

The Malcolm Baldrige Award: What Technology Managers Can Learn From Health Care Winners

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Abstract

The Malcolm Baldrige Award is the highest presidential award for quality in the United States. Since 2002 there have been 28 winners of the award: eight from the health care field and four from the manufacturing category. This study identifies significant characteristics of health care award winners that can translate into exceptional quality and revenue performance for technology managers in manufacturing.

Keywords

Baldrige, Quality, Continuous Improvement, Management

Introduction

The world has different quality standards to which a company can adjust, ISO 9001 for example. A standard of that kind will probably not add that much light to a company since it can be obtained by any number of companies each year, one might suggest that ISO 9001 is a competitive necessity rather than a competitive advantage. So maybe it is the fight to win over other competitors that makes a company strive for the Malcolm Baldrige Award. Even the fight itself might be greater than the actual award, the runner up might not be recognized but has probably improved quality according to the award standards, and that in itself can bring higher customer satisfaction and revenue.

Is it really necessary to have all the different awards concerning quality, or is the Malcolm Baldrige Award just another way to have companies working hard to earn just that particular idea of quality? There are people that state; “Quality is what the customer says it is!” Is there more to it, or is the award simply about the company that listen the best to their customers? Will the company gain competitive advantages from striving for the award, is winning the award just a great reception, dinner and speeches?

Up until 2007 a total of 76 companies have won the award (Appendix 1), and it has been awarded since 1988, so there must be something positive in struggling for the Malcolm Baldrige Award, something that makes it worthwhile. Sometimes the trend seen through the glasses of a technology manager is negative, only surpassed by other categories since the last winner in the manufacturing category is from 2005. This paper aims to find similar characteristics in winners from the same category from different years and to examine what those characteristics might be. Is there a certain part that binds winners together or will they change over time? Likewise, determination of how these characteristics can be absorbed by manufacturing companies is needed in order earn the coveted Malcolm Baldrige Award once again.

Background

According to the Malcolm Baldrige National Quality Improvement Act of 1987, (NIST National Institute of Standards and Technology) the Award is named for Malcolm Baldrige, who served as Secretary of Commerce from 1981 until his tragic death in a rodeo accident in 1987. His managerial excellence contributed to long-term improvement in efficiency and effectiveness of government. The Findings and Purposes Section of Public Law 100-107 states that:

“The leadership of the United States in product and process quality has been challenged strongly (and sometimes successfully) by foreign competition, and our Nation's productivity growth has improved less than our competitors' over the last two decades.”

This first statement makes no secret of the fact that the nation needed to improve the overall quality when compared internationally and the way was to choose a national quality award. It also needed to be sponsored by a long-term, financial strong partner, with great interest in higher quality in the US manufacturing and service sectors, given those criteria's - who would be a better sponsor than the government (NIST National Institute of Standards and Technology)?

Stimulate Quality

The final statement of the Baldrige act concentrates on the fact that a national quality award program would help improve quality and productivity in the United States by (NIST, 2006):

1. Helping to stimulate American companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits;
2. Recognizing the achievements of those companies that improve the quality of their goods and services and providing an example to others;

3. Establishing guidelines and criteria that can be used by business, industrial, governmental, and other organizations in evaluating their own quality improvement efforts; and
4. Providing specific guidance for other American organizations that wish to learn how to manage for high quality by making available detailed information on how winning organizations were able to change their cultures and achieve eminence.

Essentially the statement can be simmered down to the following; “Stimulate American companies quality work, recognize their achievements, establishing guidelines and provide guidance.” This is an excellent way of improving the possibilities for higher quality, but merely a statement will not win the competition. The statements needs to be accompanied by a set of criteria’s in order to make it a competition, possibilities to measure and monitor improvements has to be made available.

Criteria

The award was founded with a set of criteria’s that over the years has changed, and according to Baldrige National Quality Program in November 2007 it consists of three different criteria’s, one for each sector different businesses can apply for the award.

1. Criteria for Performance Excellence (referred to as “Business/Nonprofit” and used by businesses and nonprofit organizations.)
2. Education Criteria for Performance Excellence
3. Health Care Criteria for Performance Excellence

Each criterion has its roots in the statements from 1987, to stimulate and help companies in their effort to improve their delivered quality. The changes are ongoing from each year, and just as an example from 2007 Criteria for Performance Excellence, the changes from 2006 is a 2-page summary. The Criteria for Performance Excellence as a whole is an 84 pages long catalogue. Education Criteria for Performance Excellence is 82 pages and the Health Care for Performance Excellence is 88 pages. (Availability - Appendix 2) The three different areas have seven main characteristics.

- 1 Leadership
- 2 Strategic Planning
- 3 *Student, Stakeholder, and Market Focus (Education)*
- 3 *Focus on Patients, Other Customers, and Markets (Health Care)*
- 3 *Customer and Market Focus (Business/Non-Profit)*
- 4 Measurement, Analysis, and Knowledge Management
- 5 Workforce Focus
- 6 Process Management
- 7 Results

As seen in the list they differ in the areas typical for each group in number 3. The differences between Health Care and Business/Non-Profit can be expressed with *Patients*, and if *Patients* are regarded as a customer the difference is none, therefore any involved

competitor cannot blame the criteria's as more or less difficult, in the end it is about the same focus on quality.

Approach

As mentioned earlier this paper aims to find similar characteristics in winners from different years, to be able to provide information on the Malcolm Baldrige Award, and how Technology Managers can learn from the winners. Three different winners will be presented, from three different years in the category of Health Care. Items investigated include: 1) what they might have in common besides commitment to the award itself, 2) is it possible to find similarities in the characteristics in three winners from three different years and 3) as mentioned criteria's changes over the years, but will the winners also change in terms of the foundation on which they have made it to the top. The three companies/cases chosen are:

Case 1: 2006 Health Care - North Mississippi Medical Center

Case 2: 2005 Health Care - Bronson Methodist Hospital

Case 3: 2004 Health Care - Robert Wood Johnson University Hospital Hamilton

Case 1: 2006 Health Care - North Mississippi Medical Center

The winners in 2006 were recognized by the Vice President Dick Cheney and Commerce Secretary Carlos Gutierrez, according to the magazine Quality (2007) the nation's highest honor for organizational performance excellence, Malcolm Baldrige Award recipient North Mississippi Medical Center, was greeted by Gutierrez:

"Congratulations to the three newest Baldrige Award recipients. Your commitment to continual quality, innovation and performance excellence has resulted in outstanding accomplishments and results for your organizations. Now, by sharing your successes and good ideas as a Malcolm Baldrige National Quality Award winner, you will be helping other organizations across the nation to also reach the highest standards of excellence."

One can only imagine what an amazing day it must be for the company to finally be recognized after all the hard work carried out to win such an award. Following a six-month evaluation process, including an on-site visit by a team of examiners, the 2006 Baldrige Award recipients were selected from among 76 applicants. An independent board of examiners evaluated them in the seven areas mentioned: leadership; strategic planning; customer and market focus; measurement, analysis and knowledge management; human resource focus; process management; and results.

However, even with such a prestigious award this winner was criticized. Mantone (2007) wrote that under threat of a lawsuit North Mississippi's parent, North Mississippi Health Services, reached an agreement in 2004 to settle accusations that the system was overcharging the poor and uninsured. Also according to Mantone (2007) in 2005 a Washington Post article highlighted some of the system's alleged billing practices tactics that included suing an uninsured patient when he asked for more time to pay his bill.

Mantone (2007) also has evaluated the outcomes of the prize when given to a company that might look for a way to enhance their reputation and says that the 757-bed North Mississippi Medical Center, hired Baldrige consultants and spent thousands of hours following the Baldrige criteria, filling out the 50-page application and being monitored by the program's examiners. It implies that even with the win, the winner has not been able to put the past behind them. Thus indicates that the money spent on earning the award might be considered a waste.

On the other hand, it might be discussed that in 2007 it was too early to evaluate the positive impact on a 2006 winner. What happened in 2004 is serious, but the award given in 2006 speaks about a high quality company, that has changed in many ways into a better performing company. No matter how sad a story, is it possible that the work carried out by North Mississippi Medical Center in order to achieve the prize was a great path for future revenue and high quality? If that is the case, the stated ideas for this award have been fulfilled.

According to the American Journal of Health-System Pharmacy (2007) the North Mississippi Medical Center in 2002, 2003, 2004, and 2005, reported no more than 50% of the patients served by the hospital selected the most-favorable rating to describe the pain management they received. In 2006, this percentage increased to 60, surpassing the national benchmark set by Press Ganey Associates, which surveyed inpatients in more than 1300 hospitals. This puts focus on the increase of awareness amongst all employees in an applicant for the award. The company, or any company in any business, would not see that increase without commitment to the cause and engagement amongst management and employees.

Thompson (2007) describes it this way “- North Mississippi Medical Center adopted the quality program’s philosophy about eight years ago said Harold J. Kornfuhrer (Pharmacy director), and “began the journey” to performance excellence. Kornfuhrer’s initial reaction, he admitted, was to view the Baldrige program and award as just another contest. But, through serving on North Mississippi Medical Center’s Baldrige steering committee from the start, Kornfuhrer said he came to realize that the quality program presented “a whole different way of doing business in health care.” It was apparently more than just another award.

The interpretation could be suggested as the “ketchup effect”, where nothing happens at first, but in the end it all seems to happen at once. However, as winner of the award the health system's strategy is working. Kreimer (2007) describes that Harry Hertz, director of the Baldrige program said that, what set North Mississippi Medical Center the sixth hospital to win the award apart, was a "tremendous focus on the health of their community," citing outreach and preventive screenings, as well as electronic medical records that link physicians' offices and school nurses with emergency rooms. The outcome seems to be more than satisfactory, and the work towards higher quality has been highlighted for a broad public. The Malcolm Baldrige Award apparently had a major positive impact on the company’s performance, and in the end a more satisfied customer. “A tremendous focus on health of their community” – these are words of very high value for any health institution in the world.

Case 2: 2005 Health Care - Bronson Methodist Hospital

According to an article in Waste News (2005) the Bronson Methodist Hospital was no stranger to quality awards before the Malcolm Baldrige Award. The article reports that the

U.S.-based Hospitals for a Health Environment (H2E) program have recognized eight facilities with its highest honor, the Environmental Leadership Award. One of the winners was Bronson Methodist Hospital in Kalamazoo, Michigan. These facilities and more than 60 other health care institutions implemented practices like reducing waste, eliminating mercury and minimizing the use of toxic products at their facilities.

Different parts of a company's mission statement can be obtained by striving towards an award, and Bronson Methodist Hospital, according to Eagle (2006) was strong-minded enough that the impressions left by looking at the design of the hospital would be a boost in the determination of the winning applicant of the Malcolm Baldrige Award. The hospital's design contributed to its success, according to Bronson executives. "We really believe that the building was the catalyst that launched the cultural changes that had to happen in order for us to be a Baldrige winner," says Katie Nettleson, R.N., vice president of patient care services and chief nurse executive, Bronson Healthcare Group, the parent organization for the hospital. This is also discussed by Kong (2007) in the article with the fitting name "The 5-star Hospital", where she says that Bronson Methodist Hospital in Kalamazoo, Michigan and its lush greenery, indoor pond, and reading spaces in its lobby could just as easily belong in a Hilton Hotel.

It would nonetheless be a blunder to believe that it was only the indoor pond etc. that gave this winner the award, even if it is believed to have played an important part in the evaluation and selection of a winner. In an article by Ament (2006) referred to as Pursuit of excellence leads Bronson Hospital to Baldrige Quality Award, the Bronson Healthcare Group President and CEO Frank Sardone says "a decade-long journey to excellence that will continue for years to come. We have a Plan for Excellence which puts the vision, mission

and values of our organization and our corporate strategies in one document, we use that to explain where we're going to all our constituents, and to provide our staff with the tools they need to achieve excellence."

The National Institute of Standards and Technology (NIST), which oversees the Baldrige program, gives a detailed summary of the hospitals award-winning accomplishments at their web site. Amongst these one can find Bronson's Plan for Excellence, strong performance in Medicare patient mortality, overall patient satisfaction, workplace excellence and attention to employees' "work/life balance," and its strong strategic management model. NIST also lists the hospitals superior use of prophylaxis, application of health information technology, employee retention rates and training, environmental consciousness, and its emergency management plans.

Case 3: 2004 Health Care - Robert Wood Johnson University Hospital

Hamilton

The winner in 2004 the Robert Wood Johnson University Hospital Hamilton also was no stranger to quality awards. Healthcare Purchasing News (2003) says that the hospital group received the QuadraMed Corp. "Pinnacle Award of Excellence" due to its documented leadership in improving patient outcomes. One of the groups' hospitals (Robert Wood Johnson University Hospital) was also recognized for its outstanding performance as an individual health care facility.

AHA news (2004) reports on another step for the quality aware organization when it said; "Robert Wood Johnson University Hospital in Hamilton, is one of four organizations to

receive this year's Malcolm Baldrige National Quality Award, the nation's top honor for performance excellence. President George Bush and Commerce Secretary Don Evans announced last week." The highest national quality award was awarded.

The Quality letter for Healthcare Leaders (2005) presented an article with detailed information on different peoples view at the company's award, "It is all about consistency," said Deborah Cardello, the hospital's chief operating officer. "It helps us to see the big picture of how important key processes are and how integration is key." Deborah Baehser, vice president for patient care services said that "what I find so beneficial about the Baldrige model is that it provides criteria and guidance for different aspects within the healthcare arena, it looks at leadership. It looks at strategic planning with customers, and at how you measure and analyze." With these quotations in mind one can suggest that this certain hospital has been using the criteria's of the award as a guideline for their business, and that these guidelines have become a part of their everyday work, finally resulting in the award.

Robert Wood Johnson University Hospital expressed an early interest in the factor "Employee Satisfaction" as a key driver for patient satisfaction. The company considers employees as one of their key customer groups according to Rick Lovering, senior vice president of human resources and health promotion. Quality letter for Healthcare Leaders (2005) says that since 1999, employee satisfaction has risen from about 70% to more than 90%, which places the hospital among the top 10% nationwide for employee satisfaction.

The focus on employee's satisfaction and that this factor delivers higher quality to the customers, a win-win situation for the hospital, was a major reason for the Baldrige award. The evolution in terms of numbers was incredible, satisfaction with benefits rose from nearly 30% in 1999 to more than 90% in 2003; satisfaction with leadership increased from nearly

90% to almost 100%; satisfaction with participation in decisions grew from slightly above 40% to 90%; and satisfaction with employee recognition has improved from 70% to 97%. Retention of employees has gone from 80% in 2001 to 98% in 2003, Quality letter for Healthcare Leaders (2005).

These are all incredible changes. From an outside perspective, the reasons for this success, puts light on leadership and its importance for the wellbeing of the organization.

The 2004 winner has had a few years to prove worthy of the award, and they have been doing so. According to Boruchoff (2006) the Hospital was engaged in a big exercise in April 2005, New Jersey participated in a simulated biological terror attack. Participation was voluntary and hospitals that choose to “play” were permitted to select one of three levels of participation, each with increasing levels of involvement. Robert Wood Johnson University Hospital participated at the highest level, which involved eight hours each day that was to include shift and incident command change. Amazingly over 380 “victims were processed for treatment” during the exercise, the Emergency Department (ED) handled an average of 200 visits per day and continued to accept and treat non-exercise patients, which added to a total of over three hundred daily visits for each of the three days. Additionally, the hospital courtyard was converted into a 100 bed medical unit.

The results conveyed that the hospital was in an advanced state of preparedness compared to many other facilities. Visitors to the Robert Wood Johnson University Hospital during the exercise included State, Federal, and International observers, resulting in positive comments and invitations to assist an Asian country with their efforts as well as speaking engagements to many different organizations. The evaluation of the exercise is yet another award to the hospital. To uphold the duties of the hospital when participating in such an

exercise calls for commitment, engagement, leadership and organizational integration of great proportions. But as Deborah Baehser states, senior vice president of clinical services and chief nurse executive; “a high-performing organization has a committed workforce that is aligned with mission, vision and values and is motivated to achieve organizational objectives”, Hospitals & Health Networks (2007).

Highlighted Successes

The information provided from each winner selected as Health Care cases for this paper has been highlighted by NIST (National Institute of Standards and Technology) in the following section. Significant health care provider characteristics are illustrated in Figure 1.

2006 North Mississippi Medical Center

- In 2006, NMMC provided community services to 156,750 people through free health fairs, screenings, health education and CPR classes, and immunization programs held throughout the rural region in churches, shopping centers and other locations. Charitable donations, charity care, medical cost savings, and volunteer services total about \$70 million annually.
- NMMC provides access to an electronic medical record to every caregiver throughout its system. Information on the medical record can be retrieved and entered by nurses in schools, by physicians in their offices, and by partner community hospitals across the 24-county region that NMMC serves. This

provides current medical information for patients and helps reduce medical errors and duplication of effort. Specialists and primary care providers in remote sites can be linked via a state-of-the-art telemedicine system.

- To help achieve its mission “to continuously improve the health of the people of our region,” NMMC provides nurses to 23 elementary and middle schools, certified health educators to three schools serving K-5th grade students, and certified athletic trainers to 13 high schools.
- At NMMC, a Care-Based Cost Management (CBCM) approach has provided cumulative gains of \$11.1 million since 1999 largely as a result of reducing practice variations and medical complications. Debt has decreased from 26.7% to 21.8% in 2006 (year to date). NMMC had \$56.5 million in revenue over expenses for 2006, an increase of \$29 million over 2005.
- In 2006, physician overall satisfaction, measured by Press Ganey, surpassed NMMC’s benchmark by 8% to 9% with overall satisfaction and ease of practice scores at 99% and the leadership score at 98%.
- Results for inpatient satisfaction demonstrate consistent improvement since 2004. “Likelihood to Recommend” scores improved from about 52% in 2002 to almost 60% in 2005, and in 2006 approach the Press Ganey 90th percentile. (Press Ganey Associates provides satisfaction measurement and improvement services to the health care industry.)
- Since 2000, overall employee satisfaction exceeded the 90th percentile benchmark levels from Human Resources, Inc.

- Through tuition reimbursement and other activities, NMMC allocates more than \$1.4 million annually to help employees upgrade skills and advance careers.

2005 Bronson Methodist Hospital

- Patient satisfaction has improved from approximately 95 percent in 2002 to almost 97 percent in 2004. Since 2001, Arbor Associates has annually presented BMH with its Award for Highest Overall Patient Satisfaction.
- Medicare Mortality Rate decreased from 4.8 percent in 2002 to 3.5 percent for January-July 2005, performing better than the CareScience Expected Standard and the CareScience Best Practice.
- In 2004, 2005, and 2006, BMH was included in Fortune Magazine's 100 Best Companies to Work For; and in 2003, 2004, and 2005, BMH was among the 100 Best Companies for Working Mothers identified by Working Mother Magazine.
- BMH received the Michigan Quality Leadership Award in 2005 and 2001.

2004 Robert Wood Johnson University Hospital Hamilton

- The "15/30" program guarantees that patients will see a nurse within 15 minutes and a physician within 30 minutes.
- RWJ Hamilton utilizes its 5-Star Service Standards, which include commitment to customers and co-workers, courtesy and etiquette, and safety awareness, to recruit, train, and evaluate employees.

- RWJ Hamilton, New Jersey's fastest growing hospital from 1999 to 2003 has attained a market leadership position in an extremely competitive environment.
- Patient satisfaction with the emergency department has improved from 85 percent

<p>2006 North Mississippi Medical Center</p> <ul style="list-style-type: none"> - Overall satisfaction and ease of practice scores at 99% - Employee satisfaction exceeded the 90th percentile 	<p>2005 - Bronson Methodist Hospital</p> <ul style="list-style-type: none"> - Patient satisfaction 97 % - Amongst the 100 best companies to work for 	<p>2004 - Robert Wood Johnson University Hospital Hamilton</p> <ul style="list-style-type: none"> - Patient satisfaction 90 % - Commitment to customers and co-workers, to recruit, train, and evaluate employees.
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in 2001 to 90 percent in 2004, exceeding the national benchmark.

Figure 1. Significant Health Care Provider Characteristics

Health Care Winners Summary

The highlights above are interesting facts but even when summarized somewhat difficult to overview. When looking at the reason of their success, a pattern occurs; two similar characteristics are found in each award winner:

1. Patient (Customer) satisfaction is very high and rising
2. The companies has all been paying a great deal of attention to their employees

These two factors are closely tied together. It has been suggested according to Summers (2006) that consumers do not necessarily know what they want until they have used the product or received the service. The three cases in this paper could be suggested to have looked at quality like that.

As health institutions all three believe in well-educated and motivated employees, as the key to reach higher customer satisfaction and therefore, higher quality. Measuring the expected quality from health care institution customers is a multidimensional task. For example, if a customer is transported by an ambulance unconscious and with critical injuries, the service expected is probably to be kept alive. In that given situation it is not possible to know or to ask, therefore the personnel will be a crucial point of the customer satisfaction. A customer bringing in their children differs from those who come with their parents or by themselves all depending on who needs the services provided by the health care institution. A highly motivated employee is more likely to do a great job than one with no motivation.

How does this translate into Industrial Technology?

Are manufacturing companies regarding their customers and employees with the same level of targeting precision? Have the manufacturers been keeping up with new ideas on marketing? Webster (1992) gives an idea on how things changed in the early 1990's, where he claimed that the past marketing management role based on the microeconomic maximization model, had to be seriously examined. It needed to be put in a new perspective regarding its bearing on marketing theory and practice, since customer relationships were soon to be seen as the strategic resource of the business thus future revenue. After investigating 187 companies in manufacturing, Katou (2007) provides empirical support for the relationship between organizational performance and the effectiveness of HRM policies. This concludes that the article provides strong support for a general perspective but in the

appearance of individual HRM policies. The policies outlined are training and development, providing internal promotion opportunities, incentives schemes based on profit, information sharing or employee involvement.

Manufacturing Examples

This leads us into the discussion about manufacturers, and a search for cases and companies that exemplify how their focus on employee satisfaction, have become a quality achievement.

Shop-fitting manufacturer uses education to satisfy customers & employees

HRM International Digest (2006) describes that a culture change among employees has helped to turn around the fortunes of a UK shop-fitting manufacturer. It was all achieved by award-winning training in the principles of lean manufacturing. Before, working conditions were poor and morale was very low. This naturally would lead to reduced efficiency and delayed deliveries to customers. The low efficiency resulted in a large obstacle for business development and pricing. The company's training of their employees involved master classes at the Manufacturing Institute, seminars and a 13-day course, entitled "The Accelerated Route to Lean Manufacturing", in which methods and tools needed to implement changes were taught.

Other learning included key skills such as computer skills, time management and hosting evaluation. The list of efforts in training employees goes on to include two weeks of specialist training in various subjects and 24 days of health and safety training spread over

two years. On an individual level the procurement manager enrolled in a Foundation of Purchasing and Supply college course while at the same time an administrator was permitted day release in order to take a class in accountancy.

These facts share characteristics with the winners of the Malcolm Baldrige Award from the health care category, where the employees are highlighted as important resources to improve quality.

Outcome for the Shop-fitting manufacturer

The article titled; *Culture change makes Crusader fit for the future: Training in lean manufacturing helps to transform company*; also puts the success in figures saying that the outcome from the actions above was vast. In 2003-2004 the company looked at a £240,000 operating profit, however more than £90,000 was allocated to make an upgrade of the factory as well as paying for two pay rises for employees. The working environment and employee morale enhanced greatly. The most important outcome thus is the on-time delivery of the products. The level of 74 percent delivered on time, changed into a more impressive 94 percent. Stock and work in progress is less than half of its former size from around £140,000 to £65,000. In addition, employees made some interesting remarks: “There are no secrets any more”, and “We’re always talking” and finally “We all think lean” these are all comments from satisfied employees, the foundation for this change.

Medrad – A United States Example

Medrad is a medical device manufacturer, whose vascular injection systems are market leaders in Angiography, Cardiology, Computed Tomography, and Magnetic

Resonance (medrad.com). The company applied for the Malcolm Baldrige award several times, before winning the award in 2003. Site visits by award officials was made in 2000, 2002 and naturally in 2003, it was Medrad's fifth application that finally paid off. The motives that lead to the award were that the company grounded its intention in a three-prong philosophy: to improve the quality of health care, to ensure continued growth and profit, and to provide an enjoyable and rewarding place to work, Quality Management (2004). Fundamentally, this viewpoint puts three parts as equal stakeholders: employees, shareholders and customers. The 55 page application from Medrad (2003) testifies that all front-line employees are trained in communications and customer handling. To guarantee a stable enhancement of Medrad's ability to understand the customer's, the company provides continuous training to people dealing with customer contacts. Hence, even Medrad, just like winners from Health Care Category, focused on their employees in order to win the Quality award in the manufacturing category.

Conclusion

It is impossible to win the Malcolm Baldrige Award without focusing on employee satisfaction and therefore the companies with highly motivated and satisfied employees will provide greater quality compared to competitors with less motivated employees. The companies that overlook the trophy in the office of the CEO can all say that they have been recognized for paying great attention to their employees, and by having a company that delivers high quality to their customers.

Organizations that are recognized as high-performers are the first to admit that it's no easy task. The article Attributes of a High-Performing Culture states; "A high-performing organization has a committed workforce that is aligned with mission, vision and values and is

motivated to achieve organizational objectives,"

- Deborah Baehser, senior vice president of clinical services and chief nurse executive at the Robert Wood Johnson University Hospital Hamilton in New Jersey, a winner of the 2004 Malcolm Baldrige National Quality Award states; "It's not a quick process."

Officials at Bronson Methodist Hospital, Kalamazoo, Mich., a 2005 Baldrige winner, agree. "It's not a one-year program," says John Hayden, Bronson's vice president of human resources. "If an organization isn't willing to make a five-year commitment, they shouldn't bother starting."

The article, *Attributes of a High-Performing Culture*, also highlights what both organizations stress; - the need to have a clear vision, set expectations and assign accountability to ensure organizational goals are met. The article also highlights what Dianne Grillo, vice president of health promotion at Bronson said; "Every employee is aligned to organizational objectives and receives a quarterly bonus if those objectives are met. There aren't too many employees who can't tell you how they help accomplish departmental and organization goals."

In the introduction to this paper the statement "There are people that says; Quality is what the customer says it is!" Was followed by the question "Is there more to it, or is the award simply about the company that listens the best to their customers?" The conclusion says that a motivated and satisfied workforce is the key to success. Do we need to know what comes first - a happy employee or a happy customer? The suggestion after learning about the award winners has to be that success starts with a happy employee, and that a happy employee is the key to high marks when measuring satisfaction amongst customers.

Future Research

Working with employee satisfaction as a part of a companies' mission is proven to increase quality output. It would be of high value to investigate companies that pay little attention to their employees and determine if that decreases the perceived quality or keeps it on an unvarying level.

It would be possible and very interesting to categorize companies within the industrial sector in a way that measures the amount of attention paid to employees and how that reflects on customer satisfaction and quality. This could help highlight how the Industrial Technology companies have seemingly lost ground compared to the Health Care Industry.

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Appendices

Appendix 1 1988-2007 Award Recipients'

2007

Small Business	PRO-TEC Coating Co., Leipsic, Ohio
Health Care	Mercy Health System, Janesville, Wisconsin
Health Care	Sharp HealthCare, San Diego, California
Nonprofit	City of Coral Springs, Coral Springs, Florida
Nonprofit	U.S. Army Armament Research, Development and Engineering Center (ARDEC), Picatinny Arsenal, New Jersey

2006

Service	Premier Inc.
Health Care	North Mississippi Medical Center
Small Business	MESA Products, Inc.

2005

Manufacturing	Sunny Fresh Foods, Inc.
Education	Jenks Public Schools
Education	Richland College
Service	DynMcDermott Petroleum Operations Company
Health Care	Bronson Methodist Hospital
Small Business	Park Place Lexus

2004

Manufacturing	The Bama Companies, Inc.
Small Business	Texas Nameplate Company, Inc.
Education	Kenneth W. Monfort College of Business
Health Care	Robert Wood Johnson University Hospital Hamilton

2003

Manufacturing	Medrad, Inc.
Service	Boeing Aerospace Support
Service	Caterpillar Financial Services Corporation
Small Business	Stoner, Inc.
Education	Community Consolidated School District 15
Health Care	Baptist Hospital, Inc.
Health Care	Saint Luke's Hospital of Kansas City

2002

Manufacturing Motorola Commercial, Government & Industrial Solutions Sector
Health Care SSM Health Care
Small Business Branch-Smith Printing Division

2001

Manufacturing Clarke American Checks, Inc.
Education Pearl River School District
Small Business Pal's Sudden Service
Education University of Wisconsin-Stout
Education Chugach School District

2000

Manufacturing Dana Corporation – Spicer Driveshaft Division
 (Torque Traction Technologies Incorporated)
Manufacturing KARLEE Company, Inc
Service Operations Management International, Inc.
Small Business Los Alamos National Bank

1999

Manufacturing STMicroelectronics, Inc. - Region Americas
Service The Ritz-Carlton Hotel Company, L.L.C.
Service BI
Small Business Sunny Fresh Foods

1998

Manufacturing Boeing Airlift and Tanker Programs
Small Business Texas Nameplate Company, Inc
Manufacturing Solar Turbines Incorporated

1997

Manufacturing 3M Dental Products Division
Manufacturing Solectron Corporation
Service Merrill Lynch Credit Corporation
Service Xerox Business Services

1996

Manufacturing ADAC Laboratories
Service Dana Commercial Credit Corporation
Small Business Custom Research Inc.
Small Business Trident Precision Manufacturing, Inc.

1995

Manufacturing Armstrong World Industries, Inc. Building Products Operations
Manufacturing Corning Incorporated, Telecommunications Products Division

1994

Service AT&T Consumer Communications Services
(Now the Consumer Markets Division of AT&T)

Small Business Service Wainwright Industries, Inc.
Verizon Information Services

1993

Small Business Manufacturing Ames Rubber Corporation
Eastman Chemical Company

1992

Manufacturing AT&T Network Systems Group Transmission Systems Business Unit
(Now Lucent Technologies, Inc., Optical Networking Group)

Service The Ritz-Carlton Hotel Company
(Now part of Marriott International)

Service AT&T Universal Card Services
(Now part of Citigroup)

Manufacturing Texas Instruments Incorporated Defense Systems & Electronics Group
(Now part of Raytheon Systems Company)

Small Business Granite Rock Company

1991

Small Business Manufacturing Marlow Industries, Inc.
Zytec Corporation
(Now part of Artesyn Technologies)

Manufacturing Solectron Corporation

1990

Manufacturing Manufacturing Service Small Business Cadillac Motor Car Company
IBM Rochester
Federal Express Corporation
Wallace Co., Inc.

1989

Manufacturing Manufacturing Milliken & Company
Xerox Corporation, Business Products & Systems

1988

Small Business Manufacturing Manufacturing Globe Metallurgical Inc.
Westinghouse Electric Corporation Commercial Nuclear Fuel Division
Motorola Inc.

Appendix 2

The criteria's for each area of interest is downloadable from:

Criteria for Performance Excellence
http://www.quality.nist.gov/Business_Criteria.htm

Education Criteria for Performance Excellence
http://www.quality.nist.gov/Education_Criteria.htm

Health Care Criteria for Performance Excellence
http://www.quality.nist.gov/HealthCare_Criteria.htm

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Mr. Allvin dedicates this paper to his wife, his sons, and to the friendly people of Warrensburg, Missouri, United States of America.

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