communication part of this principle is also critical. People are making decisions on what to do and how to do it all of the time. So we share this information with everyone and we do it as close to real-time as possible. Measures are reviewed in weekly team meetings and we also roll-up everything into an aggregate quarterly quality report. Although we are a privately held company, we share everything including our financials. The only thing we don’t share is salary information. One of our new people told us that the first time she saw a monthly management summary with all our financial information in it she thought it was a huge mistake, sort of like she should close her eyes and hand it to someone with a quick apology; but we really think it’s good for all of our people to know how we’re doing all the time. Information is communicated at the work group level and the company level, and that allows all teams to see how they are doing and to analyze where they can improve.

4. Let the People Own It

The final principle, and the reason that all of this information and analysis stuff works for us, is that our people really own it. They actually develop the measures. They report the information, they collect it, they analyze it, they use it. Having a whole ton of information is pretty worthless if it doesn’t get used. And the key to the success here is that a lot of the information that we collect is self-reported and non-threatening. We’re really using this information within our work groups to fix processes and not to blame. At first we only reported the information in aggregate. We thought we didn’t want to set up an unhealthy competition between our teams, but it didn’t take very long for our people to say that they wanted information at a team level, so they can make improvements in their own work groups and take action on the data that we have. Our people have been instrumental in building our information system, one that is not a burden to them but is a useful tool. They see the results and accept ownership and accountability because the system is theirs.

Summary

In summary, we think the keys to see our success in strategic planning and information analysis are organizing it behind those four key points: Build around key business drivers, focus on a few critical goals and critical measures, communicate them widely and, probably most important of all, having them owned by our people.
Development of a CRI Star

Human Resource Development and Management

Eileen Taylor—One of our key business drivers is our people. Here’s another star—our Human Resources Star (Figure 3); it shows the development of a CRIer.

Figure 3. CRI’s Human Resources Star

The five points on the HR star are all about finding the best people, giving them the right tools, and then letting them do their job. These five key areas are not unique to us. What I think sets us apart, is the consistency in what we do—a determination, even a stubbornness, to stick to our standards in each of these five areas.

A Team Based Organization

We’re a team based organization. In 1988, after a great deal of study, we organized into cross-functional teams. As an organization it suits us very well, and has led to significant improvements in productivity, quality, client, and employee satisfaction.

Selection

Ninety percent of our employees have at least a Bachelor’s degree, and many begin their careers with us right after college. Our selection process is thorough and rigorous. We use a number of different tools, like structured interview guides, to address key dimensions, but I believe it’s our commitment to the complete process that makes the difference. Every candidate for every full time position meets with at least three, and more often four or five people before we make them a job offer, and I mean every candidate, from an entry level research assistant to an experienced research manager. By the time we make an offer, we know an awful lot about the candidate, and just as importantly, they know a lot about us.

Why do we go to this much trouble? Because we believe in promoting from within. When we make our selection decision we always consider where will this person go from this job? Generally speaking, if we can’t see at least two other opportunities for the person within the company, we won’t make them an offer.

The toughest challenge in selection, I think, is sticking to your standards. Some-
times that pool of candidates just doesn't seem to have somebody you really want to hire; and when the work is piling up, and you've been looking for a while, it is so tempting to say, well, I guess this person will be OK! We know that those hires generally don't work out, so we persist until we find someone we're truly excited about. But it's not an easy thing to do.

Development

We believe training is one of our best practices. We can show a positive correlation between training hours and increased client satisfaction. We link our training and education plans to key business drivers, and we use a number of tools to get us there. I will tell you about two that worked particularly well for us.

The first is our personal development plan book. Every new CRIer receives their book their first day on the job. It includes their new employee checklist as well as the checklist for the particular job they're starting. It's the employee's responsibility to keep this book up to date throughout their CRI career.

They work with their manager to see what's been done and what needs to be done next. When an employee moves to a new job within the company, they simply add the new checklist for that new position, and again, they and their new manager work together to see what needs to be accomplished.

There are just two of us in CRI's Human Resources Department, so we look for ways to use people throughout the company to help us build on what we can do. The training and education advisory board is one way we do that. The board is composed of seven people from across the company who meet regularly to discuss emerging training needs, recommend changes and approach, and to generally improve what we're doing. The group has been in existence for several years, and much of the success of our training efforts are due to their efforts.

Participation

We describe our culture as one of individual responsibility. That doesn't mean people go off in a lot of different directions without a plan. It does mean that people understand what they're working on. They participate in team meetings and work together on decisions to provide the best quality and service for the client. Because they participate, they have the knowledge and the power to step up and make a decision to meet the client's needs.

Without this full participation, CRIers wouldn't be prepared to exercise individual responsibility. We also know that people will exercise good decision making when they know they have management support and they have it all the time.

Communications

Effective participation depends on large part on effective communication, and that's the fourth point on the star. Our technical sharing meetings began shortly after
we reorganized into teams in 1988. It wasn’t too long before we realized we had lost an important communication link. People doing similar jobs were no longer one department where they could learn from each other. To solve this problem we instituted monthly sharing meetings. These are get together’s for people who have similar responsibilities in different teams. These sessions are an important opportunity to share learning and to brainstorm solutions.

We began our monthly good news sharing meetings several years ago, and we benchmarked the idea at another company. At the time our business didn’t seem to be growing very much and we were getting a little bit down about that. We read about this idea that there are always good things to celebrate, and we realized that was exactly what we needed. We have met every month since, and our only agenda items are to have something good to eat and to share good news. Everyone attends, including the people from our other offices by video conference, and anyone who wants to can share their personal or business good news.

**Reward and Recognition**

We also have formal recognition programs as do most companies. And we have a well defined performance management and incentive compensation program. One of the unique features of our process is the partner review. Each manager meets with the partners to discuss the performance of each person reporting to them. These meetings happen twice a year, before the performance discussion with the employees. This approach insures consistency and accountability throughout the company. It also keeps the partners in touch with how everyone is doing.

We also love to celebrate and have fun. We want our recognition programs to be inclusive and not exclusive, so our efforts are geared to encouraging everyone to do their best. You won’t find us setting up a program that rewards only those who achieve a goal first, or only those who do the most. We set goals to allow everyone who reaches the goal to enjoy the reward.

And then there’s the pure fun part of what we do to provide balance in our work life: A miniature-golf tournament in January. Family Halloween Day. And Hat Day. These and more help us to celebrate not just who we are as CRIers, but who we are in our personal lives as well.

There are also times when our rewards take us to a whole new world. We have set and met significant company-wide goals, and the celebrations have been trips to New York, San Francisco, and to Disney World for all the CRIers. And I do mean all! Not just the sales group, not just the management group—everyone!

These have been major events to celebrate major milestones in company growth. We now have a new goal and a new destination. When we reach that goal—we’re all going to London.
Process Management and Business Results

Ginger Sack and Julie Haman—At Custom Research quality is everybody’s job. It all starts with leadership and the development and deployment of a culture that expects and encourages continual improvement.

Foundation
To build a quality system, you first have to lay a solid foundation. There are two parts to CRI’s foundation. First the Steering Committee established the principles of our company which states our commitment to providing high quality research on every study. Then the group of employees identify the eight values that provide everyone with the framework to use on day to day operations (see Appendix).

Communications
After we establish the foundation, we need to make certain everyone knows about it. We must talk the talk! We introduce new employees to our company’s principles and values through a program we call Spotlight on CRI. By having the four Steering Committee members host this program, we show people that our commitment to quality starts at the top. It certainly doesn’t end with this program. CRI’s foundation is continually reinforced through articles in the company newsletter, at good news sharing meetings, and through post-it™ notes, just to name a few. We use any medium we can to keep people aware of our principles and values.

Training
At CRI all employees are trained in how to use many of the standard quality tools available, particularly root-cause analysis, process mapping, and benchmarking. These tools are necessary because all employees are assigned the responsibility of improving processes at CRI. We believe that with full employee involvement true process improvements can be identified and accepted by those in the company that actually use the processes. Changes can’t be dictated from above.

A Goal to Reduce Cycle Time
In 1990 we launched a reengineering effort. Our goal was to improve quality while reducing cycle time. This initiative was a challenge for us. You see, as our name implies, we do custom research projects. Some doubted that we could find a common thread that winds around every project that we do. Using a fishbone diagram, however, we were able to prove our doubters wrong. As you can see in Figure 4, a simplified version, even though we are structured in very diverse teams, there are clearly nine processes common to all studies. By identifying these nine, we were able to focus our energies on improving each one.

We formed task forces around these nine processes and flowcharted them, asking the “five why’s” about every step in the flow. We tried some new things, rejected some others, and within two years had made significant improvements to all nine.
But that wasn’t enough! Remember our motto—Leaders are never satisfied at CRI. Every year we take one or two of the nine processes and concentrate on making them better. The group of employees that decides what to work on next is called “the rollout task force.” This group uses measurement data and employee input to make its decision. Again, process improvements are not directed from above but from within.

**Figure 4. Fishbone Diagram for Reducing Cycle Time**

![Fishbone Diagram for Reducing Cycle Time]

**Making Expectations Clear to People**

To further bolster our foundation we needed to tell people exactly what is expected of them. We do this largely through performance standards written for each employee. One common standard is that every employee must provide high quality research services. Another is that each employee is responsible for getting into place at least one process improvement per quarter.

**Reinforcing Our Values and Principles—Internally and Externally**

Continuous reinforcement of these values happens at all levels. One example is that the reinforcement of CRI value involves teamwork. Teamwork helps us make quality goals by providing resources during peak needs. For instance, some studies require a lot of material preparation—sorting, packaging, collating and so on, and require help from everyone regardless of title. I worked at a table with everyone from assistants to vice presidents with all of us binding index cards in groups of ten. But the study shipped accurately, and on time, and our client was well served.

Value reinforcement is done by our leaders and managers every day. For example, when errors are made we focus on the process, not the person. As a way to help us realize that all of us make mistakes, our partner, Jeff Pope, tells the story about a research project he did on table lamps. Each lamp was coded A, B, and C, so his clients wouldn’t know the brand name of the lamp they were talking about. Unfortunately, when the study was over, Jeff didn’t know the brand name either. Now, each of us has our own big mistake story we could tell. But how many of us have heard one from the leader of their company.

Another way we continuously reinforce improvement is through special initiatives.
Process management and business results, continued

A year ago it took CRI five to seven days to produce our final deliverable product. We wanted to reduce this to one day. A group identified a process that we believed would work, but it needed to be tested, and we wanted to shock the system to see what would happen. So we presented the challenge to one of our client’s service teams. If this team could consistently reduce cycle time to one day, all team members would earn an expense-paid weekend vacation. We used this prize, not only to incent the team, but also as a thank-you for the extra effort that we knew that this would take. And the idea worked. The team made the goal and the company was quickly able to identify unanticipated road blocks.

Employees aren’t the only ones that need to know about your principles and values. So do your outside suppliers. The companies that conduct the in-person interview in shopping malls are essential suppliers to CRI. The quality of our end-product depends on the quality of the work produced by these suppliers. To make certain mall suppliers are trained properly, we partnered with our mall site suppliers to develop the Ready Reference Guide. This guide details all the procedures that need to be followed on every study. We also write study-specific instructions and travel to the different mall sites to aid in the training process.

We have a two-way feedback system on every project. Data is aggregated quarterly and shared with the appropriate suppliers. We tell our suppliers what we think, and we give them the opportunity to act on it. We also provide our suppliers with a lot of recognition. Here are three examples: 1. The CRI Honor Roll recognizes mall site suppliers who achieve a certain high level of performance across all the projects that they do. 2. Getting all projects completed on time is a roadblock for us. To combat this problem we developed a more lighthearted early-bird program. Every time a mall site completes a project early, they get a plastic worm. When they get 10 of these worms, they get a much nicer prize. It’s hokey, but it works. 3. Each year, based on some fairly stringent criteria, we choose two suppliers to honor with CRI’s partnering award. The winners receive a token gift and are hosted at a dinner by CRI.

Here’s an example of employee improvement: Our Coca Cola client requested that we do reports using Powerpoint software, but our processes are based on Microsoft Word. For years, Coca Cola reports required extra hours and effort. But not anymore. Laurie Jasperson, an entry-level employee, created templates to quickly and accurately transfer material from Word to Powerpoint. Laurie took it upon herself to tackle the project. CRI now saves hundreds of dollars on every Coca Cola report.

We also want to point out the importance of measuring results so we know where we’ve been and can see where we want to go. We use 100 different measures to evaluate how we’re doing. This might seem formidable but we’ve designed a system that takes no longer than 15 minutes per project to record the data.

Employee Satisfaction

Everything begins with people in our business, and recognition is a key factor. Eighty-two percent of us say that good performance is recognized, 80 percent state that...
we’re satisfied with our training, and 88 percent participate in decisions. Each of these measures is double the business service norm.

**Processes**

To get an overall picture of project processes, we created a quality index. This index weights, according to importance, the measures that we use on each project. And there’s about 100 of them. So, for example, an incorrect number on a data table would get a weight of three. Compare this with a spelling error and a question error which gets a weight of one. Out of a possible 200 clients, CRI is achieving 189. Two other index measures are accurate reports, which we deliver 97 percent of the time, and meeting or beating project deadlines which we do 94 percent of the time.

**Productivity**

In a service business this is measured in sales volume per employee. We have seen this number nearly double since we began our quality journey in 1988 (see Figure 5). Our sales revenue per full-time employee has been significantly higher than key competitors for the past six years.

![](Figure 5. Productivity (Sales Per Employee Index))

The ultimate measure of our success is whether we’re delivering what our clients expect. And we are, 97 percent of the time, the same as our benchmark Ritz Carlton. But meeting expectations is like airline safety. It’s the price of entry. In order to keep our clients coming back we must do better than maintain. And we do! This past year, we exceeded client expectations on nearly three out of every four project we conducted.

**Conclusion**

Here’s how to establish a quality system: Top leadership must lay the foundation for the culture. Next, training must be provided and systems set up to enable everyone to be involved in continuous improvement. And finally, the culture of continuous improvement must be constantly reinforced. Walk the talk, and then you too can have a quality department as large as your entire company.
Customer Focus and Satisfaction

Christine Brettingen & Thomas Neri—As account managers we're responsible for developing new clients and getting additional business from existing clients. That means customer focus and satisfaction is critical to our success. They involve two of CRI's five key drivers: requirements and relationships. Much of what we do at CRI is directed toward understanding each client's requirements, then developing plans to meet or exceed those requirements in a way that builds long-term relationships.

Customer focus

In 1988 CRI began a dramatic strategic shift, cutting our client list in half so we could build stronger relationships with our biggest clients. We analyzed our roster of 138 clients and found that the smallest 60 or so accounted in total for much less profit, and much less volume, than we thought. Those 60 clients were companies where we might do just one or two projects a year. What these smaller clients did account for was a disproportional amount of staff time. In a people-intensive business like ours, time is our scarcest resource. We were trying to be all things to all clients, big and small. Our client satisfaction was average, but not world class.

Over the next two years we shifted our strategic focus to building partnering relationships with a limited set of clients where we could do a volume of business that was cost-effective and profitable. The 60 lower-volume clients were referred to other research firms better suited to meet their needs. The results (see Figure 6) show that this strategy paid off handsomely. In the eight years between 1988 and 1995 our client list has been cut in half while our volume has doubled.

Figure 6. Strategic Shift—Payoff

![Figure 6. Strategic Shift—Payoff](image)

Our team organization, which we also adopted in 1988, offered the perfect way to understand our clients' businesses and deliver customized research solutions. Part of CRI's business is helping clients measure and manage the relationships with their customers. So, as experts, how do we manage our own client relationships? There are three steps in CRI's client relationship system. We begin with an overview and then present some detail about each step.
Overview
The first step in the client relationship system is to ask clients what they expect. With the smaller client base that we now have, CRI is able to determine specific expectations for each client, not just for groups of clients or industry segments. The second step is to measure the results. Since we make a living conducting surveys for clients, research and measurement comes naturally to us. The cornerstone of our system is to measure satisfaction on every project with every client. Once a year we also measure the health of our overall relationship with each client. These are key parts of CRI’s management by fact which is a core Baldrige value. (See Figure 7.)

Figure 7. Measuring the Results with Relationship and Project Feedback

The third step is to communicate the results throughout the company so action can be taken. In customer satisfaction research for clients, we often see that results are poorly communicated and underutilized in terms of leading to action. So, we work diligently to make sure that everyone at CRI knows about and understands whether our clients are satisfied. That’s the overview—let’s now take a closer look at each step.

Step 1. Find Out What Clients Expect
Before starting a first project for every new client, we conduct a simple interview, asking them to describe their expectations of CRI. When we first started doing this about eight years ago, we were amazed at how much we learned just by asking. A typical question we ask a new client is this: Think ahead to three months from now, when CRI has finished this first assignment. If you consider it a success, what kinds of things would CRI have done to make it a positive experience?

Here’s an example from our west-coast branch. Last year, we were awarded ongoing tracking research from Kaiser Permanente, a leading health care provider in Northern California. When we interviewed them about their needs, we learned they had had absolutely no confidence in their prior research from another company. They feared that the interviewing quality was poor, and they didn’t trust how the data was tabulated either. So, what they wanted from us was flawless data collection, and error free data tables. Ordinarily, we consider these the basics of our business, and we seldom hear that they are the key service aspects desired. But we heard this new client loud and clear, and geared our service delivery to involving them more in our processes to build a foundation for gaining their confidence.
After we’ve gathered this kind of information, we confirm our understanding of the client’s expectations in writing. That letter goes to each member of the account team so they know what’s of critical importance for that new client. We also use those expectations in account planning and for monitoring our progress.

So to sum up step one, while our client interview process is a very basic and straightforward system, we adhere to it faithfully and use the results of it company-wide to understand each of our client’s expectations.

**Step 2. Measure the Results**

This step is probably the heart of our client relationship system. We monitor client satisfaction in two ways: relationship feedback and project feedback (Figure 7). The relationship feedback shown on the left side of the chart is obtained once a year through interviews conducted by one of the members of CRI’s Steering Committee. In it we ask each client to assess their relationship with CRI in comparison to other firms they work with. We think of this as our annual check-up with each client. The second way we obtain feedback is through our project feedback system shown on the right side of the chart. If the relationship feedback is an annual check-up, project feedback is a continuous monitor of our vital signs.

We truly believe that if we know how satisfied our clients are that everything else, including better financial results, will follow. Measuring every client’s satisfaction on every single project is so valuable because it’s immediate. Typically, we get feedback within a few weeks of completing a project. This is the vital-sign measure of the health of our relationship—of how well we’re meeting our client’s expectations, but not postponing it until the annual check-up.

Since one of the things we do for a living is measure outlying satisfaction among their customers, people often ask us what type of scale we use to measure our own client satisfaction. We’ve experimented with several different scales and have settled on one that measures how well we met that client’s expectations on the project: Did the client get more than expected? What was expected? Or not get what was expected? We believe in this scale because we know that it works.

Part of the strength of CRI’s client relationship system is the participation of our clients. As mentioned earlier, our annual relationship feedback interview is conducted with every key client contact, and on project feedback, our mail questionnaire has consistently achieved an 80 percent return. This is an exceptionally high return on mail questionnaires and many people have asked us how we achieve it.

First, our clients know the feedback is important to us and we will act on the suggestions made. Second, the feedback is done in a letter format, coming from one of the CRI’s partners. We believe this gets more attention from our clients, and the personalized touch is consistent with the way we want to do business. We also make it convenient. The survey is short and to the point (see Figure 8). And last, we acknowledge every feedback letter with a brief thank you note, reinforcing its value to us.
We also know that just meeting expectations isn’t enough! Our overall corporate goal is to always surprise and delight our client partners. To us, that means exceeding, not just meeting expectations. We have quantified CRI’s service improvements over the nine years we’ve been measuring it. Our scores for exceeding expectations have gone from 45% when we started our quality journey, to 73% last year (see Figure 9). That means 73% of the time we exceeded expectations on more than 400 projects.

Step 3. Communicating the Results

Client feedback on all projects are read by the Steering Committee. When we exceed expectations, a partner places a congratulatory sticker and a handwritten note on the feedback before circulating it. Internally, this is sometimes called “management by stickers.” That may seem silly to you but to us it’s fun. It’s a rallying point for team pride and has become a CRI tradition. It’s also a good example of how quality practices don’t have to be elaborate to be effective as long as they fit your culture.

Another important strength of our project feedback is that when we miss meeting expectations on projects we can respond, and remedy a problem, before it damages the relationship. Not long ago, a client at Burger King indicated that we missed meeting his expectation on a project. Following up, we learned that the client was very time pressed and felt he was spending too much time on our report planning stage. Based on this, we developed a new review and approval process that worked within his schedule. Our feedback improved to exceed expectations on the next project.

Client satisfaction is our most important type of management information, and we treat it that way. In fact, we believe in its importance so much that part of the incentive plan for every person at CRI is determined by their client satisfaction. Finally, we consistently communicate the client’s satisfactory results throughout our company. Every single person who touched the project sees the client’s feedback on the project.
Quality Journey and Lessons Learned

Jeff Pope and Judy Corson—CRI’s quality journey has been the most significant single effort in our company’s 22 year history, and we’ve certainly learned a lot of lessons from it. Our involvement with the Baldrige Award and Criteria began in 1990 when we adopted the Baldrige Criteria as the way to run our company. That showed us two things:

1. First, we saw parts of a quality system we needed but didn’t have. For example, in a service company like ours, having measures of our processes was a big gap. That probably comes second-nature to many manufacturing companies with quality control traditions. But it was a gap for us back then.

   So, we were forced to become innovative and I believe we came up with some clever ways to measure our production processes. In contrast, since survey research is our business, measuring customer satisfaction seemed obvious to us. In fact, we’d already been measuring our own customer satisfaction for three years when we first picked up a copy of the Baldrige Criteria.

2. The second thing we learned from the Baldrige Criteria, early on, was how the pieces fit together to form a management system. We had many of the pieces in place, but we didn’t use them as a coherent management system until we got involved with the Baldrige process.

Persistence Paid Off—In Many Ways

We first applied for the Baldrige Award in 1991. We really didn’t think we were ready, but a friend who was a Baldrige Examiner encouraged us to apply anyway. That was a good decision because it launched us on an exciting and profitable journey. To our surprise we got a site visit the second time we applied in 1992. Then another site visit in 1993, and yet another site visit in 1994. We took a year off from the Baldrige Award in 1995 and applied for the Minnesota Quality Award, and we won it on our first try. That was a very positive and affirming experience for our entire organization. Minnesota has many innovative approaches built into its site visit process which made that experience an extremely positive one for everyone. Then we applied for the Baldrige again in 1996—and won! What have we learned since 1990? We have identified six key lessons we want to share with you.

1. While continuous improvement is the big reward of the Baldrige process, pursuing the Baldrige Award itself had important value to CRI. Going for the Award moved us along further and faster than we would have improved on our own. Let me tell you those annual award cycles roll around pretty fast. By the time you get your feedback from last year, next year’s application needs to be started. So, you absolutely have to keep moving, and improving, fast. There’s no other way!

   Do you know how distance runners sometime use a so-called rabbit, a runner to pace them in the early laps of a race to help them run faster? Or how people sometimes hire personal trainers to help them do a few more repetitions of a tough
Quality Journey and Lessons Learned, continued

exercise routine? That's what pursuing the Baldrige Award did for us. The Baldrige Award was our rabbit and our personal trainer to move us faster and make us work harder than we ever would have been able to do just on our own.

The site visits—all five of them—were big motivations and rallying points for our staff. They were a lot of work and—especially in the first years—there was quite a bit of tension involved. But they were also a high, like nothing else our company has ever done. In fact, when we didn't win the Baldrige on the first couple of tries, we surveyed our employees to see if they wanted to stop applying. They told us, no way! They thought these darn site visits were too exciting to give up. They really did!

2. Tenacity pays! Maybe you can tell from our history of applications that CRI is a pretty persistent bunch of people. And it does pay off. Quality truly is a journey, not a destination, and quality and performance excellence are important enough that they aren't quick fixes, and they weren't the fad of the month for us.

The Baldrige brand of performance excellence was the way we had chosen to run our company. The Baldrige is the national quality award of the U.S. So winning it shouldn't be easy. Maybe it shouldn't be quite as hard as it is either. But it shouldn't be easy! You need tenacity in business to be successful, and you need tenacity to create performance excellence. We learned from this journey that tenacity does pay. Both in winning the award and most importantly in the improvements we've realized and the results we've achieved.

3. We learned to be ourselves and develop CRI's own brand of quality, not try to fit the Baldrige mold or what we thought that mold was. We finally realized we had to assert what was right for us and what was not. For example, in benchmarking we do a lot of informal benchmarking and we think we're good at it. We also do some well targeted formal benchmarking. But with only 100 people we don't have the staff and the resources to carry out the large number of major benchmarking projects that some large companies do. We sort of apologized for that during our first couple of Baldrige site visits. Then we began standing up and saying, in effect, this is what's important for a company like ours and we're pretty darn good at it. Anything more would be a waste of time, so we don't do it, period. That attitude was a big step in maturity for us.

4. Holding ourselves up to scrutiny has been very valuable. When we applied for the award, we found that we were actually doing more in some parts of the company to create quality processes than we realized. And feedback always helps. We're a bunch of people who like honest feedback, so getting it from a team of Examiners representing America's best companies, seemed like a steal to us.

5. Using the Baldrige Criteria and applying for the Baldrige didn't cost anything. Curiously, the most frequent comment we get from business people when they hear we won the Baldrige Award is: Gee, it must have cost a lot of money! That's dead wrong. Everything, absolutely everything we've done in following the
Baldrige Criteria are things we should have done anyway to manage our company the way we wanted to.

The Baldrige Criteria contained the formula for an excellent company. We were pleased to see the '97 Criteria renamed: Criteria for Performance Excellence. We think that's exactly what they are. If your company is finding that quality, or the Baldrige cost too much, maybe you're doing things that you shouldn't be doing. That's one of the lessons we learned from the Baldrige journey. We had to pick the things that were the most important things to us but following the Baldrige Criteria and applying for the Award really hasn't cost us anything. In fact, quite the opposite.

We found that quality is good business! The Baldrige brand of performance excellence has been good business because our clients are more satisfied. In 1996, 73% of our clients said we exceeded their expectations. It's been good business because our employees are more committed and motivated. You've heard about the excitement that the Baldrige journey generated among everyone, and we've been able to measure that. In our employee survey taken just before we won the award, 94% of the people at CRI said, all things considered, CRI is a good place to work. That compares with a nation wide average of 76%.

6. Finally, the Baldrige has been good business because our financial results are up. We trace the start of our quality journey back to 1988. Since that time, our dollar volume has doubled, our percentage profit has tripled, and our dollar profit has grown by 500%. More satisfied clients, more committed employees, and better financial results. We think that's all proof that quality makes very good business sense. We have found that the Baldrige concepts are a template for performance excellence. That's the single most important lesson.

Many companies have heard of Baldrige and over a million copies of the criteria have been distributed. Why did these concepts work for us, when they don't necessarily work elsewhere? We think it's because what we call the ABC's of business (Figure 10).

**Figure 10. Why the Baldrige Criteria Worked For Us**

- **Believe in it**
- **Act on it**
- **Consistently communicate culture**

The ABCs

---

Spring 1998
A—We act on all this stuff. We just don’t talk about the Baldrige concepts, we act on them and we implement them, every day throughout the company. As marketing researchers we know that behavior is always more important than simple intentions. People at CRI know quality is important to us because we act on it. We walk the quality talk!

B—We can act because we truly believe in these approaches. We believe that quality makes a difference, and the Baldrige Criteria will result in improved business performance. We believe that having a staff of well trained, empowered people is the most important driver of our business and it makes the other four key business drivers move. So, our beliefs and our actions are linked.

C—We consistently communicate the concepts, and have actually built an entire company culture around the Baldrige version of performance excellence. The actions, the beliefs, and the consistent communication through the culture are all linked. All the pieces tie together and are consistent. One way we consistently communicate the quality system at CRI is through the star icon. It captures our goal of surprising and delighting our clients. It incorporates the five key business drivers, the five things we believe we must do well every day to be successful. This star icon has been a powerful device for communicating these key principles within our company and making the Baldrige brand of performance excellence the foundation of CRI’s culture.

Those are the lessons we’ve learned, and they’re the ones we think can be applied to just about any company. There are a lot of things different about CRI. We’re the smallest company to have ever won the Baldrige Award. We’re the first professional service firm. We’re the first company with two CEO’s. We’re the first company that includes a female CEO. So, you might think our experience would be different from many of the other winners. Yes, our approaches sometimes have been different—because of our size they have to be. But we’ve learned the same fundamental lesson as the big companies, which is that a total approach to performance excellence is the best way to run a company day in and day out! It really works!
Appendix

CRI's Principles and Values

Principles

Basic Goals
- Serve clients more effectively than any other research company on the types of projects we conduct.
- Provide high quality research on every study for every client.
- Earn the respect and trust of our clients.
- Make a healthy profit.
- Keep CRI an exciting and enjoyable place to work.
- Grow at a rate that will keep the company vital and create opportunities for all our people.

Staff Development
- Hire people with intelligence, ambition, commitment, and exceptional promise.
- Create job satisfaction by providing challenge, responsibility, and recognition.
- Give people a stake in CRI's success.
- Maintain a lean staff.
- Show concern for each other as individuals, both off and on the job.

Client Relationships
- Stick to the kinds of research we can deliver at a high level of competence, even if that means turning down work.
- View research from the client's perspective and recommend what we'd do if we were in their place.
- Deliver research at a competitive cost for work of comparable quality.
- Be open and honest with clients about cost estimates and billing.
- Maintain a standard of professionalism in everything we do.

Values
- Integrity
- Quality
- Profit
- Growth
- Professionalism
- Teamwork
- Innovation
- Recognition
CASE STUDY

Custom Research Inc. Malcolm Baldrige National Quality Award Winner, 1996

Author information

Judy Corson is a Partner and co-founder of Custom Research Inc. After graduating from the University of Minnesota, Judy began her research career at the Pillsbury Company. She developed Consumer Research Associates as a new business for Pillsbury and spun it off as Custom Research Inc. in 1974. In addition to guiding CRI to world-class status, Judy shares her philosophy and talent with professional and community organizations throughout the United States.

Jeff Pope is a Partner and co-founder of Custom Research Inc. He began his career in Chicago with Elrick & Lavidge, later moving to Peat Marwick, and then to Pillsbury as New Products Research Director, and later as New Products Marketing Manager. He left Pillsbury to co-found CRI in 1974. Jeff received an MBA, with distinction, from Northwestern University. Known for applying creative insight on product design or a fresh perspective on analyzing results, he is the author of Practical Marketing Research.

Jan Elsesser, as Executive Vice President, is in charge of sales and marketing for CRI, providing overall direction for the business development, account management, and new product development efforts for the company. She is a graduate of the University of Minnesota and has been with CRI since the firm was founded in 1974.

Eileen Taylor is Senior Vice President for Human Resources at CRI. She oversees CRI's selection, development, performance measurement, and recognition programs. Eileen graduated with honors from the University of Rhode Island and worked for the U.S. Department of Agriculture in economic research before joining CRI.

Ginger Sack is a team leader heading up the team that handles all project design, management, and analysis for CRI's largest client. A cum laude graduate of Drew University, Ginger spearheaded CRI's effort in reducing cycle time, an important part of the company's continuous quality improvement effort.

Julie Haman joined CRI as research associate in 1994, shortly after graduating, summa cum laude, from the University of St. Thomas, with a degree in marketing and social science. She is a member of one of CRI's client account teams. Julie also volunteers her time for a number of community activities.

Christine Brettingen, one of CRI's most experienced research professionals, is Manager of the San Francisco office, working with west-coast clients in consumer, high-tech, telecommunications, and hospitality industries. Christine is a Phi Beta Kappa graduate of the University of Minnesota and worked in advertising before joining CRI.

Tom Neri is an account manager and a key member of the New York office. He works with clients to understand and define their research needs, and design research to meet those needs. A graduate of Pace University, Tom is active in the American Marketing Association and is chair of the New York AMA Marketing Research Leadership Council.
The European Way to Business Excellence

Prof. Dr. Klaus J. Zink, Chair for Industrial Management and Human Factors, University of Kaiserslautern, Kaiserslautern, Germany
Thomas Bäuerle, Dipl.-Wirtsch.-Ing., University of Kaiserslautern
Thomas Brandstätt, Dipl.-Wirtsch.-Ing., University of Kaiserslautern

For the past several years, economic, political and social developments have led to a change in the framework for entrepreneurship. In particular, the growing intensity of international competition, the rising level of customer requirements, and stronger legal regulations, are demanding a new kind of management and leadership.

Products and services from companies in Japan and the United States that have adapted successfully to these challenges are of high-quality at reasonable prices. European products can compete on quality, but efforts to achieve that standard are costly and, in the end, lead to prices that are no longer competitive. The supporters of traditional management concepts—which are still dominating European management—will, in the future, be unable to cope with these new challenges. The required combination of quality and target-oriented costing can only be achieved by a comprehensive approach that includes a complete change in the whole business culture, rather than short-term concepts focused on improvements in isolated areas, implemented in times of crisis.

The success of Japanese enterprises—and also the strengthening of the U.S. economy—has shown that (among other things) Total Quality Management concepts can help to achieve considerable improvements and consequently enable economic success. The importance of comprehensive quality management concepts is increasingly acknowledged throughout Europe.

Implementing Total Quality Management requires dramatic changes in the structure and culture of an organization. This can lead to problems during the introductory phase. Consequently, TQM requires systematic internal and external preparation. It will only be possible to strengthen competitiveness if it is at first possible to develop the whole industrial system.

Because of growing internationalization—imposed, for example, by the single European market and the planned European currency—quality efforts must not be concentrated on individual countries but must attain a “European” dimension. This movement was initiated with the establishment of the European Foundation for Quality Management (EFQM).
In an initiative to propose quality as the task of top management, the presidents and chief executive officers of 14 leading European companies signed a letter of intent to found the European Foundation for Quality Management (EFQM). The former president of the European Commission, Jacques Delors, was also present at the September 1988 ceremony in Brussels. Thirteen months later, in October of 1989, the EFQM was founded. EFQM is a foundation that is financed by membership fees and support from the European Commission.

Figure 1. EFQM Founding Members

Robert Bosch GmbH, Stuttgart (D)
KLM-Royal Dutch Airlines, Amstelveen (NL)
British Telecommunications, London (UK)
Nestlé AG, Vevey (CH)
Bull S.A., Paris (F)
Ing. C. Olivetti & C., S.p.A., Ivrea (I)
Ciba-Geigy AG, Basel (CH)
Philips Electronics N.V., Eindhoven (NL)
Dassault Aviation, Vaucresson (F)
Renault, Billancourt (F)
AB Electrolux, Stockholm (S)
Gebrüder Sulzer AG, Winterthur (CH)
Fiat Auto S.p.A., Torino (I)
Volkswagen AG, Wolfsburg (D)

Purpose

The purpose of the EFQM is to systematically improve competitiveness in European industry by continuously promoting Total Quality Management. This can be seen in the Foundation’s mission and vision.

Vision

EFQM’s vision is to be a leading organization, recognized on a global basis, for the development, promotion and facilitation of a coherent approach to Total Quality Management as the vehicle for achieving business excellence in European organizations.

Mission

1. To stimulate and assist all organizations throughout Europe to participate in improvement activities leading ultimately to excellence in customer satisfaction, employee satisfaction, impact on society and business results.

2. To support the managers of European organizations in accelerating the process of making Total Quality a decisive factor for achieving global competitive advantage.

Objectives

- The European Model for Business Excellence is recognized as providing the key strategic framework and criteria for managing an organization and identifying
improvement opportunities regardless of the nature or size of that organization.

- Winning the European Quality Award or the European Quality Prize is recognized internationally as a major achievement, and the winners are acknowledged as role models of business excellence.

- EFQM is providing membership satisfaction through value-for-money services, such as: conferences, management roundtables, and publications on Total Quality Management.

- The philosophy, methods, tools, and techniques of Total Quality are accepted as a key element of curricula at all levels of education and training in Europe.

- EFQM achieves coherent and constructive relationships with national quality organizations, the European Organization for Quality (the transnational network of quality organizations, which exist in all European countries), and the European Union.

- EFQM is operating on a sound financial base.

The EFQM Seeks to Realize Vision, Mission, and Objectives of Activities in Several Fields:

- Services to Managers: Services to managers include the annual European Quality Management Forum, open days at member companies, roundtable meetings concerning special items, briefings and seminars, and also management brochures.

- Recognition: Prizes for outstanding research in Total Quality, the European Quality Award for companies and (since 1996) for public sector organizations.

- Education, training and research: In this area, the EFQM aims to establish university-enterprise networks. In addition, regular surveys on the needs and expectations of companies will be conducted, in-company training developed and realized, and research projects initiated (including an annual conference on this topic).

- Communication and information: The EFQM systematically searches for and uses contacts with media to promote TQM. Part of that is to provide information material. For example, EFQM regularly publishes the “Quality Link,” and establishes databases, documentation and case studies.

- Regional EFQM activities: Subgroups of the EFQM have been founded in all European countries.

- Joint projects with the European Organization for Quality: Within this cooperation, for example, a list of TQM consultants has been established.

The European Model for Business Excellence

The European Quality Award for companies, public sector organizations and (starting in 1997) small and medium-sized enterprises is one of the most important activities of the EFQM. With the European Quality Award, the EFQM recognizes the effort and success of companies that have achieved outstanding performance through TQM. It was presented for the first time in 1992 and incorporates.
The European Model for Business Excellence, continued

- European Quality Prizes, awarded to organizations that show excellence in the management of quality as their fundamental process for continuous improvement
- The European Quality Award itself, which is awarded to the best of the prize winners—the most successful examples of TQM in Europe.

The Way an Organization Should Work

The European Model for Business Excellence describes the way an organization works as follows:

Customer Satisfaction, People (employee) Satisfaction and Impact on Society are achieved through Leadership driving Policy and Strategy, People Management, Resources and Processes, leading ultimately to excellence in Business Results.

Winners of The European Quality Award & The European Quality Prize

<table>
<thead>
<tr>
<th>Year</th>
<th>European Quality Award</th>
<th>European Quality Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Rank Xerox Ltd.</td>
<td>BOC Special Gases Ltd.</td>
</tr>
<tr>
<td>1993</td>
<td>Milliken European Division</td>
<td>UBISA - Industrias del Ubierna</td>
</tr>
<tr>
<td>1994</td>
<td>D2D (Design to Distribution Ltd.) (former ICL Manufacturing Div.)</td>
<td>ICL Manufacturing Division</td>
</tr>
<tr>
<td>1995</td>
<td>Texas Instruments Europe Ltd.</td>
<td>Ericsson Spain S.A.</td>
</tr>
<tr>
<td>1996</td>
<td>Brisa</td>
<td>IBM SEMEA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TNT Express UK Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TNT Express UK Ltd.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Netas</td>
</tr>
<tr>
<td></td>
<td></td>
<td>British Telecom</td>
</tr>
</tbody>
</table>

Structure

The structure of the model is characterized by the separation into enablers, that lead to business excellence, and results achieved by activities in the field of the enablers. The enablers ensure:

- The involvement of all managers in driving the organization towards Total Quality
- Integration of TQM in the organization’s policy and strategy
- The organization releases the full potential of its people to improve its business continuously
- The management, utilization and preservation of resources
- The continuous optimization of all processes.

The aim of the enablers is to improve business results through increased customer and employee satisfaction regarding environmental aspects.

Characteristics

Overall, the European Model for Total Quality Management (see Figure 2) can be characterized by the following aspects:

- Dominance of customer satisfaction, which is given 20 percent of the total weighting
The European Model for Business Excellence, continued

- High priority of employee orientation and satisfaction
- High priority of identification and systematic management of (key) processes and the management of resources
- Integration of the impact on society of an organization
- The direction of all efforts towards the improvement of business results.

Figure 2. The European Model for Business Excellence

![Diagram of the European Model for Business Excellence]

The European Model for Business Excellence can serve as a basis for regular assessments of the current situation of an organization and as a way of monitoring progress. By comparing the actual with the desired situation, areas for action can be identified.

Enablers

Enablers are prerequisites for realizing business excellence in an organization. Although, the model is not prescriptive, each enabler is described by several sub-criteria that serve to highlight what is intended. For the identification of strengths and areas for improvement, it is necessary to examine the degree of excellence of the approach as well as the degree of deployment. To assess the excellence of an approach, the following questions have to be answered:

- Is there a systematic approach that is based on prevention?
- Is the approach subject to regular reviews and improvement?
- Is the approach integrated into normal operations and planning?

To evaluate the degree of deployment of the approach, it is necessary to answer the following questions:

- Is the approach applied to all relevant products and services?
- Is the approach applied to all relevant areas and functions?
- Is the approach deployed over all relevant hierarchical levels?
Leadership

How the behavior and actions of the executive team and all other leaders inspire, support and promote a culture of Total Quality Management.6

The unconditional commitment of management—especially of top management—during the implementation as well as during the stabilization of TQM, is one of the most important prerequisites for success. The provision of appropriate resources is important, but insufficient in this context. The top management of an organization has to live out the quality philosophy and act as a role model. The following areas are particularly important:7

- How leaders visibly demonstrate their commitment to a culture of Total Quality Management
- How leaders support improvement and involvement by providing appropriate resources and assistance
- How leaders are involved with customers, suppliers and other external organizations
- How leaders recognize and appreciate people’s efforts and achievements.

The basis for the realization of leadership-principles is the stabilization of the TQM concept through the integration of all promoters. Powerful leaders—top management and the chairman of the works council (representative body of the employees)—must be actively involved in the change and the development of culture and organization. As an example, Figure 3 shows the management structure at Texas Instruments Europe, which is structured according to the European Model for Business Excellence.

Figure 3. TI Europe Management Structure8

Eight Quality Steering Teams (QSTs) and the overall TI Europe Strategic Leadership Team (ESLT) were installed, each of them taking responsibility for at least one criterion. The approach ensures maximum synergy between the teams. The TI Europe Strategic Leadership Team consists of business managers and leaders of the Quality Steering Teams. It is chaired by the European president.
TI Europe's managers actively lead and invest time in the establishment, membership and chairmanship of Quality Steering Teams. These QST are formed to manage the improvement process. Most of the managers are involved in at least two teams on the European or business level, one of which they chair.9

Policy and Strategy

How the organization formulates, deploys, reviews and turns policy and strategy into plans and action.10

Achieving Business Excellence requires a concept that is oriented towards a long-term view. Therefore, while the integration of a quality philosophy in the policy and strategy of an organization is a necessary requirement, the principles of TQ also have to be used in the formulation, deployment, review and improvement of policy and strategy. These aspects can result in a modification of the organizational structure as well as of the structuring of operations, and can also lead to a change in behavior—an important development that cannot be achieved by short-term programs. Practical experience shows that such extensive organizational developments take several years.

In the European Model for Business Excellence, the following aspects are to be considered:11

- How policy and strategy are based on information which is relevant and comprehensive
- How policy and strategy are developed
- How policy and strategy are communicated and implemented
- How policy and strategy are regularly updated and improved.

The first step in the concentration and direction of organizational forces towards long-term development is the definition of a vision. A vision is a statement issued by an organization describing the type of organization it wishes to become. The following are two examples of a vision statement:

- TNT Express UK Ltd.

TNT Express UK Ltd. is a market leader in logistics and provides a comprehensive range of transportation and supply chain management services. Our mission is to be the best and most successful provider of logistics services in the United Kingdom. We achieve our aims by providing excellent standards of service on terms which allow us to well reward our employees and shareholders and to provide a sound base for continuing growth in the future.

- Design To Distribution Ltd.

D2D will become Europe's leading Contract Electronic Manufacturer in its chosen markets by providing products and services worldwide that exceed customers' expectations.

The vision then has to be turned into action. Normally, this means that missions or common values have to be deployed and translated into organizational goals which employees can understand and identify with. This process of “policy deployment”
The European Model for Business Excellence, continued

continues until all employees are integrated.

Policy and strategy as the basis for organizational planning have to reflect data that are correlated with Total Quality Management. Therefore, feedback from customers and suppliers, information about competitors and “best-in-class” organizations and feedback from employees must all be considered.

A regular review process must ensure that these data are integrated and business strategies adjusted in line with developments inside and outside the organization.

People Management

How the organization releases the full potential of its people.12

A systematic approach is needed to release the full potential of the organization’s employees to continuously improve business and the satisfaction of employees. This includes the following aspects:13

• How people resources are planned and improved
• How people capabilities are sustained and developed
• How people agree on targets and continuously review performance
• How people are involved, empowered and recognized
• How people and the organization have an effective dialogue
• How people are cared for.

In the first step, a systematic and strategic planning of human resources has to be executed. Therefore, it is necessary to compare actual and future requirements, and to determine the extent that necessary competencies already exist in the organization. On that basis, a qualitative and quantitative human resource plan can be developed. The systematic identification of the training needs of employees is essential as the basis for a target-oriented and efficient development of human resources. For example, training is often given to employees, but it usually does not take into account the different requirements of the jobs and the corresponding qualification of the people. A simple solution is to compare actual with required qualifications in a matrix. If the identified gaps can be closed through training, the employee receives specific training accordingly.

Critical success factors in general describe relevant areas of customer requirements which have to be fulfilled by the organization to ensure success in business. Those critical success factors are also used to determine requirements for the development of the employees.

The motivation of employees is a most essential factor for TQM. For example, it can be motivating for employees to be involved through small group activities.14 Depending on the kind of work, the members, and time frame of the group, different forms of small group activities are possible. Quality improvement meetings are useful for discussing quality-related items between managers and their employees. In quality circles employees on the shop-floor level solve problems they have chosen themselves. Project groups—people chosen by how their skills relate to the problem—exist until a given problem is solved or a departmental overlapping process is analyzed.
The European Model for Business Excellence, continued

Research studies show that communication is also a critical success factor for the motivation and engagement of employees. The European Model for Business Excellence therefore stresses horizontal and vertical communication—not in the sense of communicating as much as possible, but rather oriented toward the needs of employees.

Resources

How the organization manages resources effectively and efficiently

A variety of resources must be effectively deployed to support the organization’s policy and strategy. Therefore, resource criteria can be divided into the following categories:

• How financial resources are managed
• How information resources are managed
• How suppliers relationship and materials are managed
• How buildings, equipment and other assets are managed
• How technology and intellectual property are managed.

The use of financial resources must support the organizational policy and include a process of continuous improvement. In addition to that, the orientation towards long-term targets is especially important. Therefore, the management of financial resources, for example, can be based on yardsticks such as “stakeholder value.”

The management of information resources is characterized by the validity of and the access to information. The internal and external connection between departments and functions, and with customers and suppliers, is an important aspect in this context.

The optimum utilization of suppliers, materials, buildings and equipment has been part of several concepts in the past few years. Besides concepts aimed at reducing capital investment, there has been a focus on new concepts for cooperation with suppliers, and for the preservation of natural resources.

The systematic use of new technologies for product- and process-innovation and related aspects has also been discussed within the resources criteria. This includes the implementation of a process to identify new and alternative technologies and assess their impact on the organization’s business.

Processes

How the organization identifies, manages, reviews and improves its processes

The systematic management of (value-adding) processes is aimed at identification, analysis and, if necessary, reorganization to ensure continuous improvement of all businesses. In the European Model for Business Excellence, the following sub-criteria are defined:

• How processes key to the success of the business are identified
• How processes are systematically managed
• How processes are reviewed and targets are set for improvement
• How processes are improved using innovation and creativity
The European Model for Business Excellence, continued

- How processes are changed and the benefits evaluated.

The strengthening of process orientation can be achieved by a thorough improvement or radical redesign of all processes. If necessary, this will lead to a shift from a traditional functional to a more process-oriented structure of the organization. The concept of “process ownership” can then become part of a process-oriented organizational structure. To be accepted, the process owners must have the necessary authority as well as specialized knowledge.

Process management in the sense of TQM is orientated towards cross-functional processes— not only in manufacturing but in the whole organization. Therefore, the key processes which support the critical success factors have to be identified, analyzed and improved. They can only be identified by the top management, because only this group has the necessary knowledge about the general situation of the organization, both internally (concerning performance), and externally (concerning competitive position).

Figure 4. Key Processes at Design to Distribution Ltd.19

| System, product and service delivery | Competitive technology |
| Process improvement reviews          | Prospective customers  |
| People satisfaction                 | Self-assessment        |
| Supplier partnership                | Recognition            |
| Cost reduction                      |                          |

An important aspect in the optimization of key processes is the definition of interfaces between different departments of the organization or with external customers and suppliers. Additionally, structural measures have to be taken to stimulate innovation and creativity in continuous process improvement.

A basic requirement for improving the performance of key processes is to monitor them using benchmarks that are able to supply information about the success of process changes compared to the set targets.

Business Results

The results criteria monitor to what extent an organization achieved success and improvements on its way to business excellence. The company is assessed according to the following questions:20

- Are there positive trends in the data over the last years?
- Did the organization achieve its own targets?
- Has the organization’s performance improved compared to competitors and “best-in-class” organizations?
- Has the organization the ability to maintain a high level in results?
- Are the results complete with regard to the organizational structure, e.g., are there
results for all customers, products or employees?
• Do the results cover all relevant areas with regard to the criterion (for example, with regards to financial measures or employee satisfaction)?

The results criteria include the satisfaction of (external) customers and of employees, the organization’s impact on society, and the business results.

**Customer Satisfaction**

What the organization is achieving in relation to the satisfaction of its external customers.\(^2^1\)

The most important criterion in the European Model for Business Excellence is the satisfaction of the external customer, which is defined as the immediate customer of the organization and all other customers in the distribution chain of its products and services through to the final customer.\(^2^2\)

The data on customers’ view and other “indirect” measures of customer satisfaction integrate all aspects that are not explicitly mentioned in the model but are implicitly part of all enabler criteria.

Because of the value of customer orientation in a TQM approach, the following have to be the most important targets of all business activities:

• Knowledge of customers and market needs and requirements
• The management of relations with customers
• Full satisfaction of customer needs and expectations.

Current and future customer requirements have to be identified with regard to social, economic, technological and ecological developments, and a clear separation between short-term (“fashion”) and long-term development is crucial to this aspect.

A key process for a customer-focused organization is the management of its relations to customers. An adequate human resource development system and a customer-oriented information system are essential to keeping and maintaining good relations with customers.

Customer satisfaction, which is the ultimate measure of the success of an organization, must be monitored in a way that ensures that the data are representative and valid. Data used to derive key information for future planning must be collected regularly, and different approaches should be used to ensure objectivity. The following list shows possible guidelines for monitoring customer satisfaction:\(^2^3\)

• Overall image:
  - accessibility
  - communication
  - flexibility
  - proactive behavior
  - responsiveness.
• Products and services:
The European Model for Business Excellence, continued

- conformance quality
- delivery
- design
- environmental profile
- innovation
- price
- reliability.

• Sales and after sales support:
  - capabilities and behavior of employees
  - customer literature and technical documentation
  - handling of complaints
  - product training
  - response time
  - technical support
  - warranty and guarantee provisions.

• Loyalty:
  - intention to repurchase
  - willingness to purchase other products and services from the organization
  - willingness to recommend the organization.

Figure 5 shows an example of customer satisfaction monitoring from a large service company. In addition, direct measures of customer satisfaction and other relevant data can provide additional information, such as:

• The number of complaints
• Time to resolve complaints
• Warranty payments
• Awards and accolades.

Figure 5. Customer Satisfaction Indicators at TNT Express (UK) Ltd.

(1 = Unacceptable, 5 = Excellent)
People Satisfaction

What the organization is achieving in relation to the satisfaction of its people.15

Using surveys, focus groups, suggestion schemes or annual reviews, the perception of the employees concerning a large number of aspects can be collected. As with customer satisfaction, the organization has to ensure that the data are representative and valid. Possible aspects relating to the motivation of people are:26

- career development
- communication
- empowerment
- equal opportunities
- involvement
- leadership
- opportunity to learn and achieve
- recognition
- target setting and appraisal
- the organization’s values, mission, vision, policy and strategy
- training and education.

Factors relating to the satisfaction of employees can be:

- company administration
- employment conditions
- facilities and services
- health and safety conditions
- job security
- pay and benefit
- peer relationships
- the management of change
- the organization’s environmental policy and impact
- the organization’s role in the community and society
- working environment.

It is important to constantly monitor and review progress concerning people satisfaction. In doing so, it can be helpful to have data as shown in Figure 6.

If these indicators are supplemented by other data—for example, on absenteeism and sickness, staff turnover or accident levels—realistic information about employee satisfaction can be obtained. The most important area in the field of people satisfaction is that after surveys the results are published, and action is taken, in order to avoid employee demotivation.
The European Model for Business Excellence, continued

Impact on Society

What the organization is achieving in satisfying the needs and the expectations of the local, national and international community at large (as appropriate). This includes the perception of the organization’s approach to quality of life, the environment and the preservation of global resources, and the organization’s own internal measures of effectiveness. It will include its relations with authorities and bodies which affect and regulate its business.28

Because of its consideration of an organization’s impact on society, the European Model for Business Excellence is different from other approaches to quality management. Because of the great importance of environmental conservation in Western Europe, the integration of these criteria in the model is particularly relevant. Areas addressed include the community’s perception of the organization’s impact on society as well as other “indirect” indicators concerning:29

- the performance as a responsible corporate citizen
- involvement in the communities where it operates
- activities to reduce and prevent nuisance and harm from its operations and/or within the life cycle of its products
- reporting on activities to assist in the preservation and sustainability of resources.

Along with direct image surveys, measurements such as the number of complaints, offenses against national and international laws, the number of dangerous accidents, the amount and types of awards and accolades, can give important information concerning the organization’s impact on society. Possible areas to address are shown in the Figure 7.

Figure 7. Examples of Rank Xerox’s Impact on Society30

- Bronze Star Award for two copier packaging designs
- Blue Angel Award to Xerox 5352 and 5614 copiers
- Number of reprocessed components used reached over three million
- Percentage of recycled components used just under 80 per cent
The European Model for Business Excellence, continued

Business Results

What the organization is achieving in relation to its planned business objectives and in satisfying the needs and expectations of everyone with a financial interest or other stake in the organization.31

The European Model for Business Excellence was the first model that explicitly integrated business results. The Malcolm Baldrige National Quality Award now also includes this criterion.

The business results are differentiated between financial and nonfinancial results. Financial gauges could include the following aspects:

- profit and loss account items (e.g., sales, net profit)
- balance sheet items (e.g., total assets, working capital, long term borrowing)
- cash flow items (e.g., operating cash flow, financing cash flow)
- other relevant indicators (e.g., return on assets, shareholder value).

Nonfinancial gauges include internal efficiency and effectiveness indicators which are vital to the organization’s continuing success. Nonfinancial measures should include information about the critical processes that were described in the criteria “processes” and “resources.” Figure 8 shows an example of financial results. The data could include:

- overall performance (e.g., market share)
- key processes (e.g., defect rates, cycle time)
- information (e.g., accessibility, integrity)
- supplier and materials (e.g., defect rates, response time)
- assets (e.g., utilization)
- technology (e.g., innovation rate, patents).

Figure 8. Shareholder Value and Net Revenues at SGS-THOMSON 32

Conclusion

The European Model for Business Excellence and the Malcolm Baldrige National Quality Award

Comparing the criteria of the two quality models of the year 1997, one can state an area of correspondence that extends over the following aspects:
Conclusion, continued

- the high importance of customer and employee satisfaction
- the necessity of leadership engagement, which is integrated in the organization’s strategy and which has to be deployed to operational goals
- the systematic management of processes.

The most visible difference between the two models is the criterion “Customer and Market Knowledge” in the Malcolm Baldrige National Quality Award, for which there is no counterpart in the European Model for Business Excellence. In the European model, customer orientation is expected to be the “overall” target of all enabler criteria. The need for a separate customer criterion within the enablers has to be and is being discussed internally with regards to the review process of the European model.

Both models—and this is very important—have developed from a “quality” model in the traditional sense to a model for Business Excellence, a model to assess the whole organization and to manage its operations.

Summary

First of all, it is important to note that the discussion on Total Quality Management began very late in Europe, compared to the rest of the world. But the conviction that such a concept to achieve business excellence can be of essential help in regaining and ensuring competitiveness is now spreading over Europe.

The following aspects have proven to be prerequisites for a successful implementation and stabilization of TQM:

- The implementation of a holistic management concept such as TQM must be seen as a long-term development of an organization. The necessary changes in the organizational structure and behavior of all employees can take several years.
- Short-term successes are important for the motivation of all participants and can be achieved by improvement projects. One must, however, ensure that the concept is not reduced to a “flavor-of-the-month” program.
- It is necessary to have an organizational culture, with common priorities defined in vision, missions and values. These common priorities must be deployed over all functions and all hierarchical levels.
- The formulation of targets is only possible if the current situation of an organization is identified and understood. Therefore, identifying the initial position and progress at regular intervals with the help of self-assessments (for example based on the European Model for Business Excellence) is strongly recommended.
- The most critical success factor is the behavior of management. It is essential to act consistently as a role model, provide resources and realize changes in structures despite resistance.
- If quality ceases to be a separate item, and instead becomes a part of the daily routine, then TQM is realized successfully and is made an integral part of the organizational culture.
Prof. Dr. Klaus J. Zink is Professor and Chair for Industrial Management and Human Factors at the University of Kaiserslautern. He also heads the research institute “Technology and Work” at the university.

Professor Zink studied Technical Business Management at the University of Karlsruhe. He then was working as an Assistant Professor at the Institute for Industrial Engineering and Human Factors (University of Karlsruhe). In 1975 he finished his Ph.D. studies (Dr.rer.pol.) and was awarded the “Fritz-Giese-Preis” for his doctoral thesis. In 1978, he became Professor at the University of Wuppertal.

He has authored several books and more than 150 essays and articles, such as “New Forms of Work Organization,” “Ergonomic Aspects of New Technologies,” and “Quality Management,” and created visions for the development of organizations and the people working in these organizations.

Besides working as a management consultant for selected companies and his membership in several national and international committees, he has represented Germany on the jury of the European Quality Award since 1992.

Thomas Bäuerle, born in 1967 in Stuttgart (Germany), achieved a Master in Business and Engineering at the University of Kaiserslautern. Since 1993 he has been an assistant lecturer to Prof. Dr. Klaus J. Zink. From 1994 to 1996 he worked in the research group, “Quality Management,” at the University of Kaiserslautern. Since 1996 he has worked at the research institute, “Technology and Work,” in Kaiserslautern.

He is managing a project on “Business Process Controlling” together with a major German electronics company. He is also internal TQM coordinator at the research institute and EQA Assessor Trainer. His main field of interest is Total Quality Management and, in particular, instruments for realizing customer orientation. He has published numerous articles on Total Quality Management.

Thomas Brandstädt, born in 1966 in Voelklingen (Germany), achieved a Master in Business and Engineering at the University of Kaiserslautern. Since 1993 he has been assistant lecturer to Prof. Dr. Klaus J. Zink. From 1994 to 1996 he worked in the research group, “Quality Management,” at the University of Kaiserslautern. Since 1996 he has worked at the research institute, “Technology and Work,” in Kaiserslautern.

He manages projects in SME’s (e.g. electronic industries) where he implements process oriented organizational structures in accordance with the EQA-model. He is currently responsible for two projects dealing with the implementation of quality management in local government, with a focus on process management. His main research field is the implementation of process oriented structures in SME’s and in the public sector. He has published a series of articles on those subjects. Mr. Brandstädt is also an EQA Assessor-Trainer.

Notes


3 See European Foundation for Quality Management (Ed.): The European Quality Award 1997 -
Notes, continued


6 Ibid., p. 15.

7 Ibid., p. 15-16.

8 Ibid., p. 88.


11 Ibid., pp. 17-18.

12 Ibid., p. 19.

13 Ibid., pp. 19-20.

14 For detailed information about small group activities see Zink, K.J.: TQM als integratives Managementkonzept: das europäische Modell und seine Umsetzung, München/Wien 1995, p. 307-326.


16 Ibid., pp. 21-22.

17 Ibid., p. 23.

18 Ibid., pp. 23-24.


21 Ibid., p. 25.

22 Ibid., p. 35.

23 Ibid., pp. 25-26.


26 Ibid., pp. 27-28.

27 Figure taken from: Jones, A.: TNT Express (UK) Ltd - People management and people satisfaction, in: Zink, K.J. (Ed.): Successful TQM: Inside stories from European Quality Award Winners, Gower Publishing Ltd, Hampshire 1997, p. 162.


29 Ibid., pp. 29-30.


Key Measures For Organizational Performance

Susan West Engelkemeyer, Assistant Professor of Management, Babson College, Wellesley, Massachusetts

Many organizations are challenged by how to effectively and efficiently pilot an organization toward attaining its mission. Traditional measurement systems provide incomplete (or even inaccurate) feedback on progress against strategic goals. When used effectively, a balanced set of measures can link an organization's vision, mission, and strategy throughout all levels with the application of practical measures that monitor and track progress against strategic goals and objectives.

This article provides information on characteristics of effective measures, ways to strategically link measures at all levels of the organization, and guidelines for the development process. Additionally, the Key Measures Initiative and Pilot Measures for Babson College are detailed and discussed.

To use the analogy of an airplane, how many of us wonder if our organizations are heading toward the direction of vision and mission statements? How many organizations will end up at a completely unintended destination? How often do we wonder what measures and milestones would help our organization achieve strategic goals? What set of measures would ensure that one area of performance would not be enhanced at the detriment of another? In order to reach our intended destination, many of our organizations need a comprehensive set of indicators and measures from a fully-equipped instrument panel.

There are three cardinal rules of flying: aviate—keep the aircraft straight and level and keep the engine running; communicate—gather information on weather, traffic or other conditions; and navigate—get the aircraft to its intended destination. In order to effectively pilot an aircraft (avitate, communicate, and navigate), it is essential to constantly monitor basic instruments, assimilate the information that the various measurements provide, and make necessary adjustments.

To aviate, the pilot needs to monitor airplane "attitude" information and engine data. Attitude information is provided by the turn and bank indicator (which indicates if the wings are straight and level), the airspeed indicator (which is most critical during takeoffs and landings), and the altimeter (which indicates altitude). Basic engine information needed to effectively aviate includes the oil temperature, the tachometer, and the
Key Measures for Organizational Performance

Introduction, continued

fuel gauge. Inattention to any one of the instrument readings could spell disaster. A person can be an acceptable aviator if they can take off, fly and safely land. However, the real key is to effectively communicate your direction and navigate to reach your stated destination.

You need a radio to be able to communicate about traffic, weather and other relevant conditions. Use of a compass in combination with an ADF (air direction finder) can help you know how you are progressing toward your intended final destination as you pass over low-frequency homing devices along the way. Although many more instruments are important to successful flight, the nine mentioned above are perhaps some of the most basic, or key indicators.

To successfully pilot an organization, information is needed on proper direction and feedback on progress against strategic goals along the way (navigation). Key internal measures provide data on organizational factors, such as employee satisfaction and effectiveness of the reward and recognition system (aviation). Other factors indicate if the organization is flying straight and level toward its goals, maintaining a sufficient pace to distance the competition, and maintaining enough altitude to have full view of the landscape and pass over hazards along the way (aviation). Key benchmark and other external data provide important comparative and competitive information, and other internal information provides important information on strategic goals in order to facilitate alignment (communication).

Why implement key measures?

Leaders can implement key performance measures to improve the strategic management of an organization. They can monitor the progress of key performance measures that are linked to the strategic goals of an organization, enabling the positioning of the organization for competitive excellence; the key measures that identify milestones and performance indicators guide the organization and document progress against strategic goals. Organizational key measures filter down into divisional, workgroup and individual measures, which enable strategic alignment throughout the organization.

The benefits of institutional key measures include:

• Feedback on how the organization is performing on strategic goals
• Predictive capability from trend analysis
• Focus for the entire organization on a broad set of measures
• Prioritization of strategies and actions based on results

There is a measurement renaissance afoot in corporate America. Industry leaders have discovered that measurement plays a crucial role in translating business strategy into results. And those executives who are enlightened to this way of thinking surely will continue to reap bottom-line benefits for their organizations. [Lingle and Schiemann, 1996, p. 56.]
Why implement key measures, continued

- Broader and more comprehensive data for decision-making that reduces the possibility of improvements being made in one area at the expense of another.

Development of key measures

Figure 1 provides a synthesis of the literature on characteristics of effective performance measures [Hyndman and Anderson, 1991; Lingle and Schiemann, 1996; Maskell, 1994; Thor, 1995]. Essentially, key measures should provide relevant information that enables managers to obtain feedback on performance relative to strategic goals, identify where attention is needed and what action to take, and at the highest level, provide a balanced perspective of organizational performance.

Figure 1. Characteristics of Effective Performance Measures

<table>
<thead>
<tr>
<th>Effective measures:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Relate to strategic goals. Key measures</td>
</tr>
<tr>
<td>must be linked to what is important to</td>
</tr>
<tr>
<td>the organization.</td>
</tr>
<tr>
<td>• Contain a blend of financial and</td>
</tr>
<tr>
<td>non-financial indicators. The measures,</td>
</tr>
<tr>
<td>in combination, must provide an</td>
</tr>
<tr>
<td>understanding of how effectively and</td>
</tr>
<tr>
<td>efficiently the organization is</td>
</tr>
<tr>
<td>performing.</td>
</tr>
<tr>
<td>• Focus on the vital few elements to</td>
</tr>
<tr>
<td>measure. The measures must be complete;</td>
</tr>
<tr>
<td>however, too many measures create</td>
</tr>
<tr>
<td>confusion and lack of focus—15-20 Level</td>
</tr>
<tr>
<td>1 measures are suggested (a discussion</td>
</tr>
<tr>
<td>of levels appears on page 55).</td>
</tr>
<tr>
<td>• Foster improvement. The measures should</td>
</tr>
<tr>
<td>indicate where performance can be</td>
</tr>
<tr>
<td>improved.</td>
</tr>
<tr>
<td>• Are well communicated throughout the</td>
</tr>
<tr>
<td>organization. Thus, all employees have</td>
</tr>
<tr>
<td>a common focus and understanding of the</td>
</tr>
<tr>
<td>critical success factors for the</td>
</tr>
<tr>
<td>organization.</td>
</tr>
<tr>
<td>• Are reviewed as often as appropriate.</td>
</tr>
<tr>
<td>The appropriateness and completeness of</td>
</tr>
<tr>
<td>the key measures must be monitored, and</td>
</tr>
<tr>
<td>measures need to be revised as</td>
</tr>
<tr>
<td>appropriate.</td>
</tr>
<tr>
<td>• Provide information on level, trend and</td>
</tr>
<tr>
<td>comparative/competitive data. Performance</td>
</tr>
<tr>
<td>must be placed in the context of</td>
</tr>
<tr>
<td>comparative and competitive data as well</td>
</tr>
<tr>
<td>as against historical standards.</td>
</tr>
<tr>
<td>• Are consistent with rewards, recognition</td>
</tr>
<tr>
<td>and management style. Misalignment</td>
</tr>
<tr>
<td>between performance measures and the</td>
</tr>
<tr>
<td>performance management system of the</td>
</tr>
<tr>
<td>organization inhibits effective use of</td>
</tr>
<tr>
<td>the established measures.</td>
</tr>
<tr>
<td>• Focus on the long-term well-being of the</td>
</tr>
<tr>
<td>organization. Measures that are not</td>
</tr>
<tr>
<td>future-oriented will not provide adequate</td>
</tr>
<tr>
<td>opportunities for response and effective</td>
</tr>
<tr>
<td>change to ensure future success and</td>
</tr>
<tr>
<td>well-being of the organization.</td>
</tr>
</tbody>
</table>

The first two characteristics in Figure 1 suggest that effective measures should relate to strategic goals and contain a blend of financial and non-financial indicators. These two characteristics have perhaps the greatest impact on the method used to develop the measures as well as their content, and will be discussed in detail.
If you don’t know where you’re going, any path will take you there. — Sioux proverb

Many authors discuss the importance of key measures to organizational performance and strategy [Kaplan, 1994; Kaplan and Norton, 1993 and 1996; Lingle and Schiemann, 1996]. In a national survey of 203 executives, Lingle and Schiemann [1996] stated that the most significant conclusion from their research was that “measurement plays a crucial role in translating strategy into results.”

Kaplan and Norton [1996] indicated that companies that applied a “balanced scorecard” approach found an unanticipated benefit: “its value as the cornerstone of a new strategic management system.” The scorecard was found to be a way for companies to begin “linking long-term strategic objectives with short-term actions.” (Scorecards will be discussed more fully on page 57.) Most of the authors who indicated a link between strategy and key measures did not suggest a specific approach for creation of strategy-based performance measures. Kaplan and Norton [1993] suggested that measurements begin with vision and strategy, then flow through the four scorecard areas into critical success factors and critical measurements. This approach, however, did not differentiate between (or discuss how to link) measures at different levels in the organization.

In order to link the measurement system to key business objectives and ensure organizational alignment, performance measures should be derived from organizational strategy and cascaded down through the organization. Figure 2 details how business strategy can be translated into key measures at all levels of the organization.

Figure 2. Strategy-Based Key Performance Measures

![Diagram of strategy-based key performance measures]

Goals and Objectives

- Vision/Mission
- Business Strategy
- Strategic Business Objectives
- Critical Success Factors
- Key Business Processes/Departments
- Process Measures

Level 1: Business Unit

Level 2: Key Processes

Level 3: Work Group
The development of key measures begins with the vision and mission of the organization. These, in turn, help define the business strategy and the strategic objectives of the organization. Three levels of key measures cascade down from the strategic business objectives: Level 1, business unit (high-level) measures; Level 2, key process/departmental (middle-level) measures; and Level 3, work group (lower-level) measures. Although linked, the three sets of measures will differ in scope and level of detail. Lower levels determine appropriate measures that link to and indicate progress toward the higher level objectives and measures. Measures become more specific as one moves deeper into the organization.

Critical success factors at the company or business-unit level have the most direct link to business strategy. These are the things that a company must do well for its strategy to succeed. Measures at this level provide information on the overall health and well-being of the entire organization. These measures may be hard to quantify and are not necessarily directly linked to any one particular process in the organization. A review of measures at this level would indicate general areas where problems may be occurring and would provide guidance on where to start an improvement process. However, the measures are too abstract or aggregate in most cases to provide root cause information. What they do provide is important information on areas of the organization that are performing well, and areas that are underperforming. Level 1 measures can be seen as the thermometer of an organization. An abnormally high or low reading would indicate a potential problem, and only by moving down in the organization could the root cause and subsequent fix be found.

The key process/departmental (Level 2) measures are derived from the objectives and measures that shaped Level 1 measures. These measures are focused on the key business processes or departments that directly impact the critical success factors.

The data collected at the work group level (Level 3) are generally direct, and flow from middle-level objectives and measures. Often, the data collected at the work group level feed into and inform higher level measures, as the data “roll up” into higher-level measures. Figure 2 shows that objectives and measures cascade down, and data and information roll up. This has implications for the information system required to support key measures.

Volonino, et. al. [1995, p. 105], discuss the need for executive information systems (EIS) to “support diverse classes of business data (e.g., external, internal, structured, and unstructured) and distinct classes of users (i.e., executive as well as non-executive users).” The authors discuss the need for systems that provide access to diverse types of information as well as methods to gain insight into and communicate with others about the data and information. The EIS that supports workflows becomes integrated into business processes and tied to the corporate strategy (a three-tiered information system that supports the three levels of measures suggested above), and links the functional aspect of lower-level data to key processes and ultimately to the current business vision and strategy of the organization.
Figure 3 provides an example of the cascading process for a hypothetical consumer goods manufacturing firm. The business unit measures (critical success factors) are articulated and used as input into developing linked middle-level measures, which in turn are used as a basis for lower-level or work group measures.

Figure 3. Three Levels of Key Measures

The measures presented in Figure 3 are not intended to be a complete set of measures, rather they are intended to provide an example of how the objectives and measures can flow down the three levels, and how the data collected at lower levels can feed into and roll up into higher levels. Assume the hypothetical company this example represents has a strategic business objective to be number one or two in the market for one of its primary products. To remain competitive, the company would have to introduce new or reformulated products on a regular basis. Therefore, a critical success factor may be the proportion of sales from products developed in the last three years. Research and Development would be a key process that would in part enable the company to have a high proportion of sales from new products. A measure of the cycle time for new product development would indicate how quickly products come to the market. Stepping down into the work group level would be the lead time for package design and artwork, a key component of any new product design or redesign. Rolling up from the work group measure, lead time for package design would be one component of the cycle time for new product development, and new product cycle time in turn is one of the factors that impact the proportion of revenue from new products.

Linking measures to strategy and cascading measures down through the organization ensures focus on factors that impact strategic goal attainment and facilitates alignment of goals, objectives, strategies and actions. In order to have a complete set of information to pilot the organization, a blend or balance of measures is also necessary.
The Balanced Scorecard

I look at the bottom line. It tells me what to do. —Roger Smith [Thor, 1995, p. 122]

Financial performance, until recently, has dominated measurement systems. A broader set of measures can help an organization effectively balance internal, external, short-term, long-term and competitive factors. Several authors call for financial in combination with other types of measures to better monitor performance [Birchard, 1995; Eccles, 1991; Lingle and Schiemann, 1996; McNair, et al, 1990; Rubin, 1995].

Kaplan and Norton [1992] studied twelve companies at the leading edge of performance measurement to derive the “balanced scorecard.” The balanced scorecard, one approach to key organizational performance measures, provides a set of measures that give top managers a “fast but comprehensive view of the business.” This includes financial measures (which indicate results of actions already taken) in combination with operational measures on customer satisfaction, internal processes, and the organization’s innovation and improvement activities (which in combination are the drivers of future financial performance). According to the authors, the balanced scorecard answers the following questions:

<table>
<thead>
<tr>
<th>Scorecard Category</th>
<th>Question Answered</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Financial</td>
<td>How do we look to shareholders?</td>
</tr>
<tr>
<td>• Internal processes</td>
<td>What must we excel at?</td>
</tr>
<tr>
<td>• Customer</td>
<td>How do customers see us?</td>
</tr>
<tr>
<td>• Innovation and Learning</td>
<td>Can we continue to improve and create value?</td>
</tr>
</tbody>
</table>

Kaplan and Norton were the first to suggest specific categories within which measures should be developed. The internal measures link to processes and the customer perspective determines if processes deliver and are measured in terms important to the customer. The innovation and learning category focuses on the long-term health and prosperity of an organization. This is perhaps the one factor that may not necessarily result in measures from a strategic-cascading process. According to Kaplan and Norton [1992], “a company’s ability to innovate, improve, and learn ties directly to the company’s value.” This category of measures should focus on product/service and process improvement, two ways to sustain growth and development—one from the top (revenue) and one from the bottom (expense) line. The financial measures indicate how effectively the strategy and process measures are reflected in measures of value for shareholders and other stakeholders.

The process for developing key measures

Kaplan and Norton [1993 and 1996] and Thor [1995] suggest guidelines on an effective process for developing key measures. (See Figure 4 for a summary.)

A key component of effective measurement development is testing and piloting of proposed measures, because this is the only way to know if there are gaps, overlaps or interpretation problems with the proposed measures. In addition, involving those being measured in the development process facilitates buy-in and understanding of organiza-
The process for developing key measures, continued

The development process should include:

- An appropriate strategic plan or its equivalent
- Involvement of those being measured in the development of the measures
- Testing of proposed measures with real data (if possible)
- Pilot testing of measures
- Clear communication that the purpose of the measures is for continuous improvement and competitive excellence.

Benefits:

- Ensures measures support strategic goals and enables strategic alignment
- Facilitates buy-in and understanding of organizational linkages
- Determines if data are aids to decision making and identification of root causes
- Identifies interpretation problems and gaps or overlaps with current measures
- Assures employees that the focus is on process improvement, identification of root causes and aids for decision making, not assignment of blame for poor performance.

Measurement Blockers

What other factors, if not attended to, will be measurement blockers? Lingle and Schiemann [1996] present the most extensive discussion on factors that inhibit the effective implementation and use of key measures. They found the four most frequent barriers to be:

- Fuzzy objectives—measures in financial and operational areas tend to be the most precise and easy to quantify. However, many companies lack precision in objectives and measures in the customer, employee and change areas.
- Unjustified trust in informal feedback systems—(a.k.a. management by anecdote and intuition). Informal feedback mechanisms provide important information about possible problems, but may only be indicative of the “squeaky wheel.” Companies must be disciplined to use valid and reliable means to identify and confirm issues and problems.
- Entrenched measurement systems—doing what has always been done is the easiest path to continue; all companies have resistance to change. However, in the words of Rita Mae Brown “The definition of insanity is doing the same things over and over again and expecting different results.”
- The activity trap—a focus on activities and not processes and results. Companies must be disciplined to focus measures on key processes and their outcomes in order to ensure that they are not only doing things right but doing the right things.
In order for the measurement system to be successful, there is one more critical element: its link to the reward and recognition system. Without this link it is hard to imagine how the measurement system could be used to drive change in the organization. Only when executives “put their money where their measures are” will measures “become integral to how a business is directed and run” [Lingle and Schiemann, 1996].

**Measures in Higher Education**

While college degrees are highly esteemed, the value added by the educational process has become increasingly suspect. [Massy, 1996, p. 3]

There is increasing pressure for more relevancy and accountability in higher education; the industry is being pushed to demonstrate the value-added of an education and indicate how all areas of the institution contribute to strategic goals and facilitate measurable student outcomes.

Higher education has traditionally relied heavily on input measures (e.g., SAT scores, percent of faculty with Ph.D.s), with attention also given to output (e.g., employment data, graduate school acceptance) and financial measures (e.g., endowment, giving and budget). However, these measures provide an incomplete (and often inaccurate) picture of the performance of colleges and universities.

According to Banta and Borden [1994], true performance indicators should “derive their significance from their ability to link outcomes both with purposes and with processes.” According to the authors, performance indicators should:

- have a clear purpose,
- be coordinated throughout an organization or system (vertical alignment),
- extend across the entire range of organizational processes (horizontal alignment),
- be derived from a variety of coordinated methods, and
- be used to inform decision making.

These characteristics mirror those found in the business-related literature. Banta and Borden [1994] claim that “academics have not been able to identify indicators that would satisfy the twin purposes of accountability and improvement.” Yet performance indicators are a means to operationally define institutional mission and goals and to monitor progress toward their achievement, and to measure and monitor key processes that are vital to strategic goals.

The literature contains numerous examples of performance measures and balanced scorecard measures for business and industry [Kaplan and Norton, 1992, 1993, 1996; Lingle and Schiemann, 1996; McWilliams, 1996; Newing, 1994; Vitale, et. al, 1994]. The literature also contains a number of examples of performance measures in higher education [Banta and Borden, 1994; Dolence and Norris, 1994; Honan, 1995; Ping, 1993; Taylor and Massy, 1996].

Banta and Borden [1994] discuss the 20 indicators of effectiveness for Midlands
Measures in higher education, continued

Technical College (Columbia, South Carolina). They include measures such as student knowledge and skills acquired in the major area of study, survey responses from employers and receiving institutions on the success of employees or transfer students, and student perceptions of the role of the college in achievement of their personal and career goals. Although a complete list of measures was not provided, it appears that these measures focus heavily on the results or outcomes of the teaching and learning process. What is not apparent is a focus on measures of efficiency and effectiveness of the key processes (academic and administrative) that are critical to the educational process.

Cornell College (Iowa) has created 20 institutional performance indicators, including both current and historical data on enrollment, admission rates, entering student academic profiles, percentage of freshmen on financial aid, Iowa versus out-of-state residents, diversity of the student body, attrition rates, graduation rates, student-faculty ratio, utilization of part-time faculty, top ten academic majors, average revenue per student, education and general fund expenditures, endowment and annual fund, private gifts, and alumni participation, according to Honan [1995]. These indicators are heavily financial, input, and output (or outcomes) oriented, with no apparent measures relating to internal processes.

According to Banta and Borden [1994], Samford University (Birmingham, Alabama) has a process-oriented performance measurement system that consists of measures from critical points in each process. Samford’s critical processes, those considered essential to institutional success, include enrollment management, learning, environment management, marketing, and compliance with regulations and standards.

Ohio University monitors six general areas of performance, including student preparation and demand, general productivity measures, student and alumni satisfaction, educational value added, costs and efficiency, and program quality control, according to Ping [1993]. It appears that these measures include financial and internal process measures.

Dolence and Norris [1994], provide a complete list of key performance indicators for a state university and a denominational college. The University of Northern Colorado has 20 key measures, each with a current value, five-year goal, 10-year goal and the metric used. The measures tend to focus heavily on enrollment factors and financial data. The following is a complete list of key measures for the Univ. of Northern Colorado:

- Undergraduate FTE enrollment
- Graduate FTE enrollment
- Off-campus cash funded enrollment
- Academic quality of entering freshmen
- In-state resident students
- Minority share of UNC graduates
- Six-year graduation rate
- Undergraduate fall-to-fall retention rate
- Doctoral degrees awarded
- Alumni attitude audit
Illinois Benedictine College has 32 key performance indicators, with five years of historical data where available. The measures are in eight categories: enrollment, student progress, quality of students, quality of programs, faculty, financial conditions, facilities, and campus and community life. They are as follows:

- **Enrollment**
  - FTE students
  - New transfers
  - Residential students
  - Undergraduate headcount
  - Undergraduate FTE
  - Minority student body (%)
  - Total graduate headcount
  - Graduate SCH
  - Graduate FTE

- **Student progress**
  - Undergraduate fall-to-fall retention
  - Undergraduate five-year graduate rate
  - Graduate retention rate
  - Graduate graduation rate

- **Quality of students**
  - Top high school quartile (%)
  - Average ACT score
  - Percent < minimum ACT
  - Percent over 28 ACT

- **Quality of programs**
  - Program quality standards

- **Faculty**
  - Percent minority
  - Student-faculty ratio
  - Percent undergraduate SCH by PT faculty
  - Average graduate class size

- **Financial conditions**
  - Annual philanthropic contributions
  - Value of endowment
  - True endowment
  - Funds balance
  - Contribution from academic programs
  - Tuition as percent of revenue
  - Tuition discounting (%)
Measures in higher education, continued

• Deferred maintenance
  • Facilities
    • Facilities quality index
  • Campus/community life
    • Campus life quality index

Strategic Indicators in Higher Education, [Taylor and Massy, 1996] has data on more than 100 indicators from several hundred colleges and universities. The data include financial measures as well as process efficiency and process outcome measures. Examples of financial measures include tuition and fees as a percent of total revenues and market value of endowment per full-time equivalent (FTE) student. Process efficiency measures include instructional expenditures per FTE student and student-faculty ratios. Process outcome measures include factors such as percent of first-year students who matriculate and book and monograph volumes per FTE student. Granted, this would be difficult to measure in a comparable way, but what is missing here are direct measures of student and stakeholder satisfaction. Indirect measures exist, such as percent of living alumni who have donated to the institution at any time in the past five years, which would be an indirect measure of alumni satisfaction.

Perhaps Honan [1995] provides the best summary of measurement initiatives in higher education. “A primary problem with indicators as used by many institutions and boards is that they are not selected with a view to what actually matters to the long-term well-being of the institution” (p. 9).

Dolence and Norris [1994] state that the institutional-level key performance indicators (KPIs) are the “important, campus-wide measures of student quality and progress, institutional size, resources, and desired institutional outcomes” (p. 77). They suggest 20-30 measures at this level. They also discuss how program-level KPIs, the next level of measures, should focus on issues of program outcomes and quality.

Institutions of higher education are now developing performance indicators but these differ from the business measures discussed earlier. The strategic link in key measures in higher education is not as apparent as it is in business. Dolence and Norris [1994] provide examples of how the measures for the University of Northern Colorado and Illinois Benedictine College were developed from strategic goals. However, the other examples do not try to place the measures in context of the mission, vision, and strategic goals. Perhaps it is because higher education institutions have historically tried to be all things to all people, and not to carefully focus their programs, resources and energies. However, as education strives harder to meet the demands of accountability, reasonable price, and proof of value-added, more institutions will be forced to make tough decisions on low-enrolling and non-strategic programs and services. If we continue to try to serve everyone we may end up serving no one.

The measures in higher education continue to have a large proportion of financial and input measures. However, there is evidence of some institutions beginning to monitor key process data and student/stakeholder satisfaction. The discussion of a
balanced set of measures did not appear in any of the higher education literature. In the four areas of the balanced scorecard, following is a summary of higher education's current status:

- **Financial**—a large proportion of measures tend to be financial, although a limited number tend to measure the return on investment in various academic-related areas of higher education, or demonstrate effective stewardship of the institution’s resources.

- **Internal processes**—there is some evidence of process measures, although it is not apparent that key processes were identified and that the measures were developed from strategic goals or critical success factors for the organization.

- **Customer**—very few measures of student and stakeholder needs, expectations and satisfaction exist.

- **Innovation and learning**—there is virtually no evidence of measures that indicate how institutions of higher education are providing increasing levels of value-added in their products and services or attaining higher levels of efficiency through process improvements. This area may be the most critical to the long-term relevance and affordability of higher education.

In business, new products and services must be launched into the marketplace quickly and efficiently. New technologies must be invested in while companies simultaneously strive to reduce operating costs and provide more value to their customers. Higher education is also being pressed to provide higher quality at lower costs; it is increasingly difficult for students and their families to afford the escalating costs of higher education. Yet some may continue to argue that higher education is held to a higher purpose and should not be accountable to the “bottom line.” Most all organizations in higher education are not-for-profit, and such organizations utilize their revenue in support of their purpose—education. It would seem that a regular review of the return on an investment in education is not only reasonable but the least that students and their families can expect.

It appears that higher education is missing the opportunity to link outcomes with mission, vision and strategic goals, and with the processes that deliver them. This is what inhibits the improvement capability. It also prohibits higher education from linking key processes to strategic goals, and then deciding what should be done with “non-key” processes. The obvious questions are: Should some non-key processes be eliminated in order to redeploy scarce resources to more strategically-linked processes? What non-key processes are candidates for outsourcing in order to simultaneously reduce costs and focus our energy and attention on key areas?

Key performance measures should be used as a means to operationalize institutional goals and objectives and monitor progress toward their attainment. Without key measures, how can institutions of higher education ever prove they deliver on their mission?
The key measures initiative at Babson College

Historically, multiple measures of performance have been collected at the College. Until recently, the College’s performance measures have not been coordinated, displayed with trend and comparative data (where appropriate), or systematically used for analysis, decision making and priority setting. The historical set of measures were not at a level of integration and aggregation to effectively measure and monitor institutional performance. In addition, some relevant and important measures were missing or not clearly linked to the College’s strategic goals. This became apparent during preparation of the College’s Malcolm Baldrige National Quality Award 1995 Education Pilot Application. Through the self-assessment that occurs naturally with preparation of the application, it became apparent that there were gaps in the collection of data that would support strategic goals, and insufficient trend and comparative data for decision making. Figure 5 contains details about Babson College and Figure 6 is the mission statement, containing some of the factors that were the basis for deriving additional guidelines for the measures the College would ultimately use.

Figure 5. About Babson College

Founded in 1919, Babson College is a specialty business school, offering Bachelor of Science and MBA degrees. In addition, the School of Executive Education provides training and development programs for corporate managers. The College population consists of approximately 1,600 full-time undergraduate students, 300 full-time and 1,300 evening MBA students, 130 full-time faculty, and 400 administrative and staff employees. The college is accredited by the American Association of Collegiate Schools of Business (AACSB) and the New England Association of Schools and Colleges.

Figure 6. Babson College Mission Statement

Babson College is committed to being an internationally recognized leader in management education. Through its programs and practices, the College educates innovative leaders capable of anticipating, initiating, and managing change. In a climate of entrepreneurial spirit, creative and analytical thinking, global perspectives, continuous learning and social responsibility, men and women of different cultures, origins, and life stages learn together to define the opportunities of the future.

The following additional assumptions about performance measures are based on the College’s mission, strategic plans and goals, and the culture of the institution. Key institutional performance measures for Babson College must:

• Focus on student learning and development
• Measure Babson mission attainment
• Inform divisional and workgroup measures (and in turn aggregate those measures)
**Assumptions specific to Babson College**

- Provide information on effectiveness and efficiency—to better measure our ability to deliver high quality at appropriate cost levels
- Balance input, process and output measures
- Be used by the Cabinet to set priorities and make strategic and operational decisions.

**Proposed measures for the College**

Based on a review of the literature, interviews with key process owners throughout the College, and working sessions with major divisions throughout the College, a set of 78 key measures were proposed. This was intended to be an exhaustive list of potential key institutional performance measures. At a Cabinet retreat (the Cabinet consists of all the direct reports to the President), the list was reviewed to determine other possible measures, and to reduce the list to a concise yet complete list of key measures for the College.

Each Cabinet member was asked to rate each of the measures in order of importance to the College's mission attainment, strategic plans, and institutional effectiveness. Measures were rated according to the following guideline: A = very important; B = somewhat important; C = not important; D = inappropriate.

Weighted rankings were then used to narrow the list of potential institutional-level performance measures, where an “A” = 3 points, “B” = 2 points, and “C” = 1 point. All items that received a weighted score of 15 or more were retained as potential key measures (since scores clustered at 15 and above, and then below 12). In addition, a scan of the measures indicated that the measures that would survive to the next round were indeed more representative of organizational performance. The other measures appeared to be more appropriate for divisional or work group performance indicators. This second round contained 62 measures.

In order to reduce the list even further, the cabinet was asked to assume they had been named acting president. In this new position, they would be permitted 10 pieces of data and information to judge the overall health of the organization. They were asked to rank order the top 10. After ranking and discussion, during which additional items were included, a tentative (pilot) list of key measures emerged. They are as follows:

- **Undergraduate students**
  - Number of applications
  - Acceptance rate (%)
  - Yield rate (%)
  - Admission rating.

- **Undergraduate Program**
  - Learning outcomes/competence development
  - Retention rate
  - Percent of students that graduate within five years
  - Full-time faculty/student ratio
  - Financial aid $ per student (average)
  - Percent of students employed six months out
  - Alumni satisfaction with curriculum/programs as preparation for career
  - Percent of students eligible (for financial aid) receiving financial aid

Assumptions specific to Babson College

Proposed measures for the College
Proposed measures for the College, continued

- Percent of total students receiving financial aid
- Student satisfaction (overall)
- Percent AHANA (African American, Hispanic, Asian American, or Native American).
- MBA Students
  - GMAT score
  - Work Experience (# Years)
  - Number of applications
  - Acceptance rate (%)
  - Yield rate (%).
- F.W. Olin Graduate School
  - Learning outcomes
  - Full-time faculty/student ratio
  - Percent students employed three and six months out
  - Alumni satisfaction with curriculum/programs as preparation for career
  - Starting salaries
  - Enrollment by program
  - Student satisfaction (overall)
  - Percent AHANA.
- School of Executive Education
  - Learning outcomes (application and performance improvement)
  - Number of training days
  - New business (by category)
  - Program contribution (by category)
  - Client satisfaction.
- Babson College (as a whole)
  - Employee satisfaction
  - Annual giving (total money)
  - Percent of alumni giving annually
  - Total gifts received (total dollars)
  - Contribution per program
  - Percent of students employed six months out
  - Employer satisfaction
  - Endowment
  - Total annual revenue on endowment
  - Endowment per student
  - Percent credit hours taught by full-time faculty
  - Payroll cost per credit hour.

How the measures will be used

Five-year trend graphs are being developed for all the measures where the data is available; data will begin to be collected for the others. The president's cabinet will review the measures over the next year to determine if the set is fully linked to strategic goals, adequately balanced, and effective for priority-setting, decision-making and evaluation of the college's performance. At the same time, the high-level key measures will be unbundled and mapped to key processes and work groups. Over time a core set of measures will be established, and others will come and go depending on the changing needs and strategies of the college. It is hoped implementation of key performance measures will improve:
How the measures will be used, continued

• The ability to prioritize areas for concentration and improvement,
• The ability to measure progress against mission attainment,
• The ability to measure the value-added of a Babson education,
• Cross-functional measures that enable an institutional focus and perspective across
  the college, and
• Management by fact.

The process will seem long and arduous at times, and it will probably be two
years before we have a complete set of fully-linked measures at all levels of the organiza-
tion as well as a link to the reward and recognition system of the College. Kaplan and
Norton [1996] found it took 26 months for one company to have a fully-implemented
performance measurement system that was linked to the organization’s compensation
system. This is probably one of the most important aspects of the long-term success of
our organization—building an appropriate and well-designed instrument panel that will
provide the safest, most efficient, and direct path to mission attainment—being an
internationally recognized leader in management education.

Conclusions

The secret of success is constancy to purpose. —Benjamin Disraeli
If you can't measure it, you can't manage it. —Anonymous

When used effectively, a balanced set of key measures can link an organization’s
vision, mission, and strategy throughout all levels with the application of practical
measures that monitor and track progress against strategic goals and objectives. Smooth,
coordinated input to the controls, based on the continual flow of data and information
from key flight instruments enables a pilot to conduct a safe and efficient flight to the
intended destination. Through the use of key organizational performance measures,
managers acquire relevant data and information that enable necessary adjustments in
order to effectively pilot the organization during its journey to mission attainment.

It seems that effective piloting of an organization is not much different from
piloting a plane. To effectively and efficiently manage an organization toward its
destination (strategic vision), an assortment of readings (measures) are necessary. And
those measures have to encompass many aspects of the flight (organization’s journey).
Like key flight instrument readings, all organizations could benefit from the use of key
performance measures, measures that will indicate if the organization is running well,
maintaining proper course, speed and altitude, being guided by sufficient external
information, and collecting feedback at particular milestones along the way.

Author information

Susan West Engelkemeyer is an Assistant Professor of Management and Director of
Quality for Babson College. She also served as Director of Quality from 1993-1997. She
holds a Ph.D. in industrial management from Clemson University and an MBA from East
Carolina University. Her consulting and research areas include operations and total quality
management. She has published in Quality Progress and other journals and books in the
area of quality management. She has served as a senior examiner for the Malcolm Baldrige

Spring 1998
National Quality Award and as a Senior Evaluator for the Malcolm Baldrige National Quality Award 1995 Education Pilot.

References


Innovation: The “Corest” of Core Competencies

Author

Den Black, Manager, Global HVAC Innovation, Delphi Harrison Thermal Systems Division of General Motors Corporation, Lockport, New York

Editor’s note

Delphi Automotive Systems is a supplier of automotive components, systems and modules, with 216,000 employees in 36 countries. Delphi’s Harrison Thermal Systems division offers innovative heating, ventilation and air conditioning (HVAC) products and engine coolant systems. The author is responsible for leading the creation of the division’s future Global HVAC Product Portfolio, and is the divisional leader for the Harrison’s “Make it Great—Innovate” initiative, which is driving its organizational transformation. He holds six patents and is the co-inventor of the world’s first variable-stroke air conditioning compressor for automotive applications, currently in mass production.

The bottom line

Organizations that wish to thrive into the next millennium must commit themselves to becoming the benchmark for “doing innovation.” To achieve this benchmark position, organizations must define and implement a formal innovation strategy, which will serve to guide the transformation of the organizational environment and culture. Such a transformation needs to be recognized as the top priority for organizations seeking the “holy grail” of competitive advantage.

Innovation is the best investment

The development of an innovative environment and culture is the best of all possible investments. Those who learn to do innovation best will, inevitably, become the rule makers instead of the rule takers in their respective fields. Those who do innovation best will create the future that the followers will seek to emulate.

Defining creativity and innovation

Before proceeding, I want to state my distinction between the terms “creativity” and “innovation” (see Figure 1). Over the long term, it is only innovation that determines the degree to which an organization achieves competitive advantage. Innovation connotes a combination of disciplined thinking and doing, which leads to a tangible result that changes things. Doing creativity is...
Creativity and innovation, continued

relatively easy in comparison to doing innovation. However, in order for innovation to happen, it is essential that creativity occurs first. Organizations that achieve benchmark status in their fields must learn to strike the proper balance between thinking without doing, and doing without thinking.

Figure 2 illustrates a very simplistic, dynamic model about working effectively in today’s competitive environment. Essentially, the figure shows that current and anticipated human needs drive everything. Developing deep insights into these needs is the basis for identifying prioritized opportunities to address them. Awareness of opportunities can spark human creative thinking processes that in turn can lead to innovative solutions that have perceived value to those who have these needs.

Figure 2. A Very Simple Dynamic Model of our World

Unconscious versus conscious needs

It is important to note that these needs can be either conscious or unconscious with respect to the potential consumers. It can be argued that some of the biggest opportunities await those who can uncover the unconscious, or unarticulated needs first. Processes exist to get at the unarticulated needs, but to describe these processes is beyond the scope of this article. Suffice it to say that the probability of becoming a rule maker in your area rises exponentially in proportion to your organization’s ability to identify the
In the end, long term advantages will go to those who learn to excel at:
• identifying emerging human needs, and
• providing innovative, value added solutions at the right time.

Both of these activities require the application of imaginative and innovative thinking skills. The good news is that the quality of our innovative thinking skills can be improved with practice over time. Significant research conducted over the last 50 years supports this notion that individuals and groups can learn to be more innovative. Thus, innovative thinking can be viewed as a learnable skill. It follows that the first priority of any organization seeking competitive advantage must be to encourage and cultivate this competency. It follows that the secret to achieving competitive advantage lies in learning to out-think the competition. This may include being first with a new product or service, rather than letting someone else blaze the trail.

Innovation is of paramount importance. Some quotes from the world’s renowned authorities testify to that opinion (see Figure 3).

**Figure 3. Selected Quotes on Innovation**

“The sole purpose of a business organization is innovation. No matter what else anybody tells you: Corporations achieve competitive advantage through acts of innovation.”

-Peter Drucker

“Imagination is more important than knowledge.”

-Albert Einstein

“Every organization—not just businesses—needs one core competence, innovation.”

-Peter Drucker

“I think that the greatest education in the world is the education which helps one to be able to do the right thing at the time that it has to be done.”

-Charles F. Kettering
I believe that the right thing to do is make doing innovation your organization's corest competency, and the right time to do that is right now.

It is noteworthy that all stakeholders—managers, customers, shareholders and employees—win in this scenario. Innovative environments are fun places to work, because everyone is valued and respected for the ideas they contribute and the contributions they make. Everyone is both a thinker and a doer, in contrast to some more traditional environments, which are segregated into those who are expected to think and those who are only expected to do. Innovative environments unleash the awesome, untapped creative energies that reside in everyone for the ultimate benefit of everyone.

Figure 4 illustrates the relationship between an innovative organization and the bottom line outputs of an enterprise. It can be argued that firms compete in basically two ways—relative differentiation, and relative low cost of their products or services. (See graph at the top of the Figure 4.) It is most desirable to position the firm in the upper right quadrant, as perceived by customers. That is, products and services are perceived as being distinctly different, while simultaneously they are being priced relatively low in comparison to competitive offerings. Stated simply, products in this quadrant will have the highest perceived value in the marketplace, and they will enjoy a preferred status among customers. Firms in this quadrant are competitively advantaged.
Innovative thinking contributes to improving both of these competitive dimensions (See bottom portion of Figure 4). Product and service innovation leads to increased differentiation, which leads to growth, which enhances all of the vital output metrics. Likewise, process innovation leads to efficiency improvements, which leads to lower costs. Lower costs improve corporate fitness, which improves the output metrics. Thus, innovation is the source of the competitive advantage that enterprises covet.

The need for maximizing the innovative spirit in your organization is clear. But how do you do it? Figure 5 illustrates the innovation triad, which we use for the basis for our success. The elements of this model are:

1. Management commitment and active support
2. An explicit innovation strategy
3. Ongoing training related to best practices and tools.

All of these elements must be in place to maximize the innovative output of an organization. However, management commitment and active support is, by far, the most important. It is essential that the leadership display a genuine passion for doing innovation by their daily actions. The leaders must ensure, by word and deed, that the topic is ubiquitous and pervasive throughout the enterprise. In short, the leadership must walk the talk to show every employee that the focus on innovation is more than just the latest buzzword.
Suggested 10-Step Roadmap for Achieving Innovative Excellence

Our organization is currently following a 10-step roadmap. We have an Innovation Council that has been in place since the end of 1997, and its membership consists of volunteers from all levels of the organization. The job of the innovation council is to enhance our understanding and awareness of innovation, focus and align our collective innovation energies, and prioritize needs for innovative products, processes and services. These 10 steps are an expansion of the innovation triad, providing specific actions to accelerate our progress along the road to achieving innovative excellence:

1. Obtain top management commitment and active support for the “Innovation Initiative.” Identify an Innovation Champion.
2. Bring the topic of innovation into the daily conversation to:
   - build awareness within your organization
   - provide understanding
   - promote commitment
   - prompt actions that promote innovation in your environment.
3. Create an “Innovation Council” with the charter to identify, prioritize and implement specific actions in support of the initiative. Populate the council with volunteers, not draftees.
4. Identify best practice organizations and strive to emulate their methods and environment.
5. Develop an explicit Innovation Strategy for the organization, and incorporate it as part of the formal business plan.
6. Reexamine your current hiring process to ensure it’s capability to predict the innovative potential of future employees. Seek out, and apply, best practice hiring processes.
7. Create an “Innovation Space” which is configured to facilitate innovative thinking.
8. Identify current roadblocks to innovation and commit to removing them.
9. Create simple metrics to measure your progress, and methods to recognize those who contribute in significant ways.
10. Above all, everyone in the organization needs to learn to:
    - value different thinking
    - find at least two good reasons why it can be done
    - celebrate failure as a learning opportunity.

The road to innovative excellence can be long and torturous. It requires that everyone work to rekindle a childlike sense of wonder and curiosity about the world that many of us lost during the process of becoming educated. It requires that we become possibility thinkers instead of hardened cynics. It requires that we solicit and value the
Demands of the innovation journey, continued

really different ideas, and that we examine them carefully for the seeds of greatness that they may hold. In short, achieving innovative excellence will require that we unlearn many habitual ways of thinking. However, the internal and external benefits will greatly exceed the costs and the effort to achieve this transformation.

The Needs Identification Process

Figure 6 offers a framework for identifying current and anticipated human needs in the marketplace. As stated previously, these needs really drive everything. They are the source of all current and future opportunities. Thus, organizations that wish to become competitively advantaged must commit themselves to being excellent at the art and science of needs identification.

**Figure 6. Identifying and Anticipating Global Market Needs**

This process is both mechanistic and highly creative. First, it involves the mechanistic part— the orderly gathering of data, forecasts, trends and business intelligence, which can be integrated into a cohesive whole. Second, it involves the creative part— the creative and imaginative interpretation to identify and prioritize the sometimes hidden opportunities within the information. Thus, needs identification is an excellent place to begin to apply the latent innovative energies within the enterprise.
Identifying human needs in the marketplace, continued

The needs identification model indicates that the required information comes from five sources:

1. Market drivers—what people “say” they want
2. Anticipated needs—what people “don’t know” they want yet
3. Technology forecasts—what is “possible”
4. Current competitive offerings
5. Future competitive offerings.

The gathering of this information, and its assembly into a cohesive whole, should be an ongoing process. Periodically, formal sessions should be held to facilitate imaginative interpretation of the information, answering these three questions:

1. What are the implications for our organization?
2. What emerging needs can we envision?
3. In what specific ways should we respond?

Creating a prioritization list or matrix

We array the output of these needs identification sessions (Figure 7) as a matrix of a prioritized set of market needs, with a listing of candidate ideas for responding to those needs. This matrix makes it easier to analyze and prioritize the innovative responses in terms of which market response(s) will contribute the most toward addressing the entire set of needs.

Figure 7. Prioritizing the Current / Anticipated Market Needs

<table>
<thead>
<tr>
<th>Prioritized market needs</th>
<th>Candidate ideas to address those needs</th>
<th>Leads to Prioritized product initiatives to address those needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current voice of customer</td>
<td>Idea finding</td>
<td>Idea capture</td>
</tr>
<tr>
<td>Anticipated voice of customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority of the initiatives is relative to the priority of the needs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Naturally, the quality of this output will relate directly to the quality of the thinking that went into the process. The application of proven best practices for encouraging innovative thinking contributes, in significant ways, to the quality of the results.
In summary, the needs identification process entails the disciplined gathering of information, followed by imaginative interpretation to discover the prime opportunities that will fuel the journey to competitive advantage through an ongoing process of creativity and innovation.

Developing an Innovation Strategy

To some extent, an innovation strategy is a cultural thing. The creation of an explicit innovation strategy is an essential element to drive the transformation of the organizational culture.

Stated simply, an innovation strategy defines in broad terms how an enterprise intends to go about creating the future, as opposed to simply letting the future happen. This strategy should be incorporated in the formal business plan. It complements the traditional sections of marketing, technology and human resources strategies.

All sections of the business plan need copious injections of human foresight, imagination and creativity to make these plans a reality. An innovation strategy bolsters the various sectors of the organization by causing people to think through these key success factors and to consciously work to ensure that they are in place to support the overall business plan.

Perhaps no one has captured the essence of the concept of innovation strategy better than Gary Hamel and C.K. Prahalad, coauthors of the landmark book, Competing for the Future. A sampling of their comments appears in Figure 8.

A sampling of what has been said by others, the best way to predict the future is to create it via the collective, synergistic imaginations of all of the people in the firm.

To become a rule maker, your organization, simultaneously, must be organizing the right people, to do the right market-driven things, using the right innovation process, in the right creative environment, at the right time to capture the emerging market opportunities.

Firms that are rule makers in their fields today have these characteristics in common. Their leaders recognize these elements as requirements for making innovation happen. The reason that some firms emerge as rule makers is that they have simply been more foresightful, imaginative and innovative than their competitors in the implementation of this framework in a balanced manner. Balance is essential for optimized results. These elements interact, much like the links of a chain. Thus, the innovative output of any organization will be constrained by the weakest link at any point in time. The innovation strategy that you create for your organization must provide for strengthening all of these links in a continuous fashion.
...We prefer the word foresight to vision. Vision connotes a dream or an apparition, but there is more to industry foresight than a single blinding flash of insight. Industry foresight is based on deep insights into the trends in technology, demographics, regulation, and lifestyles that can be harnessed to rewrite industry rules and create new competitive space.

...Competition for industry foresight is essentially to establish one’s company as the intellectual leader in terms of influence of the direction and shape of industry transformation. Industry foresight gives a company the potential to get to the future first and stake out a leadership position.

...Industry foresight must be informed by deep insight into trends in lifestyles, technology, demographics and geopolitics, but foresight rests as much on imagination as on prediction. To create the future a company must first be capable of imagining it. To create the future a company must first develop a powerful visual and verbal representation of what the future could be.

...Industry foresight grows out of a childlike innocence about what could be and should be, out of a deep and boundless curiosity on the part of senior executives, and out of a willingness to speculate about issues where one is, as of yet, not an expert. Foresight is the product of eclecticism, of a liberal use of analogy and metaphor, of an inherent contrarianism, of being more than customer led, and of a genuine empathy with human needs.

...How is it that, when facing the same set of environmental trends and conditions, some companies seem capable of weaving together a view of the future that is imaginative, compelling and foresightful, and other companies seem merely confused?

...Scenario building and forecasting typically start with what is, and then project forward to what might happen. The quest for industry foresight often starts with what could be, and then works back to what must happen for that future to come about.

The task of defining and implementing an innovation strategy is not a trivial matter. It requires ongoing leadership commitment, dedication and persistence. In short, it can be hard work. Nevertheless, organizational leaders who aspire to become rule makers in their field must allocate the time to think through these issues. The alternative is to relegate the organization to the perpetual position of being a rule taker, or even worse, face extinction.

On-Going Training for Doing Innovation

The final element in creating an effective innovation strategy is to provide everyone in the organization with access to best practice methods and tools for doing innovation. The goals are to ensure that there is widespread awareness that innovative thinking is a skill that can be improved with practice over time, and to encourage universal applica-
Innovation: The Corest of Core Competencies

Training is the foundation, continued

One resource: The Creative Education Foundation

One of the first people to espouse the notion that people could learn to be more innovative was Alex Osborne, an advertising executive from Buffalo, New York. Mr. Osborne established the Creative Education Foundation during the 1950s to provide a source for developing the requisite skills. Subsequently, his idea has blossomed into a plethora of consulting firms and organizations, which provide training. The Creative Education Foundation remains a global clearinghouse for leading-edge thinking in the field. The foundation is a convenient source for all of the extensive research and writings on this topic. In addition, during the third week of June, the foundation sponsors the annual Creative Problem Solving Institute. This week-long event is attended by almost 1,000 people from many countries. It is an outstanding opportunity to network with the world’s best thinkers in the field of thinking about thinking.

Conclusion

These efforts are producing results in our company. Awareness and understanding are improving rapidly. The topic of Innovation is becoming a part of our daily conversation. We have identified an existing best practice organization, and we are collaborating with them on joint projects that will accelerate the transfer of their practices into our culture and environment. We have communicated our priority needs for innovative ideas to all our employees, to better align those ideas with the solutions we require.

My purpose in writing this article is to present a clear and compelling case for elevating innovation to the position of the corest of core competencies within your organization. I’ve included a conceptual framework to assist you in getting started quickly on the journey to achieving innovative excellence.

You don’t need to be a genius. It only takes uncommon application of common virtues, with supreme determination and persistence. The journey may well be long and demanding, and the goal of innovative excellence is clearly worth achieving. In our view, innovation is the corest of core competencies for any individual and organization that wants to survive and grow.

References


References, continued


Author information

Den Black is employed with Delphi Harrison Thermal Systems, a Division of General Motors Corporation in Lockport, New York, and is responsible for Advanced Global HVAC Products. Previous to this assignment, Mr. Black has held a variety of positions associated with the creation, design, development and manufacture of Delphi Thermal Products, including Divisional Technology Planner, Chief Engineer for Current HVAC Module Design and Development, and Chief Engineer for A/C Compressors and Precision Products. Mr. Black has a total of six patents and is the co-inventor of the world’s first variable stroke air conditioning compressor for automotive applications, currently in mass production.

In recognition of his various creative achievements, Mr. Black has received a variety of prestigious awards over the years, including the General Motors “Boss Kettering” award for significant inventions, the GM Extraordinary Accomplishment Award, the General Motors Institute Engineering Achievement Award and the Society of Automotive Engineers U.S. Outstanding Younger Member Award.

Mr. Black has a BSME degree from General Motors Institute, an MSME degree from Purdue University, and an MBA from the University of Dayton.