Improving the way organizations run through participative planning and management.
Baldrige Award: 10 Years of Elevating Organization Excellence

This year marks the 10th Anniversary of the Malcolm Baldrige National Quality Award, and we thought it would be useful to assemble for you a composite of information about it. This News & Views article consists of five parts, and is taken from official NIST material acquired at the Quest For Excellence IX conference held in Washington, D.C., February 10-12, 1997. Quest For Excellence is the official conference of the Malcolm Baldrige National Quality Award. Attendance at this ninth annual conference was the highest ever, with 1,400 registered.

Over the past nine years, 622 firms have applied for the Award; 268 were large manufacturers, 116 were large service businesses, and 238 were small businesses. Of those, 120 scored high enough on the application to receive site visits by Examiner Teams; this included 62 large manufacturers, 33 large service companies, and 25 small businesses. Of those who received site visits, 28 did well enough to win the Baldrige National Quality Award: 14 were large manufacturers, 6 were large service companies, and 8 were small business.

Interest in the Baldrige Award remains high, with between 100,000 and 150,000 Criteria Booklets being requested annually. In addition, state and local quality awards programs have been developed, based on Baldrige criteria. In 1991, three years after the start of the Baldrige Awards, there were eight state award programs. In 1996 there were 42. In addition, there are 13 local quality award programs.

The number of requests for State Criteria booklets has grown dramatically from 4,625 in 1991, to 81,786 in 1996. Award applications have increased from 111 in 1991, to 804 in 1996. The number of examiners to conduct site visits has expanded significantly, too. In 1991 there were 296; in 1996 there were 2,065.

The Quest For Excellence conference consisted of a keynote address from the Secretary of Commerce, and detailed presentations from the four 1996 winners. Presentations on new directions for the Baldrige Award were also made.

The five parts of this article are:
1. An edited version of Commerce Secretary William Daley’s keynote address at the Quest For Excellence IX conference: Baldrige National Quality Award Dividends Ripple Throughout the Economy.
2. Results of NIST’s (National Institute of Standards and Technology) annual update of its stock price tracking of Baldrige winners: One More Time: Latest NIST Stock Study Shows Quality Still Pays.
5. What a lot of people want to know about the Baldrige Award: Frequently Asked Questions and Answers about the Malcolm Baldrige National Quality Award.
Part 1. Baldrige National Quality Award Dividends Ripple Throughout the Economy

The Honorable William Daley, Secretary, United States Department of Commerce

In your quest for quality, you won’t find a better guide than the Baldrige Award criteria, which are widely accepted as the standard for performance and business excellence. These criteria are in the hands of more than a million business leaders and are used by thousands of organizations for training, for self-assessment, and as a tool to develop performance and business processes.

I would urge you to apply for the Award. Even if you don’t win, there is no better way to energize your company and accelerate your improvement efforts than to go through the Baldrige Award application and review process.

The 28 companies that have won the Baldrige Award are a distinguished and diverse group who are proving to the world that all companies can use the quality performance principles embodied in the Baldrige Award to improve the way they do business. They are models for how people and organizations can— and must— work now and into the next century.

These winners are living proof that companies can enhance their competitiveness even as they make their companies better places to work and their communities better places to live— by teaming with customers and partners, empowering employees, and being good corporate citizens.

There’s no such thing as overnight results. You won’t hear about magic bullets or quick fixes. The pursuit of excellence starts with a commitment from the top and is woven throughout the entire organization. Quality is not something you bolt onto the side of your business, as one winner pointed out, it’s how you do business. The customer is not only king, but also quality judge. The highest levels of performance require continuous improvement and learning.

The application of quality standards fostered by the Baldrige Award has played no small part in the reinvigoration of our economy, which has created over 11 million new jobs over the last four years. Now going into its tenth year, the Baldrige Award is playing a vital role in helping the United States gain the edge in a fiercely competitive global marketplace. The more I hear and read about this award and the progress it has generated, the more I firmly believe that, as a nation, we must continue to invest in it.

The award program has proven to be a remarkably successful public-private partnership. The annual government investment of about $3 million is supported by over $100 million in private sector contributions. And the partnership extends far beyond money. Each year, more than 300 experts from industry, universities, non-profits, and government give many hours of their time to review applications for the
award, conduct site visits, and provide each applicant with extensive feedback.

The 28 winners also have taken seriously their charge to spread the gospel about quality. They’ve given approximately 30,000 presentations that educate other companies and organizations about the benefits of using the Baldrige Award framework and criteria. They are joined by Commerce’s National Institute of Standards and Technology (NIST), which is working with state and local organizations to build a national network of performance improvement advocates and practitioners.

More than 40 states have established—or are establishing—award programs, most of which are modeled after the Baldrige Award. And our competitors are catching on, too. Internationally, there are now more than 25 quality awards. And for the past four years, U.S. firms based overseas have won quality awards in Europe and Singapore.

We’ve come a long way since the 1980s when everyone—customers, analysts, journalists—were sounding alarm bells, fretting that the strong Japanese commitment to quality posed a serious threat to American economic leadership. The Baldrige Award and its growing “family” have helped turn that around. Today, the United States is the global leader in quality, one of the main reasons that we are enjoying shrinking unemployment, record export levels, and a startling 4.7 percent GDP growth last quarter.

The fact is that quality pays. It pays in satisfied customers. It pays in motivated employees, who are committed both to their jobs and to their communities. It pays in an improved bottom line. It really pays in improved profitability for investors. A stock investment in Baldrige winners yields an impressive payoff. A new NIST study found that the 16 publicly-traded Baldrige winners continue to outperform the Standard and Poors 500 by about 3 to 1. Even the 48 publicly-traded applicants who received site visits outperformed the S&P by 2 to 1.

Manufacturing News recently reported that companies that stressed quality throughout their entire operation saw sales grow by an average of nearly 16 percent per year. That’s almost three times the rate of growth for companies in the lowest quality categories—those whose idea of quality is inspection of parts.

With these kinds of results, we have to find a way to spread the Baldrige Award message beyond private industry. Increasingly, for-profit and not-for-profit health care and educational institutions, which are vital to the social and economic life of the country, are looking to adopt the same tough performance excellence standards as businesses.

A recent report prepared by the Council on Competitiveness pointed out the extraordinary challenges facing our health care industry. Providers feel the pressure to deliver better quality at a lower price. And the burden often gets passed to American businesses, whose global competitiveness suffers because of the high health premiums they’re paying for their employees. Health care spending by private business climbed to $241.3 billion in 1994. And, as a nation, we approached one trillion dollars in health care spending in 1995, over $3,600 per person in a single year.

We face similar challenges in education, which is why the President has made the issue his top priority in his second term. Our system is falling short of its potential. We
need to raise the standards of excellence in teaching and enhance our learning environments, so that our children are prepared to assume leadership roles in a high-tech, competitive 21st century economy.

When it comes to health care and education, we all want to drive costs down and quality up. And now there is a growing recognition that the principles of the Baldrige Award criteria can help us meet these challenges as well. NIST held a very successful pilot award program for the education and health care sectors in 1995. The program drew greater interest than expected, with 46 health care and 19 education organizations submitting applications. But when federal funding to support these pilots was left out of NIST’s 1996 appropriation, they were discontinued after one year.

But now the private foundation for the Award has come forward and volunteered to raise a new endowment to establish an award program for the health care and education sectors—if the federal government offers its share of support. If the Clinton Administration has its way, the federal government will be doing just that. The President’s fiscal year 1998 budget for the Commerce Department includes $2.3 million for NIST to launch awards for health care and education. Given the reality of dwindling federal resources, and considering the President’s firm commitment to balance the budget by 2002, this increased investment in the Baldrige Award is a strong statement about his belief in the importance of quality performance.

If Congress appropriates this very modest investment, these new awards will empower our schools and our hospitals to cut costs across the board at the same time that they raise their performance and upgrade their services. I know that the health care and education communities, as well as the business world, will embrace this long-awaited step. And I look forward to the coming years, when we will have health care and education winners sharing the Baldrige spotlight with their business counterparts and sharing their success stories with their communities.

Since the legislation creating the Baldrige program was signed in August 1987, the Award’s stature has increased, as it plays an increasingly important role in helping us meet the challenges of the 21st century. It’s been called an American treasure, the Nobel Prize of business. With 28 winners, hundreds of applicants, and thousands of companies using its criteria to improve, the Award’s dividends ripple throughout the American economy.

When the President presented the 1996 Baldrige Awards, he said of the winners: “This is the way all of our organizations should work. This is the way our families should work, the way our charities should work, the way our religious institutions should work, the way our colleges and universities should work, the way our schools should work.” And, he added, this is “the way our government should work.” I couldn’t agree more.

1 This article is taken from the text of Secretary Daley’s keynote address at the Quest For Excellence IX Conference, February 10, 1997, Washington, D.C.
News Views

Part 2. One More Time: Latest NIST Stock Study Shows Quality Pays

You won’t hear it quoted on the nightly business news. You won’t find it in the financial section of your newspaper. But according to the Commerce Department’s National Institute of Standards and Technology (NIST), the “Baldrige Index” has outperformed the Standard & Poor’s 500 for the third year in a row.

The fictitious Baldrige index is made up of winners of the Malcolm Baldrige National Quality Award. "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 third study of its kind, NIST “invested” a hypothetical $1,000 in each of the five publicly-traded, whole company winners of the Baldrige Quality Award and a percentage of $1,000 in the parent companies of nine subsidiary winners (a list of the companies is attached). The percentage represents the number of employees the subsidiary has as a percentage of the whole company’s employee base. An equal amount was hypothetically invested in the S&P 500 at the same time.

The investments were tracked from the first business day in April of the year the companies won the Baldrige Award (or the date they went public) to December 2, 1996. Adjustments were made for stock splits. Also, if a subsidiary was sold to another company or if a company was divested, the progress of the subunit was followed, not the original parent company.

NIST found that the group of five whole company winners outperformed the S&P 500 by 3.5 to 1, achieving a 380 percent return on investment compared to a 110 percent return for the S&P 500. The group of 16 publicly traded winners—which includes the five whole company winners and the parent companies of winning subsidiaries—outperformed the S&P 500 by about 3 to 1, a 325 percent return on investment compared to a 112 percent return for the S&P 500. NIST studies in 1994 and 1995 also found that Baldrige Award winning companies outperformed the S&P 500.

NIST also conducted a similar investment study for the 48 publicly traded companies receiving site visits as part of the Baldrige Award application process. That group outperformed the S&P 500 by 2 to 1, achieving a 167 percent return on investment compared to an 83 percent for the S&P 500. (Names of applicant companies are confidential.)

"While there are no guarantees for success," said Hertz, "year after year, Baldrige award winning companies have shown that any U.S. business, large or small, service or manufacturing, in any sector of the economy, can use the concepts embodied in the..."
Baldrige Award criteria to improve the way it does business.” For example:
- At ADAC Laboratories (1996 manufacturing winner), revenue per employee has gone from $175,000 per employee to more than $325,000 per employee in the last several years. Its U.S. market share has increased from 12 percent to 50 percent.
- In the last five years, Federal Express Corporation (1990 service winner) has increased its operating income by 147 percent while reducing costs per parcel (its primary indicator of efficiency) by 20 percent.
- Since winning the Baldrige Award in 1988, Globe Metallurgical Inc. (small business winner) has increased revenues by 204 percent and profits by 310 percent.

A non-regulatory agency of the Commerce Department’s Technology Administration, NIST promotes U.S. economic growth by working with industry to develop and apply technology, measurements and standards. NIST was selected by Congress to design and manage the Baldrige Award program because of its role in helping U.S. companies compete, its world-renowned expertise in quality control and assurance, and its reputation as an impartial third party.

1996 Stock Study—Malcolm Baldrige National Quality Award

<table>
<thead>
<tr>
<th>Whole Company Winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastman Chemical Company</td>
</tr>
<tr>
<td>Federal Express Corporation</td>
</tr>
<tr>
<td>Motorola, Inc.</td>
</tr>
<tr>
<td>Solectron Corporation</td>
</tr>
<tr>
<td>Zytec Corporation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subunit Winners</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The sum invested was $1,000 x the % of the parent company’s employee base that the subunit represented at the time they applied.)</td>
</tr>
<tr>
<td>Armstrong World Industries, Inc. - Building Products Operations</td>
</tr>
<tr>
<td>AT&amp;T Consumer Communication Services (now part of the Consumer &amp; Small Business Division of AT&amp;T)</td>
</tr>
<tr>
<td>AT&amp;T Network Systems, Transmission Systems Business Unit (now part of Lucent Technologies, Inc., Network Systems)</td>
</tr>
<tr>
<td>AT&amp;T Universal Card Services</td>
</tr>
<tr>
<td>Cadillac Motor Car Company (subunit of General Motors)</td>
</tr>
<tr>
<td>Corning Telecommunications Products Division</td>
</tr>
<tr>
<td>GTE Directories Corporation</td>
</tr>
<tr>
<td>IBM Rochester</td>
</tr>
<tr>
<td>Texas Instruments Incorporated - Defense Systems &amp; Electronics Group (now part of the Systems Group of Texas Instruments)</td>
</tr>
<tr>
<td>Westinghouse Electric Corporation - Commercial Nuclear Fuel Division</td>
</tr>
<tr>
<td>Xerox Corporation - Business Products &amp; Systems</td>
</tr>
</tbody>
</table>
Results of Baldrige Winners’ Common Stock Comparison

Methodology
A hypothetical sum was invested in each publicly-traded winning company’s common stock on the first business day in April of the year they won the Baldrige Award (or the date when they began public trading, if it is later); $1,000 was invested in each whole company, and for subsidiaries the sum invested was $1,000 x the percent of the whole company’s employee base the subunit represented at the time of its application. The same total dollar amount was invested in the Standard & Poor’s (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 sale was determined and that dollar amount was reinvested in the new parent company.

Adjusting for stock splits, the value was calculated on December 2, 1996. Information is reported two ways: all publicly-traded winners and only whole company Baldrige winners. The 16 publicly-traded winners, as a group, outperformed the S&P 500 by approximately 3 to 1, achieving a 324.9% return compared to a 111.8% return for the S&P 500. The group of five whole company winners outperformed the S&P 500 by 3.5 to 1, achieving a 380.2% return compared to a 109.6% return for the S&P 500. A summary of the results follows.


<table>
<thead>
<tr>
<th></th>
<th>$ invested</th>
<th>Value 12/2/96</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winners</td>
<td>6,485.27</td>
<td>27,554</td>
<td>324.9%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>6,485.27</td>
<td>13,738</td>
<td>111.8%</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th></th>
<th>$ invested</th>
<th>Value 12/2/96</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole company winners</td>
<td>5,000</td>
<td>24,008</td>
<td>380.2%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>5,000</td>
<td>10,481</td>
<td>109.6%</td>
</tr>
</tbody>
</table>

Results of Baldrige Site-Visited Applicants’ Common Stock Comparison

Methodology
A hypothetical sum was invested in each 1990-1995 publicly-traded, site visited company’s common stock on the first business day in April of the year they were site visited (or the date when they began public trading, if it is later); $1,000 was invested in each whole site visited company, and for subsidiaries, the sum invested was $1,000 x the...
percent of the parent company’s employee base the subunit represented at the time they were site visited. The same total dollar amount was invested in the S&P 500 on the same day. (Winners of the Award are among the pool of site visited applicants, but are not considered in all cases.)

Adjusting for stock splits, the value on December 2, 1996 was calculated. Information is reported four ways: all publicly-traded site visited companies, all whole company site visited applicants, and each of those groups without the winning companies included. (Note: a company may be included multiple times if they received more than one site visit.)

The 48 publicly-traded site visited applicants, as a group, outperformed the S&P 500 by 2 to 1, achieving a 167.5% return compared to a 83.3% return for the S&P 500. The group of ten whole company site visited companies outperformed the S&P 500 by more than 2 to 1, achieving a 185.9% return compared to a 83.8% return for the S&P 500. The group of 35 site visited applicants without the winners outperformed the S&P 500 by 68%, achieving a 138.3% return compared to a 82.0% return for the S&P 500. The six whole company site visited applicants without the winners did not outperform the S&P 500. This group achieved a 60.6% return, while the S&P 500 achieved a return of 80.8%. Names of Baldrige applicants are kept confidential. A summary of the results follows.

All 1990-1995 publicly-traded, site visited applicants

<table>
<thead>
<tr>
<th>1990-1995 Site Visited Applicants</th>
<th>$ invested</th>
<th>Value 12/2/95</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>16,387.98</td>
<td>30,032</td>
<td>83.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>43,838</td>
<td>167.5%</td>
</tr>
</tbody>
</table>

All 1990-1995 publicly-traded, whole company site visited applicants

<table>
<thead>
<tr>
<th>1990-1995 Site Visited Whole Company Applicants</th>
<th>$ invested</th>
<th>Value 12/2/95</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P 500</td>
<td>10,000</td>
<td>18,376</td>
<td>83.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>28,586</td>
<td>185.9%</td>
</tr>
</tbody>
</table>

What recommends commerce to me is its enterprise and bravery. It does not clasp its hands and pray to Jupiter.

— Henry David Thoreau
Part 3. 1997 Baldrige Criteria Reflects Evolution Into a Standard For Excellence

The 1997 Baldrige Award criteria has a new look, reflecting its widespread acceptance as a standard for performance and business excellence. Changes include a new name, reordering of categories, a redesigned framework and a more readable format. “But, the foundation on which the criteria were built—helping companies enhance their competitiveness by delivering ever improving value to customers and improving overall company performance—remains as firm and solid today as it was in 1988,” said Harry Hertz, director.

Initially, the criteria, now called Criteria for Performance Excellence, were perceived only as the basis to apply for the award. But, they quickly became used by thousands of organizations of all kinds for self-assessment and training and as a tool to develop performance and business processes. More than a million copies have been distributed since the first edition in 1988. “Using the Baldrige criteria helps American businesses improve their competitive advantage, productivity, customer satisfaction and employee involvement, yielding stronger financial performance and business results,” said Hertz.

In addition to the new name, the categories from 1996, except category one (Leadership), have been reordered, and in some cases renamed, to show that all of a company’s actions should lead to business results and to better depict the relationship among categories. The 1997 categories are:

- Leadership—examines how senior executives guide the company and how the company addresses its responsibilities to the public and practices good citizenship;
- Strategic Planning—examines how the company sets strategic directions and how it determines key action plans;
- Customer and Market Focus—examines how the company determines requirements and expectations of customers and markets and how it enhances relationships with customers;
- Information and Analysis—examines the management and effective use of data and information to support key company processes and the company’s performance management system;
- Human Resource Development and Management—examines how the company enables its work force to develop its full potential and how the work force is aligned with the company’s objectives for performance excellence;
- Process Management—examines key aspects of how processes are designed, managed and improved; and
- Business results—examines the company’s performance and improvement in its key business areas: customer satisfaction, financial and marketplace performance, human resources, supplier and partner performance, and operational performance and how it performs relative to competitors.
The new framework for the 1997 criteria shows all seven categories under an umbrella titled: Customer and Market Focused Strategy and Action Plans (see graphic). The change was made to provide a better systems view of performance management.

“The framework has been redesigned to highlight the importance of a customer and market-driven strategy, the role of information and analysis, and the goal of improved business results,” said Hertz.

All of the criteria rest on two primary building blocks. “One is that quality is customer-driven; the other is that companies must continually improve their performance and capabilities. These concepts are woven throughout all of the criteria,” said Hertz. For example, the customer and market focus category—tied closely to leadership in the new framework—examines how the company determines its customers’ requirements and expectations. In the business results category, the first item addresses the main customer-related results—customer satisfaction and dissatisfaction and customer satisfaction relative to competitors.

To make the criteria easier to understand and to use, many of the criteria items and their areas to address have been consolidated. As a result, the number of criteria items has been reduced from 24 to 20 and the number of areas to address has been reduced from 52 to 30. Also, descriptive information previously contained in item notes now is included in an expanded section on item descriptions and comments.

NIST made these changes in consultation with past Baldrige Award winning companies, current and past examiners, and many others. The 1997 Performance Excellence Criteria are available from the NIST Office of Quality Programs, (301) 975-2036. The criteria also are available on-line at: http://www.quality.nist.gov.

Baldrige Award Criteria Framework: A Systems Perspective
Part 4. Proposed National Education and Health Care Quality Awards

Education and health care organizations would have their own award categories as part of President Clinton’s FY-1998 budget proposal for the Baldrige Award. The proposed budget includes $2.3 million for the awards.

At a ceremony last December for the 1996 Baldrige Award business winners, the President said, “I’m very pleased that there will be new winners in the categories of nonprofit health care and education organizations. I can tell you that if you look at the percentage of our economy and more important, the stake in our quality of life and our future in health care and education, this is coming not a moment too soon.” Commerce Secretary William Daley said, “These new awards will be a wonderful opportunity to boost performance and services and to cut costs across the board for consumers and companies, as well as at the government level.”

The private foundation for the Baldrige Award will raise an endowment to help establish an award program for these two sectors, if federal funding also is available for support. The endowment will help fund activities such as printing and distributing criteria and training private-sector examiners who review applications. In 1988, the foundation raised $10.4 million to endow the current Baldrige Award open to for-profit businesses only. If Congress appropriates funds for these new award categories, NIST expects to have criteria available by December 1997, and health care and education organizations could submit applications for the first awards in 1998.

The education and health care sectors have expressed clear interest in establishing Baldrige Award programs for these communities. In 1995, NIST conducted a successful pilot award program to determine the interest and readiness of health care and education organizations in participating in a Baldrige Award program. Forty-six health care and 19 education organizations submitted applications for the pilot. In conjunction with the pilot, NIST distributed more than 30,000 copies of the education and health care criteria modeled after the criteria for the business award.

“These new award programs could help education and health care organizations improve performance, facilitate communication and sharing of best practices, and foster partnerships involving schools, businesses, health care organizations, human services agencies and others,” said Harry Hertz. “Health care, education, business and government leaders are concerned about the costs to the economy of health care and education as well as the need for improved quality of services. Increasingly, these problems are affecting our country’s economic development and competitiveness. The performance excellence concepts embodied in the Baldrige Award criteria are being seen as a way to help meet these challenges.”
Part 5. Frequently Asked Questions and Answers About the Malcolm Baldrige National Quality Award

Who was Malcolm Baldrige?
Malcolm Baldrige was Secretary of Commerce from 1981 until his death in July 1987. Baldrige was a proponent of quality management as a key to this country’s prosperity and long-term strength. He took a personal interest in the quality improvement act that was eventually named after him and helped draft one of the early versions. In recognition, Congress named the award in his honor.

What is the Malcolm Baldrige National Quality Award?
Congress established the award program in 1987 to recognize U.S. companies for their achievements in quality and business performance and to raise awareness about the importance of quality and performance excellence as a competitive edge. The award is not given for specific products or services. Two awards may be given annually in each of three categories: manufacturing, service, and small business.

While the Baldrige Award and the Baldrige winners are the very visible centerpiece of the U.S. quality movement, a broader national quality program has evolved around the award and its criteria. A report, Building on Baldrige: American Quality for the 21st Century, by the private Council on Competitiveness, said, “More than any other program, the Baldrige Quality Award is responsible for making quality a national priority and disseminating best practices across the United States.”

The U.S. Commerce Department’s National Institute of Standards and Technology (NIST) manages the award in close cooperation with the private sector.

Why was the award established?
In the early and mid-1980s, many industry and government leaders saw that a renewed emphasis on quality was no longer an option for American companies, but a necessity for doing business in an ever-expanding, and more demanding, competitive world market. But many American businesses either didn’t believe quality mattered for them or did not know where to begin. The Baldrige Award was envisioned as a standard of excellence that would help U.S. companies achieve world class quality.

How is the Baldrige Award achieving its goals?
The criteria for the Baldrige Award have played a major role in achieving the goals established by Congress. They now are accepted widely, not only in the U.S. but also around the world, as the standard for performance excellence. The criteria are designed to help companies enhance their competitiveness by focusing on two goals: Delivering ever-improving value to customers and improving overall company performance.

The award program has proven to be a remarkably successful government and industry team effort. The annual government investment of about $3 million is leveraged by over $100 million of private sector contributions, including more than $10.
million raised by private industry to help launch the program and the time and efforts of hundreds of largely private-sector volunteers.

The cooperative nature of this joint government/private sector team is perhaps best captured by the award’s Board of Examiners. Each year, more than 300 experts from industry, as well as universities, governments at all levels, and nonprofit organizations, volunteer many hours reviewing applications for the award, conducting site visits, and providing each applicant with an extensive feedback report citing strengths and opportunities to improve. In addition, board members have given thousands of presentations on quality management, performance improvement, and the Baldrige award.

The 28 award-winning companies also have taken seriously their charge to be quality advocates. Their efforts to educate and inform other companies and organizations on the benefits of using the Baldrige Award framework and criteria have far exceeded expectations. To date, the winners have given approximately 30,000 presentations reaching thousands of organizations.

What are the Baldrige criteria?

The Baldrige performance excellence criteria are a framework that any organization can use to improve overall performance. Seven categories make up the award criteria:

- **Leadership**—Examines how senior executives guide the company and how the company addresses its responsibilities to the public and practices good citizenship.
- **Strategic planning**—Examines how the company sets strategic directions and how it determines key action plans.
- **Customer and market focus**—Examines how the company determines requirements and expectations of customers and markets.
- **Information and analysis**—Examines the management, effective use, and analysis of data and information to support key company processes and the company’s performance management system.
- **Human resource development and management**—Examines how the company enables its workforce to develop its full potential, and how the workforce is aligned with the company’s objectives.
- **Process management**—Examines aspects of how key production/delivery and support processes are designed, managed, and improved.
- **Business results**—Examines the company’s performance and improvement in its key business areas: customer satisfaction, financial and marketplace performance, human resources, supplier and partner performance, and operational performance. The category also examines how the company performs relative to competitors.

The criteria are used by thousands of organizations of all kinds for self-assessment and training and as a tool to develop performance and business processes. More than a million copies have been distributed since the first edition in 1988, and heavy reproduction by companies and electronic access multiply that number many times.

For many companies, using the criteria results in better employee relations, higher productivity, greater customer satisfaction, increased market share, and improved profitability. According to a report by the Conference Board, “A majority of large U.S. firms have used the criteria of the Malcolm Baldrige National Quality Award for self-improvement, and the evidence suggests a long-term link between use of the Baldrige criteria and improved business performance.”
Which companies have won the award?
1996—ADAC Laboratories, Dana Commercial Credit Corporation, Custom Research Inc., and Trident Precision Manufacturing, Inc.
1995—Armstrong World Industries Building Products Operation and Coming Telecommunications Products Division
1994—AT&T Consumer Communications Services, GTE Directory 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

How are winning companies selected?
Businesses headquartered in the U.S. may apply. Applications are evaluated by an independent Board of Examiners composed of primarily private-sector experts in quality and business. Examiners look for achievements and improvements in all seven categories. Companies that pass an initial screening are visited by teams of examiners to verify information in the application and to clarify questions that come up during the review. Each applicant receives a written summary of strengths and areas for improvement in each area addressed by the criteria. “The application and review process for the Baldrige Award is the best, most-cost effective and comprehensive business health audit you can get,” says Arnold Weimerskirch, former chair of the Baldrige Award panel of judges and vice president of quality, Honeywell, Inc.

Is it tougher for small companies to win the award?
The Baldrige Award’s eight small business winners—both service and manufacturing companies—have proven that any U.S. company can improve by using the criteria’s performance excellence framework. However, given the importance of smaller businesses to the U.S. economy, NIST is mapping out ways to put a special emphasis on strengthening awareness of the Award program and criteria among these companies.

One promising vehicle for tapping into the nation’s small and mid-sized companies is through the Manufacturing Extension Partnership (MEP), another NIST-managed program. With affiliate centers in all 50 states and Puerto Rico, the MEP is a nationwide system of services and support for smaller manufacturers giving them unprecedented access to new technologies, resources and expertise. In surveys of MEP clients, quality management and improvement is one of the most-requested areas for assistance. A Baldrige expert is working with directors of the locally-managed MEP centers to inform them about the benefits of quality for smaller manufacturers.

Can only U.S. companies win the award?
Any for-profit business headquartered in the United States or its territories may
apply for the award, including U.S. subunits of foreign companies.

**Do the award criteria take into account financial performance?**

Yes. The criteria include many factors that contribute to financial performance, including business decisions and strategies that lead to better market performance, gains in market share, and customer retention and satisfaction. Companies are urged to use financial information, including profit trends, in analyzing and reporting on improved overall performance and to look for the connection between the two.

**Does the award amount to a product or service endorsement for the winners?**

No. The award is given because a company has shown it has an outstanding system for managing its products, services, human resources, and customer relationships. As part of the evaluation, a company is asked to describe its system for assuring the quality of its goods and services. It also must supply information on quality improvement and customer satisfaction efforts and results. That does not mean that a winner’s products or services are endorsed.

**Why are the winners asked to share their successful strategies?**

One of the main purposes of the award is to pass on information about the winners’ quality programs that other companies can tailor for their own needs. Representatives from the winning companies have willingly shared their companies’ performance strategies and methods with thousands of other firms.

**To what extent are they asked to share their strategies?**

The managers of each winning company must decide how much time and effort to devote to activities such as speaking engagements and tours of facilities. The requirements of the award program are minimal. Winners are asked to participate in the award’s annual conference, and several cosponsored regional conferences, to provide basic materials to those who request it on their company’s performance strategies and methods, and to answer news media inquiries.

**Do advertising and publicity diminish the image and prestige of the award?**

The law establishing the award states that a winner may publicize its receipt of such award and use the award in its advertising. Promoting public and business awareness of quality improvement is one of the prime goals of the program and advertising is one way to meet this goal. Guidelines help companies assure that their advertising is appropriate in representing their Baldrige Award recognition.

**Are companies simply chasing after the award and ignoring the lessons of performance improvement?**

The perception by some that winning the award is the goal of U.S. companies is not supported by the facts. Says Earnest Deavenport, chairman and chief executive officer of Eastman Chemical Company, Eastman, like other Baldrige Award winners, didn’t apply the concepts of total quality management to win an award. We did it to win customers. We did it to grow. We did it to prosper and to remain competitive in a
world marketplace.” Thousands of organizations are using the Baldrige Award performance excellence criteria to assess their company and to improve. The program has helped to stimulate an amazing movement to improve U.S. organizations, including companies; academic institutions; and federal, state, and local government agencies.

**If this is a federal program, why are companies charged a fee to apply?**

Federal funding for this program is about $3 million annually and is used by NIST to manage the program. The application fees are charged to cover expenses associated with distribution and review of applications and development of feedback reports. The application and review process are widely considered to be a very cost-effective and comprehensive business health audit. For an application fee of $4,500 for large businesses and $1,500 for small firms, companies receive at least 300 hours of review by a minimum of eight business and quality experts. Site-visited companies receive over 1,000 hours of in-depth review. Every applicant receives an extensive feedback report highlighting strengths and areas to improve. An article in the *Journal for Quality and Participation* said, “The Baldrige feedback report is arguably the best bargain in consulting in America.”

**May a company hire a consultant to help prepare answers for the Baldrige application?**

Applicants for the award are asked to supply facts and data to substantiate their claims concerning their business management practices. Consultants, including members of the Board of Examiners, may provide services on quality management issues as well as the Baldrige award process. However, since there are no secret answers or even right or wrong answers to the Baldrige application, the award cannot be won by hiring someone to fill in the blanks.

A company must show through facts and data that it has a world-class business management system in place and that it is continually looking for ways to improve. As a final check before recommending winners, members of the Board of Examiners visit the more outstanding candidates for the award. During these site visits, examiners interview employees and review pertinent records and data. The objective is to verify the information provided in the application and to answer questions raised during the board’s review. A company that hired someone to fill out its application would never make it through this rigorous review if its performance management system was not supported by facts and data.

**Is it a conflict of interest for Examiners to work as consultants?**

No. Members of the Board of Examiners are experts in evaluating performance management systems. They are in demand as speakers, as information resources, and as consultants. These activities serve as a way to make more people aware of performance improvement techniques and the Baldrige Award. However, since the examiners and judges on the board review applications for the award and are involved in recommending winners, precautions are taken to prevent a conflict of interest or even the appearance of conflict. Rigorous rules are followed at every stage of the review.

Primarily, this means all members of the board must abide by a code of ethics requiring, among other things, that they disclose all business affiliations that might
create a conflict. In such cases, they cannot review an application, comment on it, or make any judgments that could affect it. It is a violation of the code for board members even to ask for information on applications other than those to which they are assigned.

Other safeguards and checks also are built into the four-step review process. For example, during the first step, each application is evaluated independently by at least eight different examiners. By the time the review is over, some applicants will have gone through over 1,000 hours of evaluation.

**Does a decline in applications for the award indicate a decline in interest about quality and the Baldrige Award?**

The number of applicants for the national Baldrige Award is not an indicator of overall interest in quality or the award program. Interest continues to grow both nationwide and internationally. For example, participation in state and local award programs has increased steadily. In 1991, fewer than 10 states had award programs. Now, more than 40 states have or are establishing award programs. Most are modeled after the Baldrige Award, and many companies opt to compete for them first before considering a Baldrige Award application. All four of the 1996 Baldrige Award winners also won state quality awards. In 1995, more than 575 organizations applied for state and local quality awards.

Internationally, about 25 quality awards are in place. Most have been established within the past several years, and many are based on the Baldrige Award. In Japan, home of the Deming Prize, an award that more closely resembles the Baldrige Award has been established.

Interest in the Baldrige Award program also is picking up in other sectors of the U.S. economy including the health care and education communities.

Also, it is important to remember the award program is much more than a contest. While recognizing companies that have successful performance management systems is the most visible part of the program, its intent is much broader. Equally important is the award’s role in raising awareness about quality by encouraging all U.S. businesses and organizations to set up performance improvement programs whether or not they intend, or are even eligible, to apply for the award.

**Will the Baldrige Award categories be expanded to include education and health care organizations?**

NIST is working with the business, education, and health care communities in an effort to establish a full-fledged award program in these two sectors. In conjunction with experts from these two areas, NIST tailored the Baldrige Award criteria and framework for businesses to more readily suit the needs of health care and education organizations. Drawing greater interest than expected, 46 health care and 19 education organizations submitted applications for a pilot award program in 1995. NIST distributed over 30,000 copies of the criteria for the pilot.

Since federal funding to support these pilots was not included in NIST’s 1996 appropriation, they were discontinued after one year. However, NIST is working with the Malcolm Baldrige National Quality Award Foundation to establish a base of long-term, private-sector funding to complement funding being proposed by the Administration to support an award program in 1998.
How does the Baldrige Award differ from ISO 9000?

The purpose, content, and focus of the Baldrige Award and ISO 9000 are very different. The Baldrige Award was created by Congress in 1987 to enhance U.S. competitiveness. The award program promotes quality awareness, recognizes quality achievements of U.S. companies, and provides a vehicle for sharing successful strategies. The Baldrige Award criteria focus on results and continuous improvement. They provide a framework for designing, implementing, and assessing a process for managing all business operations.

ISO 9000 is a series of five international standards published in 1987 by the International Organization for Standardization (ISO), Geneva, Switzerland. Companies can use the standards to help determine what is needed to maintain an efficient quality conformance system. For example, the standards describe the need for an effective quality system, for ensuring that measuring and testing equipment is calibrated regularly and for maintaining an adequate record-keeping system. ISO 9000 registration determines whether a company complies with its own quality system. Overall, ISO 9000 registration covers less than 10 percent of the Baldrige Award criteria.

Is the Baldrige Award a U.S. version of Japan's Deming award?

The basic purposes of both awards are the same: to promote recognition of quality achievements and to raise awareness of the importance and techniques of quality improvement. However, the Baldrige Award:

- Focuses more on results and service
- Relies upon the involvement of many different professional and trade groups
- Provides special credits for innovative approaches to quality
- Includes a strong customer and human resource focus
- Stresses the importance of sharing information.

Why does NIST manage the award and what is the role of ASQC?

NIST is a non-regulatory agency of the Commerce Department's Technology Administration. Its mission is to promote U.S. economic growth by working with industry to develop and apply technology, measurements, and standards. NIST was selected by Congress to design and manage the award program because of its role in helping U.S. companies compete, its world-renowned expertise in quality control and assurance, and its reputation as an impartial third party. ASQC assists NIST with the application review process, preparation of award documents, publicity, and information transfer. ASQC is a professional, nonprofit association serving more than 80,000 individual and 700 corporate members in the United States and 62 other nations.

For Further Information

Malcolm Baldrige National Quality Award Office
A537 Administration Building
National Institute of Science and Technology
Gaithersburg, MD 20899-0001
Telephone: (301) 975-2036
Managing for the 21st Century at Mack Trucks, Inc.

Pierre Jocou, President and CEO (Ret.), Mack Trucks, Inc., Allentown, Pennsylvania

Introduction

A French essayist named Paul Valery once wrote that “the problem with our times is that the future is not what it used to be.” Without question, the future is not what it used to be. But is this a problem or an opportunity? All of us can see what’s happening in the global marketplace. Even in a very mature industry like trucking, our customers, employees, business partners and suppliers are becoming more sophisticated, more demanding every day.

Today it’s not enough to make a good product, and I mean good by your own standards. Good is not good enough anymore. We have to know what makes our products or services more desirable to the customer than our competition’s products and services. But we need to do more than that. We have to know how to make our products and services more desirable, affordable, and available than the competition’s product. This is very simple to say, yet very difficult to achieve. Total quality management is the key to bringing the necessary changes in processes in organizations and in management. These changes will allow companies to thrive on the turbulence that will only increase in the future.

In this article, I will first discuss the business Mack Trucks, Inc., is in, to illustrate that even in a mature industry that is perceived by many to be low-tech, we are faced with a tremendous and increasing amount of turbulence. I will then discuss the challenges we faced over the last decade or so, when we hovered near bankruptcy, and the very practical actions we took to deal with those challenges. I will close the article by discussing what we believe the turbulent future will dictate in terms of organizational and managerial evolution.

Mack Trucks, Inc.: A brief history

Over the last 25 years, North American sales of heavy duty trucks has been very erratic. The industry had an 84% increase in total sales from 1983-1984, then a 32% increase from 1986-1988. Then we experienced a 40% drop from 1988-1991, followed
The business end of Mack Trucks, continued

by sales doubling over the next four years. We are expecting roughly a 20% drop in 1997 and probably a 20% drop in 1998. This is a business that demands an adaptive organization. While all trucks may look alike to you from the outside, they are actually highly customized business tools, built to the exact specifications of a very demanding and very specialized customer. Everything from wheel bases to transmissions to the placement and size of fuel tanks, varies from order to order. This is Mack’s traditional reputation—offering a custom-built truck at an assembly line rate.

Success from World War I to the early 1980s

Success in this kind of business demands a tremendous amount of customer focus. Since World War I, Mack trucks have enjoyed an almost mythical reputation for durability and power. When something was “built like a Mack truck,” it was built to last. And as recently as 1980, the company had more than 20% of the North American heavy duty truck market and employed some 17,000 people.

The late 1980s: Loss of customer focus, quality, market share and employees

But by the late 80s, that slogan began to ring hollow. The company had lost its focus on the customer. Our quality suffered, but we did not know how much because frankly, we were not measuring it. Our employees were not involved in decision-making at any level. As a result, our relations with the employees and their unions were very poor. Our customers very soon noticed it and ultimately our market share dipped to less than 10% and employment sunk to 5,400 people. About 11,000 Mack employees lost their jobs. In 1989, the company lost $185 million.

Extensive changes led to a restoration of quality in the 1990s

By 1991, Mack was hovering near bankruptcy, and unless something was done quickly, it would soon be finished. The first changes that we made were symbolic, like selling the private executive aircraft. But the more extensive changes followed. Chief among them was a new management team unified by an effort to focus on our customers. The goal was to restore our products to their legendary quality, to improve our productivity, and to make our employees players in the process through total quality management.

Early successes, improvements

Since 1990 we have been conducting comprehensive and systematic audits of our vehicles as they come off of the line, and assigned “demerits” for any deficiencies found. The effort is by no means over, but it’s worth noting some of the improvements we’ve already made. As of the third quarter of 1996 we have reduced the average number of defects by some 80%. Just as important, other quality ratings have also improved. For instance, the number of warranty claims that we receive after one year of on-the-road
service—despite more demanding, less tolerant customers—have decreased by 66% since we began this quality effort in 1990.

Better efficiency, higher productivity

This success was good, but not good enough. We had to cut our costs too. Our higher quality products are now being produced more efficiently than ever. The number of hours it takes our people to produce a truck has decreased nearly 40%. In 1995 we built 11,000 more trucks than in 1990, with 1500 fewer people. So the efficiency of the company has increased substantially.

Positive responses from the marketplace

The market responded to these improvements, and our market share is growing. In 1996, we will take more than 12% of the U.S. truck market and we are continuing to improve our share year after year, after years of decline. We have moved from the number six nameplate in America to number three. We have restored the company to profitability after five years in the red. It is not a very large profit by any means, but it is a process-born, solid profit. Perhaps most importantly, we have restored the confidence of our customers and the pride of our employees in working for Mack Trucks.

Total Quality Management at Mack

We achieved success through total quality management principles and tools. In my opinion it is extremely important to emphasize that total quality management is not about pretty words, virtue, or morality. Total quality management is about business. It is about efficiency. It is not about being in agreement with some standards or some norms. It is about being in agreement with customers, the market, our people, and our shareholders; and these stakeholders have nothing to do with norms.

TQM draws from many sources and is applicable to any system

TQM is the legacy of a century of management. It’s the work of Taylor, Ford, Sloan, Deming, and so on. Total quality management is inspired by all of them and draws from nearly all the systems invented, studied, and analyzed since the industrial revolution. Total quality management uses components from all of these things, all of these people, all of their ideas, and goes one step further.

The goal: Customer value

All of these management or production systems have a common goal: To produce the best products at the best price, available when and where they are needed. Their ultimate aim is the excellence of the global performance of the company in terms of quality, cost, and delivery, the three quintessential conditions of competitiveness.
The TQM equation is: 
Quality \times \text{Cost} \times \text{Delivery} = \text{something valuable}

TQM works because it focuses us on the goal—customer value. Regardless of the turbulence of the times ahead, this goal will always remain the same. Customer value is defined as the best mix of quality or desirability, cost or affordability, and delivery or availability. These variables must be in balance, a balance decided by the customer. If we were to express that balance in mathematical terms, TQM is $Q \times C \times D$, not $Q + C + D$. Therefore, if one of the variables is at zero, then the total is zero. For example, if I want to go to a theater to see a play that is very attractive, desirable, affordable, but the play is sold out, then the play is of no value to me. It is the task of management to ensure that the company’s priorities for the quality, cost and delivery of its product are in line with the market priorities.

TQM is about the quality of management, not the management of quality

TQM is the system that will best help the company develop its ability to create value for its customers, for its stakeholders, for its shareholders, and therefore increase its overall competitiveness. TQM does not address the output of the company, TQM addresses the company itself. To put it in a different way, TQM is not about the management of quality, it is about the quality of management. TQM is neither a program nor a model that can be bought ready to use, it is an entire system of management. A system in the sense that it includes a philosophy, principles, methods and tools. If you try to use the methods without embracing the philosophy or the tools without the principles, you will fail. Furthermore, the system must be custom built to suit the particular company with its own culture, problems, weaknesses and strengths. This is the system that helps us manage turbulence and makes us a more efficient company.

Balancing value for the customers, employees and shareholders

We must also balance customer value with value for our people and value for the shareholder. Each of these three values must be in equilibrium. If the focus is entirely on the bottom line to the detriment of employees, the company cannot be successful. Again, if one factor of the equation is zero, the total is zero.

So this is the goal: Value for the customer, the employees, the shareholder. It is easy to say, but how do we get this balance of results for everybody? In my opinion, since value is the goal, we must eliminate from the company anything which is of no value.

Everything in the company must add value

Our customers pay for the salary of our employees, for space in our factories, for pieces of equipment, for portions of inventory. Do these things bring value to the customer? That’s the question we have to ask ourselves all of the time. Useless spending and wastefulness are the world’s most commonly shared business practices. And waste elimination is the key to eliminating the apparent, but erroneous, conflict between the company’s economy, the customer’s economy, or the employee’s economy.
One of the greatest challenges in this process is convincing people that their hard work, their sweat, has no value in itself—it is a consumption of resources. Wasted “sweat”—literally and figuratively—represents astonishing percentages of any business’ costs. If you could eliminate or reduce those costs, you could put those resources toward another product enhancement, or another staff person, or any of the services that are so highly valued by our customers.

So waste elimination is the way to producing value. But how do we achieve the waste elimination necessary to deliver more value to our customers, employees and shareholders? From my experience at Mack, I recognize four areas that must be managed properly to reach this goal.

---

1. Managing customer value

The first is managing customer value. Simple to say, difficult to do, but customer value management involves understanding and measuring, time and time again, what the customer wants, needs, and will need in the future. It means ensuring that everything in the company is organized to identify value and maximize it. At Mack we totally reorganized our internal structure to emphasize customer needs in product development, order fulfillment, sales, and in after-sales service. And we use all the tools at our disposal—value analysis, communication exchanges, customer surveys and internal supplier–customer relationships—to stay in tune with our customers.

---

2. Leading people

The second area is the value of the company’s most valuable asset, its people. The extent to which we really believe that, as opposed to just saying it, will determine our success. Our initial efforts were to increase communication, share more information with all of our employees, so they fully understood our market, financial positions, and difficulties. But communication alone is not enough. In fact, even if communication is effective enough to create understanding, understanding is not enough. People must be involved in the process. We are using all the tools at our disposal to do this. We manage our performance appraisals to ensure that they reflect these values, conduct employee attitude surveys, and stress the team concept in all areas.

People must feel that they have responsibility for eliminating waste and responsibility for increasing value. And they must know that this double responsibility is recognized by the company.

Another thing, most companies are organized by function. Communication and reward goes by function. Objectives and budgets are organized by function. But products and processes are cross-functional. The chain of adding value is cross-functional. We must recognize the fact that conflicts arise from organizing by function, and we must therefore become cross-functional. At Mack, we are preparing to put the organization in line with our convictions.
3. Managing the process

The next area is process management. I don't need to dwell on the importance of lean processes in today's competitive global market. I mentioned earlier that we had a 40% improvement in productivity. We achieved this by focusing plant personnel and systems on delivering value; on examining the way their workstations were laid out; on eliminating any wasted time, motion or unneeded equipment, tools or inventory from our line operation. Now, our challenge is to more effectively move the same focus beyond the assembly line and deploy it throughout the whole company with tools like the ISO 9000, Statistical Process Control, activity based management, process mapping, and so on. All processes must be focused on the double objective, improving value and eliminating non-value.

4. Managing progress

However, in these turbulent times, we must move beyond value management, beyond product management, and beyond process management. We must move toward what I call progress management. To advance is not enough anymore. People have to know which direction to advance in. Deming said progress without direction can be chaos. I believe progress is also a process, and like any other process, it has to be managed.

Obviously, the effort toward progress has to be focused and monitored. The Plan, Do, Check, Act cycle must become part of doing business and must become management's main job. If it is not, the consequences are disastrous. Again, total quality management provides the tools we need to properly manage our progress. Tools like Gantt charts, benchmarking, and Hoshin Kanri.

Somebody once told me something very simple: The most important thing is to make the most important thing the most important thing. It is the job of management to make that happen, and we have plenty of tools to do so.

Total commitment is necessary

So those are the four areas that we must focus on through total quality management. We can't choose between the four. All must be addressed at the same time. There are plenty of management tools for dealing with any one of them, but there is no magic technique for addressing all at the same time. The only way to achieve results is to understand TQM, agree with its philosophy, be willing to play by its rules, especially with the top management of the company. If the top management is not involved, does not understand the links between all of these things, it will not happen.

Figure 1 on the next page shows an integrated graphic of our total quality efforts, including the QDC triangle, the PDCA cycle, and the four areas of eliminating waste.

A businessman is a hybrid of a dancer and a calculator.
— Paul Valéry
The “desired future” of Mack

In order to better manage its progress, Mack has shifted its focus. We’ve stopped comparing ourselves to our past performances, and started to look ahead, to our desired future. We express this desired future in the Mack Vision: “A Worldwide, Competitive and Growing Total Quality Company.” It is simple, very short, and easy to remember, but it is a legitimate and credible statement. This is the message we have communicated throughout the Mack organization. But as I mentioned, communicating is not enough. We must show our people how to realize this vision—and most importantly, involve them in the process, and transform spectators into players.
The “Mack Success Equation”

To that end, we developed a strategy that we call the Mack Success Equation. This equation is what we need to raise our performance above the current trend and to put Mack on course toward our desired future. Simply put, this equation is 20% + 50% + 100% = Improved Profitability (actually, a dollar figure known to our employees), as shown in Figure 2. Our goal over the next several years is to achieve a 20% increase in return on assets and a 50% increase in business growth, with a corresponding 50% reduction in waste of all kinds. These three very simple, very clear goals will be accomplished through a 100% commitment to total quality management and the development of worldwide strategies with our parent company in Europe, Renault. Following this formula should result in a targeted dollar improvement in our operating income, over and above the income forecast in our current five-year plan.

Figure 2. The Mack Success Equation

<table>
<thead>
<tr>
<th>20% Return on Assets</th>
<th>+ 50% Growth / Waste Elimination</th>
<th>+ 100% Total Quality / Synergy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>= Improved Profitability over the Business Cycle</td>
</tr>
</tbody>
</table>

In order to focus everyone on this goal, we borrowed the symbolism of the Quality–Delivery–Cost Triangle I used earlier (Figure 3). Just as quality, delivery, and cost must be in equilibrium, so must our efforts to eliminate waste, grow our business, and increase our return on assets. The goal can only be achieved through total employee involvement, through a strategic deployment throughout the Mack organization. Everyone in the Mack organization must have a clear understanding of how he or she will contribute to the 20+50+100 equation.

Figure 3. The Quality–Delivery–Cost Triangle

Quality—Desirable
Delivery—Available
Cost—Affordable
Using Hoshin planning

Total Quality is providing the tools for ensuring that our growth and waste elimination efforts are coherent across the company and complement each other. The Hoshin Kanri planning process was introduced as a tool for helping employees generate, evaluate and select the initiatives that will help the company realize its vision. Using Hoshin, the company has developed 75 initiatives that, if realized, will more than reach the goal. The initiatives range in scope from developing new international markets to reducing paper and printing costs.

Conclusion

Our efforts at moving beyond product and process management into progress management began in 1994. As we move forward, we are trying to instill in our personnel the importance of the PDCA cycle, and to remind them that this process never ends. It is very easy to motivate people in a crisis. But when the crisis is perceived to have passed, people believe that the time for TQM has passed. People are very agreeable to going from point A to point B in a short intense work effort, but they are far less agreeable to an extended, indefinite process.

For this reason, it is very important to continue to benchmark, to measure our progress against our desired future and against our competitors. This is how we hope to maintain the sense of urgency, and that is one of Mack's primary challenges.

The situation is nearly always urgent in today's competitive market. Any organization will have to be adaptive to thrive in this turbulence. An advertisement we ran a few years ago sums it up rather well. It was a picture of a bulldog with a caption that read "ready for anything the world throws at us." In a market like ours, with a complex product mix, and more demanding employees, shareholders, unions and customers, the bulldog has to be ready for anything—and so do you, regardless of the business you are in. Because of the quantifiable, measurable results is has brought to us, Mack is committed to TQM as the system that will help us succeed in the midst of this change.

Author information

Pierre Jocou retired as Chairman, President and Chief Executive Officer of Mack Trucks, Inc., in December, 1996. Prior to joining Mack, Mr. Jocou served as the Renault Group's senior vice president for quality management. He also served as Vice President of Renault's Worldwide Parts and Service Division and Corporate Managing Director of the Parts and Service Division of American Motors Corporation in Detroit. He is a founding member of the executive committee of the European Foundation for Quality Management (EFQM), a member of the board of the French Association for Quality, and President of the French Institute for Quality and Management. Mr. Jocou holds a degree in aircraft hydraulics and engines from the French Air Force Technical Academy. He is author of numerous articles and books including Au Coeur du Changement (The Depth of Change), a study of TQM at Renault.
Heavy Duty Hoshin Deployment: Real World Applications for Accelerating Strategic Business Breakthrough

Authors

Samuel Torrence - Executive Vice President, Mack Trucks, Inc., Allentown, Pennsylvania

William Montgomery, Ph.D. - The Center for Creative Management, Pittstown, New Jersey

Introduction: An Aerial View of Strategic Planning

Planning is like breathing—it is essential. Some planning, like breathing, is done naturally and automatically. In other cases, special effort is required. At perhaps the highest level is strategic planning, which requires special effort. When performed well, strategic planning is a powerful force in the company and in the marketplace. The value has been demonstrated in hundreds of articles, such as Capon's study1 of 113 companies which concluded that integration of corporate-level strategic planning and financial planning creates the highest returns. Capon's message was two-fold: First, that integrated, company-wide planning is more beneficial than divisions conducting their own separate efforts; Second, that financial analysis is an important ingredient in effective strategic planning. This article demonstrates a highly effective, rapid strategic planning effort at Mack Trucks that is both company-wide and financially integrated.

An overview of Mack Truck's Hoshin Planning

The form of strategic planning we used at Mack was Hoshin Planning, or Hoshin Kanri, which evolved from various improvements that have occurred along the strategic planning highway over the last twenty-five years. A basic framework for strategic planning in the United States was described by Kenneth Andrews in his classic text The Concept of Corporate Strategy, published in 19712. Andrews envisioned strategy as the means to match the capabilities of an organization with the possibilities available in the marketplace. He developed the Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis that is so often the beginning of strategic planning efforts today. The next breakthrough in strategic approach was Michael Porter's book of 19803 entitled Competitive Strategy, in which he encouraged planners to look beyond their own company and into their whole industry. He pointed to the competitive and economic forces that influence the goals and operations of each company within the industry.

A brief history of Hoshin Kanri

Hoshin planning began in Japan during the early 1970s. The first American text on the subject was published by GOAL/QPC in 19894. Since the early 1990s, thanks to the initial efforts of GOAL/QPC, Hoshin approaches have been practiced in hundreds
A brief history of Hoshin Kanri, continued

of companies, and various articles and papers have explained the important elements of effective planning using Hoshin methods. The critical importance of (1) senior management leadership, (2) management involvement at all levels, (3) a broad base of employee contribution of ideas, and (4) measures of success, have all been recognized in the Hoshin literature. The element that has been less used in the Hoshin methodology, the one we believe is a next step in the evolution of Hoshin planning, is financial planning and its link to the strategic planning initiatives.

The benefits of Hoshin

We have found that Hoshin planning provides the fabric in which to integrate financial planning because it is rich with features and linkages. In particular, Hoshin Planning facilitates:

- Building on the Vision and Mission of the organization.
- Exploring a broad range of the organization's environment, including technological changes, regulatory effects, competitive positions, customer movements in both their requirements and their preferences, economic conditions, and strengths and weaknesses within the organization.
- Gathering ideas and information from potentially all levels of the organization.
- Generating dozens of significant potential initiatives at the corporate decision-making level, or executive level.
- Communicating initiatives back into the organization for expansion into more detail and for involvement, participation, and support. This process of discussion and dialog is supported by several Hoshin tools and is referred to as a “catchball.”
- Returning the re-worked initiatives back to the corporate decision-making level, or executive level.
- Deploying selected initiatives.
- Developing measures of success for each of the activities that support the selected initiatives.
- Reviewing and supporting progress on a regular basis.

Tools associated with Hoshin

The tools in Hoshin Planning generate a high level of energy, creativity, and participation. They also render a strategic plan that is alive and highly visible to the organization. These tools are:

- Environmental Trend Charts
- Strength, Weakness, Opportunities, Threats (SWOT) Analysis
- Macro Process Flow Charts
- Affinity Diagram
- Weighted Interrelationship Diagram
- Radar Chart
- Relationship Matrix
In addition, we created a tool we call a financial-based decision matrix which helped us understand the financial value of each project over time. Company-wide Hoshin Planning results in an abundance of ideas. The potential for effectiveness is great. The question for strategic planning steering groups using Hoshin techniques becomes not so much one of stimulating the “strategic thinking” that Mintzberg addresses, but more one of deciding how to select the most effective initiatives. The selection criteria is key and, in the practical world, needs to address dynamic financial analysis. Financial success, in turn, means that customer satisfaction is paramount. The changes in service and in products that result from the strategic planning must be favorable in the marketplace. Analyzing financial situations depends, therefore, on understanding and forecasting levels of customer satisfaction.

Planning the Trip

Formed in 1900, Mack Trucks is currently celebrating its 97th year. We like to say that we are a 97-year-old company with a six year history. In the last six years we have been especially aggressive in our thinking, in our marketing strategies, and in expanding the image of the bulldog.

Mack’s early efforts at basic Hoshin Planning

Mack has practiced a long term financial and business planning process for several years, but early in 1995 we wanted more. We wanted a long term strategic plan that would link directly to, and provide specific long term direction for, our financial planning. We wanted product and market growth, and we wanted employee involvement. The desire was becoming clear, but everyone we talked to in the company asked the same types of questions about a new planning effort: “How do we get people involved? How do I add this to everything else I’m doing? How do I know what it is that I want to work on? How do we make sure that the communication is clear and complete, so people understand exactly what the focus is?” Some of us were familiar with Hoshin Planning, or Hoshin Kanri, from experiences at other companies and from reading about the process. We knew the basic features of Hoshin Planning and we knew that if we wanted to find answers to our prevailing questions, we needed something new.
An early question regarded the words “Hoshin Kanri.” We did not want to use the words simply as part of a fad. We knew, however, that Hoshin Kanri could be a useful, powerful approach for planning, but we didn’t feel comfortable calling it anything else, even though you can call it rapid policy deployment or breakthrough planning, or whatever. The word “Hoshin” literally means “metal object pointing direction,” which has been likened to a compass. The word “Kanri” relates to managing. For us, it was essential to ensure that the entire organization move in the same direction. We wanted engineering, sales, manufacturing, and all others functional groups to be focused even sharper and working together even tighter than ever.

We understood that Hoshin Kanri could help us focus our resources, in addition to focusing our efforts. Priority of resources would clearly be driven by the priority of our goals and initiatives. We were frustrated during the early stages of the planning effort because we kept creating the “to do” list but we weren’t creating the “to don’t” list. We learned that setting priorities meant selecting, which meant having common goals and criteria. We found that with the Hoshin tools we could generate thousands of ideas throughout the company. However, the challenge was in selecting which ideas to use.

What was driving Mack Trucks? As Pierre Jocou came into the organization in 1994 as CEO, he brought a passion for TQM. One of his first suggestions was to take a look at what we had been doing in the past, where we were now, and our business plan for the future. The business plan at Mack Trucks covers a six year period. At one of the planning meetings, the executive team began to ask itself if it was truly satisfied with the six year business plan. Was that plan providing direction, and were we really working to accomplish what we thought we were capable of achieving? The executives all said “no,” so the team decided to clarify Mack’s desired future (Figure 1). We asked the sales people to talk about a possible future of outstanding growth. We asked the financial people about the future from another viewpoint: If the market under-performed, what would have to be accomplished from a financial side. We were looking at both growth opportunities and expense/capital reductions. We were challenging ourselves by not settling on a financial business plan when we had a more stimulating desired future that we could work towards.

---

Nothing in the world can take the place of persistence. Talent will not; nothing is more common than unsuccessful men of talent. Genius will not; unrewarded genius is almost a proverb. Education will not; the world is full of educated derelicts. Persistence and determination alone are omnipotent.

— Calvin Coolidge
Any good CEO or management team is going to have stretch goals, but how far do you stretch? There were many people who believed in the business plan, but some believed that the business plan itself was a stretch. That led us into developing a Mack success equation (Figure 2).

**Figure 1. A Model for Mack’s Desired Future**

![Diagram](image1)

**Figure 2. The Mack Success**

![Diagram](image2)
The Mack success equation, continued

The Mack success equation, simply put, was 20 + 50 + 100. We said that over the six year business plan our goal is to improve our return on assets by 20 percent, and our business growth by 50 percent, with a corresponding 50 percent reduction in waste. These are certainly stretch goals for virtually any company, especially one that is as large as Mack. Further, and perhaps most importantly, these goals are in addition to our business plan goals which we had determined were simply not aggressive or meaningful enough in our competitive environment. Then there was a 100 percent commitment to total quality and synergy. We believed that that would give us improved profitability over this business plan. We said that if we accomplished each part of the 20 + 50 + 100 equation, we should be able to substantially exceed our business plan. This certainly captured our attention, but we had thought that perhaps we stretched too far. We didn’t know if the organization was going to be able to withstand the possible pressure or stress.

Putting the idea into action

To make the Mack equation a reality, we had to generate highly effective ideas and initiatives that would improve the bottom line. We also needed to ensure a successful Hoshin effort, which meant we had to engage the hearts and minds of the employees. When we created the goal, we believed it. But then, as the potential magnitude of the effort sank in, we wondered if we were stretching too much. We had just come from five years in the red, had just enjoyed a good year in the black, and now we were saying, let’s strive for substantial improvement over and above an aggressive business plan. We were uncertain how people would react.

Educating employees was essential

We began educating people on that very simple formula of 20 + 50 + 100. In fact, a lot of people questioned us, saying that somewhere along the line we lost the math. If you add up all the numbers, it doesn’t make any sense. People were also asking how we came up with 20, or 50, or 100. Well the 100 is easy to explain. Anyone that believes in TQM will tell you that you have to be 100 percent committed. You might not be able to accomplish everything you want, but you need that total commitment. The 50 percent growth and waste reduction were really designed to give a balanced focus in the company. We realized that we needed to offset waste elimination by growth. I think that the reality that we are all faced with, no matter what our industry, is that a person might not be doing the same job in a couple of years, but if the company is growing and pacing itself, each person will still have a job. That’s what we were trying to tell people. What do you need when you work on growth? You need people. So we can educate people, and we can train people to have new skills. The 50-50 balance with growth and waste reduction was to give that kind of an offset. Today you can go to any Mack employee and say 20 + 50 +100, and they’ll tell you what it equals.
We required rapid deployment, because we knew we were heading into a business downturn. The trucking business is cyclical, and industry history has shown that record-breaking highs are usually followed by record-breaking lows. In 1994-1995, we had record-breaking highs, so any good management team would be preparing for a low, in a way that would avoid sudden knee-jerk reactions to changing sales. We planned for a deployment that would be effective and rapid, knowing this would be a challenge, and possibly a risk. Failure would be difficult to mend. One of the things we learned the hard way in the past was that we could not dictate from the top of the organization and expect great results. The Hoshin Planning process involves all the people in the organization, so it’s not just pointing everybody in the right direction, it’s involving them in the change and the movement. As will be discussed in more detail later, our deployment has been rapid, widespread, and successful. We have some Hoshin initiatives handled directly by a vice president. These initiatives stayed in the executive area because that is the lowest level of accountability for those projects. We have other Hoshin initiatives that go all the way into the organization and all the way across the organization.

To add to the acceleration, we emphasized “progress management,” which involves reviewing and tracking projects. The reviews are supportive in nature. The objective has been to support teams and projects rather than second guess or criticize them. We applied our total quality management philosophy with its four main management areas of focus: (1) The people management; (2) The customer-value management; (3) The process management; (4) The progress management. The progress management basically asks “where are we, where do we want to be, and what are the time schedules?” With such reviews, we avoid surprises, the project teams are supported in having barriers removed along the way, and there is a better continuity and linkage among various projects. These benefits show that the review process helps accelerate completion of projects while involving the employees.

To better delineate our journey, we established an aggressive time schedule (Figure 3). In April of 1995 we had our vision, especially with our 20+50+100 equation, but we were like Moses, coming from the mountains with our tablets, and we didn't know what to do to begin deploying this effort. We needed to involve the organization. In May the executive group had a working Hoshin Kanri session facilitated by one of the authors, Dr. Bill Montgomery. Besides internalizing such items as “Is this really what we want to do, is it the right approach for us, and why do we think it will work,” the team used the Hoshin tools to review and clarify the overall vision and next steps. We then wanted to carry the message and training to other managers. About three times a year, Mack has senior management gather at the world headquarters for a “bulldog session.” At the bulldog session in June of 1995, we arranged a Hoshin Kanri introduction to 120
Taking Hoshin into all levels of the organization
Taking Hoshin into all levels of the organization, continued

and SWOT analysis. All of this effort continued to expand the affinity diagrams and the ideas for growth, waste reduction, and increased return on assets. The employees had been invited to embark with us on this new journey, and they responded with great enthusiasm and effort.

Screening and selection of useful ideas

Thousands of ideas were generated. Each functional area sorted, screened, and grouped the ideas into projects and initiatives before passing them in catchball fashion to the executive group. The objective of the screening was simply to remove suggested ideas that were known duplicates or were already included in the business plan. The object of grouping the ideas was to create initiatives and projects that incorporated the individual actions. Ideas were group by similarity of their action and intended outcome. The thousands of ideas resulted in hundreds of initiatives being suggested to the executive committee. The executive team’s concern before totaling the value of these initiatives, was that the targeted commitment would not be reached. What happened was surprising to us all—the target was exceeded by five times! Even after the list was further reduced to eliminate duplicates across organizations, and the most financially appealing items were selected, the target today still remains at over twice the original target. We have also realized some financial gains already, and are on track with the six year plan.

Looking at financial benefits of different initiatives

In early August of 1995, the executive team began preparing for the process of selecting initiatives by gathering financial estimates for each initiative over a six year period. The basic question was, if the initiative started today, what would be its annual cost and its annual generation of cash? We also addressed resources, levels of difficulty, and other items. The concept behind this effort was simply that selection of projects needed to consider cash flow over time. A project that would generate less cash, or even less of a percent return than another, but would do so in one year rather than five, may be appealing as a first project for several reasons. Customer satisfaction, a key element in any decision, was considered to be reflected by the cash generated through market-share increases associated with the initiative.

Forming a tree diagram from one initiative

Once the initiative were selected, we indexed them and showed their relationship via a tree diagram, like that in Figure 4. This figure is representative of the actual tree, which is quite large. All growth initiatives are marked with a “G.” If the growth initiatives were cross functional, they were labeled G1, G2, G3. If the initiative were within a functional area, they were labeled GA (market growth via projects in the Administrative functional area), GE, GM, GF, and GS. We identified 14 cross-functional, or corporate, initiatives and 61 functional area initiatives to complete over the planning period.
Implementation of the initiatives was about to begin. Each functional area and each manager in the company knew the value and importance of their effort, but we needed to form a tighter understanding of the process, time frames, roles of individuals, tracking tools, and support structures. We also needed to establish ongoing communication links such as bulletin boards, e-mail, and newsletters. As part of establishing this overall infrastructure support, we provided training on Hoshin Planning methods and tools on a periodic basis for all interested employees. Demand for these classes is high. People were, and still are, interested in the tools and in learning new skills, especially because they know it is part of the overall change at Mack Trucks.

Implementation began in the fall of 1995 with significant financial targets for year-end 1995 and 1996. We started with 75 initiatives for the planning period, with 26 to be completed by year-end 1996. Each functional area began their training, data collection, and management of their initiatives. Supportive reviews, the progress management aspect discussed earlier, are held monthly at the executive level.
Summary, and initial conclusions

In summary, we have achieved a rapid, company-wide Hoshin Planning effort at Mack Trucks, with strong employee involvement and initiatives completed on time with substantial financial impact. We attribute our success to date on several factors:

- Management at all levels achieved a common view of the desired state.
- Upper management of the company was passionate about the value of the effort.
- One person from the executive team supported all deployment and led all reviews.
- Financial goals were integrated into the strategic planning from the beginning.
- Goals and targets were expressed in clear, measurable terms—usually dollars.
- Training occurred early and continuously.

We have updated the original strategic plan with our latest environmental data and progress. We are looking forward to a successful 1997.

References:


Author information

Samuel Torrence is responsible for furthering and accelerating the development and deployment of Total Quality Management throughout the Mack organization. Dedicated to quality, reliability, and total customer satisfaction, Mack Trucks provides innovative, forward-thinking products to customers worldwide. Mack is one of North America’s largest producers of heavy-duty trucks, in addition to major product components. Mack vehicles are sold and serviced in more than 65 countries worldwide. Sam joined Mack Trucks in 1993 as Vice President of Human Resources and Total Quality. He previously held the same position with Bridgestone/Firestone in Nashville. He received his bachelor’s degree in industrial administration from General Motors Institute and his Juris Doctorate degree from Akron University School of Law.

Bill Montgomery is a quality consultant and trainer specializing in all aspects of...
organizational effectiveness related to quality initiatives. After four patents and several management positions at AT&T, he designed and implemented AT&T quality management programs starting in 1985, which included forming a training organization, leading seminars, and facilitating councils. He has conducted internal Malcolm Baldrige assessments, formulated hoshin planning initiatives, and trained company facilitators and project teams. Bill has written and presented papers on broad-scale process improvement initiatives, and on the application of hoshin planning. He completed a master's degree in management at Pace University and a Ph.D. in engineering from the University of Pittsburgh.
Organizational Redesign at L.L. Bean: A Serendipitous Journey

Robert Peixotto, Vice President, Total Quality and Human Resources, L.L. Bean, Inc., Freeport, Maine
Deborah Heller, Ph.D., Principal, HellerCunningham, Brookline, Massachusetts

Part 1. Total Quality at L.L. Bean, by Robert Peixotto:

I’ve had the privilege over the last fourteen years to be part of a very special company. L.L. Bean is not a very large company. We just crossed the billion dollar mark in 1995, and we employ about 3,500 people. L.L. Bean is a company that in many ways is larger than life, with a lofty and noble sense of business purpose, that has become known, to some extent, as an American institution. But like most businesses over the last five years, ours is becoming increasingly global, competitive, technological, and unpredictable. To thrive or even to survive requires us to change. Yet for us, the need to adapt can often be at odds with our rich heritage and our proud traditions.

Our challenge is to respond to new business realities while maintaining and enhancing L.L. Bean’s special character, and that’s a tall order, as everything we do is rooted in heritage. Our quality journey turned out to be a major change effort that has spawned many other change efforts. And our current business realities have been a huge unexpected change. But before getting into that story, I will present a little background information on L.L. Bean.
How the company got its start

Our company was started because its founder had wet feet. In 1907 a young man named Leon Leonwood Bean wanted to keep his feet dry and comfortable while deer hunting. The all-leather boots worn by loggers of the day gave good support, but they were heavy and would get wet. The all-rubber boots of the day kept your feet dry but were clumsy to wear. L.L. decided to combine the best features of both into one boot. He fashioned some lightweight leather uppers on rubber overshoe bottoms, tried them out and was delighted with the results. He made several more pairs for his hunting companions and they liked them too. There was no reason in the world, he decided, why anyone who enjoyed the outdoors shouldn’t have a pair of their own.

The early years

In 1912 he obtained a mailing list of Maine hunting license holders. He developed a three page brochure and by sending them out gave birth to L.L. Bean, the company. L.L. Bean, the legend, was soon to follow. The Maine Hunting Shoe was a unique and innovative product, but 90 of the first 100 sold were defective and returned. L.L., at some financial risk, made good on his guarantee. He refunded the purchase price, improved the boot, satisfied his customers, and really gave birth to everything we stand for today.

The golden rule of customer focus

L.L.’s influence can still be summarized as his golden rule: “Sell good merchandise at a reasonable profit, treat your customers like human beings, and they will always come back for more.” Sometimes we think L.L. should’ve gotten some credit for starting the quality movement. Customer focus has been at the heart of the business that he built. He used to tell anyone that would listen: “A customer is the most important person ever in this office, in person or by mail. A customer is not an interruption of our work, he is the purpose of it.” Customer focus is deeply ingrained in our culture and traditions. It’s the bedrock of our business. In times of change, our customer focus is unchanging.

Substantial growth for the last 30 years

L.L. Bean is a family held company. L.L. himself ran the company until his death in 1967, and shortly thereafter his grandson, Leon Gorman, took over as president. Under Leon’s leadership, the company’s growth has been stellar. Three million dollars in 1966, $30 million in 1976, $300 million in 1986, and today we’ll be about $1.2 billion. That’s a compound growth rate of about 17 percent sustained over 30 years.

A brief look at the business of L.L. Bean

L.L. Bean is a catalog merchant supporting active outdoor-oriented lifestyles of men, women, and children with sporting goods, apparel and footwear. This lifestyle is rooted in a deep belief and appreciation of the outdoors. This appreciation runs the
A brief look at the business of L.L. Bean, continued

gamut from strenuous active outdoors involvement to a more passive but deeply felt love of nature.

We sell apparel and footwear for active use and for casual and weekend vacation wear. We sell sporting equipment for hunting, fishing, backpacking or camping, canoeing, kayaking, cycling, cross-country skiing, and winter sports. And we sell furnishings for home and camp as well.

Ninety percent of our business is done through catalogs. We have one retail store in Freeport, Maine, a town of 6000 where we do $100 million of business a year. In addition, we have seven factory outlets in Maine, New Hampshire, Delaware and Oregon. In addition to U.S. sales we market to Japan, Canada, and the United Kingdom. We have a Japanese partner that operates six retail stores scattered throughout Japan.

The first quality efforts in the late 1980s

Our quality effort began in 1988 when our president, Leon Gorman, was invited to a White House gathering to hear President Reagan unveil the Malcolm Baldrige National Quality Award. Not one to refuse a White House invitation, Leon accepted, and was extremely impressed by what he heard and saw. By the time he was back in Freeport he had decided that we should apply for the award. His motives were simple enough and that is what he told his managers during our 1988 management retreat. Now you have to understand that Leon has kind of a classic dry Maine sense of humor. He said: “If we do win the award we will be under a great deal of pressure to renew and enhance our quality improvement efforts to make sure that we live up to our reputation. And if we don’t win the award we’ll be under a great deal of pressure to renew and enhance our quality improvement efforts to make sure that we live up to our reputation.”

Shifting away from a guarantee-based approach to quality

It was funny at the time, but in hindsight Leon was actually already showing his leadership with regard to continuous improvement and organizational learning. We learned an awful lot as a result of our site visit and feedback. We are a top-rated service company consistently achieving world-class customer satisfaction, but no award was given that year in the service category because we weren’t doing it very productively. We were often satisfying our customers after the fact when something had gone wrong for them. It was a guarantee-based approach to quality. Since 1988 we have adopted a total quality program that looks a little different.

Total Quality as a complete way of doing business, empowering people and managing processes

Total quality is not a program, it is the way we do business. For us it has two key drivers: (1) The way we involve people is called our performance through people strategy and (2) The way we manage processes is called strategic process management. Unlike
Organizational Redesign at L.L. Bean

Total Quality as a complete way of doing business, continued

many companies, we started on the more difficult human side of quality. We’ve worked to change the company environment from a top-down, controlling work place to one where people who create quality for the customer can take responsibility for quality, feel that they are encouraged to make improvements, and feel well-supported by their leaders.

The human side of TQM

During this people phase, we created an assessment process called Feedback For Improvement (FFI), which provides every work group in the company a measure of progress in creating a total quality climate. It serves as a catalyst for dialog on what further improvements are needed and what strengths need to be leveraged. We also made significant improvements in our performance management system, ensuring that we had accountability for quality and that people were judged for what they had done, how they did it, and the degree to which they had participated in improvement. We’re now about ready to do another round of change in our performance management process.

The process side of TQM

Our work on the process side of quality began about four years ago. Since then we’ve been involved in learning all we can about business processes improvement. We started from ground zero. One of the first things we did was run an enormously successful pilot in our creative area that produces our catalogs. The team delivered major gains in both quality and productivity. We are currently saving about $750,000 a year based on their efforts. They reduced the cycle time by one month, which means that as a retailing organization we can make decisions about our products one month closer to market. Hand-offs were cut by 50%. The page revisions before the catalog went to press were reduced by 70% and we reduced product returns related to the catalog.

Initiating teams

We also developed a process architecture for the company, and developed a small staff of business process improvement consultants. In 1995 we initiated 14 different process improvement teams in support of strategic directions and key business needs. We unleashed change of an unprecedented magnitude in every nook and cranny of our organization.

Some internal assessment

In May of 1995, as part of our strategic planning process, we did an in-depth assessment of our quality efforts to date. Our internal Baldrige assessments have shown good progress since our 1988 site visit. Employee surveys showed substantial improvement towards a total quality climate. In benchmarking our FFI surveys against other high quality companies, we scored significantly better on 23 out of 32 questions we compared, and significantly worse on only two. We asked 3,500 employees to rate, on a
Some internal assessment, continued

seven point scale, the level of agreement with the phrase: “I am very committed to L.L. Bean and it’s goals.” Only 33 people registered any form of disagreement. Half of the people surveyed on “I am proud to tell people outside of Bean that I work for the company” scored a perfect seven, strongly agree. Finally we had financial results to show for our quality improvement efforts. Financial analysis of just four of 14 business process improvement efforts yielded benefits of $8.5 million.

Needed to integrate business process improvements

But we recognized that we had lots of room for continued improvement. We had done a lot of work on our business processes, but we had data telling us that our management processes were perceived to be inefficient and ineffective. Selection and prioritization of methods was unclear and unfocused. Business process improvement, though it was working, was basically occurring apart from the organization, almost as another duty. And as we moved out of the redesign phase in our process improvements, we were losing valuable time in making the hand-off to implementation. Energy and resources were being lost.

A disturbing wake-up call

Three months after this assessment we saw a deterioration in our forecast for 1995 sales of a scope and magnitude that was unthinkable, let alone unpredictable. In a few short months our projections fell by nearly 20% or $200 million. It felt like the bottom had fallen out of the business. We began to wonder whether our catalogs were even getting to our customers.

Our carefully laid financial, hiring, and inventory plans were quickly irrelevant. All of our catalogs for the busy Christmas season were already in the mail or in production. Our merchandising was working eight or nine months out and they didn’t have the benefit of knowing what was going on to influence their merchandising decisions and it was at a time when we had to be committing to our spring 1996 circulation.

Total Quality helped us focus on some fundamental questions

In deciding how to react we had to ask some fundamental questions: What’s wrong with the business? Is it us or is it the industry? Is it a short term phenomenon or an abrupt start to some long term shift in consumer and industry fundamentals? Is the franchise still sound? How could we have lost consumer relevance so quickly? Is our business model somehow suddenly not viable? And unfortunately we didn’t have a lot of time to answer some of those questions before acting. We needed to leverage the newly developed strength around total quality.

Three courses of action

1. Increase market research. Our first priority was to understand what was going on for our customers. Lots of research helped us understand the issues in our market-
Three courses of action, continued

place and the effects of competition. This action was consistent with our value of customer focus.

2. Focus on process improvements in inventory and cash flow. We needed to stabilize the business, and in our case that meant taking care of inventory and cash. The continuous improvement approach paid off. There was no silver bullet. This was a very intensive, buyer by buyer, item by item, week by week, vendor by vendor, sort of a process. In the end, in spite of a horrific demand shortfall, we ended the year with inventory right on plan. It's amazing what people can do if you give them a challenge and the opportunity to perform.

3. Focus on productivity improvement and cost reduction. Finally, we needed to reduce costs and improve productivity. With the realities of our new business volumes, we had to cut payroll costs in the short and long term, and do so with an awareness of the importance of these actions on our culture. We also knew that great companies distinguish themselves by how they act when times are tough. So in one way this was a crisis, in another it was an opportunity. Our value of respect for people would be our guide.

Our approach to cutting costs

To work on cost cutting, we adopted a strategy that we called “accelerated productivity, accelerated attrition.” We decided that our cost reductions would focus on poor quality costs. These are the avoidable costs of doing things that go wrong in the business and create waste, rework and less satisfied customers. Our tool of choice would be business process improvement, something we had already invested time to learn about. We knew that these efforts would eliminate jobs, but it was hard to predict how many. So we created voluntary accelerated attrition programs offering employees incentives for making choices about their continuing employment. These programs were designed to create space in the organization for re-employment of people as jobs were eliminated. This approach was more expensive, less predictable and more difficult to manage, but we felt it was consistent with our values of total quality and respect for people.

Teams managed processes on an ongoing basis

Under the accelerated productivity strategy we conducted a cost of quality assessment and identified $200 million in avoidable costs. We adopted a goal of reducing those costs by $30 million by 1998. We began to make a shift from business process improvement interventions to strategic process management. This meant moving to teams that are managing processes on an ongoing basis, not just during business process improvement interventions.

Innovative ideas for downsizing

On the accelerated attrition side, we made a very early decision that we would
Innovative ideas for downsizing, continued

not downsize in the traditional, involuntary sense. We felt strongly that downsizing doesn't show respect for people and there is research to show that it just doesn't work. Instead, we fell back on our long-standing stakeholder commitments and adopted a "share the pain" strategy. In an effort to save jobs, we didn't fund 1996 pay increases. A Time Magazine/CNN poll asked 1250 Americans "If your company needed to reduce payroll costs, would you prefer they cut everyone's pay by 10% or lay off 10% of the workforce?" Eighty percent preferred the pay cut. We didn't cut pay but we did withhold annual merit increases to save jobs. We felt reasonably comfortable in doing this because our pay is pretty competitive. We withheld our annual employee cash performance bonus for the first time in 50 years. We hadn't earned it and we didn't have the cash. Senior management incentives were eliminated for the year. At L.L. Bean, senior management wasn't spared the pain of tough times. Our charitable contribution program was slashed. Our stockholders were impacted with our dividends. But we came to recognize that even these stakeholder sacrifices and normal attrition would not reduce costs fast enough. So we invented the program that we called accelerated attrition.

Creating options for employees also benefitted the organization

Our attrition options consisted of early retirement incentives, enhanced severance for people who chose to voluntarily resign, and a new two year sabbatical program to provide a benefit while meeting a company need at the same time. We provided career and retirement counseling as people made their decisions. People leaving got medical benefits during their transitions, as well as help in locating new employment. About 10 percent of our workforce, 356 people, left the company through these means. Another 38 took sabbaticals. That left 394 holes in the organization, so we could re-employ and retrain remaining people whose jobs would be eliminated due to our productivity efforts. Having those holes in the organization made the productivity efforts a little bit easier because we didn't have to dislocate people to make the changes.

A new internal hiring and retraining strategy

We froze the creating of new positions and we severely restricted external hiring for replacements. Most importantly, we promoted hiring from within by adopting a "hire for potential" strategy. We funded transitions with a $1 million pool of retraining funds. All of our managers received training in how to hire for potential because they were all used to hiring for experience. We've had over 400 people move to new opportunities during the last seven months as a result of these programs. Some of these were opportunities that they might have had to wait years for. Accelerated attrition costs were written off in 1995 and it generated $11 million in savings in 1996.

Rethinking seasonal, part-time employment

We did some other things too. We have a tremendous Christmas peak in our business and we annually hire between 4000-5000 seasonal people to help us get
CASE STUDY

Organizational Redesign at L.L. Bean

Rethinking seasonal, part-time employment, continued

through Christmas. We are fortunate enough as a respected employer that about half of those people come back year after year. During the plunge of 1995 we wanted to limit peak hiring for obvious reasons so we instituted a program that we call “extra milers.” We asked employees to volunteer to leave their non-operational jobs and to spend periods of time ranging from three days to four weeks working on the front line. We had 400 people leave their offices and step into the shoes of front-line employees. I worked with customers on the telephone.

Many dividends to getting everyone on the front-line

In addition to saving money, the dividends were enormous. It brought us all closer to the customer and closer to the business. It enabled learning on an unprecedented scale. Imagine a product manager working on the floor of the retail store, selling the products that he or she developed. Imagine an inventory buyer calling back customers on out-of-stock items that they buy. Or a systems designer using on-line systems that they designed to take customer orders.

Further benefits

Another benefit was that in a very tough year it provided a tangible and somewhat energizing way just to help out. In a related move we ended up shutting down some production lines in our manufacturing division. Because of the business weakness before changing inventory processes, we obviously overproduced for the orders that we were receiving. Instead of laying off people we moved them to jobs in distribution, retail and returns. After three months they returned to their old jobs with new perspectives and new loyalty.

Communication has been critical

Underlying all of these reactions has been communication. As business plummeted last fall, Leon personally directed communications about the business to make sure that we were getting as much accurate information out to the employees as soon as we could and giving full disclosure. We canvassed the rumor mills. We conducted formal surveys and tried to respond to questions on the minds of our employees. Then immediately after accelerated attrition, Leon and I cleared our calendars and spent two weeks conducting 23 town meetings throughout the company. They were 2/3 information sharing and 1/3 questions and answers. Believe me, after no pay increase and no bonus for the first time in modern history, there were tough questions. But the town meetings were well-received and gave leadership a face, a forum, and some credibility in a tough year.

Conclusion

In spite of our decisions, this has not been an easy year for our people. All of us have been shaken. Our recent employee survey which we took about six months ago
shows marked declines in perceptions of pay and job security, not surprisingly. Many of the people that have worked at Bean have worked there a long, long time and have developed a sort of paternal dependency upon the company. Over the coming years we are going to be working to change that from dependency to healthy adult commitment.

It's been a wild ride. We feel good about our reactions, using the tough times to reinforce our values and to literally put our money where our mouth is with respect to total quality and with respect for people. As each new challenge faced us we kept asking ourselves what was right. We wanted to react in a way that enables learning and moves us forward.

In our industry we're never quite sure why or how long sales will sustain themselves. As far as we're concerned, we've survived a wake up call. The business is more volatile and more unpredictable. The long term answers lie in a fundamental review of our business, and thorough understanding of our customers, as well as dramatic enhancements in productivity, so that we're not as dependent on that “last dollar of sales” for profits. And we'll continue to rely on our values in guiding our decisions.

---

**Part 2. Reorganizing a Department: a Discussion by Robert Peixotto and Deborah Heller, Ph.D.**

Introduction

About 100 people attended a workshop led by Bob Peixotto and Deborah Heller. The presentation and discussion focused on how Total Quality and Human Resources (TQHR) engaged in an organizational redesign, what happened after the implementation began, and some lessons learned. Deborah was the external consultant engaged to support the project.

Background

Bob Peixotto:

I took the position of Vice President, TQHR, with a deep conviction that the areas of human resources and total quality really fit together well. While this may not be true at other companies, at L.L. Bean it felt like the right merger because we were really invested in the people side of quality. We thought that the way we involve people had a major role in total quality. However, over time we began to realize that the TQHR department just wasn't prepared for the future and I felt we needed to make some major changes.

Having been responsible for the quality effort for a couple of years, I knew that as we redesigned our own organization, the rest of the company would be looking at us and asking whether this stuff really works. TQHR had been going around preaching good management and good leadership, so we had really put ourselves on the hot seat to practice what we preach. We set some very high standards for ourselves in that process, and there was a lot at stake.

As background for our initiative, I should tell you that in 1992 we spent about
Background, continued

six months working on a vision statement for the department, which really began to change our role as a department and what we did in the company (see Figure 1).

**Figure 1. The Vision for Total Quality and Human Resources Department**

What the Future Requires Us to Become:

As catalysts for Total Quality and superior performance, and as a voice for L.L. Bean’s unique character, Total Quality and Human Resources will work to preserve L.L. Bean’s unique heritage and help the company achieve its business goals.

To accomplish this, Total Quality and Human Resources will provide leadership to inspire and support all levels of management to:

- Create a productive and effective business universally known as a great place to work.
- Make L.L. Bean known as a place where people’s unique talents, outlooks, and contributions are valued, and where they can develop personally and professionally.
- Encourage L.L. Bean people to take responsibility for their lives, for their health, careers, and financial security.

We spent a lot of time discussing what we did for the organization. We decided that (1) we essentially made things start to happen; (2) we were catalysts for total quality and superior performance for the organization, and; (3) we were a voice for L.L. Bean’s unique character. We wanted to preserve that heritage while helping the company achieve its business goals. There was nothing in our vision about taking care of the employees or administration. We had always seen ourselves as supporting the individual employee. However, as we started this visioning process we realized that we could never meet the needs of 3,500 year-round employees or the 9,000 employees we have during our peak season. That would have to be the job of individual managers and leaders. Our role was to make those managers and leaders as effective as they could be.

We also wanted to focus on the productivity and effectiveness of the business, and that’s where the addition of total quality to the human resource repertoire really seemed to fit well. With process improvement, we could now have a direct impact on the financial results of the organization like never before.

**New challenges**

In order to really change, and not just put a stake in the ground with the vision statement, we did some benchmarking work. Our compensation department had actually done some work with Navistar, Data General, and Duke Power to evaluate the business environment. From looking at their work, we expected major changes in the environment that we would be supporting. Most of these changes seem self-evident now,
New challenges, continued

but five years ago it was pretty staggering: That boss and employee would become colleagues; managers would become facilitators and coaches; information would not only go up and down but at the level where the information resides; decision-making would not be done by a single person but collaboratively by a group.

From efficiency to effectiveness

The organization’s top goal changed from efficiency to effectiveness. Instead of thinking of people as being only able to produce predictable results, we began to want people to also produce unpredictable results, because we needed more breakthroughs. We wanted more flexibility in the organization, too. As a human resource department, we knew that the way we were organized, the way we thought about what we did, and the training our people had, would not support what the company would need as this new environment unfolded.

Confusion about our role

When I first took over the department, TQHR engaged again in a planning process. We came up with some opportunities for improvement that were pretty staggering. We learned the company didn’t agree on what our role should be and there are as many good ideas on what human resources ought to be doing as there are people in the company. Everybody thinks they’re an expert in human resources and everybody’s got a great idea. But even though most of them are pretty great ideas, you just can’t do them all.

Our credibility was at stake

Secondly, it became clear that we were spending about 2/3 of our time dealing with failure costs. For example, if a manager treated an employee badly, something would go wrong, and we would spend all our time running around, cleaning things up in whatever way was required. Within our own department we also had functional isolation. We were excellent in terms of individual functions such as health and safety, training and development, employee relations, but we weren’t an excellent department. We had no measurable goals, data, and outcomes. The bottom line was that our department had little credibility within the organization of L.L. Bean. We were not as effective as we needed to be. As we looked toward the future, we were not positioned well. It was obvious that we needed a major change.

Getting some help

We thought a lot about whether we needed help, and eventually we contacted Deborah Heller, an experienced consultant. Two of the things that really appealed to us about Deborah were that she has a background in human resources and organizational development, and she does a lot of work in quality. We were trying to bring organizational development and human resources together with quality in a new way, and so she was really well-positioned to help us out.
Deborah Heller:
When Bob called, he indicated that his organization needed to make some changes, but he was unclear about how to proceed. Because TQHR had been involved in a strategic planning process and because Bob was sensitive to his customer’s needs, he had some preliminary ideas. When we met to talk about his request, some of the issues he and I discussed included:

- Ideal outcomes for the project;
- Potential benefits for L.L. Bean and for the department;
- Obstacles to success;
- Identifying people with the right skills and talents who had functional expertise and who can also think organizationally;
- Demonstrating a model process for the organization as a whole and gaining buy-in from the organization as well.

Design team size
Bob identified 15 people he wanted to participate in this effort. We discussed the challenge of working with a large team. As you know, when working with teams, the more people you involve the longer the process takes, especially if you are working toward a consensual model. In addition, scheduling becomes a challenge. However, Bob felt we would benefit from the wisdom and input of all 15 he identified, and we moved forward to plan our first set of meetings.

Job security
At the first meeting (an hour and a half) to build the agenda for the first offsite, it became clear that people were concerned about job security, both for themselves and their staffs. That led to Bob making a commitment to all of TQHR that this project was not designed to eliminate any staff. Furthermore, as part of any redesign, he would work with staff to find the best fit inside TQHR, to help them move within Bean if necessary and to support any job changes if necessary. This assurance made it possible for the design team to be creative and innovative. (As it turned out, only one person left the department at the time of implementation of the new TQHR.)

Our first offsite
Our agenda was to form the team, share goals, define opportunities and obstacles. We also focused on developing a project statement, success measures, scope of project, issues of authority and responsibility, both inside and outside, and how the two of us would relate to the team and to each other.

Our first meeting was scheduled for two days. I think Bob thought we were going to redesign the organization in that meeting. Well, the entire time was spent forming the team and developing the project description. We just kept coming back to that project statement, but as Bob says, it turned out to be the best two days we ever
Our first offsite, continued

spent. We worked the entire first day, had dinner, and were coming back to work in the evening. We were all sitting around in a circle discussing events of the day, and one person raised the question about Bob’s ability to change the department without getting the permission of the president. Bob said, “As the new V.P. of the department I can do what I want.” And they all said, “No.” This was a big issue for the group. Bob actually left the first meeting with an assignment from the group to go meet with the president, review what we were going to do, and report back to the group. It was an important moment because Bob was responsive to their concerns, and when he came back to the group with a “go-ahead,” the team was ready to begin to think about a business view for TQHR, and a process view of the work.

Bob Peixotto:

In the next months we met frequently for two day segments in various inns throughout southern Maine. As a team, we began to talk about TQHR as a business and what that meant. We got clearer about our customers and began to think about a decentralized model. But the first piece of work we did was to identify what the core processes were. Our team needed to fully understand what business we are in, what are the key processes, and then what’s the best way to organize around those to be effective. Deborah suggested an approach where we identified all TQHR’s current activities, wrote them on Post-its and put them up on walls. Then we grouped them by category: What do we want to keep doing; What do we want to stop doing; What do we want to start doing. And then we organized our “start doing” and “keep doing” activities into process maps. In addition, Deborah led us through activities such as creating metaphors for an ideal organization and developing the criteria for assessing a good organizational design.

New paradigms

As we did this, some new paradigms began to develop. The model about moving from order-takers to consultants was a key piece of the paradigm shift. If you work in HR, you know that a lot of people call you and you’re expected to respond and be available. We began to talk about a new definition of availability, and what could TQHR do at Bean that would really support the business. Our new paradigm as to define ourselves as partners and to develop a consulting model for delivery.

In fact, TQHR is still in the process of changing paradigms, looking at core processes, and determining the criteria that we’re going to use to measure the new organization. Built on the work we did in the design team, our criteria are:

- To provide internal customer areas with representatives from TQHR to work with and for them,
- To make it simpler for customers to get what they need from TQHR,
- To provide internal people with more opportunities for their own career development and for some creativity,
New paradigms, continued

- To provide more coordinated design and delivery of T Q H R products and services,
- To have a mechanism to provide internal coordination.

Rethinking, not just redesigning

What had started out to be an organization redesign became a total rethinkings of who we are. We weren’t just moving the boxes around, we were rethinking what products and services were being delivered to the organization, how we conceived of ourselves in the organization, and what the processes were. That was the catalyst for the major change, and it was very effective. There was an awareness that we were making a major change, which was significant. Our team struggled with a variety of organizational designs— the implications of moving from a functional to cross-functional orientation, and the implications of redefining roles and responsibilities. Having a clear project statement that defined the scope, success and authority, was crucial as we moved forward.

Communication

Deborah Heller:

What Bob hoped would take two days ended up taking nine months. The team met for two or three days as a time, once a month and became a well-functioning team. One of the issues that was managed pretty well was communication with the current T Q H R organization as well as with the organization as a whole. The design team did a lot of work on communication. We discussed how the team talked with each other, what issues would be shared with the organization after each meeting, who would share it, and what the message would be. Design team members were aware and sensitive to the concerns their peers had about what was going to happen. They did not want to share too much too quickly, before decisions had been made and at the same time wanted to be as open and involving as possible. When in doubt, they opted to share rather than not to share. Through their work, they presented an aligned message and communication. Bob paid careful attentions to e-mails and memos and planned staff meetings for communication. In addition, as the team took the proposed design “on the road,” for feedback, the rest of the organization became involved and provided ideas and suggestions.

Peopling the organization

Bob Peixotto:

Once we had our design, we had people fill out a form we developed called an Aspirations and Experience Inventory. It described the new organization to everybody in the department and asked them to identify the position they aspired to in the new organization. In essence they gave us their resume because there were things that people had done before they came to the department that wasn’t readily available to all the
Peopling the organization continued

managers in the functional areas.

We also developed a profile of the competencies that we would require in the new organization. Each individual and their manager in the department filled out a competency worksheet. They sat down and had a reconciliation of those worksheets, which was such a great developmental discussion that we use them on an ongoing basis.

Finally, we had an off-site leadership meeting where we put the new organization on the walls in flip charts. We had taken pictures of everybody in the department, so each manager went up and posted names of their dream team for their part of the organization. Some names were up there a lot, and some weren't there at all. So we began a two day process of reconciling.

Prior to the meeting, Deborah and I had talked and she had suggested that one of the ground rules for the "peopling" was to focus on what was best for T Q H R rather than for a particular team or business. Therefore, at the end of the first day, the three people in senior leadership in the department, myself and the two directors, stuck around for a while and began to ask ourselves what the priority of the company was. At the time we were building a new distribution center, and we were redesigning our whole product development function as a company. We decided that we would have to put our strength as an organization where the company's priorities were and that broke lot of ties in the process.

I reserved the right to make the decisions about who would lead the service teams and the resource teams. I selected the senior team and then the people under me selected their team. The senior team and the team leaders were the people that participated in the peopling exercise. I was very aware of the symbolism that was going to be important in selecting the senior team. In the old organization we had three directors. The new organization had two directors, one person that hadn't been a director and one of the current directors. Judging from the competencies of the various people and their reputations, people saw that we were taking this process very seriously.

Redesign the job structure

While Deborah had been talking about the reward system supporting organizational change, it sounded academic until we really started moving in this process. It then became clear that the old job structure did not support the new team system of team leaders and individual contributor experts in the resource center. We decided to redesign the job structure, cutting the number of job descriptions by 75 percent. This is one example of the things we did to support the change. This is now a model that T Q H R provides to Bean as a whole as other divisions want to do things differently.

Ultimately, when people moved out of their old jobs they moved into a completely new organization. We went from a centralized organization to decentralized teams supporting each of the business units. We created a resource center where new products and services were developed. We designed an integrating mechanism to keep the whole department together. We changed from managers to team leaders, from
Redesign the job structure, continued

functional experts to cross-functional leaders, and that meant that people needed to
move, and their job titles needed to change. No job was the same after the reorganization
as before. We essentially wiped the slate clean and rehired back into the organization. On
October 17, 1994, the new TQHR organization was born.

The design

Bob Peixotto:

Figure 2 is a model for our new organization that we call our “peacock diagram.”
You can see that we have a variety of internal customer areas with cross-functional service
teams, and then the Total Quality Resource Center. The spaces between TQHR and the
service teams are called “pods.” Pods provide an opportunity for any group of people in
TQHR as a whole to come together, independent of service team or where they were in
the resource center, to work on specific short term projects. They also allow for discussion of issues that came up and needed to be addressed.

Teams have a finite period to put together a project statement—they do their
work and disband. For example, let us say that a cross-functional team needs to work on
the annual pay process. We get involvement from both the service teams and the re-
source center. They work for a month or two on the pay process and we get the customer
perspective because the service teams are out there with the customers. Then they do it,
disband, and we move on to the next issue.
Deborah Heller:

At the point when the design was completed and the “peopling activity” was finished, the team focused on the tasks of the new organization. As a department of high-performers and doers, they wanted to move quickly to the transition and focus on the “work.” As a consultant, it was hard for me to get them to pay more attention to process than task. I had hoped they would focus on helping people leave their old jobs and begin their new responsibilities, building their new teams, on building new relationships, on developing the new competencies and seeing the transition as a process rather than an event. The change process is truly tested in implementation. And the road was bumpy. Fortunately, because of the work the design team had done and because Bob is respected and cared about by his staff, the bumpy beginnings smoothed out.

Bob Peixotto:

One of the lessons learned was about the importance of separation and forming. On October 18, we thought we were alive and rolling. Our people were mourning. They had worked in those functions for years, had seen the same people each morning, knew each other’s families, and now they were in different facilities. We did not pay enough attention to the separation from the old organization. If it could be done over again, we’d have slowed down and we’d do something very ritualistic to sort of bury the old organization and give birth to the new.

The teams really needed to invest time in forming. We were discussing what the vision was for TQHR and what we were going to do, but now each team had to figure out what to do, identify their vision for what they can do as a subset, and how are they going to interact with one another and so forth. Also, in retrospect it would have been much better to spend more time on how people were going to be working together rather than the product they were going to be delivering. That made the implementation a little more difficult.

Another thing we learned is that you can’t think of every detail. There were 100,000 details that we didn’t think of and we thought we’d done a pretty buttoned-up design. Little things like how to handle a request to change a life insurance beneficiary. We knew that was going to happen on the service teams, but hadn’t thought about how to link that to our centralized functions and who would input the data.

One of the solutions to this was to use the buddy system, so people had benefits buddies and training buddies and so forth. They had somebody who they could immediately call who had been in the old organization, so we could make it work effectively. We also set up on our computer system a how-to manual of new procedures for the new organization. Whenever a question came up we’d write up a little how-to and it would get out to everybody. That was very useful.
Self image

One of the problems that we had to deal with was self images. The people who were out in the client areas as service team representatives were used to being technical experts. Now they were asked to be out working with management in every area, and they were struggling to gain all the knowledge that they needed. The people who worked in the resource center were used to directly delivering services to customers, and now they were expected to deliver through others.

When we rolled out the new organization, people faced a massive uphill learning curve. We had to spend a lot of time training in all the various disciplines. That was the largest individual and organizational development we’ve ever done as a department. It was painful and agonizing.

Parallel organizations

During the transition, we were running parallel organizations. When you’re changing you need to stay in business and continue doing what you are doing! But at the same time you’re trying to develop the capacity to do something else. That is a major stress on people, and clearly, issues of creativity are not front and center in their minds. They’re worried about getting the work done and thinking “Oh my God, what’s going to happen as we switch over. What’s my role going to be and how are we going to make this work?”

Integrating our organization

As Deborah had pointed out, a key element for success of the new design was the need for integration among the teams themselves, and between the teams and the resource center. The new internal organization had to learn to talk to each other, communicate across different lines, align activities so as to support each other, and to continue developing employees to function well in the new structure. Deborah pushed us hard to attend to ourselves, emphasizing that we would be better at our work if we attended to our process. However, we were so busy trying to meet customer needs and adapt to our new design we probably did not spend enough time caring for ourselves.

Six months into the new organization

Deborah and I met to plan the six month review. From what I described, she actively encouraged me to support the plan for our whole department to take one or two days a month away from our customers in order for us to attend to our own internal communications and to enhance our learnings. My people were initially reluctant. It was like pulling teeth to get people to participate in those things at first. They said they were overwhelmed with work as it is, but ultimately we set aside one day twice a month to meet. We essentially shut down and spent a day together as a whole department working on ourselves.
CASE STUDY

Organizational Redesign at L.L. Bean

TEAs

We called those one-day sessions TEAs, a very fancy acronym for Things, Events, and Activities that we do together. On those days we do organization development, work on process improvement, and do updates on the business. However, we're doing things that people would have been doing anyway but they would have been chasing calendars to try to do it. That's been a very major intervention to talk about sustaining gains or continuing learning development.

Success measures

We had three measures of success. When we originally discussed the new organization with our customers in the department, one of the things we asked was what are you looking for from us. Then we developed the measures of quality, based on the words of our customers, that we were trying to deliver as an organization. We did a baseline survey right before we changed over, to see how are we serving people on all of these attributes. After a six month review we did another survey. It showed a 33 percent improvement in quality and customer satisfaction. We continue to do those surveys and we see continuity improvement.

After our first six months we looked at our feedback for improvement data, our climate survey. In spite of all the pain that we were going through, when we asked people how the total quality environment was in our area, we had an 18.6 percent increase after the first six months. So people were generally feeling like they were developing well. That was a very important measure to us because we wanted to model what we preach.

Finally, we wanted to focus on the business. In 1994 our operating expenses as a department were $4.5 million and we were able to identify company-wide savings of $10.75 million. So we were a free department to the company and that was a major improvement to our credibility in the organization. We were no longer the necessary evil, because we were delivering results to the bottom line.

A manager's learnings

There were several key learnings I took from this experience:

1) The new model (moving from order-takers to consultants and partners) really moved HR people from the day-to-day work of compensation and benefits and the back and forth of responding to people's needs into a new, consulting mind set.

2) We weren't trying to fit L.L. Bean into somebody else's total quality model. We had our own house brand. We were able to adapt both our quality model and our organization to make the two come together effectively in this reorganization.

3) It was important to have a process—an approach to guide the design team and to allot the sufficient time to be creative, to work through differences and to develop consensus.

4) An initial discussion with senior management was crucial to getting organizational buy-in at the very beginning. We continued that process by shopping the design—as we came up with various iterations, members of the design team took the plan for the new organization and took it out to the customers. We got lots of feedback, which made
organizational redesign at ll bean

it possible to improve the design, and it raised customer expectations in terms of what the new TQHR was going to deliver.

5) Every time we met as a design team we would end the meeting by deciding what we would share, and what we wouldn't share with the rest of the company. We decided that we were going to share as much as we knew as soon as we knew it even if it wasn't all hatched yet. The only thing we wouldn't share were things that would increase people's individual anxiety in the organization. So after every meeting we literally left with a flipchart full of what we would share and what we wouldn't share. I would go hack to my office and the next morning everyone in the department had an electronic mail, usually about two pages long, explaining exactly what happened in the meeting. That was a very effective practice—I received many compliments from the department for doing so because it kept everyone in the loop.

6) When we began to institute change in a part of the organization, not only did we create some turbulence within that particular department, but also it rippled out to the rest of the organization. As one goes through an organizational design, it is important to think about managing the various connections, both internal and external. You are never working in isolation.

Deborah Heller:

One of the goals I had was that the design team and TQHR as a department, would not only experience the change process, but also would be able to learn from it to be a resource for the organization. I tried to make the process we engaged in as overt as possible so we all could learn as we progressed. Bob has indicated that TQHR is now a resource for the company in change management, and I am delighted.

My role as facilitator coupled with a background in organizational design, systems thinking and change management provided both strengths and challenges. I cared about the people and about the project. I brought expertise in design and change management and I knew about some of the problems and potential traps. I was invested in the transformation and wanted it to be very successful. Sometimes I found it difficult when my clients followed a direction different from the one I advised. Of course, some of those directions led to new and far better results and some led back to solutions that I advocated. Ultimately, I relearned patience and something I've always known, but is so hard— timing is everything and each intervention and suggestion can only come in its own time.

The 15 people on the design team were dedicated, knowledgeable, creative, and consistent in their willingness to work hard. Bob's leadership was essential to the success of the project. We built a good working relationship, making it possible to pay attention to the connections and linkages to the organization as a whole, as well as to the department and of course to the team. Bob was willing to experiment with new behaviors and approaches and successfully modeled “leading change.”
Leadership

Bob Peixotto:

I want to conclude with something that was very enlightening for me as a leader. After the process one of my people complimented me on how the leadership had been in the process. She interviewed me for two hours about what I had done during the process, and we came up with these new leadership approaches from this process:

- Committing to not carrying the meeting alone as a leader;
- Increasing personal comfort with the messiness and chaos of change;
- Diminishing one's own propensity to take things personally and be defensive when issues were coming up;
- Being prepared to sit in silence with other people. There were often times for me when a question would go out and we learned to just sit there. Someone will break the silence eventually. Otherwise I used to be the one that jumped in all the time;
- Listening to questions, without feeling the need to respond with answers, and using that as data to evaluate any possible resistance to change;
- Reframing leadership from delivering motivating messages and always having a prescriptive plan to eliciting and acknowledging people's feelings and diverse responses and sharing harsh realities;
- Accepting that it's not always a leader's job to be liked by everyone and that being happy is not necessarily the measure of success for change;
- Not underestimating the symbolic value of actions;
- Continuing to seek counsel from a lot of people.

Author information

Robert Peixotto is Vice President of Total Quality and Human Resources at L.L. Bean, Inc. In his 14 years there, he has also held positions as Director of Human Resource Operations, Director and Manager of Strategic Planning, Budget Manager, and Financial Analyst. Bob has been associated with L.L. Bean's total quality effort since 1988 when the company applied for the Malcolm Baldrige National Quality Award. Divisions of the company have won the Margaret Chase Smith Maine State Quality Award and the Quality and Productivity Management Association's 1993 North American Leadership Award. Bob's own department was honored by Personnel Journal with its Optima Award for excellence in managing change in its total quality effort.

Deborah Heller, Ph.D., is a principal of HellerCunningham, a Brookline, Massachusetts consulting firm that specializes in developing and implementing customer driven strategies, facilitation of senior level groups, designing high leverage interventions to achieve organization wide gains, designing and implementing team based process redesign methods using systems thinking, designing and delivering creative, customized workshops and educational events to improve competency and transfer skills to internal people. A graduate of Smith College, Deborah received her Master's and Doctorate in Sociology from Boston College.
Creativity translates into money on a daily basis. Steven Spielberg, Jeffrey Katzenberg, and David Geffen, recently announced that they were selling one-third of their new company Dreamworks for $900 million. Simple arithmetic shows that the valuation placed on this company is $2.7 billion, and the partners, these three creative individuals, are walking away with stock valued at $1.8 billion, less the paltry sum of $100 million that they paid for their shares.

This $1.7 billion of value, I would argue, is the premium for creativity. We see this kind of premium being paid on a daily basis. Look at IBM’s acquisition of Lotus. Without Ray Ozzie working on the next version of Lotus Notes all IBM really would have acquired for its multi-billion dollar investment is a rolodex, or a stack of customer cards.

The importance of creativity is increasingly a global issue. About two years ago I was in Japan having breakfast with a colleague who teaches at the Imperial Business School in Tokyo. I told him I was writing a book on business creativity. He looked at me with one of his very Zen looks, and said: “Creativity is not an important topic in Japan.” (I got a little nervous, since I was hoping to sell the Japanese the rights to my book.) “Creativity is the only subject for Japan! Japan has gotten efficient. Japan has mastered quality. Japan has mastered logistics. Japan has mastered many lessons. Now it is about the soft stuff! It is about creating value through harnessing creativity!”

When I use the word creativity, I mean the process used by an individual, a team, or an organization, where ideas are generated and developed, and lead relatively consistently to the realization of some kind of value. That definition embraces a lot of what people might also call innovation or even entrepreneurship. Entrepreneurship, for example, is essentially a skill of being able to perceive things differently from your neighbor so you see and act on opportunities that other people do not. This is the domain of creativity, and since we live in a time of great change, this notion of creativity is extremely important.

Creativity is really about harnessing change. It is about having an optimistic view of change—turning the way we think about change from being a set of forces that one
Creativity is about harnessing change, continued

has to cope with to viewing it as a set of conditions that offers an opportunity for the creation of new capabilities and new business opportunities. Creativity, viewed this way, is not just about creating a new product. It is about creating new ways of doing things. It is about creating new capabilities. It is about creating new ways of seeing things. In short, the object of organizational creativity is equally about creating new perceptions and new processes, as well as new products and new services.

Skills that managers need

A new key skill for managers is an ability to attract talented people and create an environment that these people enjoy working in—an environment that is fulfilling to them because it is a community of talent, it has the enabling technology at hand, and it is a really cool place to be. The job description for management, vis-a-vis talent, will require something like the traditional skill set of the old-time Hollywood producer. The managerial mind-set required to manage creativity is not about buying a cook book on how to manage creative problems. It is about being a person who enables the creative process to take place. Creativity is mobile. Talent is expensive. The ability to cause it to come and stay in one's organization is extremely important.

An implementation gap

I often ask audiences: “Who feels that creativity is fundamentally important to your business, that it is of some strategic importance?” I typically get a response of around 80–90 percent. Then I ask: “How many of you have a system for managing creativity that your people understand, that works reasonably well, and on a fairly consistent basis leads to the realization of economic and strategic value for your company?” The response to this is around 1–2 percent. This suggests a profound gap between the aspiration to creativity and the capability for creativity. That is what I will address next.

Management typically has dysfunctional ideas about creativity

One thing that gets in the way of closing the gap between wanting and achieving innovation is that managers have a lot of dysfunctional ideas about creativity. They often think about it as being soft, or identified with the arts, or part of the optional curriculum. Sometimes they think about it like a fast food meal: Let's order out some creativity. Let's bring in a creativity facilitator, a creatologist, a brainstorming expert. Let's go on a retreat and do some creative brainstorming!

Creativity as capability

One of the most interesting meetings I had in the journey to finishing the book Jamming, was a couple of hours in the office of M. Douglas Ivester, President of Coca Cola. He said, “Your book is called The Art and Discipline of Creativity?” I answered, “yes!” He said, “I like that word discipline.” Then he literally got up from the desk and started pacing around. He said something like this:
Creativity as capability, continued

You know at Coca Cola, we don't care about creativity today. We don't care about a breakthrough next week. We don't care about a creativity campaign next month. What we care about is creativity 365 days a year! Creativity is expressed in every interpersonal interaction in our company, in every meeting, in every glimmering of a new idea, and that is the way we treat it! It goes from being an idea to being something more developed, to being something real! We try not to let our company get in the way of our creativity.

I think that is impressive, because that is what a capability is all about. A capability is not something you can necessarily publish in your corporate identity statement. It is something that people know in their gut and that they practice on a daily basis. And it is not particularly glamorous. It is hard work and involves a lot of pain, suffering, and conflict.

Source of growth

Everyone is looking for sources of growth these days and that's where creativity comes in. Growth comes from creativity. To discuss the methodology of creativity, I like to use jamming. Jamming is a word that comes from jazz, and jazz is music that is improvised. To me jamming is about a methodology for creativity.

There are several ways of making music. Millions of people play the piano, and most buy the sheet music, which is the distilled essence of what the music is all about. It is the blueprint. When Mozart wrote his Piano Sonata in A-Flat Major, he was very creative. He had certain intentions, but it was not one of his intentions that you as the musician would invent new notes. Mozart's job was to create the notes. Your job is to play them correctly. That is one way of making music, just like that is one way of running a company. Jazz is different. Jazz is music that is improvised and improvisation is one of the cardinal skills that individuals, teams, and companies need to learn in the aspiration towards greater creativity.

Jamming or sheet music

In a business sense, sheet music is a coordination and control mechanism. It is largely a legacy of the industrial revolution for managing complex organizations. The mechanisms had a lot to do with insuring effective, clear, and accurate communication; coordinating complex processes; and assuring efficiency towards goals.

There was an era in the 19th century when bureaucracy was not a dirty word. A bureaucratic organization was one where everything was known, could be referred to in a procedure manual, was rational, hierarchical, and easily controlled. This is all well and good if you assume that the organization never needs to change. This is sheet music of all kinds, all the various forms of structure—whether it is a linear strategic planning process, involving extrapolations from the present, or the annual strategy ritual.

These days we need to be doing something different—what I call jamming or improvisation. It's magical to me to see people who have this mysterious skill. They get on stage, count off 1, 2, 3, and start playing brand new music. This is music that has to pass a number of tests. It has to feel good—not just to the people who are up on stage,
but also to the people in the audience because ultimately the audience votes with its willingness to buy tickets and CDs. It is not creativity in a vacuum. It is creativity within a context. It is not just an aspiration to creativity or a mood for creativity. It is the practice and discipline of creativity.

Improvisation always starts with a structure. It is melody. It is harmony. It is a certain kind of mood, a certain point of view. Jazz musicians come to music with a tremendous amount of knowledge. They know how to play their instruments. They know about music harmony and about music tradition. It is a myth to think that improvisation is about just doing whatever you feel like. This is why Doug Ivester at Coca Cola got turned on to the notion of discipline. It is a myth to think you just go with your gut. It is about a balance between freedom and structure. It is about a balance, in fact, between a number of different ingredients that hopefully come together in a form that sounds really good.

There’s a fear on the part of managers that creative people are unmanageable, that creativity is an uncontrollable process. As someone once told me, “creative people are the kind of people that can overspend on an unlimited budget.” The truth is that well orchestrated creativity systems in companies are about a balance between structure and freedom, between procedures and the unknown, between knowledge and naïveté or a beginner’s mind. So improvisation turns out to be a very powerful way to look at creative collaboration and creativity in organizations.

Three Signature Skills

There are three signature skills that are the most important skills of a great jazz improviser. I believe they are also very important skills for businesses:

1. Clearing the Mind

Start with a mind free of preconceptions

When jazz musicians get on stage, they don’t start with a head filled with notes. They don’t know exactly what they’re going to play. In fact, it usually sounds better if they don’t know what they’re going to play. It is only when one has a mind free of preconceptions can something fundamentally new happen. If you’re plotting strategy based on the “trend as your friend,” you’re never going to get to any place new.

Get a fundamentally new view of the situation

Being innovative is about how organizations get to a fundamentally new view of
1. Clearing the Mind, continued

Their situation, a beginner's mind. In 1995, I worked for a large consumer product company. I asked them: "Where do you get your new ideas, your new stimuli?" They said, "We hired this famous market research company and we hire Harvard professors, like you." I said, "Well, if that's what you're doing, you're going to be out of business in ten years because the people you should really be talking with are the sixteen year old kids with nine earrings in their left ear. But you don't even know how to talk to this kid. If you did have a conversation with him, you might very well find out what you've been looking for in terms of what the next big breakfast cereal concept is."

Example 1

Organizations have done a lot of different things to try to get to a beginner's mind. Meiji Seika, which is a big Japanese confectionery company, is very hierarchical. Yet, they have one person who, a couple of years ago, had an extraordinary job description. His job was to move to Brussels from Tokyo, eat lunch and dinner, and go to grocery stores. That was it. His nickname was the taste bud. It sounds very frivolous on one level, and on another level, it is rather profound. If you're a multi-billion dollar company, how are you going to get new ideas? Are you going to get them sitting up in the command module, or speculating about what your strategy should be? No! You go to the sources. For Meiji Seika, it's sending someone to Brussels to shop with Belgium shoppers and see how they put their purchases in net shopping bags, and what kind of food they're cooking, and what the feel of it is, and then bringing that information back to the corporation.

Example 2

Doug Ivester at Coca-Cola is a master of getting a fundamentally new view. He loves to go out on anonymous storechecks in the field. A couple of years ago he went out with a colleague and a little video camera to Rome, Georgia. He walked around in jeans and a T-shirt. He talked to the people at the local Karate studio and at the Park Service, and found out if they had a Coke machine and asked if they wanted one. He came back with a video tape which is now quite famous at Coca Cola. Here's Mr. Top Guy, the CEO, going out doing his own little research project, coming in and showing it to his senior management team. You can predict the results. People actually started going out looking more for what was really going on, and of course there was this flurry of video tapes.

Conclusion

So this issue of clearing the mind is part attitudinal, part managerial, part cultural, and part mechanical. You need to be asking: How do we go out, find the edge, and get the off-the-wall, white-space knowledge? You can buy it or you can clear your mind as an individual and as a company. You want to get beyond the prideful ownership of your knowledge, your expertise, and your capabilities to find something genuinely new. And managers need to make it a part of their job to bring this about.
2. Clearing the Place

A new environment facilitates the flow

The second cardinal skill in the jazz skill set is Clearing the Place. When you do new stuff, you often need a different kind of environment, one that free of pre-conceptions. When Charlie Parker, a very famous jazz saxophone player, was inventing a new kind of music called bebop, he would say, “I’ve got to go out to the woodshed.” He started playing these really strange scales. He wanted to do this in isolation because he didn’t want people criticizing him. He didn’t want people prematurely praising him. He simply wanted to be in a different place. Most companies that I’m aware of don’t think about clearing the place. Their environments are about relentless busyness. They are not about an environment that is free of pre-conceptions that may initiate and nurture a different kind of thinking.

Having a place different from the day-to-day

It is about whatever it takes to create an environment that is separate from the day-to-day, and is designed to encourage the kind of improvisation I’ve been describing. In a sense, you know all about jamming already, because jamming in a day-to-day context is conversation—talking—and we all talk. You had conversations over breakfast. You had an idea of what you wanted to say, but could you predict the exact words you were going to say? When you talk to somebody, do you know a minute from that point, or five seconds from that point, what the word choice is going to be or how you’re going to say it? Probably not. It is something that emerges from the interaction. Somebody says something and it stimulates something in you—you co-create something.

Conclusion

One of the senior people at DuPont once said, “To me a company is nothing more than the sum total of the permissible conversations.” Think about that; it is rather profound. And think about how that then relates to the issue of place. If you’re in an environment of relentless busyness, what kind of conversations are permitted? Conversely, if you’re thinking about designing your environment for conversations, think about what you can do.

You can ask yourself what is the situation in your company? Where are the woodsheds? What are the opportunities for conversation that are either inhibited or enhanced by the physical design of the environment? What is the effect of the virtual world that you’re supporting with e-mail, groupware and other kinds of tools on the ability of people to collaborate on new things, in an enabled fashion, in this virtual world.

3. Clearing the Beliefs

What beliefs and expectations do you want?

The final of the three skills is Clearing the Beliefs. Basically this has to do with setting expectations. Expectations are very powerful things. When jazz musicians get on stage they do have the expectation that it is going to sound really good, even though
3. Clearing the Belief, continued

they don’t know exactly what they’re going to play. They have a belief. But it is more than just belief. You can say, “We believe in creativity and support risk-taking among our talented people.” Every company in the universe says that and it is meaningless. You need an expectation, too.

The proof is in how deep and searching is your statement of the kind of behavior that you expect, and how you see that translating into creative results. How does your organization establish the belief and expectation in creative productivity—both at the level of interpersonal relationships and at the corporate culture level? PepsiCo, for example, has in its high performance leadership credo a statement of several hundred words about what creativity means for them, how it translates into managerial behavior, how it translates into economic value, and what it is in relation to their view of human behavior. It is about culture, expectations, and it includes description. It is about establishing expectations and belief. It is also about trying to generate new beliefs and expectations when old ones become dysfunctional.

Do an audit to understand your current capabilities

One thing that is very useful at the organizational level is a creativity audit. A creativity audit tries to find the current capabilities for creativity in your company. Keep in mind that every company is a factory for producing ideas. Those ideas are either killed or promoted, funded or not funded. They lead to desired results or do not. The problem in most organizations, probably 99 percent of them, is that those processes are either unconscious or they don’t work very well.

An audit is about understanding what exists. It’s getting your people into a room with a big blackboard and saying okay, what’s our system? Where did the ideas that we have today come from? Who had them? What happened to those ideas? Do a flow diagram—idea here; idea killed here; here’s a barrier; here’s a gate. I’ve had experience doing these diagrams with a lot of different teams. It is fascinating to see what happens. Usually there is very little agreement on what the system is. Moreover, when they finally do get down to understanding the ingredients of the system, it is often so complicated that they feel as though it is beyond their ability to control it and they don’t know what to do. What they need to do is understand the system. It is almost like being a company historian—understanding what the cases are, what are the ideas that were developed and did/did not bear fruit. The audits should cover other senses as well:

• Inventory your talents. Who do you have? How are they doing?
• Look at the make versus buy decisions around talent.
• Scan the environment: How is your competition doing relative to the issue of talent.
• Look at the productivity of your idea factory. How productive are they?
• What percentage of your revenue comes from new products? What kind of new products?
• How is this all translated into compensation, reward and structure?
• What is your information technology infrastructure? How does that enable or
Getting Started, continued

- How is this all given directionality by a strategy process? Is that the right kind of process to go for white space as opposed to just connecting the dots to find a trend?
- And, most importantly, how does it all relate to managerial skill?

Author information

John Kao is Academic Director of the Managing Innovation Program at Stanford University. He is also CEO of The Idea Factory. His newest, bestselling book, Jamming: The Art and Discipline of Corporate Creativity, was published in 1996 by Harper Collins, and has been translated into 20 foreign language editions. Jamming is also a feature length film recently produced and directed by Kao.

John Kao received a BA and MD degree from Yale, and spent four years as a clinical fellow in psychiatry at Massachusetts General Hospital. He then received a MBA from Harvard Business School and spent 14 years on the Harvard faculty where he developed the highly popular MBA course, Entrepreneurship, Creativity and Organizations.

He has been involved with over 100 companies as an advisor in such fields as biotechnology, entertainment, computer software, and financial services. He served as "matchmaker" between Massachusetts General Hospital and the Shiseido Corporation of Tokyo which led to a $100 million academic joint venture. He also served as a consultant to the World Health Organization, UNESCO, and the Government of Singapore, and recently became a Fellow of the World Economic Forum. He was involved in producing two feature films: Sex, Lies, and Videotape, which won the Palme d’Or at Cannes, and Mr. Baseball, which was distributed by Universal. In his spare time he enjoys being a jazz pianist.
Targeted Innovation: Applications in a Rapidly Changing World

Lois Helene Bronstein, Marketing Research Programs Manager, DuPont Company

Creative solutions are required for businesses to adapt to a constantly changing global environment. Targeted Innovation is one of a variety of techniques used by the DuPont Company to identify business problems, and generate and apply creative solutions.

When a problem has an obvious solution, it should usually be implemented. When there is no obvious solution, creative thinking is needed and Targeted Innovation can help. Targeted Innovation can best be described as creative problem solving with: (1) A definite goal in mind, (2) An up-front commitment to action, and (3) Creation and maintenance of an “institutional memory.” These will be discussed in some detail later in this article.

We have integrated Targeted Innovation into our processes for generating new business opportunities, developing business strategies, and new product development. It has been successfully used in situations as diverse as product naming, identifying new uses for products, identifying business growth opportunities, identifying new manufacturing processes, and resolving organizational problems.

Some examples where we have successfully used Targeted Innovation have been to:

- Develop communications materials for DuPont Silverstone® cookware
- Identify applications for DuPont's Axarel® beyond cleaning
- Develop a communications tag line for DuPont Flooring Systems
- Develop potential offerings for the Industrial Roofing market
- Identify alternative manufacturing processes to using chlorine
- Identify growth opportunities for DuPont Medical Products businesses
- Identify new uses for an elastomer
- Identify new uses for a manufacturing site
- Develop names for a carpet spot remover
- Identify uses for nylon in the pet industry and with the aging population
- Develop future scenarios affecting environmental services and their impact on business strategy.

The Targeted Innovation process is in consideration to be institutionalized within DuPont as a “best practice” to assure its integrity and continuous improvement. Targeted Innovation supplements other business processes. New ideas are evaluated with accepted marketing and business research techniques, and results are documented and saved for future use.
Targeted Innovation emerged to describe a process combining problem identification and creative problem solving with “institutional memory” and a commitment to action. The term Targeted Innovation was a good fit for DuPont’s culture, which thrives on new technology and scientific innovation.

Targeted Innovation is a creative problem solving process, with a goal in mind, an up-front commitment to action, and the creation and maintenance of an institutional memory. This article presents what it is, and how it is used.

We found it very important to provide structure to the creative problem solving process. Our structure has three basic aspects:

1. A goal in mind—a well defined problem to solve. That’s the targeted part of Targeted Innovation.
2. Have a commitment to action. We will not begin a creative problem solving process unless the business unit commits to following through and doing something with the results.
3. Build an Institutional Memory. It’s very easy to generate hundreds and hundreds of ideas. What might not be a good idea now, may be an outstanding idea next week, next month, or next year. Institutional memory is critical so ideas can be saved and revisited.

We have found three factors critical to the success of Targeted Innovation:

1. Treat it as a process, not a single event. It has to be part of the group’s working processes, one of the tools in their tool box, so they can use creative thinking all the time. It is not effective if it is a tool only used by “creative individuals” to go off and create something.
2. Targeted Innovation does not stand alone, but is integrated with other business processes, e.g., new product development, business strategy development.
3. Institutionalize the process so it can continually be improved. Within DuPont, Targeted Innovation is being considered for designation as a “corporate best practice,” requiring process “ownership,” documentation, training programs, and a mechanism for continuous improvement.

Targeted Innovation has these five key components:

1. Clearly defined problem to solve.
2. Agreed upon criteria for screening the “best” solutions, which incorporate accepted marketing and business research techniques.
3. Creative problem solving, using lateral thinking techniques.
The process, continued

4. Commitment to action, to apply the “best solutions.”
5. Documentation of learnings for future use.

Creative problem solving

Creative problem solving is a critical component of the Targeted Innovation. Creative problem solving can be done individually, in groups, in electronic form, in person, or by telephone, or in any combination. One of the major strengths of creative problem solving is the ability to customize, based on the problem to solve, and business requirements. A second significant benefit of creative problem solving is the ability to include diverse viewpoints, through the use of “wild cards” to stretch thinking.

In creative problem solving, we find it essential to:
1. Begin with a clear problem statement, of the form: “How might we...?” A business will be asked to apply some lateral thinking techniques to be sure they have correctly identified the problem they want to solve. More often than not, this results in changes to the initial problem statement.
2. Use a variety of Lateral Thinking techniques, beginning with those more likely to provide adaptive solutions (brainstorming and brainwriting) and moving to techniques more likely to provide innovative solutions (random word or picture, famous person, escape, analogy/metaphor, and craziest idea).
3. Utilize an environment conducive to creative thinking (place, lighting, music, seating, and minimal distractions).
4. Include individuals who:
   • Can allocate resources (management). If management of a business wants creative solutions, they must be part of the process. They cannot stand by and watch, or introduce the problem and leave; they must participate with everyone else.
   • Are going to do the work afterwards.
   • Could derail implementation; could resist changes and make them fail.
   • Are not part of the business. These “wild cards” bring in a different perspective. There’s a saying that if you do what you always did, you are going to get what you always got. Examples of some “wild cards” we have used are pet store owners, pet owners, and the SPCA, to help identify applications of nylon in the pet industry, and a cosmetologist to help look at coatings applications. Children have been used as wild cards in a number of instances, to bring a fresh, naive perspective.
5. Defer judgement of ideas. It is important to suspend judgement, both negative and positive, during divergent thinking. This can be especially difficult in a culture like the DuPont Company, where individuals were recruited, and are rewarded, for their critical thinking.

A word of caution

There are some disadvantages of creative problem solving. The most significant
A word of caution, continued

- Generating lots of ideas, requiring lots of time and resources to evaluate. Although most businesses begin the process doubting this will be a problem, after generating a few hundred ideas they recognize the challenge involved in screening and evaluating them.
- The potential to miss realities of the external environment, but not including sufficient “voices.”

Getting started

In a typical creative problem solving session, participants would:

1. Be introduced to each other.
2. Learn the purpose of the session.
3. Be given an overview of the creative problem process.
4. Be given an explanation of the problem to solve.
5. Apply lateral thinking to generate potential solutions.
6. Group like ideas into categories.
7. Select the best ideas, based on screening criteria.
8. Develop an action plan for implementation.

Setting the environment

Typically, at the start of a meeting, participants would introduce themselves by name, job title, business, location, and perhaps years of service. In a creative problem solving session we are more likely to ask participants to introduce themselves by disclosing some more personal information, probably unknown to the group. This breaks the ice, so participants recognize early that this will not be a typical meeting.

Some examples we have used are:

- What would you do if you had $5,000 to spend, only three days to spend it, and could not spend it on anything related to work?
- What is your favorite food?
- What is your favorite movie?
- What is your favorite book?

Any of these will change the conversation between people, setting the stage for different thinking patterns.

Informally present purpose and background

Information on problem

Usually we describe the purpose or background—why we need creative problem solving and the process we will use—in very informal terms. The process is described as blending divergent thinking, where lots of ideas will be generated, with some selection, converging on the “best” ideas. We generally use Post-it™ notes to capture ideas. They can be easily moved around a room for grouping, and reorganizing. If a session is not held in person, electronic mail, video, or other media can be used as an alternative.
We usually have someone from the business provide background on the problem, including some solutions that were tried and failed. Some technological explanations may be required so participants grasp nuances of the problem. We ask the business representative to design any presentation to be very informal and conversational, better suited to a local bar after a couple of beers, than to a standard meeting with lots of charts and graphs. A very formal presentation could put participants to sleep and destroy the environment set with the introductory exercise. Props are encouraged for “show and tell.”

Businesses always want to know up-front the amount of time necessary for creative problem solving. Our experience has shown we need about as much time to converge on the best ideas as we do to generate them with lateral thinking. For a formal session, at least a half-day is typically necessary.

During divergent thinking we use a number of ground rules for the participants:

1. Defer judgment. We usually ask participants to police each other when they hear any judgmental comments. Judgmental comments can: (a) Be critical of an idea, e.g., “We’ve tried that before.” “That won’t work.” (b) Be critical of the person who suggested the idea, e.g., “Do you really think that will work?!” Neither are acceptable. We have used a variety of techniques for a group to “self-police” when anyone makes a judgemental remark.
2. Quantity is more important than quality; ideas will be screened later.
3. Write down all ideas.
4. Be open to possibilities.
5. Free-wheel; be courageous.
6. Seek combinations; build on each other’s ideas.
7. Respect everyone involved in the process.

Lateral thinking techniques are all about changing your thinking patterns, using external stimuli, and applying new thinking to solving the problem. It can be a comfortable process even for those who do not think they are particularly creative.

During lateral thinking it is essential that participants are physically active. They need to get up and sit down a lot. It is also advisable to mix individual and group techniques. Group techniques are usually limited to three or four individuals per group.

These are some of the lateral thinking techniques we have successfully used:

- **Brainstorming.** We usually start with this technique. Most people are familiar with
it, which makes them comfortable. Participants coming in to help solve a problem have already thought about it, if only a little. They already have ideas of how to solve the problem in their heads. If they do not have the opportunity to write these ideas down, and share them with the group, the ideas will likely be lost, and participants will become frustrated. Brainstorming enables participants to get any ideas out, and clear their minds to freely create. Participants are usually allotted some time to write a challenging minimum number of potential solutions, one per Post-it. After the allotted time, each reads their ideas, sequentially, posts them for the group, and answers questions for clarification.

- **Brainwriting.** Brainwriting is especially good for introverts, since participants write ideas, building off each other, rather than speaking out in front of a group. Using a sheet of paper with the problem statement on top, each participant is asked to think of two new solutions. Once they have them, they exchange sheets with another group member, they read each others’ solutions, and build on them, to create two new solutions. The pattern is repeated until each sheet contains six new solutions.

- **Analogy.** Say we were trying to develop an advertising campaign for DuPont Silverstone®, used on cookware to make it nonstick. Our problem would be to create advertising which would emotionally resonate with consumers. We would want to find ways to get people excited about buying frying pans. We could use Analogy to ask participants to think of advertising for other products they found especially motivating. For each example participants could explore reasons the advertising was particularly motivating, and suggest ways similar techniques could be used to advertise frying pans.

- **Famous Person.** Imagine we were trying to think about ways we might use DuPont Stainmaster® carpet for applications other than flooring. We would exhaust ideas we could think of, from our perspectives. But suppose we “put on a different hat” and suddenly, we were a famous person, such as Superman. We can think about ways Superman might suggest using DuPont Stainmaster® carpet. Looking at the problem from Superman’s perspective can free us to be more creative. Any famous person can be used as a stimulus.

- **Random Word.** Assume we have a problem: How might we use DuPont Teflon®? DuPont Teflon® is a long chain molecule that make things nonstick. It’s what makes the DuPont Silverstone® on cookware and appliances nonstick, and DuPont Stainmaster® carpet easy to clean. Select a word at random, such as “smoke.” Participants would be asked to list some attributes associated with smoke: smell, heat, dangerous, cigarette, fire. Using one of these attributes, they would be asked to relate it to the possible uses for DuPont Teflon®. Thinking of “smell,” how might that relate to Teflon®? Perhaps Teflon® could keep smells from sticking. A stimulus can be found by opening any book at random, and using a word, or phrase, as a thought starter.
CASE STUDY

Lateral thinking examples, continued

- Escape. One way to escape is to physically go someplace else, taking the problem statement as a reference. We have made trips to shopping malls, home centers, and to manufacturing sites. You can go anywhere that provides a different stimulus. Travel can also be accomplished using visualization, by imagining you are someplace else. For example, relaxing in a comfortable chair, closing your eyes, playing some nice background music, and “transporting yourself” to a beach, where the temperature is 75 degrees, there is a light breeze, and the sounds of surf and seagulls. What does that suggest about ways to solve the problem?

- Craziest Idea. Participants are asked to think of the wildest solutions they can to solve the problem, something that sounds totally crazy, the more off-the-wall, the better. This technique is best used at the end of a session, by which time participants are not concerned about being judged, and are feeling free to be innovative. We find with even the wildest ideas, there is a core concept which suggests some not-so-crazy solutions to the problem.

Integrating Targeted Innovation with business processes

Targeted Innovation has been integrated into other business processes, including Business Opportunity Identification, Strategy Development, and New Product Development processes. Let’s look at the Business Opportunity Identification as an example. Business Opportunity has eight components:

- The process owner
- The decision making team who reviews and screens ideas
- Agreed upon decision criteria
- Inputs, representing knowledge of markets, technology, and the business environment
- A “bank” where things are stored
- An opportunity generation engine, a way to generate ideas
- Communications process to keep participants involved and energized
- Feedback so when ideas are submitted, submitters get feedback.

In Opportunity Identification (see Figure 1) we want ideas, and they can come from anyone. We want to be able to spontaneously get ideas from individuals as well as from some structured idea generation sessions. The medium could be electronic or paper.

We want to save ideas, all ideas, both those that the business thinks are “good” and those that are not, at the time; they may be useful in the future. The concept of an idea bank came to us as a safe place to store an idea, where it could earn interest and make money over time.

An idea bank can be low cost, low tech, real-time interactive, or anything in between. It could be something like Lotus Notes, or similar groupware, or paper in a file. Some level of security is desirable, as are mechanisms for deposits and withdrawals. We find it most effective for a single person to manage the bank as part of their job responsibility.
Integrating targeted innovation with business processes, continued

When developing the strategy for a business, we may employ a four-part process:

- Scenario Planning tools to identify alternative futures
- Targeted Innovation to plan for alternative futures
- Identify commonalities, differences, and leading indicators of scenarios
- Develop strategies to win.

In our rapidly changing world, it is increasingly difficult to accurately forecast the future. A business must be prepared for a number of possible futures, and build a robust strategy for success. Typically we want to examine some scenarios which are optimistic, some which are pessimistic, and some in the middle. A business first identifies their core competencies, assets, technologies, etc. Given these, they would examine each scenario, identifying its impact on the business, and ways the business could succeed, if that scenario were to occur.

In examining three, or more, scenarios, a business is likely to find some commonalities and some radical differences. The commonalities will be critical elements of success in any scenario. If elements of some scenarios would influence a business’ strategy in very different directions, it is vitally important to identify leading indicators of these elements, so they can be tracked, and contingency plans made if they actually occur. We rely on sources, such as the Global Business Network, to help understand sociological, demographic, and macro trends likely to impact DuPont businesses.

New product development

To develop new products, a business needs to:
1. Identify market opportunities.
2. Develop product concepts.
3. Develop technology for new product(s).
New product development, continued

4. Develop an implementation strategy.
5. Scale-up operations.
6. Commercialize.

Targeted Innovation can be used in any stage of the process to:
- Involve customers in identifying opportunities
- Identify alternative markets
- Develop alternative product concepts
- Develop product names
- Identify alternative manufacturing strategies
- Identify sourcing strategies
- Identify alternative distribution strategies.

At any stage in the process, when a problem needs to be solved, Targeted Innovation can help.

Conclusion

Our environment is changing faster than ever before. Businesses increasingly need creative solutions to survive and grow. Creativity needs to become part of the business culture, institutionalized, and practiced by everyone. At DuPont, Targeted Innovation has filled this need, and become a highly-valued technique for creatively solving a large variety of technical, and nontechnical, problems.

Author information

Lois H. Bronstein is a Marketing Research Programs Manager for the DuPont Company. In her work, Lois provides primary and secondary research to support business growth. Her interest in Targeted Innovation began when searching for growth opportunities for a struggling DuPont Business. Lois has since applied the technique to help many DuPont businesses identify problems and implement creative solutions.

Bronstein received a BA in Mathematics from Pennsylvania State University, a MS in Information Science from Drexel University, and an MBA in Marketing from Widener University.