Improving the way organizations run through participative planning and management.
OMI
Malcolm Baldrige National Quality Award Winner, 2000

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Business overview
Don S. Evans, P.E., President and CEO — OMI is an employee-owned company that provides clean water and wastewater treatment services for industry and municipalities. We view ourselves as a transformation company. We transform people into exceptional OMI associates, transform treatment plants into award-winning facilities, and transform our customers’ expectations to the highest levels of customer satisfaction.

One example of this transformation is a city of about 30,000 in the midwest. Its treatment plant hadn’t been operated very well. The state fined the city $1 million. The city also had $200 million in claims filed against it from neighbors. The city was clearly facing a very difficult situation. In order to reduce loading on the plant, the city was evaluating the possibility of requesting that the local industry curtail production. This curtailment would have driven many people out of work and impacted the community in a tremendously negative way.

I remember the first time I saw the place. When I was about two miles away my eyes started watering. I thought, “This is really going to be tough.” We inspected everything carefully and found that it wasn’t only the workers who appeared discouraged—even the city manager looked that way. I asked one employee at the treatment plant how things were going. He held his head down as he replied: “Well, if the plant doesn’t work, my neighbors aren’t going to talk to me anymore. My spouse doesn’t want to be seen with me.” I could tell that he didn’t like his job very much.

In spite of all this we thought we would be able to do something constructive for the facility and community. We negotiated a contract, took all of the existing employees, along with the existing facility, planned a course of action, and brought the facility into compliance within thirty days. It’s been in compliance every year since—and that was ten years ago. Last year that facility won a national award for the best-operated and maintained plant in its category in the United States. We also got a ten-year contract extension, so we’ll be serving them for twenty years at the least. We’ve been doing similar things in a number of locations across the country.
We dominate the market in the small- to mid-size city range, which is the largest market in the United States. We also build facilities for various communities.

**Employee and Customer Satisfaction**

OMI cultivates strong relationships with its employees (known as associates) and with its industrial and domestic clients. We have always understood that associate and customer relationships are important in building loyalty and long-term commitment.

I visited an industrial facility that was faced with some pretty serious problems. The FBI was investigating the plant and looking to close it. I asked management, "What kind of people did you hire to work at this facility?" The response was "Well, we put people there who weren't doing very well in the production line. In fact, we used to send them there for punishment."

We took every one of those employees out of the plant. It was Friday. Over the weekend we determined how to get the plant into compliance by Monday. We worked on the facility for forty-eight hours straight, and by Monday we had it in compliance. Afterwards we convened all the employees and started them on a continuous training and improvement program. We really created a strong program for that company. One result is that we have maintained that company as a client ever since. In fact we now operate several of their U.S. facilities.

A few years ago there were about 1.4 annual controllable violations per facility operated by OMI. This rate has been reduced to 0.6—an incredible task considering we measure every aspect of the water going into the homes and the wastewater coming out of the homes after it is treated.

We channel a portion of the revenue we receive back into the neighborhood. We do this for two reasons. First, it is the right thing to do, morally speaking. Second, it's good for business. We want clients to remain OMI clients. Channeling money back into the community helps us accomplish this long-term goal.

**Customer Savings**

It is clear that customers initially hire us to meet their water, wastewater, and permit requirements. Then they want to know if we can save them money. We save our average municipal customer about 20% annually, in terms of our cost versus the municipal cost. We save our industrial customers about 23% annually.

One customer savings example is a city in Oregon, a community of 20,000 people, with whom we've contracted since 1982. Our contract continues until 2011. We've delivered service at less than the inflation rate every year since 1982. The city has one of the lowest costs for water and wastewater treatment in Oregon.

Another example is Hudson County, New Jersey. I first went to Hudson County with our team in 1989. The county had a ten-year building moratorium in place, and you could really see the effects. The treatment plant was out of compliance, the state was charging the wastewater facility $650,000 a year for permit fees due to the amount of waste discharged and wouldn't allow any building because it...
Business overview, continued

was out of compliance. The environment throughout the entire community was, quite frankly, polluted. “Boy,” I thought to myself once again, “this is a real tough situation.”

We put a program together with Hudson County, brought the treatment plant into compliance, and were able to remove the building moratorium. We reduced their permit costs by 90%—from needing $650,000 per year for permit fees to $62,000 a year. The county was then able to build the kind of dynamic community they wanted. It has become an incredible success story. Since 1989 real estate values have quadrupled. There has been phenomenal growth in quality of life and employment opportunities in Hudson County. That kind of success has given us long-term clients and relationships.

Leadership

We manage 170 facilities located throughout the United States. This complicated situation is a big challenge.

When we take on a project we accept all employees. There might be twenty, thirty, fifty, or even ninety people. We include every one of them. We invite the employees in and tell them that we believe in them. For some this seems incredible. Believe it or not, this is often the first time anyone ever said to some of them, “We believe in you and, in fact, know you can do the job.”

Our leadership has an absolute commitment to our company and to our people. We look at this as a clear opportunity for the practice of leadership. We are unendingly optimistic, and we know we can do a great job. We know that we can transform these facilities, and the associates, and make them into award-winning plants and teams.

Helping Our People Develop

We provide associate and leadership training on a continuous basis. We support our people and recognize their potential. For example, a good portion of employees we inherited in certain work areas haven’t learned to read or write. In spite of that, we tell them they can learn these skills and we’ll help them master those skills. In fact, we tell them that we’ll teach their whole family to read and write as well. We’ve found that this results in a crew of incredibly loyal associates. The whole situation is mutually beneficial. Everyone wins.

Market Leadership

Market leadership is essential. It’s important that customers can find someone leading the market. When clients recognize that we have the ability to take their businesses forward, they become increasingly likely to choose us as their partner.

Innovation

We aim to provide the kind of innovation that enables us to compete very effectively. In a city in New Hampshire, for example, we developed a system utilizing a different technology that greatly enhanced the treatment plant’s operation. This enabled us to secure a long-term relationship with that community.
Leadership, continued

Business Growth

We have averaged a 15% annual growth for almost fifteen years. This growth, in turn, creates opportunities for our associates, and opportunities for us to learn from our customers. We probably learn as much from our customers and new associates as they learn from us. So, we have a sharing of intelligence that helps us advance from where we are to where we want to be. As a result, we've moved into a process of developing a very strong business.

We have been starting up fifteen new projects a year. Within twenty-four hours from when we show up in a community, the people there have to be 100% certain that the water we are providing, along with the wastewater we are discharging, meets all state and federal requirements. So we have to make things work immediately.

Clear Objectives

We also set very clear objectives on where we plan to be in the future. They are outlined in purpose statements that articulate what we are doing within OMI. They lay out the fundamentals of our company—where we are going and how we plan to grow the business. We envision what our future is going to be like, set that as our target, and then move forward to fulfill that vision. And we do this relentlessly.

Community Needs

We try to remain forward-looking by tailoring our services to what our communities need, which may change over time. For example, we provide teacher training in communities where we manage facilities. In this way citizens and students can better understand the importance of the environment for them, and how they can work to take care of it and improve it. In a city in Texas, for example, we use a logo on utility vehicles to provide a “safe place” where any child can go any time. At our facility we’ve trained our people in assisting children throughout the community. Every community has a different program, and every part of what we do, ultimately, is seen as an aspect of our corporate responsibility.

Customer Delight

And when we do everything right (which is most of the time) we grow as a business. We develop long-term relationships with customers. We operate effectively and develop a growing business. We give associates and communities a vision of what they can be. We provide a leadership approach suitable to deliver that mission for them in a consistent fashion. And that, to some extent, explains our wonderful achievements. The mayor of a city in Oregon, said: “OMI doesn’t just treat water; they walk on it.” Now, I love that.

Strategic planning

Roger Quayle, Vice President, Quality & Technology—To be successful we must be nimble and quick and have very good plans. Strategic planning helps us to do this. It is one of our most improved processes, and we believe it is more important now than it has ever been.

The key event in our planning process is the annual planning workshop. It's a
Strategic planning, continued

A three-day workshop held in late April or early May. Outputs flow into our midsummer financial planning. Attendees include the Red Team (the seven executives who lead the company), the regional vice presidents, our Quality as a Business Strategy (QBS) consultant, and two high-potential managers who we invite to the discussion. A three-inch planning notebook, with inputs to the planning session, is distributed two or three weeks prior to the meeting. All participants lead discussions on the various inputs during the planning meeting.

Figure 1 shows a macro-level flowchart of our planning process. One of the important tools we use to stimulate our thinking is scenario planning. In our most recent session we reviewed three possible marketplace scenarios that included what our competitors might do. We then picked one that seemed most likely and focused on how we would respond if that scenario were to occur.

During the planning process, strategic objectives are reviewed and updated. The updated objectives are related to the 150 processes in our Linkage of Processes (LOP) model. We look to see if any of the processes need improvement to facilitate the accomplishment of our objectives.

Two important things we do as we start the strategy are (1) look at our Family of Measures (FOM), and (2) make a prediction. We ask ourselves, “If we did nothing different, what would happen to our FOM within the next twelve to eighteen months?” Then we go through the planning process, update our strategic objectives, and come up with strategic improvement initiatives. At the end of the session we make predictions again on what will happen to our FOM if we make these changes in the strategy. And then we compare the predictions from the prior
Strategic planning, continued

A member of the Red Team is assigned to each improvement initiative as a sponsor. A charter is developed to focus the improvement effort. The initiative is broadly communicated, and the process is reviewed regularly. At the end of the year we review the whole planning process and look for improvement opportunities.

A valuable new input into our planning process is the sixty-seven-page feedback report that we received as a result of our Baldrige application and site visit. Other inputs include our market analysis; the latest customer surveys, segregated by industry and geography; and directives from our parent company, CH2M HILL (currently their focus is global, full-service operations and financial strength). We review our purpose statement, which includes our mission, business focus, vision, cultural norms, current strategic objectives, and the FOM.

We review associate feedback (biennial survey). We also have a new project survey, where we interview people before start-up to see how they liked working for their former employer, and then six months after we start a project to see how they like working for us, and then compare the two surveys.

We review customer feedback, which includes external customer surveys (done every two years), customer focus-group feedback, and semiannual customer report cards (which are kind of a quick check on performance).

Then we audit projects, which involves conducting customer interviews and collecting and analyzing that information. We do a “red dot” session with associates when we do project audits. We get them together and ask, “What does OMI do well and what could OMI do better?” We make a list on a flip chart and give the associates red dots, and they prioritize those initiatives based on the ones they think are the most important. The most important ones are put on the action plan that they follow through with after the project audit.

We also review existing improvement initiatives and study new technology and anticipated changes in regulations from HR, safety, and environmental agencies; contracts; and supplier inputs. And, finally, we review audit reports from project reviews, laboratory reviews, safety reviews, compliance reviews, and financial audits that we conduct during the year.

Strategic Objectives


OMI’s current strategic initiatives and objectives continue to focus on the customer and providing world-class customer service. This has been an objective since 1986. We want to be innovative to achieve performance excellence and to provide market leadership in the markets that we serve. It’s also very important for us to focus on profitable and manageable business growth. In order to provide opportunities for our people, we are committed to growing the company but never at the expense of customer satisfaction or financial performance. Ownership in the
Strategic planning, continued

Feedback from our 1997 and 1998 Baldrige applications indicated that we had many good processes and systems that were not well linked, aligned, or focused. As a result, we implemented a “Quality as a Business Strategy” (QBS) leadership system (Figure 2). The strategic planning process is the QBS activity that brings everything together. Prior to QBS we reviewed all planning and all inputs to planning independently. For example, we had a team that reviewed external customer-survey results, analyzed them, and developed action plans. We had another team that reviewed the Baldrige feedback report, analyzed that, and prepared action plans, and so forth. We did this with all the different planning inputs. Now, we consider all inputs during the planning process and ensure linkage and alignment. Before any initiative is launched we first consider what the impact will be on our FOM.

Improvement charters are developed for each improvement initiative. The charter includes: 1. A general description of what we are trying to do. 2. Measures of how we would know an improvement or change was a positive change. 3. Plan Do Study Act (PDSA) cycles to help a team or individual get started.

Existing teams, new task teams, or individuals manage improvement initiatives. OMI currently has twenty-four corporate improvement initiatives. Examples include safety process, valuation process (where we evaluate and bid on new projects), process for starting new projects, equipment maintenance process, and intranet process.

Collaboration and Communication

A key to my success is collaboration with others. One of OMI’s important partners is CH2M HILL, our parent company. We partner with them for design and build, and we then operate the projects. We also partner with Thames Water, from the U.K. They provide water systems for London and other large projects throughout the world. They’re important to us for their large-systems experience and financial strength. We are important to them because we have world-class quality systems and access to the U.S. market.

We partner with All Max for plant-operations software and information systems, with WW Grainger for MRO items, and many others.

OMI works hard at improving the way strategies are communicated throughout the organization. Our purpose statement includes the company’s strategic objectives and is discussed at all new project start-ups, and all new associate orientations. Strategy is shared during annual quality training sessions, at the annual project management summit meeting in the winter, at the annual senior leadership meetings in the summer, and at regional meetings during the year.
Strategic planning, continued

Implementation guidelines for improvement initiatives are communicated to teams and individuals through use of the charter form, and our intranet is used for posting information about our progress towards accomplishing strategic objectives.

Monitoring Results and Improving

OMI works hard to monitor progress on the strategy. A few years ago, before we implemented our QBS system, we had some associate feedback that projects had to do these quality things but corporate leaders and managers were not “walking the talk.” Now, with QBS, the Red Team reviews a report at each quarterly meeting that shows the status of our improvement initiatives, including the percentage completed, the schedule, the budget, and related details. We also review the FOM at every quarterly meeting, monitor trends, and look at possible impacts on the measure resulting from improvement initiatives that are under way. Our planning team said that the 2001 planning meeting was the best session we ever had, and we left the meeting with a list of twelve things to make it even better next year.

The Baldrige feedback report emphasized the importance of demonstrating improvement in all categories. For strategic planning, some of the improvements that we have made include developing a process for our project strategic plans that are linked to the corporate plan. Using a formal strategic planning approach in 1995 for the first time resulted in our differentiation strategy—implementing Quality as a Business Strategy. In 1999 we expanded the planning team to include the level of managers below the Red Team, which are the regional vice presidents. In 2001 we expanded the team again to include high-potential managers, to expose them to what is going on in the company and to bring in a different perspective, so that we could look at things in a different way.

Planning sessions also provide a wonderful forum for executive team building and pursuing joint goals. Each executive has a charge to learn and grow during the process, but most important, executives can get outside of their functional silos and learn much more about all areas of the company, not just the areas they are experts in. Our leaders thus become more well rounded and make better decisions.

Conclusion

Because we work hard to develop and communicate corporate initiatives at all levels, people throughout the company become linked and aligned. Our strategic planning, in short, helps OMI focus scarce resources to get the best business results. It is hard work and requires discipline, patience, and perseverance. But when done well it focuses and links a company’s efforts to achieve amazing results, and it can be fun and rewarding.

Customer and market focus

Jane Walter, Regional Vice President, Project Development—Our company is focused on people—certainly on OMI associates, but especially on current and future customers. There is a direct correlation between the company’s culture of customer satisfaction and the growth of our business. A customer in Idaho said, “OMI is to be commended for having professional staff who think smart, get their...
Customer and market focus, continued

hands dirty, and frequently exceed their customer’s service delivery expectations." We strive to ensure that all of OMI’s customers feel this best-in-class level of service and quality from our associates.

OMI’s customer is typically a city manager, public works director, city engineer, city council member, or a commission. The ultimate customer, our customer’s customer, is the taxpayer—people like you and me who turn on the tap and expect to have high-quality water flow in, and also expect that everyone’s wastewater will be treated in a safe, cost-effective, and environmentally sound manner.

How do we know what our customers are thinking? How do we know their present and future needs? How do we know what our potential customer will need? How do we understand the market so that we are focused and positioned to win new work? Ten or fifteen years ago our senior executives would personally visit all of our customers and talk to them individually. They can’t do that today. Our company has grown a lot since then, and our customers’ needs are much more complex.

We recognized the need for a more formal system of determining customer satisfaction, loyalty, and needs. Yet OMI still wants to ensure that its cultural norms are imbedded in its systems. That means the door is always open. Customers know they can call Don Evans to talk informally about the services OMI provides and the people that are delivering those services.

Mechanisms for listening to potential customers have been created, including a comprehensive project development evaluation process for pursuing new work. For example, OMI had an opportunity for new work in New Mexico. We assembled a team of technical experts, performed a thoughtful evaluation of those facilities that were focused on technical innovation, employee transition and well-being, and cost-savings opportunities. We were successful in winning that contract because we knew how to listen and respond well to our potential customer’s needs.

Listening posts for existing customers include focus groups, a complaint system, a customer satisfaction survey process, and semiannual client report cards. The client report card is fairly new and is an excellent companion listening post to our biennial customer surveys. A Baldrige feedback report, however, indicated a gap in feedback opportunities: two years was not frequent enough to deal with emerging problems and/or trends. So in 2000 we started the semiannual client report card.

In 1999 our team completed the first survey of our company’s industrial market segment, and in 2001 we did our fifth core business survey. The core business survey reaches all OMI customers, and competitors’ customers. The survey process is managed by a focus group composed of a cross-section of OMI associates. This team, along with our survey consultant, distributes surveys, collects data, reviews and analyzes data, and assigns responsibilities for issues and improvement actions indicated by the survey results. Through the listening posts, including in-depth interviews with a representative sample of customers, OMI has determined key customer requirements. Those requirements include meeting the environmental needs of the projects, providing service that is at a lower cost, high-quality services,
customer and market focus, continued

Community involvement, safe working practices, and fair treatment of all associates.

In 1992 survey ratings were just good, rather than outstanding. A task team was formed, and a community involvement program was developed that focused on customer needs and environmental stewardship. Budgets were developed, and the program was deployed. Scores from the next three surveys, spanning six years, went up. Then, in 2000, there was a slight decline; although we are still rated very good, the gap is significant to us, and we are addressing the decline. We reconvened a task team and contacted specific customers to determine the cause. We will not rest until our data demonstrate an improvement.

Customers expect that our systems and processes will result in efficient operations at lower cost. OMI typically provides water and wastewater operations services for about 21% less cost than customers have experienced under their own management. Those savings can be used to benefit the ultimate customer—the taxpayer. Savings can be used for capital improvements, or to prevent or reduce a rate increase. Politically, the savings demonstrate cost stabilization and responsible management. In this scenario, city management is proving that the decision to outsource operations to a private contractor was a good one. For OMI the cost savings and high survey ratings equal customer satisfaction and increased market share.

Currently 5% of OMI's operations is industrial waste treatment. In 1999 we completed our first industrial customer survey and found that 59% believe OMI usually or almost always exceeds their expectations. Growth in the industrial market segment is critical to OMI's diversification strategy.

Prior to 1999, OMI tracked only complaints from our customers. As the Baldrige feedback indicated, the complaint tracking system was somewhat antidotal and not well deployed. We now track all comments related to customer service. We use listening posts, such as standardized monthly reports, semiannual score cards, and regular customer contact, to track and address positive and negative comments. Understanding existing and current customer needs means business growth.

Market Analysis

Gary Miller, Executive Vice President—We use what we know about our current and potential customers to ensure business growth. If we want to increase our stakeholder wealth, the surest formula is to create the expectation, and deliver sustained growth in revenues and profits.

OMI's linkage of customer focus to our growth strategy is our platform for the future success of the business enterprise. Our survey results show that overall, OMI's customers are more satisfied with OMI's service than our best competitor's customers are with theirs.

The type and level of data we have are a result of a comprehensive market analysis conducted about three years ago. We got key information about customer wants, what they perceive our services to be, and the kind of information needed to
Customer and market focus, continued

clearly understand the drivers of our business. It also provided information to track our competitors. Furthermore, from a strategic planning and business standpoint, that market analysis was helpful during the Baldrige application process. We could demonstrate that we knew our market and our competitors.

Market Share

Unequaled customer confidence and satisfaction have resulted in a significant market-share capture for OMI. It’s a very attractive market with very big long-term contracts. That attractiveness invites strong competition, including foreign companies. While OMI is not the biggest in the industry, we compete successfully against some very strong European companies. Because of the culture that we have created, along with our strategic planning and operational processes, we have been able to capture about 60% of the business we pursue in the United States.

Contract Renewals

OMI has achieved about a 90% renewal rate over the past three years. We build on the customer focus that we have, and we put a lot of effort into customer satisfaction. That results in our having the highest contract renewal rate in the industry. Some customers have been with us for fifteen to eighteen years (this is an industry that is only about twenty years old) and have just renewed ten-year or fifteen-year contracts.

Good Financial Results

Because OMI’s focus is on its customers—current and potential—our key financial measures show positive trends. This year we will see about $160 million in revenue, and we will go over $1 billion in “backlog” work (projecting forward from long-term contracts); that means if we didn’t win any more work we’ve got basically about $1 billion to work off. We are a pretty stable business, and it’s really a tribute to the customer-service focus and the long-term customer agreements that we have.

Baldrige Feedback Helpful

In the short time since we won the Baldrige Award and received the sixty-seven-page feedback report, we’ve added an additional six metrics to track our marketing efficiency. We now have twelve measures; this gives us a better indication of return-on-investment from our marketing dollars.

Maintaining Focus on the Right Things

We would like you to remember that OMI’s strategic objectives and culture clearly support our associates and our customers, and this is imbedded in everything that we do every day. We don’t sell products; we sell service. It’s really a service business. It is people serving people. We understand our market and our customers very well. We have a very clear business strategy. We’re in the right business, with the right people, and a culture that allows our associates to be the best they can be.

Information and analysis

Robert Moses, Vice President and Chief Financial Officer; Adam Cohen, Manager, Project Development Services—We will focus mainly on OMI’s FOM, a balanced
score card of twenty metrics we use to gauge organizational health. This set of metrics is the latest improvement in a company-wide measurement system originally composed of more than eighty individual elements.

The original measures were done in silos. This work was quite painful and laborious, but it served as a first step and got us going toward the very nice system we now have. An eye on continuous improvement led us to reduce those eighty measures to twenty, grouped in seven sections: human resources, finance, internal review/audit, regulatory compliance, health and safety, customer satisfaction, and market share. We found that focusing on the significant twenty was more critical than the unimportant sixty.

The FOM metrics represent measures in these categories: customer satisfaction, regulatory compliance, human resources, health and safety, benefit-cost analysis, revenue ratio, employee turnover, financial measures, available funds, profit/net-income before taxes, backlog (a measure of revenue remaining besides the remaining contracts to be worked off), and marketing measures (including market share and success rates, which we segment by our core business).

Our Red Team improves our FOM metrics by selecting those that actually contribute to our strategic objectives and improvement initiatives. We coordinate the receipts of all these measures, join them together, find agreement with process owners, create control charts, and provide a measurement database. The data are collected quarterly from a number of different segments within the company. This is reported quarterly to the Red Team. Any FOM metric that doesn't directly contribute to either our strategic objective or an initiative is refined, modified, or omitted.

Data are generated throughout the organization. It is a cascading process, from the bottom up. Some measures, like regulatory compliance, financial information, and safety, originate from frontline measurement. They are collected at a regional level and integrated into the company-wide FOM. At each project, the on-site teams who track project performance against unit treatment processes generate data. This, in turn, is tracked against a project's business plan, which is organized around OMI's strategic objectives and daily operational measures.

The FOM undergoes continuous improvement, as does every activity at OMI. We have a team working on project reporting and on developing a project FOM. Another team, called the Mighty Oaks of Quality, is improving the annual project business plan process, through which we track compliance with our business plan.

Each organizational level contributes valuable data, and this is key to improving company procedures. OMI's Red Team analyzes each level, quarterly, to adjust business planning. Furthermore, the data are used by our regional business managers and our project managers to guide daily decision making. A number of other systems are also in place: informational systems aimed at satisfying user needs, financial systems, marketing, HR, process control, maintenance, laboratory, cross-functional teams involved with information analysis, a computer standards focus team, and a strategic planning team.
These teams support a robust overarching system that involves a frontline MIS management staff, providing phenomenally cost-effective support through innovative technology. The teams set strategic plans and develop and recommend standards for hardware, software, and other business applications. The teams also identify opportunities to integrate systems; this is a constant challenge.

**Benchmarking**

The Information and Analysis Focus Team works on integrating electronic systems and keeping the work units and teams aligned. The Baldrige Criteria really pushed us to enhance performance areas. One such area was external benchmarking and comparative data analysis. We found instances where some benchmarking had been undertaken, but voluntary sharing of knowledge has been virtually nonexistent in our industry, which is unfortunate.

There aren’t many reliable industry rating agencies, either, for that matter. So OMI has tried to work with selected best-in-class companies and data sources outside our industry. We select the processes we want to improve and target a best-in-class partner that we hope to share information with. Through this type of work we aim to raise ourselves to the level of a leader in the area being addressed, but the outside companies need to be as willing to share as we are.

Our safety process provides an excellent example of benchmarking. Health and safety are important to OMI. We strive to create a protected environment for our associates, protect the general public, and reduce OMI’s liability exposure. During the previous three years, despite OMI’s quality program, there were a number of incidents and accidents. Due to this, we decided to benchmark with a renowned private-sector manufacturer to improve our processes, share relevant information, add training incentives, and link safety training to our annual business plans.

Our projects have reaped benefits through this improved program linking safety training to annual business plans. The level of lost workdays dropped 26%, which put OMI 48% below the national average. Two years ago we reduced worker compensation claims by 85%.

**Internal Benchmarking**

With 170 facilities, we have a veritable bonanza of internal benchmarking opportunities. We are creating communities of practice buddies.

A number of our water and wastewater plants were looking at various studies outside our industry. But this just wasn’t helpful. The results pertained to things such as cost per million gallons treated, staffing per million gallons, and so forth. These data were not specific enough to address the situational contexts at our projects. We now catalogue and analyze all of OMI’s projects by elementary unit components. We collect data and then benchmark on the basis of those unit processes. So, instead of saying Plant A has “X” performance and Plant B has “Y” performance, we can say that Process Number 101 at Plant A is equal to or better than Process Number 101 at Plant B.
Information and analysis, continued

This is marshaled by a group of internal experts called optimizers. They have developed a system that analyzes the processes that facilitate project improvements. They also provide information to operators at base levels to enable them to better guide their daily decision-making strategies. This can help them make the changes that save OMI's customers money.

Continuous Improvement

When OMI changes its planning input (e.g., a customer need or a market condition), we have to modify the FOM performance-measurement system. During our planning process, results and trends are identified and analyzed. From this, we develop novel improvement approaches and practices, and implement them at either a company-wide or appropriate project level. The continuous improvement cycle repeats itself every quarter for OMI as the Red Team reviews the FOM.

Permit compliance, meeting the environmental standards required at our projects, represents another core measure for operational performance. OMI tracks controllable permit violations, and we are very proud to be below one violation per project per year. To put this into a context so you can better understand the significance, when we calculate this particular measurement it is based on more than 12,000 parameters that OMI must meet annually, and our compliance rate in this calculation is also 100%. It is not zero defects for us but it is darn close, and we are getting closer every year.

A recent Baldrige winner, Texas Nameplate, taught OMI that you don't have to be the biggest or have the most market share to be world-class. Achieving excellence in our core business, which for OMI is 80% of our revenues, comes from the operation of small- to medium-size water and wastewater facilities. It is just another case where being bigger is not necessarily better.

To supplement a total market measurement, which would include all of the markets and projects for us, OMI also segments market share by tracking our head-to-head proposal competition with our competitors in our core business. The results in 2000 showed that OMI won well over half of the projects that we competed for.

We are currently developing a set of project FOM metrics in the corresponding automatic reporting system. We are going to look at more benchmarking and comparative data analysis from other high-performance companies and Baldrige winners. We are expanding knowledge management tools and practices internally so that we can share the best practices across the entire company. We are integrating our electronic systems so that we can take better advantage of the available technology. So, quality is a way of life at OMI. It is a never-ending process of improvement.

Human resources focus

Gary Hunt, Vice President, Human Resources; Dennis Burrell, Regional Business Manager, Project Delivery—OMI is the only employee-owned company in our industry. As an employee-owned business we are blessed with a unique and dynamic corporate culture that provides us with unmatched energy and operating efficiencies. And truly, our owners are our most important assets. Advantages that arise from new
technologies and new processes are relatively short lived. It is the intangible human factor that builds strengths and motivation for successes. It is this human factor that enables dedication, imagination, and innovation. This helps make OMI an industry leader.

We continually strive to improve the skills of our people. Our largest site has about seventy associates. Most of our projects have ten associates or less. Every associate is scheduled to receive at least thirty hours of training annually. We also believe that every associate should work in a safe environment. And we believe we should extend that to the communities that we work in.

Empowering Our People

Empowerment is one of our key ideological components, along with a constellation of beliefs related to it that support our management philosophy. Our leaders realize that associates closest to the tasks at hand, when given proper training and encouragement, will excel at their jobs and achieve consistent, very high level performance. The people closest to the action are usually the ones most qualified to come to conclusions. We empower our associates by giving the decision-making process to the people closest to the work.

As an example, a client in the midwest was faced with an expensive capital improvement on a piece of treatment equipment. The client had basically made the decision that the piece couldn’t be fixed. The cost was quoted at $200,000.

However, the workers involved with this project knew how important it was to repair this piece of equipment. The associates brainstormed and found an innovative way to utilize the equipment and tools already present at the facility without installing any new, specialized equipment. They got that job done for about $40,000 and saved our client about $160,000.

Developing Our People

Our HR Focus Team is one of the tools we use to develop the policies and procedures needed to facilitate associate development. We begin by generating a training needs assessment to identify the skills required by each position, write a job description for each position, and then develop a training plan based on the processes they know they are going to need. That training plan becomes part of the annual project business plan for which the associates can receive part of a team cash bonus. We also believe in cross-training wherever possible, to broaden associate skills and facilitate the development of career opportunities.

A key position is the project manager, the person who runs a facility, or group of facilities. We forecast the number of project managers we need each year and assess the associates who are ready to move up and fill openings. Within a project, an associate is usually promoted to an “assistant project manager.” We will also bring in experienced project managers from other organizations; we refer to them as “project manager interns.” Typically, interns advance into project management positions within about six months. Generally, we spend about two years educating our internal hires.
Human resources focus, continued

OMI University

We developed OMI University to provide leadership and management training. We target all of our supervisors and management positions. Each university program is a forty-hour module designed to focus on a specific leadership skill. OMI University I is our introduction to supervision and leadership, and it includes courses on leadership, human resources, and accounting. OMI University II deals with management in difficult situations, finances, contract administration, customer relationships, and community relationships. OMI University's Mastery Level is our latest addition to the program. It focuses on skills that our senior leaders will need, such as managing in multiple locations, along with servant leadership.

Training Needs Assessment

Training needs assessment is a tool we use for each associate as part of a structural approach to developing our people. It identifies the skills needed for a specific job. Associates are evaluated, and action plans are developed for each associate. Individuals work alongside supervisors to develop performance goals and training plans that are meaningful and realistic.

As an example, we have a range of water and wastewater operator positions. If an operator wants to move up to the position of operations supervisor, and move from an entry-level hourly to an entry-level management position, he or she has to achieve the skill set needed to meet each specific step. There is a sequential plan that leads from operator-in-training to operator, operator 1, operator 2, lead operator, and operations supervisor.

Associates are given feedback through performance evaluations that are completed twice annually. Feedback is also provided through daily interactions with a mentor. This might be a project manager, although it could be someone else at a project. In order for the mentor to provide high-quality instruction, he or she must possess a few characteristics (e.g., knowing the training needs assessment extremely well, and having had a good deal of experience in an operational role). Another important part of this program involves flexibility. Flexibility facilitates the effective management of changes emerging in either the organization or the industry.

The Acclimation to Quality

Quality training is as important as the technical training for water and wastewater operators. We have dedicated internal and external resources towards this vital education. The amount spent on training has risen by over 200% during the last four years. We, as well as our customers, have recognized that training aimed at improving knowledge is a proactive measure that reduces the costs associated with poor-quality work habits, and the like.

Quality improvement techniques are included in our associate training programs for baseline skills, enabling our workers to excel at their labors. Obsessed With Quality processes begins as soon as a new associate is hired; we immediately enroll that person in a six-phase sequence of quality training.

- The first phase, culture building, focuses on the way in which employees work directly with customers.
Human resources focus, continued

with other people. Associates learn how to understand the different types of people they interact with. They might also take the BEST Personality Profile. The title is an acronym for bold, expressive, sympathetic, and technical. The specific terms are very important. If there are, for example, a number of bold people in a particular situation, they need to know how to interact with one another harmoniously. Associates also learn to understand more fully the different personality types of customers and learn to work much more effectively with them.

• Phase two focuses on quality tools. Associates learn how the quality process operates and how they can best engage with it themselves.
• Phase three concerns practical applications and teams. We think highly of teams and present a number of guidelines for promoting teamwork. It is very important to focus on ways to develop mission statements and team rules that aspire to maintain membership focus and high productivity.
• Phase four involves making improvement and innovation a continuous process.
• Phase five concerns our partnerships with customers and suppliers. Both are vital members of our business. We invite many of our customers and clients to participate in our quality-training programs. We want them to understand our culture and, to the greatest extent possible, help them improve their own as well.
• Phase six focuses on quality training for all associates concentrates on listening skills.

Managers receive two additional phases of quality education. These phases have been dubbed Walking-the-Talk, Part A and Part B. Walking-the-Talk is a lead-by-example philosophy that is so important in our company.

When we first started the Obsessed With Quality process we had a quality guru who drove around in a motor home providing quality training at our projects. We acquired a great deal of knowledge from him and really learned to work the quality process ourselves.

We now have our own internal quality coaches. These are associates who have their normal jobs and accept coaching as an added role because they believe in our people, our company, and the quality processes. The quality coaches want to support the company to the full extent.

As we continue to succeed and grow, challenges will continually emerge. We are learning how to keep our resources balanced to meet the ever-changing needs of our company, as well as our industry.

Associate Turnover

An early problem was associate turnover—running about 40%—way too high. We focused on the problem and identified key areas where changes could be made. About six years ago we began training in those areas. The results have been dramatic. We reduced our turnover rate to 16%, about half the average in our industry!

Keeping Informed

We use a variety of methods to communicate. Probably one of our most important communication tools is the Of Mutual Interest, our internal newsletter.

Surveys are important, too. One is the biennial associate satisfaction survey. For the last few years we have held a consistently high rating. At the same time we
have increased the associate base by 50%. We also have a new project associates survey. We knew that we were bringing changes to the lives of the new associates acquired as a result of our being hired to operate a project. We felt that becoming OMI associates would be beneficial to them, but we had no way of actually measuring it. So, as part of the Baldrige process, we developed a New Associates Satisfaction Survey. This survey is given shortly after we take a job over; it asks people about how things were going before we arrived. And then some time later, usually six months to a year, we pass out another survey and ask the people whether the job had indeed improved.

A good example is one of our largest union jobs. When we first approached the union they told us they were going to sue to stop the privatization process. Today we bring other unions to that location and show them how good our union relations are. So we have been able to prove that life is better with OMI.

Finally, we also have a survey for some very specific things, like benefits. An issue that is important to somebody in Georgia may not necessarily be important to someone in Idaho. So we ask the members, “What’s most important to you about benefits?” We can’t always please everybody but we do try.

Another important communication instrument is our performance appraisal process itself. We do performance appraisals twice a year. During every midyear we do what we call a “quick check,” which is a course correction of sorts. We use it to see how we are doing on performance. Then at the end of the year an annual appraisal based on skill assessments and job descriptions is conducted. This rating ties directly into our rewards and recognition process.

Teams

The common philosophy that binds all our teamwork strategies into a dynamic unity is empowerment. Part of the philosophy is this: Those closest to the tasks, when given proper training and encouragement, will excel. This, in itself, implies that we have trust and respect for associates. It leads to empowering them.

Since we consider associates our most important asset, we allow associates to change their work and work descriptions in the field. They are given the authority to redesign their job descriptions as they learn the work required through participation, and as they learn the specific actions needed to fulfill contract obligations.

Company-Wide Teams

Associates have the opportunity to be on a company-wide focus team. An operator, or an operator-in-training, for example, can sign up by sending in a form to our corporate headquarters. This simply informs the management that the associate wishes to join a focus team. We have created specific teams around the Baldrige Criteria of leadership, customer satisfaction, information and analysis, human resources, and process improvement.

Company-wide focus teams are also used extensively throughout OMI to provide an important link between company projects and customer needs. Focus teams are permanent work groups made up of hourly and salaried associates from

Human resources focus, continued
Human resources focus, continued
diverse geographical locations and employment positions, and with various personality styles. Since we have projects in Georgia, Maine, Idaho, Oregon, and so forth, we know that this diversity is important. It allows us to handle more effectively different issues that crop up across different parts of the country.

Company-wide task teams are usually made up of associates possessing specific skills needed for particular tasks. They further the advancement of quality. Examples are annual project business plan teams, diversity teams, and project start-up teams. The teams primarily work on dedicated assignments and are temporary in nature. When the problem has been solved, or the task completed, the team disbands.

These task teams also provide support for our company-wide focus teams. For example, the latter may meet up with an issue that is simply overwhelming, that’s just too large to take on single-handedly. In that case a task team might assemble and provide the focus team with additional and needed support.

There are also project-related teams. Each project has a number of teams, such as safety, uniform, planned experience, and the like. There are also project FOM teams, and a team for management-information systems. Each one is designed to improve the project at its own level.

Each project also has “project-specific” teams that deal with all kinds of discrete issues and challenges related specifically to present circumstances. These teams are composed of people like laboratory technicians, equipment operators, maintenance personnel, administrators, and water and wastewater operators.

All of our projects also have a “quality” team. These teams are responsible for putting up suggestion boards. As associates go about their daily jobs and notice instruments, or something that needs improvement, they are encouraged to write memos for the board. Associates need not have the skills or knowledge to remedy a problem. They are simply encouraged to present the issues and suggestions from even a nontechnical position. For example, someone might not be a plumber but may notice that some pipes in a certain building need to be worked on.

Project teams are able to accomplish just about anything. They improve project performance and efficiency. Project teams have dealt with such diverse issues as safety, quality, community involvement, rewards, recognition, and hiring.

Recognizing Quality Work

We have a rewards and recognition process. Awards can be a simple “thank you” for helping or for going the extra mile, or a certificate that recognizes such an effort. However, there are other kinds of rewards as well: The Tag-You-Win can be given to anyone by anyone. The Soaring Eagle involves a bit more than simple recognition and may include gift certificates, dinner, or the like. The Golden Apple is given for community service outside of a project. The Lightning Bolt is a one-time cash bonus for exceptional performance.

A major portion of our rewards and recognition program is based on performance. This is a three-tiered bonus program. Team monetary rewards are given based on the annual project business plan. Workers involved with each project put
Human resources focus, continued

together a business plan that is later scored, based on their performance of that plan. Individual cash and performance shares are paid based on individual and corporate performance. The rewards are paid 40% in cash and 60% in stock.

Introducing Initiatives

Improvement initiatives are how quality implementation, commitment to continuous improvement, and strong leadership pave the way for a better work environment, and for healthier associates. From 1991 to 1995 the five phases of the Obsessed With Quality process were introduced, as was the Employee Assistance Program (EAP). We enhanced the Education Assistance policy. The Rewards and Recognition program was approved. We developed the Listening Module of quality training and introduced the Walking-the-Talk – Part A, program.

In 1998, O M I University began offering our frontline supervisors the opportunity to gain training on dealing with the media, with difficult employees, and with different kinds of work structures.

In 1998 and 1999, we updated the Training Needs Assessment. We had a few assessments in place prior to this time, but not for all job descriptions. The few we had just didn’t work well, so the Human Resource Focus Team undertook, with support, developing assessments and job descriptions for all company positions. The team designed a training plan for everyone.

All of these endeavors directly reflect the importance we give to improving our work structures. They also reveal the importance we place on developing an environment that respects our associates and that reflects our consideration of them as being our most important asset. Our quality culture establishes the “I am paid to think” mentality and philosophy. And believe me, we are!

Process management

Forrest Forbes, P.E., Vice President, Project Delivery—To educate our staff and provide clear documentation for monitoring and controlling water and wastewater treatment processes, O M I uses standard operating procedures, unit process control procedures, and statistical process control procedures. While the services that O M I provides vary from facility to facility, there are commonalities that allow associates to selectively apply process knowledge.

We have four tools that help us perform our work: 1. Technical expertise and knowledge. Our competition can copy our product or service, but they can’t copy the minds of our people. 2. Facility design and construction expertise through our parent company, CH2M HILL. 3. Internal and external benchmarking. 4. Advanced proprietary computer models and matrices.

We also have four enabling processes that we expect everyone to follow: 1. Ask “what if” questions in a brainstorming environment. 2. Seek and make the right design decision for the specific project. 3. Boost performance and customer satisfaction. 4. Operate effectively at reduced costs. These four processes enable our associates to make the best-informed decisions, enhance overall operating performance, increase customer satisfaction, and build customer loyalty.
In sum, these tools and processes allow us to operate our customers' facilities effectively and efficiently. They are vehicles to optimize the E3 motto: Exceed our customers' expectations. Empower our associates. Enhance the environment.

Process Design and Improvement Model

We design processes to evaluate the mix of technology, customer requests, regulations, benchmark information, and new and prospective projects. This helps us create the optimum design for each project. As we continue to improve our processes we reduce cost. These cost savings are passed on to our customers. Process improvements enhance our knowledge, effectiveness, efficiency, and timeliness in meeting schedules and ultimately improve associate and customer satisfaction. We use a fairly consistent, eleven-step model:

1. Identify the opportunities for improvement, taking into account the stakeholders that would be affected.

2. Learn the requirements of each of the stakeholders.

3. Translate the information from the first two steps into operational variables (i.e., use operational expertise to ensure that each of the bases is covered).

4. Determine the effect on projects. Investigate and recognize how the design process might impact each of our projects. (We operate some 170 treatment plants throughout the United States.)

5. Develop a design that suits the needs. Using input from the first four steps, we construct a process that we believe will satisfy this intent.

6. Design and execute a pilot test to confirm a design will improve the performance and/or at least reduce cost. To do this, we seek out opportunities to optimize design modifications, select the best solutions, determine the change of scope required, and then perform the pilot test, which hopefully confirms that the models do work. When pilot testing is completed, we report those results to the stakeholders and provide recommendations on how to proceed. If we are in agreement, we proceed, or there may be revisions that take us back to Step 2, which means we investigate the stakeholders' requirements again.

7. Get the needed approvals.

8. Implement the new/revised design. When the final approval is given, we identify a process owner, and that owner is charged with rolling out the process to the rest of the company.

9. Optimize the operation. Monitor the status of implementation, maintain minor adjustments, and actually begin to maintain and optimize the operation.

10. Share knowledge. Generate and share internal reports on the successes and challenges that have faced the team in working on this design change. Other process owners and stakeholders use this information to avoid the pitfalls within their own processes.

11. Evaluate and improve design process. The Red Team and the process owners routinely evaluate design-process effectiveness and identify improvement opportunities.

The effectiveness of any design change is evaluated before and after it is made to ensure that all key operational performance requirements are met. This is accomplished through computer models, pilot testing, and experience with our existing processes. As we do this work, the Process Improvement Model is combined with the Plan-Do-Study-Act (PDSA) cycle. In using the Process Improvement Model, we always keep in mind three questions: 1. What are we trying to accomplish? 2. How will we know that a change is an improvement? 3. What changes can we make that will result in an improvement? Then we move on to using the PDSA cycle.

As we evaluate and improve the design process, we do four things: 1. Standard-
ize project data collection and reporting to facilitate a benchmark. 2. Use sampling and laboratory analyses to focus on process performance that initiates corrective action if deviation from desired performance levels are observed. 3. Interview our associates and customers to ensure that all of their requirements are being met. That includes internal and external customers. 4. Review the data on the effectiveness and the efficiency of each design.

Process Ownership

Dennis Blachly, Senior Operations Specialist—Key delivery processes are identified in a corporate Linkage of Processes model, sometimes called the LOP (Figure 3). There are 150 processes in the model. Each process has a process owner. The model represents a system perspective. It enables process owners and associates to understand how their individual work affects overall company operations.

We emphasize improvement at all levels of the organization. Process owners assume the responsibility for all aspects of their process: defining purpose, planning, piloting, implementation, optimization, and knowledge sharing.

Process owners lead the rollout and implementation of their process, obtain customer feedback to verify that customer expectations and changing requirements have been met, and look for opportunities to improve the process. They apply a system of appropriate measures and controls for the key input and output variables and ensure that the control systems are properly used. They choose improvement opportunities based on studies of new technology, internal and external benchmarking, customer feedback, changes in customer requirements, regular project reviews, and support of growth initiatives.

The Process Improvement Team, called the PIT Crew, created a Process Owners Manual. Every process owner gets a copy as a guide to the development, maintenance, and improvement of their processes. It includes guidelines for defining processes, identifying customers and their requirements, flowcharting the process, applying appropriate measures, obtaining customer feedback, and pursuing improvement opportunities. The PIT Crew is in charge of rollout and upkeep of this manual.

Support Processes

OMI has a number of support processes to meet internal customer standards for accuracy, reliability, timeliness, effectiveness, and cost. Our key support processes (Figure 4) are recognized as an integral part in creating value and supporting our strategic objectives. Documentation of the support processes includes a three-volume manual for processes, procedures, and policies. These volumes outline human
resource functions, management processes, operations, and quality control processes. Adherence to this documentation helps ensure that the support process requirements are consistently met.

Suppliers

OMI works with several suppliers. Generally suppliers are grouped into six categories: safety, chemicals, maintenance and operations, laboratory, administrative services and office supplies, and computer hardware and software. Our corporate purchasing manager has negotiated some national contracts, but our project managers purchase the majority of their supplies and materials locally. This meets the needs of our external customers who desire that as many purchases as possible be made at the local level to support the local economy.

Performance requirements for suppliers covers six areas: accuracy, reliability, cost, timeliness, responsiveness, and technical abilities. OMI ensures that supplier performance requirements are met by checking the specifications of the original order against what is arriving on the truck. We also use a supplier report card, which is the result of a survey sent to randomly selected OMI projects and other customers of key suppliers. The survey verifies projects’ rating of compliance with performance requirements. Survey results are shared with all of our projects and then discussed in detail with the supplier. Communication with suppliers includes telephone, face-to-face, or written correspondence to register a complaint or to request assistance.

The project manager is responsible for following through on informal communication until satisfied with the result. We have found that building relationships with individuals in supplier organizations makes it easier for them to understand what we are looking for, and easier for us to help them improve their product or service, or both. We make our technical experts available to them on issues of mutual interest, either on a case-by-case basis or through joint-improvement teams.

In summary, when dealing with our customers, our associates, and our suppliers, we think interdependence. We can’t get along without each other. By practicing the realization that we can create a bigger pie by working together, we all come out better in the long run. This may appear to be very complex, and it is when looking at the whole thing. But if you take this project management category one step at a time, as we did, you will find that you will be able to unlock the doorway to effective process management and continuous process improvement.

Bernard Miller Jr., Chief Operating Officer—In 1980, OMI was formed by our parent organization, CH2M HILL Companies, Ltd., initially as a defensive strategy related to its environmental engineering business. Customers were asking for operating services as well as design and construction. CH2M HILL allocated about a half-million dollars of seed money and two short-term labor-only projects—Jackson County, Mississippi, and the County of Maui, Hawaii. In 1981, I joined OMI as the...
Our president, Don Evans, joined OMI in 1986 from the consulting engineering business. He began to implement foundational management principles that would later become common practices—an appreciation for and support of individuals, teamwork, the importance of teams in problem solving, and consensus leadership; a focus on business growth; and a focus on customer service.

In 1990, our leadership group decided that we needed processes that would allow us to retain the company’s culture as we diversified and grew. It was no longer possible for the top leadership to routinely visit every project; we had to rely on the local managers and associates to make the right decisions. We had to consistently develop more-empowered people to be a successful company as we grew, and people had to be properly trained before they could truly be empowered.

We had our first meeting with senior leaders in Woodlands, Texas, to begin our organized quality journey. We started this journey with a process we called Obsessed With Quality. In 1991, using the Baldrige Criteria as a road map, we formed teams around the seven criteria. Either those teams still function today, or the criteria are implemented by workgroup units instead.

We did have a mission statement at that time, but it was not well communicated, and most people didn't know it existed. A district manager, Forest Forbes, was asked to lead an effort to create a new one. The Mighty Oaks of Quality, a focus group, asked every associate for input. Almost 400 responses were received, and temporary help was needed to sort and organize the comments. The result was a great bottom-up mission statement that is still used today as a part of OMI’s overall purpose statement.

We also decided to develop a memorable motto, one that could easily be used as an elevator speech (i.e., you’re on an elevator, somebody asks you what OMI is about, and you could summarize our mission by the time you get to the next floor). The team created the E³ motto. Any associate at can explain E³.

Quality training started in 1991 with a consultant who traveled to each project by motor home to deliver the initial training. This consultant still works with us to train future trainers and to deliver training to large projects. We deliver seven hours of quality training to each associate every nine to twelve months. This is a bottom-up quality effort to teach associates about teams, empowerment, coaching, quality tools, and measurement. Today, OMI has seventeen quality coaches who are full-time associates with regular jobs and donate about 20% of their time to coaching.

In 1992, OMI conducted its first internal Baldrige assessment. In 1993, a full-time quality leader was appointed to focus on quality training, quality assurance, quality control, and teams. The first generation of the corporate FOM was developed. It was called “Numbers Are Fun.” The idea was to get associates comfortable and excited about collecting and analyzing information.

In 1994, the first full-time quality trainer, Patricia Miller, was appointed. Patricia still serves in this role. She also helps train, identify, and coordinate a
OMI—Malcolm Baldrige National Quality Award Winner, 2000

CASE STUDY

Journey to performance excellence and business results, continued

seventeen-member coaching team. We also did our second Baldrige assessment.

In 1995, the first five-year strategic plan was completed. Prior to this the strategy existed, but generally it was in Don Evans' head. He would tell you what it was every time you asked him, but it wasn't really on a piece of paper anywhere. A consultant helped us go through a traditional planning workshop, which resulted in a new diversification strategy. We went from a municipal client organization to one that also pursues industrial projects.

In 1995, OMI created the new position of vice president of quality. That person, Roger Quayle, was charged with taking quality to the next level. In 1996, we developed a second generation of measures, called "The District Measures Matrix," which replaced "Numbers Are Fun." They tracked corporate trends for key measures as well as geographic district performance so that any district could see how it performed compared to others and the company overall.

In 1997, OMI applied for the Baldrige Award. A team of volunteers, called Team OMI, with support from the Red Team, wrote the application. We scored in the 400–450 point range, good enough for the Consensus Stage; a pretty good result, but we were hoping to get a site visit. We thought, "We're pretty good. We're doing lots of things right. Maybe they just didn't understand what we wrote." About that same time we also began implementation of a new leadership system, called "Quality as a Business Strategy," or QBS, by going through a series of meetings with a Deming-style consultant. The Red Team met one day each quarter to study and implement QBS.

In 1998, OMI applied for the Baldrige Award for the second time. We figured we could improve the prose. Again we reached the Consensus Stage—so much for prose. The Red Team continued to meet quarterly to implement QBS. We developed a concise purpose statement that included the existing mission statement, plus the vision, business focus, and strategic objectives. The new purpose statement was posted on our web site, included in all our marketing information, and widely shared with all associates in either poster or business card versions.

OMI also developed a system map of the company called, the Linkage of Processes, based on Deming's concept of viewing an organization as a system. The Linkage of Processes identifies and indicates relationships among OMI's 150 corporate processes. The mainstay or core processes revolve around doing and renewing work. Also, as a part of QBS, we developed the FOM, the third-generation scorecard for the company. For the first time, company-wide measures were displayed on control charts so that trends and special-cause events could be studied. As the result of internal customer satisfaction surveys, we also redesigned our safety process in 1998, resulting in dramatic decreases in lost-time incidences, recordable incidences, and workers' compensation costs.

In 1999, OMI participated in a benchmarking study called "Quality Approaches for the New Millennium" with the American Productivity and Quality Center. Associates conducted site visits at several world-class companies, and they
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attended a knowledge transfer session where study results and practices were shared. This launched new benchmarking efforts, such as creating a company intranet and an internal benchmarking effort to optimize the operation of our facilities.

In 1999, OMI achieved ISO 9002 certification at one of its largest facilities. The first QBS planning session was conducted as well, resulting in twenty-four corporate improvement initiatives plus predictions of performance for the FOM. OMI decided not to apply for the Baldrige in 1999, but rather to focus all quality resources on improvement.

In 2000, OMI identified partnering more closely with sister engineering firm CH2M HILL as a key to its long-term success. We invited their key managers to our summer leadership meeting, “Collaborating with CH2M HILL.” Joint marketing efforts, technology, and management were presented and discussed. We also made our third application for the Baldrige Award, and this time we reached our stated goal to achieve a site visit. And we were very fortunate to win the award.

It’s been a long, rewarding journey—ten or eleven years. We started the journey for one selfish reason and one very noble reason. We very much enjoyed the company we worked for. Our markets were under severe competition from foreign-owned, U.S.-based competitors, and those companies had revenues considerably greater than ours. So we were looking for a competitive advantage in our marketplace. I like to quote Flip Wilson: “You have to take three steps forward, because they’re going to push you two back.” That was the selfish reason. The noble reason was that we wanted to improve the working environment for our associates, to give them opportunity for growth, and to improve their quality of life.

Author information

Don S. Evans is President and CEO. He also serves as President of CH2M HILL Water Business Group. During his thirty-year tenure with CH2M HILL Companies, Ltd., he has served as an executive, project manager, process engineer, and construction services manager.

Roger Quayle serves as Vice President of Quality & Technology. He has fifteen years of experience in planning, developing, and implementing strategic quality improvement processes, measures, statistical analysis processes, and standards and training. He manages OMI’s Obsessed With Quality process, which focuses on empowering employees to develop new approaches to enhance their job performance.

Gary Miller, Executive Vice President, joined OMI in 1994. Mr. Miller has more than twenty-five years of management experience in the water and wastewater industry. In this capacity he is responsible for developing new projects from concept through delivery, including developing technical and financial proposals, defining scopes of services to be performed, and negotiating contracts around the world.

Jane Walter serves as Regional Vice President, Project Development of OMI, responsible for marketing and sales activities in nine western states. She has more than twenty years of leadership experience in the areas of marketing and sales, internal and external communications, program development, public relations, and community involvement program planning. She joined OMI in 1987 after working with OMI’s sister engineering firm, CH2M HILL, for more than thirteen years.

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Robert Moses is Vice President and Chief Financial Officer for OMI. He is responsible for finance, accounting, insurance, and tax functions. He developed and installed the company's financial information system and company-wide financial planning system. Mr. Moses has more than thirty-five years of experience in all aspects of finance and accounting.

Adam Cohen is the Manager of Project Development Services for OMI. His team supports new business activities and directs procurement production efforts for projects up to $500 million in revenue. He has eleven years of experience in the environmental and water sectors. Mr. Cohen serves as a quality coach in OMI’s quality process. He also participates on several company-wide improvement teams and leads the Information and Analysis Focus Team.

Gary Hunt is Vice President of Human Resources. Mr. Hunt is responsible for all aspects of OMI’s equal opportunity and affirmative action programs, contracts compliance, employee relations, negotiation, labor relations, training, organizational development, recruitment, diversity, salary compensation, and benefit development and administration. He was selected as Employer of the Year 2000 by the National Association of Colleges and Employers.

Dennis Burrell is an Area Manager for OMI. In this role, he is responsible for overseeing operations at facilities in Kansas, Colorado, Missouri, and Texas. He is also responsible for managing and administering the City of Atchinson's water and wastewater plants. His duties include overseeing personnel, directing operations, organizing construction scheduling, reviewing capital design criteria, and implementing preventive maintenance and laboratory programs. Mr. Burrell is the leader of the Human Resources Focus Team.

Forrest Forbes, P.E., is Vice President of Project Delivery. In this role, he is responsible for the financial, technical, and administrative aspects of all OMI facilities in the United States. Mr. Forbes ensures that projects meet OMI’s quality and performance objectives by working with regional managers and project managers. He is a certified wastewater operator and has more than twenty years of experience in the water and wastewater industry in both the public and private sectors.

Dennis Blatchley is a Senior Operations Specialist for OMI. He has more than twenty-four years of experience in environmental operations and management. He was instrumental in achieving ISO 9002 certification for one of OMI’s industrial projects.

Bernard Miller Jr., is Chief Operating Officer for OMI. He is responsible for the financial, technical, and administrative aspects of all OMI facilities. He supervises OMI’s regional managers to ensure that all projects meet OMI’s quality and financial performance objectives. He is also responsible for overseeing the planning, organization, and budgeting of all contract operations facility start-ups. Mr. Miller has directed and reviewed over 200 due diligence evaluations of water and wastewater treatment during the past eleven years.
The Malcolm Baldrige National Quality Award is given to U.S. organizations that demonstrate exemplary achievements in seven areas: leadership, strategic planning, customer and market focus, information and analysis, human resource focus, process management, and business results. For the first time in the history of the Baldrige awards, winners were named in the education category. The 2001 recipients are:

- Clarke American Checks, Inc., San Antonio, Texas (manufacturing)
- Pal’s Sudden Service, Kingsport, Tennessee (small business)
- University of Wisconsin-Stout, Menomonie, Wisconsin (education)
- Pearl River School District, Pearl River, New York (education)
- Chugach School District, Anchorage, Alaska (education)

President George W. Bush announced the recipients on December 4, 2001. He said, “These winners remind us that excellence in all organizations strengthens our nation. I am especially pleased that this year’s awards include the first Baldrige education winners. They illustrate that the quality of education for children can be improved with innovative programs. These organizations demonstrate that improving the quality of education for all children is everyone’s business.”

Applicants for the Baldrige Award undergo a rigorous examination process that ranges from 300 to 1,000 hours of outside review. Final-stage applicants are visited by teams of examiners to clarify questions and verify information. Applications are reviewed by an independent board of examiners, who are primarily from the private sector. Each applicant receives a report citing strengths and opportunities for improvement.

Named after the twenty-sixth Secretary of Commerce, the Malcolm Baldrige National Quality Award was established by Congress in 1987. The award promotes quality awareness, recognizes the quality and performance achievements of U.S. organizations, and publicizes successful performance strategies. It is awarded to organizations in five categories: manufacturing, service, small business, education, and health care. The award is not given for specific products or services. Since 1988, forty-six organizations have received the Baldrige Award.

The Baldrige program is managed by the National Institute of Standards and Technology (www.quality.nist.gov), an agency of the U.S. Department of Commerce’s Technology Administration, in conjunction with the private sector.

Following is a snapshot look at the five award recipients for 2001.
Clarke American Checks, Inc.
Manufacturing Category

Headquartered in San Antonio, Texas, Clarke American provides a wide range of products and services to financial-services partners across the United States. Products include personalized checks, checkbooks, checking-account and bill-paying accessories, and financial forms. Services include customer-contact call centers and e-commerce and direct-response marketing solutions on behalf of their partners. The company has about 3,200 associates in its headquarters and at seventeen manufacturing facilities and six customer-contact call centers located in fifteen states. In addition to producing over fifty-five million personalized check and deposit orders every year, Clarke American provides customer-service support twenty-four hours a day, seven days a week, to its financial-services partners and customers, handling over thirteen million calls annually.

Quality and Performance Achievements

Clarke American’s culture is built on a business approach called “First in Service” (FIS), which describes how the company conducts business and the behaviors expected of every company leader and associate. The FIS approach is the driving force behind the company’s improvement initiatives and helps align systems and processes with the organization’s strategic goals and objectives.

Revenue has increased from $300 million in 1995 to $462 million in 2000. Revenue growth has improved from 4.2% in 1996 to 16% in 2000, compared to the average industry growth of less than 1%. Since 1996, its market share has increased by 50%. Since 1995, revenue per associate has increased to $148,600, an 84% improvement. Clarke American is the only major financial-services check provider to attain an expanding market share over the last four years.

Inventory turns (i.e., numbers of times inventory turns over per year) have improved steadily over the last three years, outperforming Industry Week magazine’s average for World Class Plants. Capital investment has increased from below $30 million in 1995 to $148 million cumulatively through 2001.

Clarke American’s Key Leadership Team utilizes a goal-deployment process to communicate and deploy values, directions, and performance expectations throughout the company. All associates receive company updates through weekly, monthly, quarterly, and annual meetings. Clarke American’s eight values are 1) Customer First, 2) Integrity and Mutual Respect, 3) Knowledge Sharing, 4) Measurement, 5) Quality Workplace, 6) Recognition, 7) Responsiveness, and 8) Teamwork.

Revenue generated by customer-service operations is steadily growing. For example, revenue from customer-contact centers increased by 279% from 1997 to 2000; revenue from e-commerce solutions has increased 1,077% since January 2000; and direct-response marketing revenue has increased over 768% from 1995 to 2000.

The organization’s Partner Quality Function Deployment Satisfaction Index is a key indicator of partner satisfaction. Clarke American’s 1999 results show positive
trends, with performance levels approaching 82% satisfaction in the banking and national accounts divisions, which exceed the average scores for the American Customer Satisfaction Index for the manufacturing/non-durables industry.

Since 1997, a telephone survey of partner organizations has consistently shown a 96% satisfaction rate. Partner loyalty ratings have increased from 41% in the first quarter of 2000 to 54% in the third quarter of 2001. Customer satisfaction of Clarke's business products has consistently been above 96% since 1999, outperforming the banking industry average of 90%. Overall associate satisfaction has improved from 72% in 1994 to 84% in 2000. Associate survey participation reached 96% in 2000.

The organization's S.T.A.R. (Suggestions, Teams, Actions, Results) Program, initiated in 1995, allows associates to capture, implement, and share process improvements made to their work areas. Clarke American has implemented six S.T.A.R. ideas per associate for 2001, which exceeds the average level reported by the Employee Involvement Association. The implementation rate of S.T.A.R. ideas has increased from below 20% in 1995 to 70%, or over 20,000 ideas implemented for 2001.

Clarke American uses a variety of methods to deliver training and education to its associates, including classroom teaching, individual coaching, and web- and computer-based training. Clarke American's 76.1 training hours per associate in 2000 exceeded the American Society for Training and Development's Best in Class level of 60.

Clarke American's Accident Frequency Rating (a standard insurance industry measurement of accident frequency related to total worker-hours) has decreased from eighteen to six since 1998 and compares favorably to Industry Week magazine's Average for Best Plants rating of nine.

Manufacturing Cycle Time (in-plant production time) has improved by over 44% since 1995 and is under 18 hours for 2001. Check Manufacturing Units per Hour has improved over 150% since 1991, increasing from ten to twenty-six. Manufacturing Cost per Unit has improved 15% since 1995. Levels of internal errors, which have decreased by 55% since 1995, meet Industry Week magazine's average for Best Plants.

Clarke American has improved its twenty-four-hour service (i.e., orders produced and shipped the same day) by 102% since 1995, from less than 40% of orders to 80% of orders in 2001 year-to-date, which far exceeds the industry standard. On-time service (i.e., orders shipped by the day after they are received) has improved by over 15% since 1995 to 99.08% for the third quarter of 2001. Since 1997, Clarke American has increased its minority- and woman-owned supplier base by 28%.

Charitable contributions have increased by 124% since 1996 and exceeded $1 million in 2001. Associate participation in the 2001 National United Way Campaign exceeded 77%, compared to the 40% United Way National Average for Corporations.

The company's Team Excellence program, an award program for high-performing teams, is responsible for over $15 million in cost reductions and $103 million in revenue growth from 1996 to 2000. The Career Opportunity Program accounts for 60% of promotions being filled from within the company, giving associates long-term career and professional growth opportunities.
Pal’s Sudden Service
Small Business Category

Pal’s Sudden Service is a privately owned quick-service restaurant company with seventeen locations in northeastern Tennessee and southwestern Virginia. Pal’s has about 465 employees; 95% are in direct production and service roles, and 5% are in management. Pal’s competes directly with national fast-food chains. It offers a menu of hamburgers, hot dogs, chipped ham, chicken, French fries, and beverages, as well as breakfast biscuits with country ham, sausage, and gravy.

Quality and Performance Achievements

Even with substantially decreased sales and profits throughout the hospitality industry, Pal’s sales continue to increase. Pal’s current level of profit leads that of its primary competitor by three percentage points.

Pal’s current market share of nearly 19% is up from 10% in 1994. This positive trend indicates that Pal’s is positioned to overtake its best competitor and become the market leader by 2004.

Pal’s health inspection scores have been in the high-ninety-point range (out of 100) since 1996, while those of its best competitor have been in the low- to mid-eighties.

In customer satisfaction, including quality, speed, and customer feedback, Pal’s is outperforming its primary competitor. For example, Pal’s customer satisfaction figures for quality in 2001 are at 95.8% versus its best competitor’s, which are at 84.1%. Pal’s order-handout speed has improved by over 30% since 1995, decreasing from thirty-one seconds to twenty seconds, compared to its competitor’s performance, which increased from seventy-three seconds to seventy-six seconds over the same period of time. Pal’s level of customer complaints over the past seven years is less than one-fourth the level of its best/primary competitor and is continuing to trend downward.

Pal’s uses a variety of processes to learn about its customers’ expectations. Owner/operators participate regularly in “Marketing-By-Walking-Around” activities, which involve interviewing current and potential customers to identify their wants and needs. In addition, Pal’s has established a web site that provides customers with information about its food products, administers a Pal’s contest with store coupons as prizes, and includes local entertainment information. The web site also provides customers with opportunities for communication, all of which are answered personally by the company’s president.
Pal’s core menu is designed to meet its various customer groups’ requirements for product quality, order accuracy, speed of service, and customization. All menu items are freshly prepared in the individual stores and are thrown away if they are not sold within a predetermined time—for instance, five minutes for french fries.

Pal’s has established a competitive advantage over its primary competitor by reducing front-line employee turnover. Specifically, Pal’s turnover rate was close to 200% in 1995, declined to 127% in 2000, and continued to decline in 2001. In comparison, the best competitor’s turnover rate in 2000 was over 300%. At the management level, the turnover rate for owner/operators and senior leaders has been near zero for the past eight years. In addition, sales per labor hour improved by approximately $6 from 1998 to 2001.

Pal’s supports its key communities at the corporate and individual store levels with both financial and staff resources. For example, the corporate senior leaders are top sponsors of the United Way and recent efforts to support the September 11 aftermath. At the store level, owner/operators participate in a wide variety of activities, such as teaching food-service and food-safety classes at high schools, serving as schools’ business partners, donating materials for special events, and sponsoring special community, school, and church events.

To improve workplace health, safety, and ergonomics, Pal’s takes a “prevention first” approach. Over the past six years, employee injuries in the three areas reported (cuts, burns, and lifting) have all decreased in relation to the number of hours worked. On-the-job injury/accident claims have declined 75% since 1992.

Pal’s training processes support the accomplishment of the company’s objectives and improved business results. Owner/operators and assistant managers have primary responsibility for staff training. Pal’s uses a four-step model to train its employees—show, do it, evaluate, and perform again—and requires employees to demonstrate 100% competence before they are allowed to work at a specific workstation. This might require an employee to repeat specific training modules to demonstrate that level of competence. In-store training on processes, health and safety, and organizational culture—done via computer-based training, flash cards, and one-on-one coaching—is required for new staff at all facilities. Cross-training is required of all store-level staff to ensure their complete understanding of all production and service procedures and quality standards.
Pearl River (NY) School District
Education Category

Located twenty miles north of New York City, the Pearl River School District (PRSD) has five schools: three elementary schools (kindergarten through grade four), one middle school (grades five through seven), and one high school (grades eight through twelve). The district has about 330 employees and approximately 2,460 students. Ninety-four percent of the students who begin their schooling in Pearl River complete their high school education in the district.

Quality and Performance Achievements

The percentage of students graduating with a Regents diploma, a key objective of PRSD, has increased from 63% in 1996 to 86% in 2001, while the percentage of students in other schools with similar socio-economic profiles has decreased from 61% in 1996 to 58% in 2000. PRSD’s results are approaching those of the highest-reporting district in New York, which had a 90% passing rate in 2001. In 2001, PRSD exceeded its benchmark on three of the eight State Regents content exams and was within three percentage points of the highest-reporting district on the other five content exams.

As a result of its efforts to help students prepare for college, PRSD has improved its students’ Advanced Placement course performance—34% of the students achieved a score of three or better in 1997, and 76% did so in 2001—and dramatically increased the percentage of students taking Advanced Placement courses.

The percentage of PRSD students taking the SAT I exam has increased over the past five years, approaching that of the highest-reporting district in New York, and exceeding both the state and national averages. In addition, 75% of PRSD’s special-education students take the SAT I exam (a rate that substantially exceeds the state and national averages of 3% and 2%, respectively). PRSD’s SAT I test achievement has also increased steadily over the past five years.

PRSD reduced its per-pupil expenditures (PPE) by 9% over the past eleven years (from $14,563 in 1990/1991 to $13,180 in 2000/2001) while both comparative districts and benchmark districts have increased their PPE (from approximately $12,800 to $14,300 and $11,569 to $13,180, respectively). PRSD’s per-pupil expenditures have increased at a rate of less than half of the consumer price index since 1995 (6.2% for PRSD and 13.7% for the index). PRSD achieved these results, in part, by reducing non-instructional expenditures by an average of 21% during the period from 1993/1994 to 2000/2001. Instructional expenditures actually increased by 43% during this same period.

Overall PRSD student satisfaction, as measured by a recognized national survey, increased from 70% in 1998 to 92% in 2001, which surpasses the highest score in the survey’s data bank (86% in 2001). Overall PRSD parent satisfaction, as measured by the same survey, increased from 62% in 1996 to 96% in 2001 and exceeds the highest score in the survey’s data bank (89% in 2001).
parochial schools in the district’s service area, PRSD has increased its market share (i.e., percentage of all students in the district eligible to attend PRSD who actually enroll) from 71% in 1990 to 90% in 2000.

PRSD’s overall staff and faculty satisfaction rate, as measured by a recognized national survey, has increased over the past four years, from 89% to 98% for staff and 86% to 96% for faculty. These results exceed the survey data bank’s highest reported score for overall faculty and staff satisfaction combined (89%). PRSD’s employee satisfaction with personal growth and development increased from just over 60% in 1998 to 92% in 2001. During the same period, faculty development time doubled, from twenty-one to forty-two hours.

The plan-do-study-act (PDSA) cycle forms the basis for the curriculum mapping of the K-12 curriculum. PRSD uses curriculum maps, developed by teams of teachers and senior leaders, to align its entire K-12 curriculum to state and national standards and to align instruction within and across all grade levels. These maps, which detail the content area covered as well as the method of instruction and assessment techniques used, are adjusted quarterly based on data analyses and through benchmarking the best practices of other school districts.

PRSD has maintained its core mission of “every child can and will learn” and its three strategic district goals for the past ten years. Senior leaders ensure alignment of the mission and goals throughout the organization by using a quality structure called the “Golden Thread” and by personally modeling the mission of the organization during weekly visits to each of the schools. The Golden Thread includes leading and lagging indicators to ensure alignment and linkage among district goals, long-term goals, and targeted short-term objectives. Performance measures linked to strategic objectives are deployed for individual employees through professional development plans.

PRSD is the leader in establishing the Tri-State Consortium of thirty-six high-performing school districts in New York, Connecticut, and New Jersey. They have worked to influence the Middle States Association of Colleges and Schools to replace its accreditation process, administered every ten years, with the Tri-State Consortium Curriculum Audit accreditation process, administered every three years. PRSD attained the highest score for participating school districts during the last audit in 2000.

PRSD has a nine-step process for strategy development, executed by the Board of Education and the Administrative Council. Through this process, information is gathered on current student needs via student performance data, environmental scanning, demographic and enrollment trends, and student and stakeholder surveys. In addition, key external factors, including requirements, strengths, weaknesses, and potential risks related to testing, are gathered through national assessment data.

PRSD’s educational design and delivery process uses a PDSA cycle to systematically plan, prioritize, design, and pilot new educational programs before they are introduced widely. This process includes methods to evaluate new offerings during implementation and to improve educational programs through sequencing and linking courses across grade levels.
University of Wisconsin-Stout
Education Category

One of thirteen publicly supported universities in the University of Wisconsin System, the University of Wisconsin-Stout has about 1,200 faculty and staff and about 7,700 students. Located in Menomonie, Wisconsin, UW-Stout offers twenty-seven undergraduate and sixteen graduate degrees through three academic colleges: College of Technology, Engineering, and Management; College of Human Development; and the College of Arts and Sciences. In addition to undergraduate and graduate degree programs, UW-Stout also provides a variety of outreach programs and services to business, industry, and society and provides a full range of support services to students.

Quality and Performance Achievements

UW-Stout’s “Mission Driven-Market Smart” focus is aimed at developing students for careers in industry and education and has led to a graduate placement rate at or above 98% since 1996. All key processes, including strategic planning, program development, partnership building, and teaching and learning, are guided by this special mission. More than 68% of students graduate with practical work experience through internships or co-ops, field experiences, and student-teaching experiences.

Over a period of six years, UW-Stout has developed an approach to leadership that has resulted in empowerment of faculty, staff, and students. This system of Shared Governance starts with the Chancellor’s Advisory Council, the primary leadership group, which includes senior managers, faculty, academic staff, and students. The Chancellor regularly communicates with faculty and staff by writing frequent e-mail messages to all staff (on a variety of topics); attending Faculty Senate meetings, Senate of Academic Staff meetings, and Stout Student Association meetings; and doing campus walking tours.

UW-Stout has multiple mechanisms to assess student, alumni, and employer satisfaction. High alumni satisfaction results exceed UW system and national averages. More than 90% of graduate program alumni and nearly 90% of undergraduate alumni say they would attend the university again. Employer ratings of graduate preparedness show superior and consistent performance relative to a best-in-class comparison. Employers have consistently rated 99% to 100% of Stout graduates as “prepared for work.” Another measure of student satisfaction is reflected in the number of students who transfer into the university. UW-Stout is ranked first among the UW System campuses in the number of technical college transfers.

UW-Stout emphasizes an integrated approach, called “active learning,” where traditional instruction is reinforced with extensive technology laboratories and industry partnerships. Seniors exceeded the national average for active learning by 13% for 2000. Other measures of active learning are in the areas of “worked with other students on projects in class,” “worked with classmates outside of class on assignments,” and “working effectively with others.” Results for these measures for 2000 show that UW-Stout exceeded the national average by 21%, 17%, and 11%, respectively.
The development of new programs is based on a needs assessment, employer and industry input, and educational research. The two-stage proposal process results in a program implementation plan, followed by program launch and ongoing evaluation, and a program review process that includes guidance from an employer/industry advisory council. The approach provides linkage with the mission and Board of Regents priorities. In response to industry needs, new concentrations are developed and implemented in one year.

Commitment to developing programs is consistent with its mission and addresses its niche, with 80% or more of program offerings either unique to the UW System or offered by no more than one to two other UW System campuses.

UW-Stout has developed partner relationship building processes to enhance the university’s ability to deliver educational services and expand service to more students, locations, and programs. For over six years, this key educational delivery strategy has involved twenty-seven partners, including technical colleges; K-12 systems; universities; professional and trade associations; Wisconsin, other U.S., and international organizations; and businesses.

The university has implemented a comprehensive, collaborative, and iterative strategic planning process for developing five-year goals. Organizational direction and expectations are set by and deployed through the Chancellor’s Advisory Council using a process involving internal and external stakeholders. With representation of all internal stakeholder groups and students, this council enables the university to function under Shared Governance, one of the organization’s values.

UW-Stout has maintained a favorable trend for budget allocated to instruction. Percentage of budget allocated to instruction has increased from 55% in 1997 to almost 60% in 2001, outperforming the UW System comprehensive university average. The percentage spent on personnel indicates a favorable trend and remains below the System average. As a result, fees were below the peer average for four consecutive years.

Room and board fees are lower than those of comparative institutions, yet students are satisfied with dining services and residence life. The results show the university being the best in their peer group for room and board expenses in 1998/1999 and 1999/2000 and 36% below the peer average.

UW-Stout has received multiple awards for innovative programs and partnerships. The university received national recognition from Newsweek (April 2001) as one of thirty-four schools cited as a “hidden treasure.” Other awards include: 1995 Governor’s Glass Ceiling Award, 1999 Outstanding Award for Technology Transfer from the National Association of Management and Technical Assistance Centers, 1998 American Association of University Women Equity Initiative Award Winner, 2000 Datatel Client Recognition Award, 2000 Recognition from the Governor for the “Ideas That Work Program,” 2001 Partners in Excellence Award, 2001 Governor’s Special Minority Business Award, and the 2001 co-recipient of the Wisconsin United Residence Hall Association “Large School of the Year.”
The Chugach School District (CSD) Office is based in Anchorage, Alaska. Chugach's 214 students are scattered throughout 22,000 square miles of mostly isolated and remote areas of south central Alaska. With thirty faculty and staff, CSD is the smallest organization to ever win a Baldrige Award. CSD delivers education instruction in the workplace, in the community, in the home, and in school to students from preschool up to age twenty-one using a comprehensive, standards-based system. With heavy use of technology, education for Chugach students can occur twenty-four hours a day, seven days a week. Half of the students in the district are Alaska natives.

**Quality and Performance Achievements**

CSD involves all stakeholders in its strategic planning process— including students, parents, community members, and businesses—to develop a shared vision, organizational performance goals, a five-year timeline of activities, and one-year targets. In 2001, stakeholders gave high satisfaction ratings to CSD in the five outcome areas of basic skills (96%), individual needs of students (89%), character development education (84%), transition skills (89%), and technology (89%).

Results on the California Achievement Tests improved in all content areas from 1995 to 1999. Average national percentile scores increased in reading from twenty-eighth to seventy-first, in language arts from twenty-sixth to seventy-second, in math from fifty-fourth to seventy-eighth, and in spelling from twenty-second to sixty-fifth. In addition, the percentage of students in the top quartile increased in reading from 17% to 56%, in language arts from 25% to 33%, and in math from 42% to 79%.

The state of Alaska began administering the High School Graduation Qualifying Examinations (HSGQE) and State Benchmark Exams in third, sixth, eighth, and tenth grades in 2000. In 2001, the percentage of CSD students who passed the HSGQE surpassed the Alaska state average in all three subject areas of reading, writing, and math and in all four grades tested. The percentage of CSD students who take college entrance exams has increased from zero to 70% since 1998.

CSD's percentage of state funds that are used for instruction increased steadily from 51% in 1995 to 82% in 2001, surpassing the state's mandatory guideline of 70%. Compared to all other rural Alaskan districts, Chugach has the highest percentage of its budget directed to instruction. CSD administrative and support service expenses fell from 25% in 1994 to the current level of 10%.

CSD uses a set of developmental levels instead of traditional grade divisions. A four-step Chugach Instructional Model enables students to progress through the ten content areas by using drill and practice, practical application, interactive simulation, and real-life situations. Embedded in the instructional model are thematic units that cross disciplines so students can connect learning in content areas such as reading, math, science, social studies, art, and technology.

Every student has an Individual Learning Plan (ILP), developed jointly with students, teachers, and parents. ILPs enable students to learn at their own pace. To move to the next level in the curriculum, students are required to demonstrate profi-
CSD uses a community-wide, highly participatory consensus approach, called Onward to Excellence, to set organizational values, short- and long-term directions, and performance expectations. Twice-a-month teleconference calls with stakeholders at remote sites and in-service programs provide opportunities for senior leaders to reinforce organizational values, directions, and expectations and to promote ethical values, faculty and staff empowerment, innovation, and organizational learning.

CSD's Anchorage House, a short-term residential program, prepares students to transition from traditional-school-based and small-community-based environments to independent life in higher education or work. The four-phase program is integrated with the content standards and addresses personal and social skills, health, career development, and community service. The program provides students with job-shadowing opportunities in the five student outcome areas, including post-secondary school, full-time employment, service learning, entrepreneurial, and vocational. In 2000, 97% of eligible students participated. In addition, Anchorage House serves students from other school districts in Alaska and the lower forty-eight states. Participation among other districts rose from twenty-seven in 1996 to sixty-five in 2000.

CSD led the formation of the state's Quality Schools Coalition to promote educational reform. CSD provides training on its approaches to education to school districts in Alaska and in other states. The district also established the Cultural Heritage Week to celebrate local cultures and to teach students about their heritage.

CSD reduced the faculty turnover rate from an average of 55% during 1975 to 1994 to an average of 12% during 1995 to 2000. Isolated working conditions contribute to faculty turnover despite high levels of satisfaction that range from 75% to 81% on a national satisfaction survey. CSD has a performance-based pay component and provides flexible working conditions, job rotation, job share contracts, and a high degree of empowerment to counter the effects of working in remote, isolated areas.

CSD provides thirty days of training annually for faculty, twice the number offered by any other school district in the state. Training facilitates alignment in action plans, organizational performance goals, and legal requirements. Training addresses how to assess student needs, instruct and support students, use ILPs, monitor learning, analyze results, and determine opportunities to improve student learning.

CSD uses technology to enhance student learning, to improve student technology skills, and to improve the efficiency of its academic and administrative operations. Through grant funding, the district increased the number of computers from two per twenty-seven students in 1994 to twenty-one per twenty-seven students in 2001. In addition, when students reach Level IV in all content standards, they receive a personal wireless laptop computer, a vital means of communication for students living in remote sites. Overall student use of the internet increased from 5% in 1998 to 93% in 2001.

Funding from grants increased from $100,000 in 1995 to $700,000 in 2001. In addition, the district serves as fiscal agent for $2 million in grants to assist other school districts. CSD generated more than $1 million through fund balances in its operating budgets over the past seven years, providing an effective buffer to offset potential decreases in grant funding and to provide flexibility in planning major expenditures.
Using Quality Tools (Including Systems Thinking) for Customer Satisfaction in Financial Services

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Introduction
Boston Financial is an established and progressive leader in the rapidly expanding financial-services industry. We provide state-of-the-art automated shareholder record-keeping and account-processing services to some of the largest mutual-fund management companies in the industry. Boston Financial was established in 1973 as a corporate joint venture of State Street Corporation and DST Systems.

State Street is a world leader in financial services, providing custody, securities lending, investment management, performance and analytic measurement, cash management, record-keeping, and information services.

DST Systems provides sophisticated information-processing and computer software services and products that help clients improve their productivity, increase their efficiency, and provide higher levels of customer service. DST has one of the most advanced data centers in the world, which provides information-processing services to support their products. These products are further enhanced by the integration of DST’s advanced technology and e-commerce solutions. DST Output, a subsidiary of DST Systems, delivers customer communications and support services.

As a supplier of services to the mutual-fund industry, Boston Financial provides some services directly and others indirectly through our partner organizations.

Our quality challenges
As the client contact for services performed directly by Boston Financial as well as those performed by our parent and partner companies, Boston Financial plays a pivotal role. In this role, we face three basic quality challenges: (1) to provide excellence in all that we do, (2) to work with our partners to provide excellence in all that they do and to integrate these services seamlessly for our clients, and (3) to empower our clients to achieve their business goals.

Our overall quality system, the Boston Financial Quality System, is our strategy to meet these challenges. Achieving excellence in our own work has been a formal company-wide strategy for four years. Creating new relationships with our partner companies to better serve our clients’ needs is now a corporate initiative.
Using the Kano Model as a means to understand client satisfaction

Determining our clients' needs was the first step we took toward satisfying our quality challenges. We identified customer satisfaction in terms of expectations, demands, and potential delight, based on Noriaki Kano's customer-expectation model. The Kano Model suggests that, from the customer's perspective, there is a difference between having contract work fulfilled and feeling satisfied.

As shown in Figure 1, complete failure to meet customer expectations results in customer dissatisfaction. It is important to note that our clients are not obligated to tell us what they expect; rather, it is our responsibility to understand them.

Once customers' expectations are met, we can begin to create a satisfied feeling for them by meeting their demands. We can gain an understanding of our clients' demands only through a two-way conversation with them. It is important to note that understanding customer demands is the only dimension of the Kano Model in which our clients communicate what they want.

To achieve very high levels of customer satisfaction, we must concentrate on attractive quality. This forces us to discover ways to both surprise and delight our clients and requires us to use our knowledge and understanding to achieve this. Our clients cannot be expected to already know what would be surprises for them or what would delight them.

The Kano Model also suggests that customer satisfaction is a dynamic process. Those services that provide delight for our clients today will be demanded tomorrow, and those that are demanded today will become expected tomorrow.

In summary, our interpretation of the Kano Model is as follows:
Using the Kano Model as a means to,..., continued

- Achieving operational excellence is a means to meeting client expectations.
- Integrating all services seamlessly for our clients meets their demands.
- Empowering our clients to achieve their business goals results in delight.

Operational excellence became a corporate goal

For us at Boston Financial, operational excellence consists of a low tolerance for defects, no tolerance for repeated defects, sustaining an environment of continuous improvement, and delivering defect-free products on time while offering competitive prices. In addition, the ability to recover from problems with accuracy and timeliness is essential.

When we decided to implement the Boston Financial Quality System, we realized that this definition is simply our clients’ expectation. The Kano Model suggests that we do not earn additional loyalty from our clients for doing the things that merely fulfill their expectations. We realized that, to successfully implement our quality system, we had to create an environment that not only fosters excellence but enables our organization to delight our clients.

Four years ago, Boston Financial made operational excellence a formal corporate strategic goal. A new quality policy was adopted throughout the organization. Access to internal resources and expertise became a mandate. A standard internal quality-measurement system was developed, and we used external benchmarks to measure our progress. It became standard practice for all operational groups to formally review their quality results and progress every week.

A prevention process provides high value at a low cost

To ensure that our clients’ shareholders experience low defect levels, our quality policy determines the required levels of inspection. If we are experiencing low accuracy in initial processing, we must raise the inspection level to remove defects. Therefore, our policy is designed to reward the improvement of initial processing. This raises the level of accuracy, which reduces the overall cost of inspection.

Traditionally our industry has relied exclusively on inspection to control quality. Although the process of inspecting for and removing defects is better than no inspection, it is not always possible to maintain high inspection levels. When daily work volume increases unexpectedly, the inspection volume decreases, thus allowing more defects for shareholders to experience. In addition, because human inspectors are not infallible, exclusive reliance on inspection does not result in very high quality levels.

It is our belief that if we can exploit the inspection process— not only as a means of defect removal but also as a source of understanding root cause— we can learn how to prevent defects. Reducing defects through prevention lowers the demand for inspection and thus frees our resources for accommodating variations in daily work volume. Thus, it is cost effective to prevent defects and reduce inspection levels, which provides a strong financial incentive. Plus, prevention can result in higher quality, which eliminates shareholder complaints.

After four years, we have reorganized our way of doing work and the number
A prevention process provides high value at a low cost, continued

Developing an appreciation for an organized system

As part of our effort to achieve operational excellence, we think of our work as an organized system. In doing so, we have made several observations.

1) In 95% or more of the instances of defective work that occur, the root cause cannot be attributed to individuals. Because the underlying business processes are not visible, it is tempting to correct defects by focusing on the individual who enters incorrect information into the computer system. But when we began to focus on the process and to measure and exploit our data to understand root cause, it became evident that we could achieve more by examining the overall system. Solving problems in areas such as recruiting, training, organizational structure, and workflow design can dramatically reduce defects.

2) Improvement is limited if we work only within individual departments or groups; more can be gained by focusing on the way departments interact and work together. True improvements can be made only by appreciating the interdependence of the individual parts of the system.

3) We gain a better understanding of customer satisfaction when we look at the results from the point of view of our customers rather than from the perspective of our company's internal measurements.

Differentiating between special and common causes

We deploy statistical process control (SPC) charts, which help us to differentiate between anomalies that occur just once (“special causes”) and problems that consistently occur throughout the whole system (“common causes”). We can eliminate special causes to make relatively quick improvements without fear of tampering with the overall process. When we eliminate special causes, our processes are in “statistical control,” which means that we can predict outcomes. If the overall process does not produce the desired results, we can use a formal continuous-improvement process to change it.

For example, we observed that whenever we assigned a new employee to an operations group, the overall defect levels no longer stayed within statistical control, and we experienced a “special” cause of variation. This has prompted us to reevaluate the recruiting and training process for new employees at Boston Financial.

We turn data into information and knowledge

Management can be defined as predictability. Our company’s management challenges us to understand our processes so that we can predict results and proactively avoid problems. We cannot be passive and wait to solve problems after they happen. As we have improved our ability to accurately measure our performance, actively reduce our defect levels, and cause fewer customer complaints, our work has become more predictable, and the environment is less stressful.

By developing a hypothesis that can be tested using the scientific method,
We turn data into information and knowledge, continued

theory helps us to better understand problems within our organization.

We turn mere data into information by applying various analytical methods, such as GOAL/QPC’s Seven Quality Control (7 QC) Tools and Seven Management and Planning (7 MP) Tools. Without such tools, it is possible to have much data, yet little information. Information can then become knowledge through the application of other tools, such as the WV Model for Problem Solving (described in detail later). “Analysis paralysis” can occur if you fail to understand how to accurately and efficiently interpret data and apply information.

Our previous dependence on a training approach in which one individual trains another resulted in variation and inconsistency. We solved this by creating standardized methods and processes that are subject to continuous improvement.

Understanding different personality types and how these different types interact is an ongoing effort at Boston Financial.

We challenge any aspects of the traditional hierarchy that act to restrict change in our organization. We are questioning the need for multiple management levels and seeking ways for employees to empower themselves. For instance, all affected associates, including the front-line workers, are now an integral part of all decision-making and improvement processes within our company.

We also promote a learning environment at Boston Financial.

Our measurement system is a key component in our operational-excellence program. Processing transactions can be represented as a simple model. We inspect a predetermined proportion of these transactions. After the inspection and defect-removal process, we combine the inspected transactions with the uninspected ones and then pass them all along to shareholders.

The quality of this overall process can be determined by measuring three variables: transaction-processing quality, the proportion inspected, and the quality of inspection. We plot these three variables daily on SPC charts and use the charts internally as daily measures of quality.

We have found it useful to also include a fourth measurement: transaction volume. We use this measurement in conjunction with our staffing model to ensure that we have the resources needed to maintain the correct level of inspection.

We use these four measures for each of the five to seven types of transactions that we typically manage. As mentioned earlier, our quality policy requires us to calculate inspection levels in such a way that the volume of inspections decreases as the processing accuracy increases.

To verify the accuracy of our internal measures, we use an organization called National Quality Review (NQR) to provide us with objective benchmark data. They review a statistical sample of 850 of our transactions every three months. This data is representative of the shareholder experience. NQR has a well-established reputation.
A system of measures, continued

Within the mutual-fund industry as an objective source of comparative quality data, this overall measurement system allows us to predict the quality of our transaction processing, and we share this information with our clients. These measures are fundamental in the implementation of our formal continuous-improvement process and focus on the process, not on the individuals involved.

In the early stages of our implementation, managers and associates alike became familiar with the SPC charts and became responsible for creating and using the measurements. Each day one person from each of our operational groups typically inputs a relatively small amount of data into these charts. Since there are just four data points per transaction, this is a manageable task.

A need existed to correct inaccurate internal measurements

Before we began our company-wide approach to operational excellence four years ago, some of our operating groups held individual transaction processors accountable for 98.5% accuracy (i.e., no more than 1.5% defects). Although we used these individual quality scores in performance reviews, we did not verify these measures with external data.

We realized our internal measures were inaccurate when we compared them to external objective benchmark data provided by NQR. Then we started examining industry-wide data from our clients and other organizations and discovered that defect rates for opening new accounts averaged 12%. These levels were measured from the shareholders’ perspective and therefore represent work after inspection. Since new accounts can involve as many as eighty-five different data-entry fields and are typically the most complex types of transactions that we handle, there are many opportunities for defects to occur.

If industry-wide processes produce defect levels of 12%, then holding individuals accountable for defect levels of 1.5% is simply not logical. By attempting to manage the person rather than the process, we had inadvertently created barriers. Our associates felt pressured to maintain a standard that the process was not capable of supporting. This prevented accurate reporting of defects, prohibited collective learning from mistakes, and tended to build mistrust between associates and their managers.

The elimination of individual quality standards as part of our performance-appraisal process and the agreement to focus on measuring the overall process was a critical step in the creation of our quality system. We made this change by establishing formal weekly meetings with each operating group. During these meetings, SPC charts were reviewed by both management and associates. The mutual understanding of the process that resulted became the basis for continuous improvement.

Defects: A definition

We consider any data entered into the system that differs from the shareholder-provided information as a defect. A defect also occurs if entered data does not comply with the fund prospectus or other printed material provided to the shareholder by the mutual-fund company. Our experience suggests that a clear definition...
Defects: A definition, continued

of what constitutes a defect is valuable in establishing a consistent measurement process and in sharing information with our customers.

The WV Model for Problem Solving

After establishing methods of measurement and eliminating special causes of variation, we began to implement process improvement. For this task, we used the WV Model for Problem Solving (see Figure 2 below), a tool developed by The Center for Quality Management.

The WV Model provides a structure for problem solving by suggesting that a series of alternating steps takes place between the levels of thought and experience.

Figure 2. The WV Model for Problem Solving.

Managers attempt to solve problems, but because they are not directly engaged in doing the work and thus do not have all the relevant facts, they might not be able to solve problems effectively. The discipline of the WV Model ensures that data and information are properly employed at each step. The model also requires adequate analysis and planning prior to execution.

As Figure 2 illustrates, we can use the WV Model proactively if we sense a problem but have not defined it. By exploring the situation using GOAL/QPC’s 7 MP Tools, we can define the theme representing the problem. Typically, during the first two steps, we analyze qualitative data and information. If the problem is already well defined, then we can react by following the remaining steps.

We typically analyze quantitative data using GOAL/QPC’s 7 QC Tools. We alternate among planning (which is on the level of thought), action, and information gathering (which are both on the level of experience). If we have previously

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The WV Model for Problem Solving, continued

Integrating the services that Boston Financial and its partners provide

solved the problem but the process has since deteriorated, we need to go through only steps 4, 5, and 6 to regain control over the situation.

As mentioned earlier, our second quality challenge is to work with our partners to provide excellence in all that they do and to integrate these services seamlessly for our clients. Our approach is to use common measures that take the customer experience into account; focus on the process; adopt formal continuous-improvement methods; and include all affected employees—front-line associates and senior management alike. By following this approach, we (1) collectively understand how our work affects our customers; (2) begin to anticipate problems and eliminate them proactively, (3) learn how to better work together as a team, and (4) build a management approach based on relevant facts.

This approach has enabled us to create common measurements that reflect the customer's point of view. For example, one of our partner companies produces the printed statements that are sent to mutual-fund shareholders every quarter. Initially, this company derived its measurement of “on-time delivery” from the performance of work orders in its factory. But this measurement misrepresented the process and indicated that more statements were mailed on time than actually were on time. Because each work order represented different numbers of shareholders, the fraction of work orders that this company considered to be on time bore no relationship to the customer experience.

When our customers complained, our partner company's management had difficulty understanding and accepting the problem. But when their measurement was changed to reflect the actual ratio of shareholder statements mailed on time to the overall number of statements, it became evident to everyone that there was an opportunity to improve the process.

Our partner company used deployment flowcharts as a tool for focusing on this process. Deployment flowcharts simultaneously describe the process steps and the relationship among organizations and departments. This allows us and our partner companies to share a common picture, uncover opportunities to eliminate waste, and aid in designing better work processes.

We at Boston Financial and our partner companies employ a common approach to our continuous-improvement efforts. This includes the use of very definite language. We are eliminating words like issues and replacing them with words like defects. A common definition of defects is necessary since we have de-emphasized blaming individuals for problems that occur in favor of emphasizing an understanding of the root cause. We also use the Plan-Do-Check-Act (PDCA) cycle to standardize our work processes.

Prior to our continuous-improvement efforts, only a small number of our senior managers and those of our partner companies participated in decision-making. We now have quarterly meetings that include team members from all our
partner companies. Furthermore, we bring together the associates who do the front-line work and the senior managers who control the resources.

Mailing quarterly statements to shareholders is a complex process. Mutual-fund companies want these printed statements to be mailed with various inserts. They also wish to send different inserts to different populations of shareholders. Government regulations require that statements must be mailed within five business days of the dividend calculation.

DST Systems calculates the statement information and provides it to DST Output, which must then manipulate the data to accommodate different inserting requirements. Statements are printed and then organized into different batches for inserting. Further batching takes place to meet mailing requirements.

In 2000, delays occurred in the mailing process for our statements for the fourth quarter. When some statements were mailed late, we realized that the underlying problem could have been in any one of these steps. Our challenge was to understand where to concentrate our improvement efforts.

A Pareto chart is a tool that provides a simple visual representation of a problem’s causes and enables you to focus on those that contribute the most to the problem. The elimination of these causes has the biggest possible impact on improvement. By analyzing the root causes of the delays in our mailing process and attributing a number of late mailings to each cause, we were able to use a Pareto chart to differentiate the critical few from the trivial many.

Our analysis enabled us to determine that capacity problems were a major root cause. Ever since we took steps to address those problems, we have been able to achieve a 75% on-time mailing rate. We determined that the late delivery of client-supplied inserts also contributed to the lateness of the mailings. We are currently making progress as we work to solve this problem.

A group of our associates realized that they were using inconsistent information whenever they had to handle complex transaction-processing problems. Because answers to their questions regarding the procedures were not documented, the associates relied on each other and their managers for solutions. They observed that associates and managers were providing different answers. Because managers were not always available to help, there was no single information source.

The associates devised a simple approach to improving the situation. They wrote their questions on Post-it Notes and put the notes on easels. The managers would then formally reply to the questions once per week with printed answers. In the process of writing the answers, the managers discovered that they either didn’t always know the correct answers or sometimes disagreed among themselves about what the correct answers were.

After this team implemented the Post-it Note procedure, they used a cause-and-effect diagram and a Pareto chart to analyze the process. They discovered that...
An example of continuous improvement in transaction processing, continued

most of the problems they experienced occurred in one field out of the eighty-five that were involved with the new-account process.

Documenting standardized written methods and creating a consistent management approach solved the problem. They appointed a department trainer to retrain the managers first and then the associates. The Post-it Note answers were used as curriculum material for designing training programs. Because the associates developed the work processes themselves, they played an active role in implementing the changes.

The positive effects of this improvement were made evident by the positive change in the new-account SPC chart for this group of associates. This incident, which was one of our first successes in formal continuous improvement, also reinforced organizational interest in the improvement process.

Due to our structure and complexity, Boston Financial did not do a company-wide continuous-improvement program all at once. Instead, we started by working with a small number of the forty-eight different client-specific operations groups to develop a standard continuous-improvement process.

We began by creating SPC charts for three attributes of each of the five to seven transaction types that we typically handle. We met weekly with managers and associates to review and discuss the data. We also introduced the principles of focusing on the process, managing by fact, understanding statistical control, and learning how to eliminate special causes.

As some of the early adopters of our quality system improved their work processes, we were able to demonstrate their success to the rest of the organization. This was important because the basic quality tools are methods that are traditionally used outside our industry. Boston Financial now has a company-wide mandate for all its operating groups to use the Boston Financial Quality System. We have also added new resources, including the services of a senior Baldrige examiner.

About 40% of our transaction processing is measured by NQR. Thirty-four of our forty-eight operations groups are now actively engaged in continuous improvement. The aggregate data for all our clients as measured by NQR indicates that in the past three years the number of defects in transaction processing at Boston Financial and our partner companies has been reduced by 50%.

One of our client groups has been cited as having “Best in Class” performance. That means that its results are the best of all mutual-fund companies measured by NQR, including Boston Financial clients and non-Boston Financial clients alike.

After four years of working toward operational excellence, our organization as a whole is beginning to value the Boston Financial Quality System. When surveyed, our customers indicated that we are meeting their expectations with our transaction-
processing methods. Some of our customers have expressed satisfaction with our ability to better integrate the services that Boston Financial and our partners provide. Last year, most of our customers acknowledged an improvement in our services, and almost all of them said they would recommend our services to others.

In general, we are developing an environment that enables us to move toward further customer satisfaction by creating more of a partnership with our clients—and moving toward customer delight on the Kano Model.

This initiative began as an evolutionary process for us, but now it's becoming a part of our culture. Three of our major accomplishments are the following:

1) We have retained existing clients and acquired new ones.
2) We have been able to negotiate better financial relationships with our clients.
3) We have met our clients' expectations and are building relationships with them to which they believe we add more value.

For further reading

Brassard, Michael, and Diane Ritter. 1994. The Memory Jogger II. Salem, NH: GOAL/QPC.

Author information

Matthew Booth joined Boston Financial in 1998. As Vice President of Operations Development, his mandate is to develop and implement new approaches leading toward operational excellence.

Prior to joining Boston Financial, Matthew served as Vice President of Quality and Vice President of Process Engineering at Scudder. There he was responsible for engineering critical business processes and applying contemporary quality methodology.
Author information, continued

Before his employment at Scudder, Matthew worked at Wyman Gordon, an aerospace forging company. He was responsible for leading a company-wide cultural transformation from a traditional “scientific management” philosophy to one of world-class operational methods. His particular focus was on inventory reduction through synchronous manufacturing.

During the 1980s Matthew worked for Johnson Matthey, a British-based multinational company that specializes in precious metals and engineered materials. There he participated in the quality revolution in manufacturing and gained experience by implementing a company-wide approach to total quality control.

Ellen Praught is an Internal Consultant at Boston Financial. She has eleven years of experience in the financial-services industry in brokerage, brokerage support, mutual-fund operations, and finance. She has worked for a number of diverse organizations, including Merrill Lynch, Putnam, and a not-for-profit organization.

During the past four years, Ellen has focused on developing and implementing a quality system that is unique to the transfer-agency business.

She holds a B.A. from the University of New Hampshire and an M.B.A. from the University of Massachusetts.

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Editorial assistance for this article was provided by Cathy Kingery.
Building A Competitive Total Customer Experience

Author

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Introduction

In the year 2000 HP instituted a corporate-wide initiative designed to differentiate HP on Total Customer Experience (TCE). To achieve that goal we first had to make sure we clearly understood why our corporate customers choose and buy from us, and how that experience keeps them coming back to HP. Delivering customer value is based on two fundamental tenets: (1) Prioritizing action that is based on the customer’s (and not necessarily the supplier’s) specific needs. (2) Creating a positive balance of customer goodwill. This is derived from cumulative customer experiences over time. It is similar to managing a bank account so that it always has a positive balance, then you can draw on it when you need it.

Customer satisfaction hierarchy

Customer satisfaction and trust are important parts of the TCE experience, and are based on our ability to satisfy the customer’s unique business needs. We realize that we are essentially dealing with a hierarchy of human needs (similar to Maslow’s human needs hierarchy), focused primarily on business needs (Figure 1).

After customers realize that they receive Superior Whole Product Experience (Level 1), they will consider seeking the next level, Superior Business-to-Business Experience. In contrast to Level 1, which is a one-way street requiring the supplier to deliver whatever the customer orders and pays for, Level 2 is more of a two-way relational experience. It is a give-and-take relationship that eventually leads to reciprocal buying from each other, or balance of trade. The provider acts as a trusted business adviser to the customer and the customer, in turn, shares business directions and issues. The provider may offer strategic business guidance and even suggest alternatives to help the customer realize a higher ROI. For example, HP customers might ask us: “Where should I be going? What should I be doing? How can I change what I am doing for my global customers so I can be more successful?” In short, they are inviting us to customize our technical solutions.
Customer satisfaction and trust, continued

to solve their unique business problems, to help them make money, and help them to be more successful with their customers. If we do this well, it earns us the privilege of sitting at their strategic table as an integral member of their strategic planning process, and encourages reciprocal trade.

When the first two levels of needs are basically satisfied, we can work up into the top strategic arena and become a Compelling Business Association. At this point we are two businesses working in tandem, either in a partnership or an alliance mode. At this stage we are going to market together: designing things together, creating markets together, sharing the benefits of combined brand equity, sharing infrastructures, and sharing channels of distribution. We are also sharing financial risk. We may even get into a symbiotic relationship wherein the dismantling of the relationship would cause both companies to suffer. This top level used to be an unusual occurrence but we are now seeing more alliances and partnerships as a cost-cutting move that also insulates companies from potential takeovers. This third level is, however, a very difficult relationship to manage because it requires a delicate balance of power: Who does what? How do you govern and moderate such a relationship? How do you maintain the trust of other customers who are not included? How much can you share without “giving away the store?”

A hypothetical example

Let me offer an example. Figure 2 represents a hypothetical corporate account, called XYZ Company, as a case study for this article (which I will also refer to later in the article) to show how we graph and use the customer feedback and profiling system to create customer relationship strategies. With a TCE index of 3.99, this account has a high-end or borderline transactional experience that is poised to be moved up to more consultative business-to-business experience. I’ll use the consequent charts to demonstrate this.

Customer loyalty is cumulative

Customer loyalty is based on life long exposure to and experience with HP—its products, its people, its community involvement, and its corporate reputation. It is earned over time by satisfying a hierarchy of customer value needs, starting at the bottom. Differentiating HP by TCE requires maintaining a positive balance of goodwill that is derived from all three levels of the value hierarchy over time, and is superior to what is offered over time by our competitors.
Customer relationship assessments measure the TCE

Forecasting and fostering loyalty requires measuring and managing value on all three levels of a customer’s TCE. A challenge is that customer feedback systems tend to focus on the bottom level only—price, performance, and the quality of product and support offerings that makes up that first level, Whole Product Experience.

Generally, supplier scorecards are used. Although they clearly define the product and service specifications that drive customer satisfaction, they often underestimate the importance of the relationship and business involvement needs that drive long-term loyalty. And they usually overlook the impact of long-standing associations with HP as a corporation, corporate citizen, and industry standard-bearer.

There are two potential pitfalls to focusing the relationship on the whole product or transactional aspects of the business relationship only. That relationship tends to be one-way driven: the customer orders the product and the supplier delivers it. The customer does not get the benefit of the supplier’s business and global advice, and the supplier does not get the benefit of the customer’s directions and plans. So both operate in a transactional vacuum. Thus, the supplier cannot move the customer up to the more lucrative consultative space and the customer cannot gain competitive advantage through partnership and supplier experience.

Managing customer value on all three levels at once

A dilemma we have with large corporate accounts is that we don’t have the luxury of managing one level of value at a time. We often have to manage all three levels simultaneously because different kinds of business are conducted within each of these corporations. We need to figure out how to do those level changes within the same account and how to balance our resources and priorities effectively. There may be a strategic alliance in one part of the account and a substantial transactional product and service business in another part. For example, in 2000 HP had a strategic alliance with Intel to co-develop the Itanium™ technology at the same time that it had a large transactional business in PCs and a consultative business in servers: three kinds of business relationships all in the same global account.

Define and manage the customer relationship

HP employs two assessments to cover the three levels of relationship in global accounts: the Relationship Assessment Process (RAP) and the Strategic Alliance Relationship Assessment (SARA), shown in Figure 3.

In our experience, customer assessments that provide mutual benefit to the customer and the supplier work best: the customer gets to strongly influence the supplier’s priorities in the account, and the supplier gets to design and modify offerings to better suit the customer.

Figure 3. Customer Assessments.

<table>
<thead>
<tr>
<th>RAP Level 1</th>
<th>SARA Level 3</th>
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<tbody>
<tr>
<td>Superior Whole Product Experience</td>
<td>Compelling Business Association</td>
</tr>
<tr>
<td>RAP Level 2</td>
<td>SARA Level 2</td>
</tr>
<tr>
<td>Superior Business to Business Experience</td>
<td></td>
</tr>
<tr>
<td>RAP Level 3</td>
<td>SARA Level 1</td>
</tr>
<tr>
<td>Compelling Business Association</td>
<td></td>
</tr>
<tr>
<td>Kind of Relationship</td>
<td></td>
</tr>
<tr>
<td>Strategic: Partner or Ally</td>
<td></td>
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<tr>
<td>Consultative: Trusted Business Advisor</td>
<td></td>
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<tr>
<td>Transactional: Supplier</td>
<td></td>
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<tr>
<td>Strategic Alliance Relationship Assessment</td>
<td></td>
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<tr>
<td>Alliance Governance</td>
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<tr>
<td>Collaborative Solutions</td>
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<td>Shared Infrastructures</td>
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<td>Combined Capabilities</td>
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<td>New Business Creation</td>
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<td>Shared Risk and Reward</td>
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<td>Strategic Leverage</td>
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<tr>
<td>Overall Responsiveness</td>
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<td>Robustness of Solutions</td>
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<td>Service and Support</td>
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<td>Ease of Doing Business</td>
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<tr>
<td>Business Understanding</td>
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<tr>
<td>Partnership Approach</td>
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<tr>
<td>Overall Relationship Value</td>
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</tbody>
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RAP and SARA cover TCE on all three levels of complex corporate accounts.
Define and manage the customer relationship, continued

and market. H P has addressed both purposes by implementing a closed-loop system that is run on all three levels of the value hierarchy. RAP covers Levels 1 and 2, and SARA covers Level 3. Both of these relationship assessments set the expectation that H P will partner with its customers by listening carefully and taking continuous mutual action to provide a superior TCE to improve business results. All H P corporate accounts are required to complete a relationship assessment annually, report findings to H P and the customer, install TCE initiatives with and for the customer, and track progress against those customer initiatives quarterly. It is a long-term partnering process (not an event) that is primarily intended to develop face-to-face relationships that steer the priorities of both sides.

I will discuss RAP to show how we do it. SARA is similar in methodology and follow-through so I will not cover it specifically. RAP covers the first two levels of the strategic relationship: (1) the Whole Product/Transactional Experience, and (2) the Business-to-Business/Consultative Experience. RAP is a pre-arranged structured feedback mechanism conducted with key decision makers and critical influencers in corporate accounts. A customer sponsor is enlisted to champion the process and invite his/her associates to participate. The customer’s experiences and priorities are then explored through a combination of structured face-to-face interviews by H P teams and internet-based reviews. The results are used to:

• Prioritize action and align account resources to the customer’s business priorities,
• Foster loyalty and build critical strategic relationships,
• Align sales approaches and business relationships to fit the customer’s business model,
• Differentiate H P from the competition.

The structure of RAP focuses customer feedback on two critical dimensions: (1) TCE, or performance, which drives satisfaction. (2) Value, which drives loyalty and growth. Every summary of RAP findings contains two sets of analyses to help define and install a relationship strategy and initiatives to improve TCE in the eyes of the customer: (1) A TCE Index that shows customer satisfaction and impacts customer retention. (2) A Loyalty Index that shows the loyalty drivers needed to grow business over time. The assessment is thus structured to measure these two dimensions.

Dimension 1: TCE

H P’s performance is viewed as a measure of TCE and overall customer satisfaction, which drives customer retention. The customer is asked to rank the importance of seven performance categories that make up the business-to-business TCE with H P:

1. Overall Responsiveness,
2. Robustness of Solution,
3. Service and Technical Support,
4. Ease of Doing Business,
5. Understanding the Customer’s Business Needs,
6. Partnership Approach,
7. Overall Relationship Value.

The customer rates HP in each performance category according to its importance to the customer’s business, HP’s performance against requirements, and HP’s improvement over time.

The TCE Index is an overall average of importance, satisfaction, and improvement. It serves as a guide to areas for improvement, and to focus us on areas to communicate customer-perceived value (Figure 4). We see that the XYZ account has an overall TCE Index of 3.99, which is averaged across the combined importance, performance, and improvement ratings of the seven categories. XYZ is slightly differentiated by technical support and robustness of solution, which is considered an overall value discipline of technical leadership.

The customer is also asked to rate HP’s competitive position in each category, and to state which company (inside or outside the industry) performs best in each category. In Figure 5 we can see that the XYZ account has an overall competitive
Competitive Index, continued

rating slightly above the competition. We also see that XYZ’s competitive strengths lie in the transactional business. If HP wants to move up to a more consultative relationship with more business partnering and advice, HP will have to get much better at understanding XYZ’s business objectives and environment in addition to building a stronger trusted-advisor relationship. If HP decides to stay transactional, it will limit the growth possibilities and reduce the potential for value-added consulting to XYZ. The customer is asked to name the number one overall priority, or the most critical thing for HP to address in the short term.

Dimension 2: Value

We define value as being a measure of customer-perceived value that drives long-term loyalty and growth. The customer is asked to forecast loyalty to HP using three loyalty categories based on the widely used Burke Consulting’s Customer Loyalty Assessment methodology. We ask three questions:

• What is your overall satisfaction with HP?
• What is your intent to repurchase from HP?
• How willing are you to recommend HP to others?

Loyalty Index

In Figure 6 we see that the XYZ account gave HP an overall Loyalty rating of 3.75, with strong satisfaction but some ambivalence about choosing or recommending HP over others in the future. This is typical of a high-end transactional account. Some buying decisions are still based on price-performance so switching is still an option for these accounts.

Preferred relationship focus

The customer is also asked two open-ended questions on future directions and e-business drivers. Finally, the customer is asked to state what the business-to-business relationship focus with HP should be, both short term and long term: operational excellence, technical leadership, and/or customer intensity/partnership.

In Figure 7 we see that XYZ wants HP to concentrate in the short term on operational excellence: managing total cost of ownership and price-performance. In other words, the customer wants HP to do an excellent job of handling all business
transactions efficiently and effectively. In the longer term, XYZ wants HP to focus on technical leadership: delivering a total product and service business solution that includes consulting and business direction. So XYZ concurs that it would be a good idea to move into the more consultative relationship as long as operational excellence is maintained.

HP operates on the premise that there are two ways of providing value to shareholders, customers, or clients: reduce the total cost and/or create unique value.

**Reduce cost**

There is a focus on cutting cost across the whole economy and no product or service provider is immune. We are expected to cut our own costs to prevent erosion of profits, and to pass cost savings on to our customers or clients. We do this by streamlining processes and eliminating non-valued-added processes, consolidating businesses, and automating systems. The internet is making it easier for the customer to access information and services without depending on salespeople, and the new ease of comparison shopping is changing the face of competition.

Figure 8 on the next page shows HP how well it is progressing in improving TCE over time. XYZ thinks HP has improved in relationship, partnership, and understanding business needs over the past year. This is encouraging if HP decides to move into the consultative relationship. But we will need to improve our robustness of solution and continue improving these three categories to get an edge over the competition.

**Create unique value**

With an emphasis on cutting producer costs and cutting the total costs of ownership to the customer, it is easy for us to lose focus on creating unique value. To focus on this, HP uses a combination: the TCE Index to determine how to manage costs and boost customer satisfaction, and the Loyalty Index and analysis to deter-
Reduce cost and create unique value, continued

mine how to create unique value for the customer to grow business long term. We try to show how we can give our customers what they want in a manner that is a cost-effective total solution for them. And we want to show them where we can help them go, how we can partner with them, and how we can create new opportunities that will enable us both to be successful. One aspect of this is reciprocal trade, which mutually benefits both companies and demonstrates commitment.

The TCE analysis is used to create initiatives to improve customer satisfaction and HP’s competitive position. These findings are related back to the customer accompanied by an action plan for improvement, and a reassurance that the perceived strengths will be sustained.

The Loyalty analysis is kept within HP. It is used to guide strategic planning, and to reset or realign the sales and relationship focus in the account to better meet the customer’s long-term needs. It is also used to create better, more compelling value propositions.

The combined analysis (Figure 9 on the next page) is used to set initiatives at a corporate level to create a unique value proposition and a competitive customer experience for all HP customers. The correlation between TCE and loyalty is used to test if creating TCE initiatives will also improve long-term loyalty to help lock-in priorities. Figure 9 shows a fairly high correlation at 0.67, so taking action to improve TCE scores and overall satisfaction will likely have a positive impact on the long-term loyalty of XYZ as well.

**TCE performance analysis**

The TCE analysis is a measure of HP’s performance against the customer’s stated requirements. It is used to determine the top two or three initiatives needed to improve TCE at the account, business unit, and corporate levels. It is comprised of the following elements:

The TCE Index is a weighted index: two times the importance rating, two times the performance rating, and one times the improvement rating, in each category. If you’re not improving, it will keep your scores down. It is an incentive to
Reducing cost and creating unique value, continued

get initiatives going and do something to improve scores.

Our global client business managers are compensated on their ability to improve their own TCE scores over time, regardless of where the scores start. This is not a contest against colleagues with different customers and different customer expectations; it is a measure of their own ability to listen to their customer and take corresponding action that benefits the customer over time. This can be done by demonstrating customer commitment, fostering relationship and trust, and improving the overall customer experience. Their customer is the judge of this, not HP.

Figure 4 shows the seven different performance categories and the TCE Index, which is an average. We show the scores in color: If it is below a 3.0 on a five-point scale, it is shown in red; above a 4.0 is green and everything in between is yellow. So immediately we see what we’re doing well at and what we’re not doing well at. We want to capitalize on the greens to communicate value. For the yellows, we may be looking at what we can improve to be more competitive, and we want to immediately fix anything in red to prevent customer dissatisfaction and defection. Red means that the competitor is ahead of us, or doing much better, and/or we’re doing something wrong.

The second part of the TCE performance analysis, the Relationship Profile (as shown in Figure 2), shows the level and nature of the business relationship perceived by the customer. It shows where the largest proportion of the account’s customers see them. (Note: The strategic level of the account would normally show up on a profile from SARA, rather than RAP.) The right-hand side of the triangle lists typical value drivers at each level. The customer wants the best total cost (price/performance) at the bottom level in addition to the best total business solution at the second level (which includes customization and consulting). A profile is drawn for all accounts.

One reason we create this profile is that if we’re perceived as a product and service vendor, price-performance is important to the customer. If we spend a lot of
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TCE performance analysis, continued

time customizing solutions and going to visit those customers, we won’t get extra bonus points—we’ll be spending time and money that may not produce a good ROI. It is important to know that if the customer thinks of us as a product and service vendor and says that’s where they want us to be, we should focus our sales approach on price/performance and take all other costs out. As we noted earlier, XYZ is on the border between transactional experience and consultative experience (Figure 2). In this case we might talk with XYZ to see if they would like us to add more services, such as benchmarking and customization, that may help HP move into the more consultative space.

A value-discipline profile

A radar chart (Figure 10) shows how the customer rates HP’s relative value disciplines. We got the idea for the chart from The Discipline of Market Leaders. In this book, Treacy and Wiersema recommend that a company or service provider be proficient in three value disciplines to be able to stay in business: product (technical) leadership, operational excellence, and customer intimacy (intensity). But it should be especially good—differentiated—in one of them to gain competitive advantage and to inspire customers to choose them over the rest of the competitors.

At the XYZ Company, HP is seen as strongest in technical leadership. That means that HP has a technical advantage over the competition. If Technical Support and Robustness of Solution are important, then HP can differentiate itself in this account.

In some accounts HP is equally good at everything, but is not differentiated in anything. In those accounts, HP may have to compete head-on with three major...
A value-discipline profile, continued

competitors that are each differentiated in a different value discipline (e.g., in one account the competitors are IBM in customer intensity, Sun Microsystems in technical leadership, and Dell in operational excellence). So we have to look at this profile and ask ourselves what we want to concentrate on. Do we want to get better at one of the areas so that we can clearly surpass one of our competitors? Or do we want to move the whole profile out from what looks like a transactional level account into a more consultative account by getting better at all three disciplines, so that we are better than all competitors overall? There is no definitive answer to this. You basically have to pick a strategy and try it. But the main thing is that you have a vision, an idea of what this looks like, and then decide what will be your strategy.

If you let yourself get caught in a reactive mode and you're reacting against each one of your competitors, they can run you ragged. If you compete head-on with all your competitors at the same time, with the same resources, it is very difficult. That is why Treacy and Wiersema recommend becoming known and differentiated in one value discipline while maintaining qualifying and competitive levels in the other two.

A personal example

I’ll offer a personal medical experience that illustrates the importance of offering a recognized value discipline, one that can help someone choose among two medical caregiver alternatives. When I was pregnant with my second child, my doctor asked me which hospital I would like to use for the delivery. He was affiliated with two hospitals, and the overall costs and medical coverage would be the same. So I asked him what he thought my choices were. “Well,” he said, “most of my clients choose El Camino Hospital because they take extra care of the mothers: more pampering, more attention, more rest, more coaching, etc. On the other hand, Stanford Medical Center is a teaching hospital connected with the university, so in the event that anything should go wrong, you would have a physician specialist there immediately (as opposed to one on-call).” He said that because my pregnancy was doing well, the likelihood of anything going wrong was probably remote.

So I chose Stanford to hedge my bets, which was a surprise to my doctor. And then something indeed did go wrong—at the last minute—and the pediatrician arrived within two minutes to treat my child before damage could occur.

My husband and I made a decision based on our personal needs and the medical provider value discipline that was most important to us. We chose technical leadership (resident expertise and equipment) over customer intensity (care) and never even considered the third discipline, operational excellence, which could have been characterized as a home birthing center. We wanted the security of knowing we had access to technical leadership if we needed it. And I was willing to forego personal care to ensure that. As my doctor pointed out, most women are not. So if the hospitals and my doctor had prejudged my preferences just by looking at other women, they would not have been accurate. And I would have been dissatisfied.

What customers value

Some key questions this example raises are: Do you know why your customer
or your client chooses you or your institution? What is the value discipline they are
counting on? What is the hierarchy of values that they have, that differentiates you
from the rest of the pack? And are you communicating that well enough, as my
doctor did, so customers can choose you and defend their choice to others?

I chose the previous example because it also illustrates the importance of being
competitive at all three disciplines simultaneously. If either hospital had been
inferior in any of the disciplines, they would not have been considered at all. Because
both were equally good and because both offered similar insurance packages, we
then made the decision based on the recognized difference in the way they assigned
their medical and human resources.

Once we understand the value discipline to focus on short-term, we will then drill
down to determine what action we need to take to improve the TCE ratings. This work
is made visual on a decision matrix. The difference between the decision matrix and the
TCE Index is that the decision matrix does not factor in improvement; it concentrates
on importance versus current performance. We create a matrix (Figure 11) for each
category, so we have the capability of drilling down into the sub-attributes and
_corresponding comments of any category to decide what needs more work.

Interestingly enough, with a cursory look at aggregate TCE data, people will
think everything’s fine. Go back to Figure 4 again and look at the left-hand side: all
the ratings are good. But when we look at a chart without the improvement score
(Figure 11), we find that one area needs immediate improvement—Technical
Support. Even though XYZ scored us high on Technical Support, it still thinks H P
should more consistently deliver excellent global technical support. So this area is a
red on the decision matrix that drills down deeper into technical support attributes.

When we look at the subcategory scores that go with the performance category
scores, we often find reds and yellows. If you were to think of this as a marriage, in

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### Figure 11. Decision Matrix—Importance versus Performance.

What attribute is most important for maintaining and improving customer satisfaction?

<table>
<thead>
<tr>
<th>Dynamic Sample A: Account / Customer Perspective</th>
<th>Dynamic Sample B: HP Team Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated Importance</td>
<td>Stated Importance</td>
</tr>
<tr>
<td>Performance</td>
<td>Performance</td>
</tr>
</tbody>
</table>

- Blue: Delighted to the point of possible overkill. Redeploy some of these resources to other areas of more importance.
- Green: Keep doing consistently well and communicate value.
- Yellow: Same as competition; satisfied with performance. Create more value and improve delivery of value.
- Red: Needs improvement.

An analysis of the gap between customer and Hewlett-Packard perception is done to determine where to reset H P’s focus. This chart is used to prioritize improvement initiatives; it does not factor in improvement trends.
essence the overall marriage gets a green light, but when pressed for ways to improve, the spouse suggests coming home in time for school events, and better finances. These sub-attributes and their corresponding comments are important guideposts in determining how to improve TCE. They’re “ahas” that bring to light vital data about things that may be slowly eroding the trust and satisfaction in the account.

Every customer chart has a corresponding HP team chart, which shows how the HP account team thought the customer would respond (see Figure 11). The gap between the two charts shows where HP needs to realign its priorities to increase satisfaction and loyalty. We look for gaps in ratings as well as gaps in priorities (loyalty drivers) to reset our strategies and focus. At HP, we tend focus on our technology, not surprisingly, because it has been very good to us over the years. However, we are finding that the top driver in loyalty is relationship value. Many of our employees have not internalized that yet. They immediately think that the only important thing is the technology (the robustness of Solution) when, in fact, the ability to provide overall Relationship value has become equally important or more so. This type of gap analysis helps our sales teams spot any changes that they need to respond to, and to realign value propositions to customer long-term need.

When there is an obvious gap between the customer’s perception and our own, we have to ask ourselves if this gap is the result of a communications shortfall, a performance shortfall, or a unique new offering by a competitor. In a high-tech company like HP, engineers love to problem-solve, so they just want to focus on solving all the problems. It is not as obvious for us to focus on doing a better job of communicating our value to the customer. The gaps often point out areas, such as “personal and executive relationships,” where we are clearly differentiated in the eyes of our customers, and should be communicating that differentiated value back more often to our customers.

In contrasting and comparing the customer’s perception with the HP team's perception, HP thought XYZ would rate Understanding Needs low but XYZ did not (Figure 11). Both agreed that Technical Support needs continual improvement. Both agreed that Solution is done well (and this is critical to loyalty). But HP missed the fact that XYZ thinks Responsiveness is good, so HP might have run the risk of overcorrecting Responsiveness, which needed no improvement, instead of spending resources on building overall Relationship value.

We will bundle the most frequently stated suggestions found in customers’ direct comments into themes. These themes are then mapped against the priorities from the TCE (stated importance) and loyalty charts (derived importance) to determine the top areas to concentrate our account action on. Top 10 lists and recommended initiatives that span all accounts are also created to drive corporate-wide action on the behalf of all our customers.
Competitive ratings

Finally, we look at competitive urgency and recommended best practices to guide our decisions about what to do first, and how that might impact our competitiveness. The Competitive Summary Chart we saw earlier (Figure 5) compares HP to competitors in the same account. We ask how we are doing in comparison to the competition in the account. We ask for specifics— not just generalized competitors in the industry, but organizations who are competing against us.

These charts often tell us that some of the competition (and some of the expectations of our customers) may be coming from outside our industry. We get some very good best-practice ideas from some of our customers and from some companies in other industries. Examples include Procter & Gamble, Nordstrom, and FedEx for some of the things they do. All of this helps us focus on how to make HP even more valuable to our customers.

In our hypothetical XYZ account, IBM might be a threat in the consultative space that HP may want to move into. HP understands what it needs to do to compete by learning how IBM goes about understanding XYZ’s business. You may recall that Nordstrom was named best-in-class in customer relationships. Nordstrom, of course, is not in our industry but that’s okay. We ask the customer to tell us who they think does the best job at customer relationships because HP knows that that relationship is important to XYZ, and that Nordstrom does it best. We then use Nordstrom as a model.

Selecting specific initiatives

Once we have all the TCE information analyzed, we select initiatives that will address all the customer’s most immediate stated needs, with the goal of capitalizing on HP’s value and improving HP’s competitive position. A set of TCE initiatives typically includes one or two things to ensure that we keep doing critically valued things very well (such as executive relationship), in addition to initiatives for improving things that may need improvement (such as billing and supply chain management). We don’t just go charging off, however. We feed all of this information back to the customer to make sure that we’ve gotten the data right and have interpreted it properly. When the customer verifies this, we now have accurate and important knowledge to go forward. With the endorsement and help of the customer, we are now able to implement and track progress on initiatives that are based on our strengths and our challenges.

Individual analysis

We will also analyze all of the individual loyalty data to determine: (1) Who the specific individuals at risk are, so we can try to turn them around or use them as warning systems. (2) Who the strong loyalists or advocates are, so we can arm them with information to help them internally lobby for HP.

We may have 2% or 3% of our customers “at risk.” This is because we deliberately include known dissenters and potential defectors in the RAP to get a complete view of the account. It is important that we hear their point of view if we are to get a balanced picture of the account experience and HP’s potential position and chal-
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Individual analysis, continued

It is also important to “flag” things that may be changing, and dissenters are often the first to raise these issues because they hear about them from competitors.

To be considered “at risk,” the respondent has given us one out of a possible five points on one of the three questions listed earlier in the section, “Dimension 2: Value.” It may mean that they are ready to leave us, that they’re dissatisfied on at least one of these things if not all of them, and/or they are “turning up the volume” on something we have inadvertently ignored earlier. It is an early warning signal that we may lose them if we do not act immediately.

A “vulnerable” rating means somebody gave us a two or three on one of the questions, so they are unsure about their intent to stay with H P.

“Favorable” respondents are people who give H P fours and fives on all three questions. They are strongly in favor of H P and often lobby on H P’s behalf. So communicating H P’s strengths and building relationships with them is important. In contrast, a “loyal” respondent is someone who gave us fives on all three questions. These are powerful internal advocates for H P in the account and should be fostered with information, face-to-face executive contact, and invitations to special events.

Goals for improving TCE and loyalty

We set overall goals for all accounts to encourage teams to continually improve TCE and loyalty. We do not set 100% goals but rather 75% goals. A lot of people ask why we don’t go for 100% loyalty and the reason is that we encourage our accounts to go after dissenters and defectors as well as advocates. Clearly it is a lot more gratifying to talk to somebody who likes and supports you. To have to talk to someone who doesn’t like you is pretty painful. But it’s also extremely important because that is how to find out what is changing in the marketplace. To drive for 100% would exclude people that we know do not support us, and the object is to find out what is going on in the account—it’s not a popularity contest. And that is why we compensate our account managers based on their ability to raise their own TCE and loyalty scores over time, and not to beat out managers with other accounts whose scores might be totally unrelated and certainly not standardized.

Derived versus stated importance

Another indicator set that we use includes derived and stated importance (Figure 12 on the next page). We use this chart to determine the critical loyalty drivers in the account so we can focus our long-term account strategies on creating value around these key customer-loyalty drivers.

The stated importance is what the customer says is important. The dilemma is that most customers focus on familiar and immediate needs, and that tends to focus us on “entry-level tickets” or things that are required for H P and any other competitors to get the business. But because these things are required of all suppliers, they do not differentiate suppliers who provide them, unless they provide them in a sustainably superior fashion. So delivering entry-level tickets only qualifies suppliers to be able to sell to the customer. It does not earn the long-term loyalty of the cus-
Derived versus stated importance, continued

The derived importance comes from what the loyal customer says is most important. Because customers may actually not be aware of the importance of some of the categories to their business, they generally state importance based on current experience and knowledge, and what they can get from competitors. For example, if they were buying candles, they might ask for longer, cleaner burning, brighter candles. But the loyal customer might tell you about a light bulb that they’ve seen from a competitor and indicate that the safety and reliability of electric light is what will be most important for illumination in the future. So the supplier who can provide the best electric illumination will get the loyalty of the customer. Sometimes customers can articulate this; sometimes they can’t.

Hostage programs

It is important not to confuse “hostage” programs like co-payments and frequent-flier miles with loyalty drivers. Hostage programs create sales at the expense of the competition but lose their effect as soon as the competition can offer the same. With hostage programs, customers do not buy on loyalty, but on arbitrary rules and rewards; as soon as the rules change, customers generally switch to suppliers who do not hold them hostage. And not even hostage programs such as frequent-flier miles can overcome entry-level tickets like safety and product quality.
Example of stated and derived importance

A marriage analogy is a simple way to illustrate the difference between acting on “stated” value or “derived” value. Suppose you say to your spouse, “Our anniversary is coming up but I have to be away on business again. What would you like me to send you?” Your spouse pauses, sighs, and then answers, “The usual,” which means some combination of red roses, chocolates, and/or two front-row seats for a special event. So you think, “Great! I’m going to send flowers and chocolates—in fact I’ll send a double batch of them every day for three days. My spouse will be delighted beyond belief.” Right? Well, maybe not.

The spouse may have expressed an “understanding” for the situation, and even stated a substitute, but remains disappointed because he or she really wanted to be together on the anniversary. The derived importance would be what she/he really wanted—to be together. But knowing that that wasn’t going to happen, other demands came out. If you stop at hearing only what the person says, and then act on that, you may miss what is really wanted until it’s too late to do it right the first time and you’ve got a problem on your hands. You may think that sending roses and chocolates would do the trick, when you would be better off coming home for a change. And, of course, the dangerous flip side of substituting value is that instead of engendering more loyalty, the substitute might do just the opposite—to remind your spouse once again that you’re never home on your anniversary, and this may cause her or him to question your long-term priorities.

Looking at the XYZ account

Looking at the data for the XYZ account in Figure 12, we see that loyalty is driven by the overall Relationship value (executive relations, total cost of ownership, and overall delivery to expectations) and the robustness of Solution. Ease To Do Business is an unspoken motivator so it could differentiate HP if both Relationship and Solution were already experienced in a superior fashion.

Ease To Do Business for XYZ has a lot to do with automating and accelerating business transactions over the internet, which enables XYZ to do things for themselves such as ordering and tracking. FedEx is capitalizing on this by giving customers a way to track their own orders on the web. Trending this loyalty analysis over time helps HP identify changes in markets and customer expectations.

Technical Support is the highest and most important entry-level ticket, so it must be delivered consistently well. Hence it drives TCE.

Conclusion

After we do the combined TCE and loyalty analysis, we then do three things:
1. We reset our business model to fit our customer’s needs, realigning our sales focus and balancing our resources to optimize value to the customer, which results in sales and value to our shareholders.
2. We create initiatives (Figure 9) to improve the TCE that the customer validates and agrees to help us with by providing access to information and people. It is a mutual thing—with mutual expectation setting and mutual initiative setting.
reinforced by a closed-loop process. Customers also help us grade progress against our initiatives. The big difference between this approach and a standard survey is that the customer is in the driver’s seat. They get to decide what is going to get done, and they are getting to grade it and tell us what the impact it is having on their business. That way they will invite us to come back to continue to tell their story because they are directing the action and outcome.

3. We realign our offerings to fit the evolving market and tailor our value propositions to communicate more unique and differentiated value to our most valued customers. That way this process mutually benefits our customers and ourselves as the supplier.

I conclude with a quote from our CEO, Carly Fiorina, that we use to remind us how to achieve our goal of providing our customers with the best TCE: “As a company, we should know our customers and their organizations as well as we know our own. We need to remember what they tell us and act based on their feedback.”

Margery Auvinen oversees HP’s Customer-Relationship Assessment Process used to steer business and relationship strategies in the company’s top 100 accounts and the corresponding HP-wide initiatives to better serve all critical customers. Before this position Margery consulted on the development of high-performance systems for HP teams. She also collaborated on the redesign and roll-out of the company’s global business management assessment system, modeled after the Malcolm Baldrige National Quality Award criteria.

Before joining HP Margery ran corporate sales and marketing education at Intel Corporation, where she helped transition the company from a technology-focused mentality to a technology and marketing mentality. As a member of the corporate sales and marketing staff, she published the corporate marketing journal, ran executive forums on industrial futures, and participated in the introduction of various corporate branding campaigns, including Intel Inside and the Pentium naming scheme.

Margery teaches executive leadership seminars at the Sacramento Executive Institute, a consortium of leading area employers and California State University-Sacramento. She also conducts management development seminars at CSUS and for government agencies.