



# **Core Values: The Integrating Link to Performance Excellence**

by

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## Results for Malcolm Baldrige National Quality Award (MBNQA) and State Program Award Recipients

### I. Introduction

This study examines core value usage, as defined by the Baldrige National Quality Program, within award winning organizations. While much attention tends to highlight the seven categories of the Baldrige criteria itself, little is known about the core values that underlie the criteria. The core values and concepts represent basic, underlying beliefs and behaviors that are responsible for the creation of a high performing organization. The core values are interwoven throughout all of the categories of the criteria and provide the foundation that integrates the key business requirements presented in the criteria for performance excellence. In addition, this study will examine the usage of improvement programs within these award winning organizations.

### II. Sample Respondents

The data in our study came from Malcolm Baldrige National Quality Award (MBNQA) winners and award winners from the following states: California, Florida, Illinois, Maryland, Minnesota, New Jersey and Texas. The sample used in this study consisted of organizations that won an award during the 1996-2007 time period. Specifically, questionnaires were sent to the official contact person within each of the award winning organizations. The official contact person is the individual that not only acts an official liaison to the award offices but also often has the widest ranging knowledge of the award winning organization. The resulting response rate was extremely high. All of the states had response rates greater than 40% and the MBNQA organizations had a response rate greater than 60%. ***We think this high response rate in the states came largely because of your endorsement of this project -- for which we again thank you.***

Table 1 displays the MBNQA and state program respondents by sector. For the surveys received, the highest responding sector was education representing slightly less than 25% of the total respondents. The state award organizations accounted for somewhat more than 80% of the respondents.

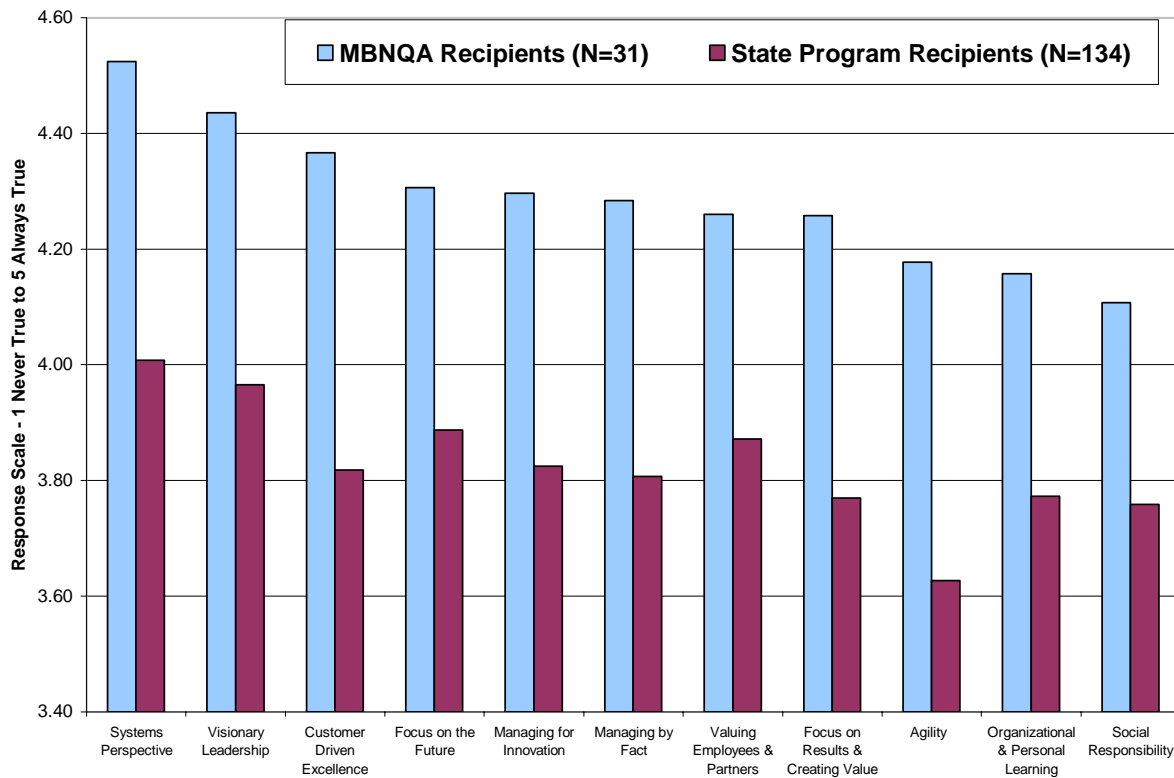
Sector	MBNQA Recipients	State Recipients	Total	% of Respondents
Education	6	35	41	24.85%
Non-Profit or Government	2	28	30	18.18%
Service	6	21	27	16.36%
Healthcare	5	22	27	16.36%
Manufacturing	6	16	22	13.33%
Small Business (Mfg or Service)	6	12	18	10.91%
<b>Total</b>	<b>31</b>	<b>134</b>	<b>165</b>	
<b>% of Respondents</b>	<b>18.79%</b>	<b>81.21%</b>		

Table 1. Survey Respondents by Sector

### III. Examining Core Values

#### A. Overall Core Values

One of the major objectives of this study was to identify the usage of the core values. Figure 1 displays the average core value response for MBNQA (N=31) and state program (N=134) recipients. The reported score is based on an average level of usage of organizational activities and actions representing the specific core values as defined by the Baldrige *Core Values and Concepts*. The questions related to each core value are shown in Appendix A. Overall, the trends for the Baldrige winners and state award winners tend to parallel each other.



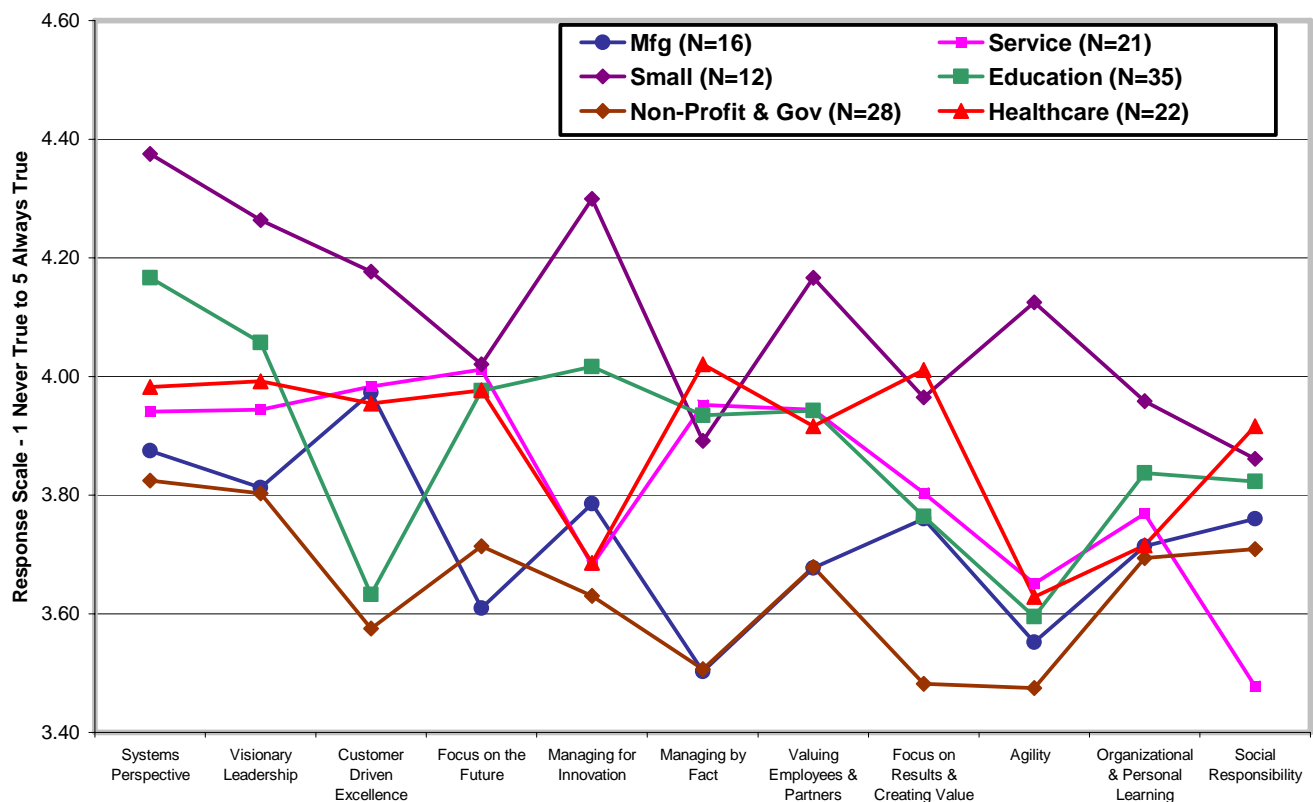
**Figure 1. Average Core Value Response for Award Recipients – MBNQA vs. State Programs (Y axis scale: 1-never true to 5-always true)**

For the MBNQA and state recipients, the core values with the highest scores were systems perspective and visionary leadership. For the MBNQA recipients, the core values with the lowest scores were organizational and personal learning and social responsibility. For the state recipients, the core values with the lowest scores were agility and social responsibility. Figure 1 also highlights some of the gaps between MBNQA and state program recipients. As expected, the MBNQA winners consistently demonstrate a higher level of endorsement for all core values. Two of the larger gaps between Baldrige winners and state award winners are in the core values of Customer Driven Excellence and Agility.

## B. Sector Analysis

Figure 2 displays the average core value response by sector for all state recipients (N=134) combined. This figure suggests there may be sector differences with regards to the demonstration of specific core values. For example, the nonprofit and government sector organizations seem to be generally lower than all of the other sectors. Further, education and nonprofit and government sector organizations appear to be lower than the other organizations in the Customer Driven Excellence core value.

As we view Figure 2, for example, the small business sector (N=12) responded with a higher mean score for nearly all of the core values and the non-profit and government sector (N=28) average responses were consistently the lowest for all the core values with the exception of social responsibility and focus on the future.



**Figure 2. Average Core Value Response by Sector for State Award Recipients (N=134)**  
(Y axis scale: 1-never true to 5-always true)

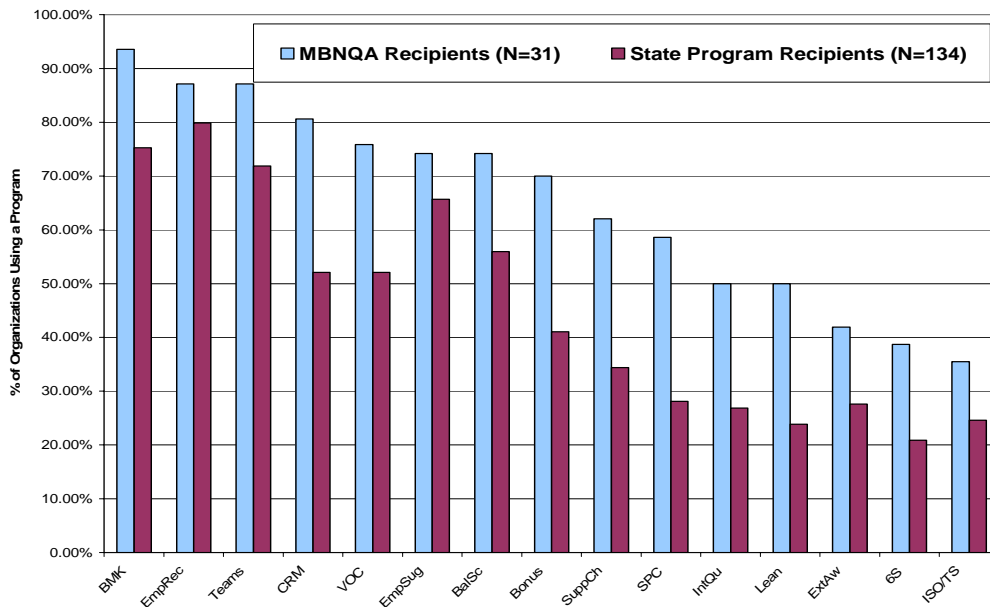
## IV. Program Development in Organizations

Performance excellence is often achieved by implementing improvement programs within an organization. As we read through journal and magazine articles, consultants, business people, and professors tout the efficacy of the particular program about which they are writing. Case examples and even testimonials are provided to further convince the reader of the worth of a particular program. As a result, managers are regularly confronted by the baffling array of choices that are available. Which

program is the right one to choose? A preliminary analysis of the data has found results that may be useful for organizations attempting to traverse the Baldrige pathway to achieve performance excellence.

**What we have found in this study is that not all programs are created equal, based upon the experiences of the respondents.** Some of the programs are more easily accomplished than others. **More importantly, though, the level of an organization’s ability is a major determinant of whether a program is likely to be successful or not.**

Figure 3 shows the percent of MBNQA and state organizations using various performance improvement programs. The intent of the researchers was not to provide an exhaustive list of all possible performance improvement related programs, but rather to provide a representative list of programs employed across organizations which perform at various levels of excellence. For the MBNQA and state recipients the most common programs utilized were benchmarking and employee recognition and the least frequent programs were ISO/TS certification and Six Sigma. One of the largest differences in program usage between Baldrige winning organizations and the state winners was in Customer Relationship Management (CRM), which appears to be consistent with the gap that is present in the customer driven excellence scores on the core values

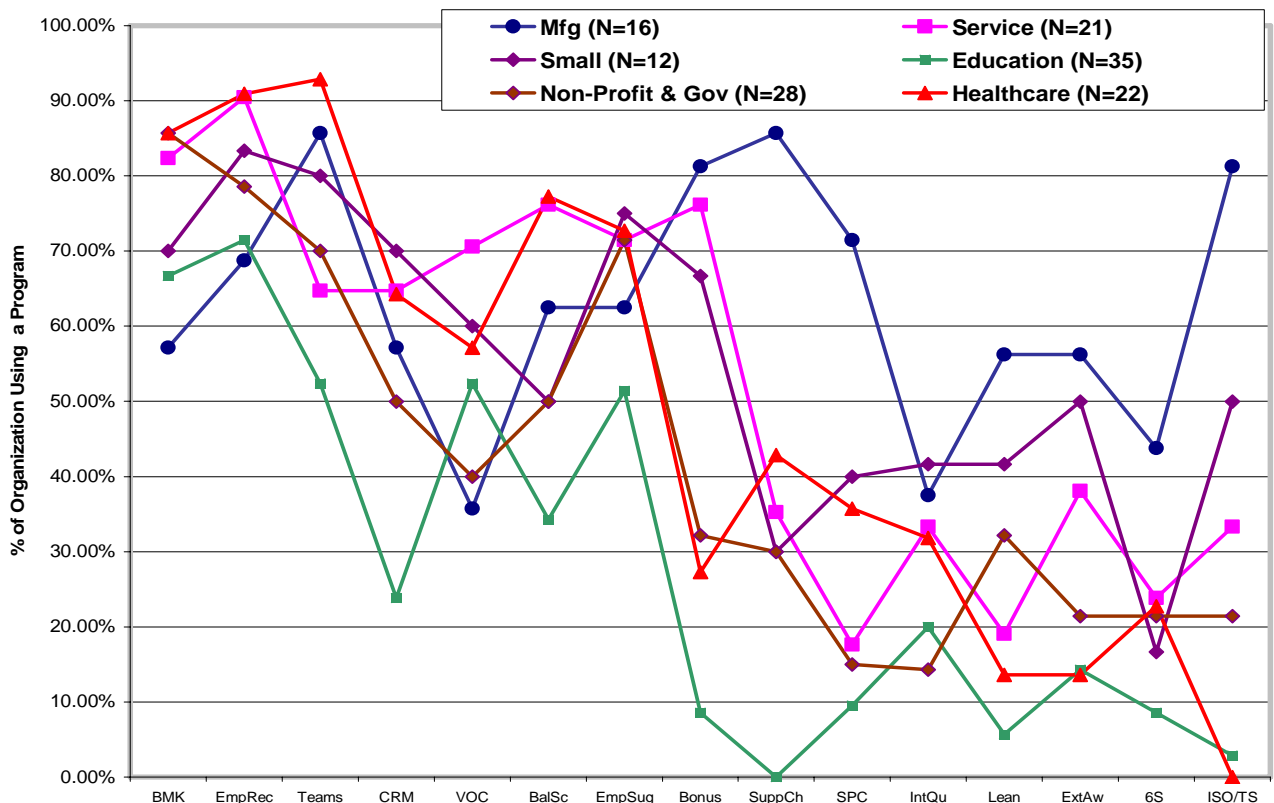


**Figure 3. Percent of Organizations Using a Program - MBNQA vs State Program**

- |                                 |  |                                   |
|---------------------------------|--|-----------------------------------|
| 6S - Six Sigma                  | EmpRec - Employee recognition program  | Lean - Lean organization          |
| BalSc - Balanced Scorecard      | EmpSug - Employee suggestion system    | SPC - Statistical process control |
| BMK – Benchmarking              | ExtAw - Supplier award programs        | SuppCh - Supply chain mgt         |
| Bonus - Pay bonus plan          | IntQu - Internal quality award program | Teams - Cross-functional teams    |
| CRM - Customer relationship mgt | ISO/TS - ISO/TS certified              | VOC - Voice of Customer           |

Figure 4 displays the percent of organizations using various programs by sector. Little difference is observed in usage of the most frequently used improvement programs among organizational sectors. However, education sector organizations do appear to use fewer “traditional” improvement programs than other types of organizations. The largest gaps appear to be in CRM and Supply Chain Management where there is almost a 30% difference between educational organizations and the next lowest grouping.

Further, the figure implies there are indeed sector specific differences in program usage. For example, the reported usage of supply chain management was 0% for the education sector and 86% for the manufacturing sector. Furthermore, 0% of the health care sector and 3% of the education sector respondents reported using ISO/TS certification, while nearly 82% of the manufacturing sector respondents reported using ISO/TS certification. For each sector at least 57% of the organizations use some type of benchmarking while less than 44% are using six sigma. From the data it is evident that some programs are more likely to be utilized in some sectors and some programs are likely to occur **regardless** of the sector. Additional sector specific graphs are provided in the Appendix B.



**Figure 4. Percent of State Award Recipients (N=134) Using a Program by Sector**

- |                                 |  |                                   |
|---------------------------------|--|-----------------------------------|
| 6S - Six Sigma                  | EmpRec - Employee recognition program  | Lean - Lean organization          |
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## B. Mapping Program Usage

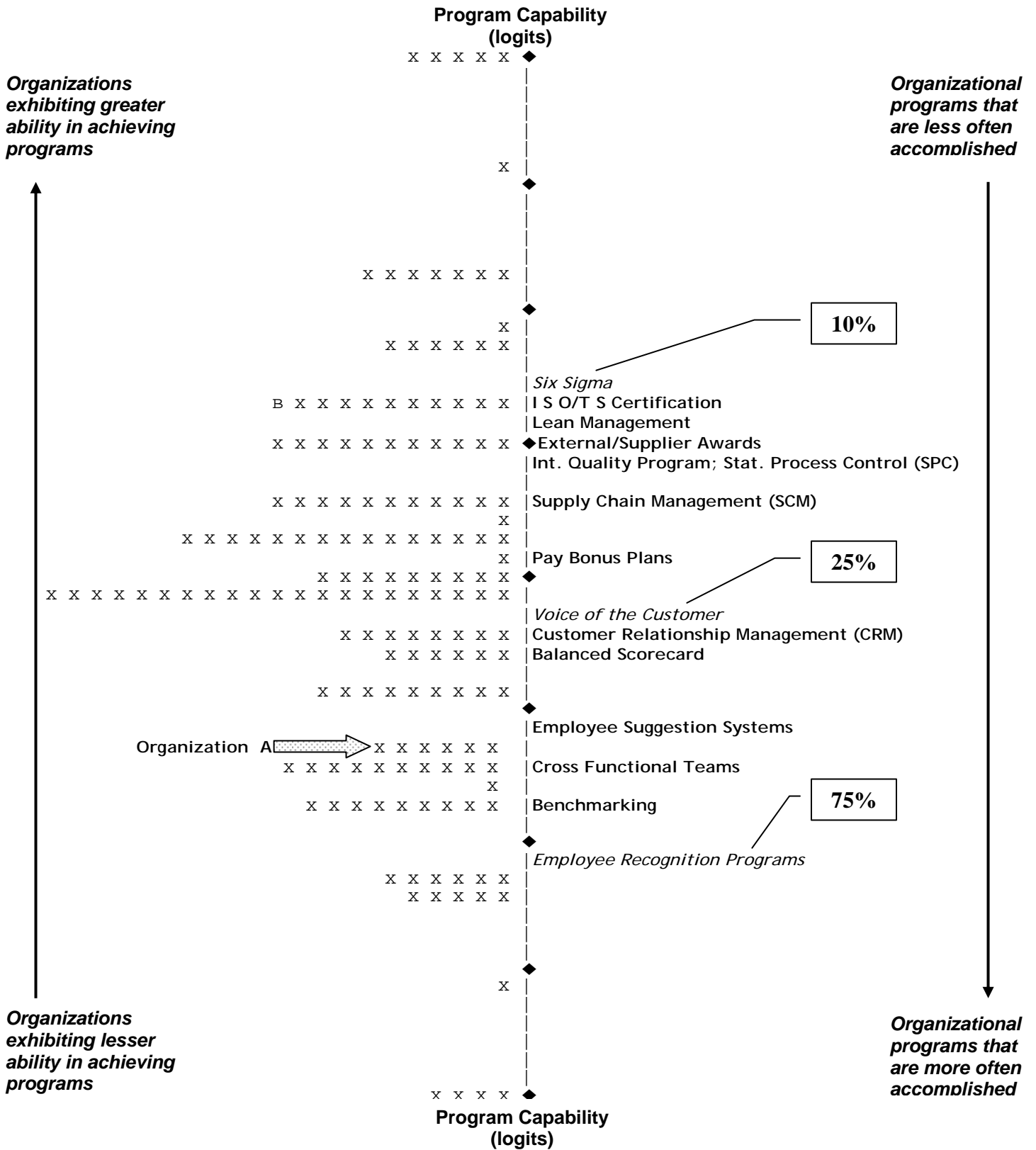
Using a technique called Rasch Model Analysis, we transformed all of the improvement program data into uniform statistical units of measurement called logits, allowing us to classify the level of accomplishment of organizational programs. The results are shown in Figure 5, the location map. Three features of the location map are significant. First, there is a vertical axis in the center of the figure, program capability, which acts as a shared ruler. Second, a distribution of organizations in this study appears on the left side of the map. Organizations at the top of the map have been able to carry out more programs than organizations lower on the map. It shows that even though the organizations in the study were all award winners, they had widely varying capabilities in carrying out programs. Third, the locations of programs appear on the right side of the map. Those programs higher on the map are accomplished less frequently than programs that are lower on the map, thus some programs are more difficult to achieve.

Essentially, the location map creates a statistical ruler that allows us to measure an organization's capability while simultaneously viewing the difficulty of the programs. Like a traditional ruler, we can determine the difficulty of different programs by the physical distances that are shown. The key points on the vertical axis of the map are the diamonds. The distances between the diamonds are all uniform with the distance between one set of diamonds being one logit. The distance between the diamonds on the vertical axis in Figure 5 would be interpreted in the same way that you would read inches on a regular ruler.

The first step is to identify the capability of your organization. That is, its location on the left side of the map. A program that is one logit higher than an organization's position means that it is twice as difficult to accomplish as a program that is at its current level. The converse is also true. A program that is one logit lower than an organization's position means that it is twice as easy to accomplish as a program that is at its level. The difficulty of adopting the program can also be described in terms of its probability of success. Understanding these relationships can guide an organization in making more effective operating decisions and more efficient resource allocations.

We will provide an example to illustrate the significance of our results. Figure 5 has some *italicized* items that we will refer to in the following discussion. What we will view is the difference in distance on the Location Map (Figure 5) between an organization and an improvement program. Assume that an organization occupies the position by the arrow (Organization A). It is an organization that has developed some ability in implementing programs. It might be an example of perhaps a bronze level award winner in a state quality award program. Let's again assume that Organization A decides it wants to continue to improve its performance. So, the management team agrees to do some research. In their next meeting, there is a heated discussion of two programs. Half of the management team thinks that the organization should implement a *Voice of the Customer* program and the other half of the management team thinks the organization should undertake a *Six Sigma* program. Which program should the organization choose? Either program can lead to improvement for the organization.

From Figure 5, we see that implementing a *Voice of the Customer* program would entail a major effort because this program is higher on the ruler than the organization's current position. However, implementing a *Six Sigma* program would be even harder because it is more than twice as far from the organization's current position as *Voice of the Customer*! Further, the Rasch Model Analysis also can translate these positions into probabilities of successfully accomplishing a program. We have noted that the probability of success for a particular program in the box at the right. Using our previous examples, the difficulty of adopting the program was described in terms of its probability of success. If the management team of Organization A decides to pursue a *Voice of the Customer* program, there is greater than a 25% probability that it will be able to successfully implement the program. If the management team decides to pursue a *Six Sigma* program, the chances of success are even lower.



**Figure 5. Location Map**

There is less than a 10% probability that it will successfully implement the program. If this same organization does not have an *Employee Recognition Program* and it decides to implement that type of program, then its probability of doing so successfully rises dramatically to almost 75%. Those programs that are higher on the ruler than the organization's position are more difficult to accomplish. In similar fashion, those programs that are lower on the ruler than the organization's position are easier to accomplish.

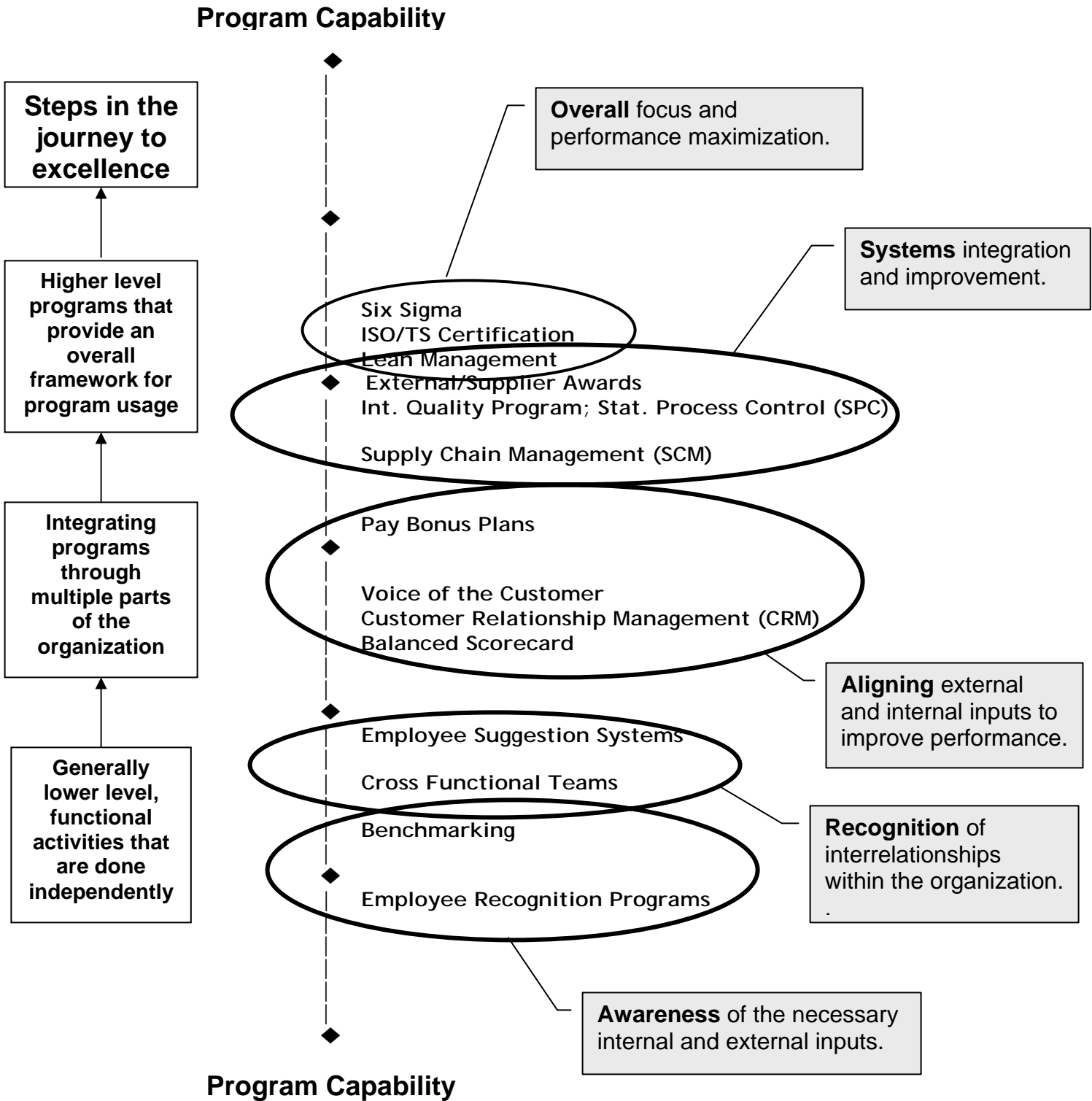
The probabilities of success cited in the previous paragraph are related to the difficulty of achieving a particular program. Probability of success like difficulty is determined by distances on the vertical ruler. If a program that an organization wants to accomplish is one logit higher than where the organization is currently situated in terms of its ability (the distance between one set of diamonds), there is only a 27% probability that the program will be accomplished. If a program that an organization wants to accomplish is 2 logits higher (the distance between two sets of diamonds), it is three times as difficult as a program at its level of ability and there is only a 12% probability that the program will be accomplished. If a program that an organization wants to accomplish is 3 logits higher than its current position (the distance between three sets of diamonds), it is four times as difficult and there is only a 5% probability that the program will be accomplished. One can see that the farther away a program is from the ability of an organization the greater the chance for failure.

**Remember, however, these are only probabilities.** Any selection of a program will generally require devoting a substantial amount of financial, human and time resources in order to make the program successful. Low probabilities simply mean that greater effort and more resources will have to be expended on the part of the organization to ensure the success of the program. Conversely, an organization might decide to undertake a program lower on the vertical axis in order to increase the likelihood that there will be a successful accomplishment of that program.

Rather than simply looking at vertical distances between individual programs, it is probably as beneficial to take an overview of the programs. Essentially, the programs at the lower levels consist of total quality type projects (improving services and work processes, employee engagement and teamwork, etc.). In contrast, those programs at the higher levels serve as integrating, larger scale initiatives, which provide a crosscutting framework that includes multiple functions or perhaps even the whole organization. For example if we refer to Figure 6, we observe that several groups of programs have apparently similar concerns. The programs requiring the lowest level of capability appear to focus on developing an awareness of the necessary internal and external inputs that will lead to improved performance. The next group of programs focuses on how the organization works by attempting to recognize interrelationships within the organization. As an organization increases its capability, it attempts to align external and internal inputs to improve performance. As we near the top of the hierarchy, the organization now becomes concerned with systems integration and development throughout the organization. The programs in the final stage are directed towards overall performance maximization.

## **V. Conclusions**

Based upon the experiences of MBNQA and state award winning organizations, we have determined that the core values vary in their level of difficulty. Some core values appear to be more difficult than others. Further, the adoption of core values within organizations can vary by sector. We have also concluded that not all programs are created equal. Some of the programs are more easily accomplished than others. More importantly, though, the level of an organization's ability is a major determinant of whether a program is likely to be successful or not. The results of this study caution managers to assess their situation before trying to adopt a program. When faced by a low probability program implementation, managers would have to expend greater effort to ensure the success of a program.



**Figure 6. Grouped Location Map**

## **Appendix A. Organizational Practices by Core Value**

### **Systems Perspective**

- make decisions based upon actual results
- integrates its strategic objectives throughout the organization
- activities that focus on improving the organization as a whole
- aligning strategies with our organizational needs

### **Visionary Leadership**

- set clear expectations for their employees
- encourage employees to contribute to the organization
- develop strategies with a customer, patient or student focus
- inspire employees
- serve as role models for others
- encourage employees to be innovative

### **Customer Driven Excellence**

- strives to improve our products or services
- resolves complaints by “making things right for our customers, patients or students”
- market share growth
- anticipating changes in the market
- differentiating our products and services from our competition
- developing an awareness of technology and competitor offerings
- customer, patient or student satisfaction and retention

### **Focus on the Future**

- has a strong future orientation
- focuses on managed levels of growth
- allocating resources based upon changes in competition or technology
- developing a long-term commitment to our stakeholders (i.e. customers, patients, students, employees, suppliers, the public and the community)

### **Managing for Innovation**

- develops a culture for innovation
- identifies new ways to improve our performance
- innovation that leads to improvements in our products, services, and operations
- innovation that builds upon existing knowledge
- removing obstacles to improvements

### **Managing by Fact**

- participates in benchmarking programs that compare our practices and performances with other organizations
- utilizing competitive comparisons to improve our operations
- improving existing measures to better meet organizational goals
- incorporating “best practices” into our operations
- measuring key organizational processes

### **Valuing Employees and Partners**

- uses flexible work practices based upon both workplace and home life needs
- is concerned with employee satisfaction and well-being
- provides employees with recognition beyond just traditional compensation
- provides opportunities for the personal development of its staff (e.g. employees, faculty etc.)
- developing external partnerships with customers, patients, students or suppliers
- internal partnering

### **Focus on Results and Creating Value**

- uses measures that relate to the key organizational results
- using measures that “lead” actual performance so that changes can be made to our operations before adverse impacts become visible
- trying to balance the needs of our stakeholders (i.e. customers, patients, students, employees, suppliers, the public and the community)
- eliminating adverse impacts on our stakeholders (i.e. customers, patients, students, employees, suppliers, the public and the community)

### **Agility**

- simplifies work and work processes
- focuses on reducing the time it takes to get a product or service to a customer, patient or student
- empowers its employees
- reducing time to enhance quality or cost
- the capacity for rapid change and flexibility
- aligning our resources for faster response to our customers, patients or students

### **Organizational and Personal Learning**

- provides employees with opportunities for personal learning through education, training, and other means for continuing growth
- emphasizes sharing knowledge throughout the organization
- provides training based upon organizational needs and priorities
- bases pay upon an individual’s knowledge and skills
- makes use of on-the-job-training
- uses cross-functional learning such as job rotation
- making changes in our operations based upon our learning

### **Social Responsibility**

- goes beyond simply meeting local, state and federal laws and regulatory requirements
- the conservation of environmental resources and waste reduction
- anticipating the adverse environmental or social impacts of our operations
- actively makes information available to the public on organizational ethics, public health, safety and the environment
- creating partnerships with other organizations on issues relating to public responsibility and citizenship
- ethical behavior in all stakeholder relations

## Appendix B. Percent of State Award Recipients (N=134) using a Program by Sector

6S - Six Sigma

BalSc - Balanced Scorecard

BMK - Benchmarking

Bonus - Pay bonus plan

CRM - Customer relationship mgt

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