Creating Value and Stakeholder Benefits:
Customer-Focused Practices of Baldrige Award Recipients

Look beneath the surface;  
let not the quality nor its worth escape thee.  

Marcus Aurelius, 121-180  
Roman Emperor

Introduction

What distinguishes Baldrige Award winners in their approach to customers?  
What are examples of customer-focused best practices?  How do Baldrige Award winners  
compare in key customer, financial, and market-based results?

This paper identifies eleven common customer-focused practices of Award  
Recipients of the Malcolm Baldrige National Quality Award.  The information was  
gleaned from content analysis of application summaries from sixteen 1995-2001 Award  
recipients.  The application summaries detail information contained in the typical 50-page  
application, where processes and results are described across seven categories, including  
(1) leadership, (2) strategic planning, (3) customer and market focus, (4) information and  
analysis, (5) human resource focus, (6) process management, and (7) business results.

The Award Criteria changed substantially in 1995, whereby the focus moved from  
documentation of quality systems and quality results to mission-centric.  Beginning in  
1995, Baldrige applicants were required to articulate their mission and strategic goals,  
then demonstrate how all organizational functions and systems deliver on the mission and  
goals.  Results then measure progress against goals, and demonstrate organizational  
performance and effectiveness.
Between 1995 and 2001, there were 26 recipients of the Malcolm Baldrige National Quality Award. Application summaries were acquired from Baldrige public information for the nine 2000 and 2001 award winners. Award recipients for the years 1995-1999 were contacted for application summaries; detailed summaries were received from an additional seven applicants. These detailed summaries, typically 35 pages in length, presented the application materials in full, with the exception of proprietary information and competitive-sensitive results. (Appendix A contains a complete list of 1995-2002 award recipients.)

The practices identified here are those that were evident in a majority of the application summaries. The summaries examined represent organizations across a broad spectrum of industries, company size, and geographic location. The striking aspect of these customer-focused characteristics is that they were prevalent in organizations ranging from a school district serving 214 students over 22,000 square miles in Alaska, to the Ritz-Carlton Hotel system, to a contract manufacturer of precision sheet metal and machined components.

The reason for commonality of characteristics across diverse winners can be attributed to the Baldrige Award Criteria. The criteria are non-prescriptive and adaptable to a variety of organizations. They are focused on results, and processes that deliver on exceptional results. The requirements do not dictate particular processes or organizational structures, rather they require applicants to demonstrate how all they do advances the organization’s mission. Customer-driven excellence is a strategic concept imbedded in the Baldrige Award Criteria. And the systemic nature of the Criteria force an organization to demonstrate the alignment of their organizational processes and
functional systems. **Figure 1** details the systems perspective and interrelationships of the Award Criteria.

![Baldrige Criteria Framework - A Systems Perspective](image)

**Source:** 2002 Criteria for Performance Excellence, p. 5

This paper is focused on identifying and providing examples for key customer-focused practices of Baldrige winners. In addition, key results – which demonstrate superior levels of customer, financial, and operating performance measures – demonstrate that innovative customer-focused practices co-exist with exemplary performance results.

**About the Malcolm Baldrige National Quality Award**

The Malcolm Baldrige National Quality Award was established in 1987 by Congress, and up to three awards can be given in each of five categories – manufacturing, service, small business, education, and health care (education and health care have been
award categories since 1999). Since its inception there have been 51 Award Winners – 23 manufacturing, 13 small business, 11 service, 3 education, and 1 health care.

Organizations that win the award undergo a rigorous examination process in three stages. Stage One involves an independent review by a team of 7-10 examiners. Stage Two involves consensus scoring and identification of strengths and weaknesses for all seven categories. And Stage Three involves a week-long site visit by a team of examiners who work to verify processes and results and to clarify aspects of the organization’s system for performance excellence. Those organizations that progress to a site visit have passed through a demanding screening process where applicants are weeded out of the process at each stage. For example, in 2002, 49 organizations applied for the award, 26 went to Stage Two (Consensus), and 11 moved on in the process to a site visit. From this pool of 11 applicants, three 2002 Award recipients were named in November, 2002.

Customer and Market-Focused Practices of Baldrige Award Recipients

A review of the literature on customer and market-focused practices of Baldrige Award recipients yields many individual case examples of specific practices. Sester (2001) discusses Motorola’s regular measurement of customer satisfaction and the development of action plans that will deliver a superior experience for customers. And he details Motorola’s lead in the application of Six Sigma, with a quality target of 3.4 defects per million opportunities. Clarke America’s approach to customer and market focus involves an incentive system where annual bonuses are tied to customer satisfaction results and a rapid complaint resolution process (Daniels, August 2002). Pal’s approach
to customer and market focus includes response from a leadership team member within six hours for each Web query (Daniels, September 2002). Each of these examples detail specific practices and policies within a particular company, but provide no insight into the presence or absence of those characteristics across particular categories of winners or among a number of award winners.

Research conducted by the European Centre for Business Excellence examined the links between business excellence practices, a focus on the customer, and business performance. This study examined European organizations that used quality models such as the Baldrige Award Criteria and the European Foundation for Quality Management’s Business Excellence Model (which is patterned after the Baldrige Criteria). Although the study provided no examples of specific customer-focused practices, it did determine that nurturing a culture which focuses on anticipating and serving customers’ needs improves the competitive performance of a company and the industry in which it competes (Oakland, 1999).

An article that focuses on a particular award category – education – discusses the first three education institutions that were recipients of the Baldrige Award. It provides excerpts from application summaries, but no specific customer-focused practices, just a statement that “customer satisfaction is as critical in education as it is in business” (Daniels, May 2002, p. 41).

Kuratko, Goodale, and Hornsby (1999; 2001) provide the most extensive examination of practices among award recipients, but their focus is on the small business category. In their research they studied five of the eight small business award recipients from 1988 through 1997. The purpose of their research was to identify traditional as well
as innovative methods of quality improvement for small business across all categories of the award criteria. They identified five key areas that are critical to the success of firms. This included (1) top management support; (2) focus on customer needs; (3) training employees; (4) empowering employees; and (5) generating new ideas. The specific customer-focused practices they identified included data gathering (surveys, phone interviews, and face-to-face customer meetings) and data analysis that led to the detection and resolution of problems (1999). In a survey of 184 small firms, the researchers identified which quality strategies and tools are used by the firms. In the customer and market focus area, the study determined the most widely used and most valuable practices focused on developing the firm’s customer knowledge. This included a propensity to measure customer satisfaction and to widely disseminate customer and company data (Kuratko, Goodale, and Hornsby, 2001).

A review of the literature on customer and market-focused practices of Baldrige winners identifies either case-specific examples or general concepts within a specific geographic segment or industry group that are reported at a general or theoretical level. Few articles provide specific examples or “best practices.” And no articles were found that identify specific customer-focused practices that span all award categories. This information would enable discussion of what is transferable or generalizeable to a wide range of firms.

**Eleven Customer-Focused Practices of Baldrige Award Winners**

Baldrige Award recipients demonstrate eleven common customer-focused practices, which are outlined in Figure 2.
Each of these eleven practices is described in detail and includes two illustrative examples that were described in the application summaries.

#1: Baldrige Award Winners Utilize Multiple Listening Posts for Understanding Customer Requirements

Baldrige winners use multiple listening methods to capture customers’ perceptions of their company’s performance. They not only study customer perceptions but also systematically track customer relationships. They ensure that their customer research is actionable by measuring and tracking specific customer requirements. Baldrige winners use behavioral and well as perceptual data. They collect information about their customers’ actual purchasing patterns. Unlike many companies, Baldrige winners collect information about multiple groups: current customers, former customers,
and potential customers. They also collect information about customers of competitors. Baldrige winners perform substantive periodic assessments of their own research methods. They also learn about customers and important consumer trends through loyal participation in their own industry trade groups.

*Dana Corporation - Spicer Driveshaft*, a 2000 award recipient in manufacturing, uses more than 25 different approaches to listen and learn from customers in order to determine their requirements and expectations. This includes quality function deployment (QFD), direct calls to customers, and reciprocal visits. An annual, third-party survey is administered to existing and potential customers across all market segments, whereby customers rate eight common attributes in terms of importance, Dana’s performance, and Dana’s competitors’ performance (Dana Corporation, p. 13).

*Operations Management International (OMI)* (2000 service) conducts semi-annual customer focus groups; administers quarterly client scorecards; and sends customer satisfaction surveys to their customers and competitors’ customers. In addition, a biennial survey is administered by a third party to determine customer satisfaction (Operations Management International, p. 11).

**#2: Highly Refined Recovery Systems and Complaint Management Processes Characterize Baldrige Award Winners**

Baldrige winners use a closed-loop complaint management process – the process begins and ends with the customer. These problem resolution processes are highly structured, and most of the companies use technology to facilitate the multi-step process. Baldrige winners emphasize the front-line service recovery dimension as well as the dimension that examines and corrects processes responsible for customer service failure. Companies focus on the front-line dimension by giving employees autonomy to resolve
customer complaints as they are communicated; they focus on processes through process improvement teams and performance measures.

A staff member who receives a complaint at Pal’s Sudden Service (2000 service) is empowered to replace the order and/or refund the customer’s money. The complaint is reported to the store owner/operator and entered on the “Complaint Log.” The owner/operator follows up the complaint by contacting the customer to ensure the complaint was satisfactorily resolved. 100% of customers who made a complaint reported they were fully satisfied with the manner and method in which it was resolved (Pal’s, p. 13).

BI, a 1999 service award winner, uses a structured service recovery process for complaint resolution. All customer complaints are forwarded to their related Business Unit manager who contacts the customer directly for additional information and clarification of the issue. These findings are communicated to the Account Executive, sales manager, account manager, and all involved Business Unit Associates via an e-mail communication. The team works in coordination with the customer to address the failure and provide a solution that meets the customer’s needs (BI, p. 8).

#3: Comprehensive, Creative, and Continuous Interface with the Customer is a Trait of Baldrige Winners

Baldrige winners use a cross-functional approach for account management and service. The norm is team-based customer relationship management. The companies’ customer service systems are designed so that interface occurs at multiple organizational levels. Most companies have designed formal processes for customer-firm interactions. Customers have flexibility in that they can communicate with company associates using multiple channels (e.g., email, telephone, pager, custom terminals, 24-hours, 7 days a
week). Many of the companies use organizational line-of-sight relationships with customers, and visits to customers’ facilities are an important relationship-building tool.

*KARLEE* (2000 manufacturing) employs dedicated customer response teams. Employees participate on customers’ design and production-planning teams, and each primary customer is assigned a two-person Customer Service team to act as the main interface for day-to-day production issues. Customer Service Representatives for three of four primary customers provide on-site support, spending two to three days a week to full time at the customer site. Each Customer Service team prepares a weekly Customer Status Summary that includes customer satisfaction concerns and issues, and any production or quality problems (*KARLEE*, pp. 14-15).

Six key corporate accounts that are “Global Strategic Alliances” have dedicated Account Executives at *STMicroelectronics, Inc. (ST)* (1999, manufacturing). These accounts have regular and open access to senior management, design and technology resources, and production capacity. The CEO and Corporate VP of ST exchange frequent visits with these customers to establish and maintain close working relationships (*STMicroelectronics*, p. 8).

**#4: Baldrige Winners Demonstrate Clarity about Customer Segments and Their Requirements**

Baldrige winners are clear on what customers require. They have measured requirements over time and focused on implementing changes to bring their performance on these attributes in line with customer expectations. These companies view the market not as one homogeneous whole, but as distinguished by segment; they tailor their products and services to the various segments.
**Sunny Fresh Foods** (1999 small business) has chosen to focus on one distinct category within their industry; within that category they target markets where they can differentiate their product and service through segment requirements and expectations. Within those targeted segments, the company determines where they can add value beyond that of their competitors (Sunny Fresh Foods, p. 8).

A tiered or matrix approach to customer segmentation is used by **STMicroelectronics, Inc**. Customers are segmented by industry, and within these segments, customers are broken into specific tiers for further segmentation. Customers are also segmented by sales volume and geography – key accounts are partnered with most closely for listening and learning; regional sales, marketing, and support centers are established within geographic areas (STMicroelectronics, pp. 6-7).

#5: Customer Focus is Demonstrated at All Levels of the Organization and this Focus Cascades from the Top for Award Recipients

Senior executives/leaders are the explicit guardians of the customer franchise. Strategic planning is based, in part, around marketplace factors and objectives. Executive compensation or evaluation is linked to customer satisfaction or relationship measures and performance.

Focus teams, established in 1990, sustain company-wide commitment in five key areas, including customer satisfaction for **Operations Management International**. Four strategic objectives for the company include customer focus, business growth, innovation, and market leadership. The executive leadership team, which includes the CEO, COO, CFO, and vice presidents, tracks measures linked to the objectives to ensure that strategic objectives, customer requirements, and improvement initiatives are linked and aligned (Operations Management International, p. 8).
Customer service is one of seven Key Business Factors for *Los Alamos National Bank* (2000 small business). Key performance measures are reviewed on a weekly basis by senior leaders; these performance measures are shared with department leaders, who in turn communicate them at weekly staff meetings. “Customer Driven,” one of seven core values, is clearly modeled by senior bank executives – the president’s desk is in the lobby to remind employees of their responsibility to the bank’s customers (Los Alamos National Bank, pp. ii, 14).

**#6: Customer Requirements and Marketplace Needs Drive the New Product Development Process for Baldrige Winners**

Baldrige winners take their new product development leads from customers. New products and services evolve from a “market-in” versus “product-out” approach. Companies partner with key customers, perform regular environmental scans for emerging customer needs and expectations, and study their competitors’ products and services to position themselves to deliver greater value to their customers.

When a customer requests new types of services, senior executives, customer service and engineering staff from *KARLEE* work together to determine how standard production processes can be adapted to meet those requirements. A task team is assigned to meet with the customer to review the requirements for the new service and to plan and implement new or upgraded manufacturing and support services (KARLEE, p. 13).

The Product/Service/Processes Introduction Process is a systematic approach for developing new and modified products and services at *Pal’s Sudden Service*. A new product or service is not introduced without clear customer input, thorough market research, detailed design, extensive testing and careful analysis, and calculated rollout to ensure internal capability and customer acceptance (Pal’s, p. 1).
#7: Award Winners Have Organization Structures that Support a Customer-Focused Orientation

Even processes that don’t involve customer contact are designed around customer requirements. These companies’ customer focus is reflected in organizational structure, the use of teams in functional areas, and employee training and education. Baldrige winners use technology that is designed specifically to respond to customer needs.

Production and delivery are designed around manufacturing cells at KARLEE. Each cell has the responsibility for knowing its customers’ requirements and for producing product to those requirements. This allows translation of customer requirements directly into process and workflow designs. The entire work force is organized into operational, administrative, and support teams, and key process measures related to customer requirements and corporate objectives are monitored.

The Ritz-Carlton Hotel Company, L.L.C., a two-time Baldrige award winner (service, 1992 and 1999) has identified key production processes. Changing customer/market requirements are incorporated into production and support processes, which assists in prioritizing processes. Each production and support process is assigned an “executive owner” at the corporate office, who is responsible for the development/improvement of these processes.

#8: Information about Customers is Frequently and Widely Communicated in Baldrige Winning Organizations

Information sharing occurs broad and deep with Baldrige winners. This communication is multi-directional. It can emanate from senior executive levels and reach throughout the organization, and it can generate from lower levels and roll-up to
senior managers. Communication is channeled so that issues can be acted on and needed changes can be implemented.

Owners/operators maintain a communications log at *Pal’s Sudden Service*. They record what they have learned about sales, expenses, customers, etc. These weekly logs are sent to senior executives who review the information, aggregate and analyze it, and use it for future planning and decision making. Store owners/operators communicate corporate and store goals to the entire staff through workplace scoreboards, meetings, etc. (Pal’s, p. 19).

Service Quality Indicators, consist of the 10 most serious defects that can occur during the regular operation of a *Ritz-Carlton* hotel. The average daily point value is disseminated to the workforce daily. These include missing guest preferences, unready guestroom, and unresolved difficulties (The Ritz-Carlton, p. 8).

**#9: Baldrige Winners Pursue Missions that Extend beyond Customers and the Boundary of the Business**

Attention is paid to the company’s larger community and civic responsibility. Commitment to the community is expected and underscored. Baldrige winners see themselves as companies that can contribute in some substantive way to their communities and society at large. Core values are linked to citizenship and community commitment.

In the aftermath of the Cerro Grande fire, *Los Alamos National Bank* had to evacuate its main office and one branch office. Nonetheless, the bank increased access to (and assumed additional costs for) banking services for their customers during this time, so their customers could have access to funds in order to feed and shelter themselves,
their families, pets and livestock during the displacement period. This was something none of the bank’s competitors did at that time (Los Alamos, p. 4).

**STMicroelectronics**’s quest is to become the world leader in environmental compliance. The company’s “Ten Environmental Commandments” commit the company to meeting or exceeding the most rigid requirements set in any of the locations where ST or its parent company operates. The company’s ecological vision is to become a corporation that closely approaches environmental neutrality. They have defined an Environmental Decalogue (10 environmental commandments) to guide their actions, and they were the first site of any company in the US to achieve ISO 14001 certification (STMicroelectronics, p. 2).

**#10: Technology and Operational Processes are Mapped to Customer Service for Award Recipients**

Baldrige winners demonstrate use of service mapping and process flow planning to ensure efficient service of customers. The customer experience is defined by rigorous planning on the company’s part. Technology is optimized as a customer service tool.

Technology is seen as vital to executing its strategy of providing low-cost service, achieving high levels of customer satisfaction and loyalty, and in sustaining above average profitability for **Los Alamos National Bank**. It uses a relational database system and comprehensive simulation model to help forecast the consequences of different business strategies (Los Alamos National Bank, pp. 3, 13).

**The Ritz-Carlton Hotel Company, L.L.C.** uses a database system that includes a “Guest Recognition” function. This automated memory system stores information on over 800,000 customers, and includes information ranging from likes/dislikes to previous difficulties to personal interests (The Ritz-Carlton, p. 10).
#11: Key Results Measures Reflect High Levels of Customer Service and Satisfaction for Baldrige Winners

There is a results-oriented mindset among Baldrige winners reflected in their practice of measuring and monitoring company performance. A balanced-scorecard approach is used by Baldrige winners to track results related to financial, employee, process, and customer areas. Performance is monitored rigorously so company activities and initiatives will accurately reflect and measure progress against strategy. Baldrige winners are also acutely aware of their performance in relation to key competitors.

Customer-focused results of Baldrige winners show unsurpassed levels of customer satisfaction. Overall customer satisfaction has averaged 80% or better – better than all competitors for Dana Corporation - Spicer Driveshaft, and 100% of customers are satisfied or very satisfied in 3 of 5 categories for Sunny Fresh Foods. 80% of customers said they were “very satisfied” with the service they received at Los Alamos National Bank, compared to the national average of 55% for all banks. Results for The Ritz-Carlton Hotel Company indicate that 91% of guests were satisfied with their overall experience in 1999 compared to 80% for the company’s foremost competitor for the frequent leisure traveler.

Baldrige award winners also experience enviable levels of customer retention. Dana Corporation - Spicer Driveshaft has not lost a single customer since 1996, and Corning Telecommunications Products Division has not lost a single customer in over 12 years. A contract renewal rate of almost 95% in 1999 is the industry’s top rank for Operations Management International.

The closed-loop complaint management process for these companies has shown results. Customer complaints have dropped from 6.8 per million units shipped in 1995 to
about 2.8 in 2000 for *Dana Corporation - Spicer Driveshaft*. Customer claims per million pounds produced have decreased from 1994-2000, and are below the six sigma level for *Sunny Fresh Foods*. Complaints were less than .4 per year per 1,000 customers in 2001, compared to over 4 for *Pal’s* best competitor.

Product or service performance results are also at a high level for Baldrige Award Winners. The customer acceptance rate for *KARLEE* in the year 2000 was 99.74%. Customer scores for quality in 2001 averaged 95.8%, compared to 84.1% for *Pal’s* best competitor. And 99% of employers surveyed rate the *University of Wisconsin-Stout* graduates as well prepared. This compares to a best-in-class state system measure of 83% for Rhode Island. *Corning Telecommunications Products Division (TPD)* found that 98% of customers surveyed rated the quality of its products as “very good” or “excellent,” and 99% of end user customers viewed TPD as the industry and technology leader.

**Performance Results for Baldrige Award Winners**

Two studies have examined the relationship between the use of quality principles and performance results. A manufacturing-based study used a loose interpretation of the Baldrige Criteria and examined the application of “total quality elements” and their link to operational performance. In this study Sampson and Terzioski (1999) reported that customer focus, in combination with leadership and human resource management, positively influenced operational performance.

Oakland’s (1999) study of European organizations that used quality models such as the Baldrige Award Criteria and the European Foundation for Quality Management’s Business Excellence Model (which is patterned after the Baldrige Criteria) showed four
financial indicators with superior performance for the organizations in the study as compared to the median for the industry. This included: (1) higher profit per employee in 79 percent of the companies; (2) higher return on total assets for 76 percent of the companies; (3) higher levels of employee retention for 79 percent of the companies; and (4) healthier profit margins for 76 percent of the companies.

The National Institute of Standards and Technology (NIST), the Commerce Department agency responsible for the Baldrige Awards, has conducted an annual “stock study” since 1991. NIST invested a hypothetical $1,000 in each of the three whole company winners of the Baldrige Award and the parent companies of the 18 subsidiary winners. The “investment” was tracked from the first business day of the month following the announcement of the Award (or the date the company began public trading, if that was later) through December 3, 2001. Another hypothetical $1,000 was invested in the S&P 500 for the same time period. The whole company winners outperformed the S&P 500 by almost 4.5 to 1 between 1991 and 2001. And the group of whole company winners plus the parent companies of subsidiary winners outperformed the S&P 500 by about 3 to 1, achieving a 323 percent return on investment, compared to a 110 percent return for the S&P 500 (Kosko, 2002).

All three studies above recognize a link between the Baldrige system and organizational performance. The Baldrige Criteria for Performance Excellence provide a systems perspective for understanding performance management. The Criteria are designed to “help organizations use an aligned approach to organizational performance management that results in delivery of ever-improving value to customers, contributing to marketplace success” (2002 Criteria for Performance Excellence, p. 1). Given the
complex system of interactions represented in the Baldrige Criteria Framework (Figure 1), it is impossible to demonstrate cause and effect linkages between particular categories and organizational results. Nonetheless, studies have discovered the link between customer and market focus and performance results (Oakland, 1999; Sampson and Terzioski, 1999). And the Baldrige stock study shows the relationship between application of the Criteria elements and market results.

The sixteen organizations in this study demonstrate high levels of performance in financial, market, and operating-based measures. Baldrige winners track multiple measures and experience high levels, trends, and comparative/competitive results. These results demonstrate sustained performance over time as well as performance relative to industry norms and/or key competitors. And the measures tracked by winners track progress against strategic goals; they help organizations understand how well they deliver on their missions. The application summaries studied in this research provided only a subset of the full performance results contained in the application. Due to proprietary and competitive issues, some results indicated only improvements made in percentage terms or omitted comparative and competitive data.

From the sample of results that were provided, information is included in Figure 3. The sample results are organized in six categories that are reflected in either top- or bottom-line performance for the company. Top-line factors included growth in revenue and market share. And bottom-line performance influencers ranged from improvements in employee productivity, to operating efficiency such as inventory turnover and order speed, to waste reductions such as order errors and defect reductions. These efficiency factors, in turn, led to improvements in operating profits and net income.
<table>
<thead>
<tr>
<th>Figure 3: Financial, Market, and Operating Performance Results</th>
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<tbody>
<tr>
<td><strong>Revenue and profit growth</strong></td>
</tr>
<tr>
<td>- Annual increases in operating profits have averaged 25% over five years for <strong>Sunny Fresh Foods</strong></td>
</tr>
<tr>
<td>- Sales have increased 39% on average from 1995 to 2000 for <strong>KARLEE</strong></td>
</tr>
<tr>
<td>- Total revenue growth rate of 15% since 1996, compared to 4.5% for <strong>OMI</strong>’s top competitor</td>
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<tr>
<td>- Net income has increased by more than 60% over the last five years for <strong>Los Alamos National Bank</strong></td>
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<tr>
<td><strong>Market share</strong></td>
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<tr>
<td>- Market share in its core business segment has increased to 60%, up from 50% in 1996 for <strong>OMI</strong></td>
</tr>
<tr>
<td>- <strong>Pal’s</strong> is #2 in market share for the region with 19%, double that of 1994</td>
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<tr>
<td><strong>Return on investment</strong></td>
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<tr>
<td>- Return on investment has tripled over the last five years for <strong>Sunny Fresh Foods</strong></td>
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<tr>
<td>- The <strong>Ritz Carlton</strong> saw their return on investment increase from 5.3% in 1995 to 9.8% in 1998</td>
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<tr>
<td><strong>Employee productivity</strong></td>
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<tr>
<td>- Labor productivity (sales per hour of labor) has nearly doubled since 1995 for <strong>KARLEE</strong></td>
</tr>
<tr>
<td>- Since 1998, sales per labor hour improved by ~$6 for <strong>Pal’s</strong></td>
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<tr>
<td>- On average, one employee services more than $6 million in assets, more than twice the banking industry average (<strong>Los Alamos National Bank</strong>)</td>
</tr>
<tr>
<td>- Sales per head for <strong>STMicroelectronics</strong> is more than twice that of competitors (over $600,000 in 1998 versus ~$250,000 for the industry and ~$200,000 for competitors)</td>
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<tr>
<td>- Annual average revenue per associate improved from $92,600 in 1997 to almost $108,000 in 2000 – an increase of more than 15% for <strong>OMI</strong></td>
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<td><strong>Operating efficiency</strong></td>
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<td>- Inventory turn has improved from an average of 9.2 in 1995 to 15.7 in 2000 (<strong>KARLEE</strong>)</td>
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<tr>
<td>- <strong>Pal’s</strong> order handout speed has improved by over 30% since 1995 (from 31 seconds to 20 seconds), compared to a key competitor, whose increased from 73 to 76 seconds</td>
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<tr>
<td><strong>Waste/defect reduction</strong></td>
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<tr>
<td>- Total waste was reduced 21% between 1996 and 1998 for <strong>Sunny Fresh Foods</strong></td>
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<tr>
<td>- Waste has been reduced to less than .5% of sales, down from nearly 1.5% for <strong>KARLEE</strong></td>
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<tr>
<td>- Internal defect rate decreased over 75% from 1996 to 2000 for <strong>Dana Corporation - Spicer Driveshaft</strong></td>
</tr>
<tr>
<td>- Errors in orders average less than one for every 2,000 transactions for <strong>Pal’s</strong></td>
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Organizational Effectiveness

- 30% of all customers use five or more services, compared with the national average of 6% for all banks (*Los Alamos National Bank*)
- *Los Alamos National Bank*’s charge-offs for loan losses (measured as a % of average assets) has declined since 1997, to about 1/3 the average % for local competitors
- New products generate over 1/3 of annual sales for *STMicroelectronics*
- Employee satisfaction levels in 1999 exceeded the industry composite in 8 of 10 categories for *STMicroelectronics*

Conclusion

This paper identified eleven common practices of Badrige Award recipients. In isolation none of these practices are unique to Baldrige winners. What is unique, however, is the fact that all of these practices exist among a majority of recent award winners. As a six-year examiner, experience has shown the author that these practices do not exist in low-scoring applications. These practices, in combination, represent a laser focus on the customer and the alignment and integration of all processes that deliver customer expectations and requirements.

The ultimate measures of effective processes are market, financial, and operating performance results. The NIST “stock study” demonstrates the market’s reward for Award recipients. And Baldrige winners also surpass their industry norms and performance of competitors in key financial and operating performance measures as well. Customer-focused practices of Baldrige award winners enhance stakeholder benefits and contribute to the customer value proposition.

This study provides a first step toward identification of specific customer and market-focused practices of Baldrige Award winners. Since the study identified practices that were common across all award categories – manufacturing, service, small business,
education, and health care – it provides a framework and examples for other organizations to consider. This research also provides a foundation for further study and empirical work that tests the eleven principles. Future research could explore these eleven practices and identify their relative level of importance to companies. And empirical work could examine the validity and reliability of these constructs and test their relationship to organizational performance.
## Appendix A: 1995- 2002 Baldrige Award Recipients

<table>
<thead>
<tr>
<th>Year</th>
<th>Award Recipient</th>
<th>Category</th>
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<tbody>
<tr>
<td><strong>2002</strong></td>
<td>Motorola Inc. Commercial, Government and Industrial Solutions Sector Branch-Smith Printing Division</td>
<td>Manufacturing</td>
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<tr>
<td></td>
<td>SSM Health Care</td>
<td>Small Business</td>
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<tr>
<td></td>
<td></td>
<td>Health Care</td>
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<tr>
<td><strong>2001</strong></td>
<td>Clarke American Checks</td>
<td>Manufacturing</td>
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<tr>
<td></td>
<td>Pal's Sudden Service</td>
<td>Small Business</td>
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<td></td>
<td>Chugach School District</td>
<td>Education</td>
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<tr>
<td></td>
<td>Pearl River School District</td>
<td>Education</td>
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<tr>
<td></td>
<td>University Wisconsin - Stout</td>
<td>Education</td>
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