

What Management and Quality Theories Are Best for Small Businesses?

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ABSTRACT

Understanding and using management models, standards, and assessment tools, in conjunction with quality concepts and tools, can help ensure that businesses and other organizations survive and flourish over the long term. The use of quality initiatives will help businesses: (1) Document and improve processes; (2) Understand customer requirements and ensure that their products and services meet those requirements; and (3) Streamline relationships between internal customers and suppliers and employees of the business and external customers and suppliers. However, implementing a quality initiative stops short of managing a business from a strategic, systems perspective that can be accomplished using various management models, quality award criteria, and standards. This paper proposes that organizations should use a model which integrates quality concepts and strategic management concepts into a powerful systemic structure called the 5P's Model. The authors suggest that this model is especially effective for small businesses since they are not as complex as larger organizations. In other words, they can more easily develop and align their respective Purposes, Principles, Processes, People, and Performance which are the elements of the 5P's Model.

KEY WORDS: 5P's Model, Quality, Quality Improvement, Quality Standards, Strategic Management Models, Strategic Quality Management, Management System

INTRODUCTION

The entrepreneurial spirit is essential for the economic well being of a nation and the free enterprise system itself. Entrepreneurs have the passion for ensuring that their businesses survive because business success means personal success. As they create businesses, they generally think of providing the best products and services at the best prices so that they can acquire customers. So, without contemplating definitions of quality, small business creators begin their journey with a passion for excellence. Yet many of these entrepreneurs do not have the background, expertise, or desire to manage their businesses strategically, and they often do not implement quality systems and initiatives until they are required to do so by customers.

QUALITY INITIATIVES

Managers who wish to implement quality initiatives should study quality models, concepts, and tools developed and popularized by W. Edwards Deming (1986, 1939), Joseph Juran (1995, 1993, 1992, 1989, 1988), Philip Crosby (1994, 1984, 1979), Kaoru Ishikawa (1985, 1982), Mildred Golden Pryor, J. Chris White, and Leslie A. Toombs (1998), Pryor and Cullen (1993, May-June), and others. In order to understand quality initiatives, one must first understand what quality is. Deming (1986, 1939) was one of the first to talk about meeting or exceeding customers' expectations and requirements that are determined or modified through continuous communication between customers, front-line associates, and management. Juran (1995) says that quality is fitness for use. Crosby (1979) refers to quality as conformance to requirements, not goodness. Neither Deming, Juran, nor Crosby specifically addresses processes, relationships, or value in their definitions of quality. Of the three experts, only Deming includes a focus on customers. This paper will use the following definition of quality (Pryor, White, and Toombs, 1998, p. 2.3):

“Quality refers to the extent to which processes, products, services, and relationships are free from defects, constraints, and items which do not add value for the customer.”

Using Pryor's definition of quality, small businesses can implement a variety of quality initiatives such as Six Sigma (Harry and Schroeder, 2000), Strategic quality management (Pryor, White & Toombs, 1998), and Total quality management (Ishikawa, 1985; Feigenbaum, 1991; Harrington, 1995; Juran, 1995) as well as various organizational development initiatives relating to teams, empowerment, and other concepts that have the potential of improving all aspects of a business. However, in order to ensure long-term survival and success, major change or improvement initiatives should be implemented in conjunction with the use of various management models such as the Strategic management Model, the 5P's Model, and the Malcolm Baldrige National quality Award Criteria. In other words, quality initiatives should be integrated into the strategic management of an organization. The model which integrates quality into the strategic management of an organization *and* requires the alignment of its elements is the 5P's Model also referred to as the 5P's Strategic Leadership Model.

MANAGEMENT MODELS

Traditionally, small organizations have been less likely to utilize strategic management models and strategic planning concepts than large organizations for many reasons: (1) Small organizations are often family-owned; (2) Small business leaders are often more focused on day-to-day operations as opposed to management models and strategic

management systems; (3) Small businesses have less money to spend on training; and (4) Their competitors generally operate the way they do – without using management models and implementing improvement systems. Also, entrepreneurs who develop small businesses usually have little desire to establish routine processes and procedures. On the other hand, large organizations often have strategic planning departments, more people who encountered management models and strategic concepts when they completed their management or other college degrees, more money to spend on training, and large competitors which are strategically-focused and competitively-driven.

This paper proposes various management models that small business leaders can use to integrate quality initiatives into the strategic management of their organizations. In so doing, they can increase the probability of their organizations long-term survival.

Strategic Management Model

One such model is the Strategic management Model proposed by Pryor, White and Toombs (1998) whereby small business owners or managers understand and utilize elements of Strategic management to manage their business. The Strategic management Model includes a SWOT analysis (i.e., analyzing a firm's internal strengths and weaknesses and its external threats and opportunities), as well as mission, vision, values, goals and objectives, strategy formulation and deployment, measurement and feedback, critical success factors, and competitive advantage. Those elements are defined in Table 1.

Table 1
Strategic Management Model Elements

Strategic Elements	Definition
SWOT Analysis	Analysis of internal strengths & weaknesses And external threats & opportunities
Mission	Why an organization exists
Vision	Where or what an organization wants to be in the future
Core Values	Principles that people in an organization care about and believe in that influence their behavior
Goals and Objectives	Broad, high-level desired results as well as specific, measurable outcomes necessary to make the vision a reality
Strategy Formulation	The plan of how and when to achieve the goals and objectives
Strategy Deployment	Deployment or execution of Strategic Plans
Measurement & Control	The monitoring and feedback element that answers the questions "How is the organization doing?" and "Are any modifications necessary?"
Critical Success Factors	What an organization has to do right to succeed
Distinctive Competencies	Unique capabilities that give an organization an advantage over its competitors

Source: Summarized and adapted from Hitt, Ireland, and Hoskisson (2004); and Pryor, White and Toombs (1998).

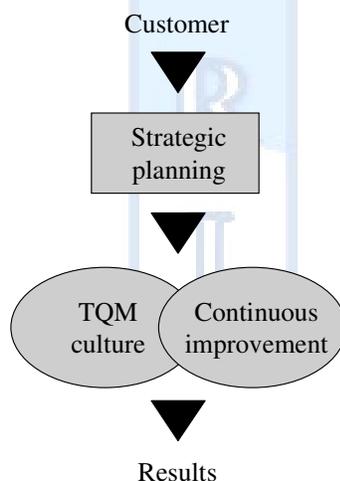
Several of the original “Quality gurus” suggested that strategic management or strategic planning is essential for quality initiatives to be successful (Deming, 1986; Juran, 1988; Crosby, 1994). Many authors suggest using a variety of business excellence models, criteria, theories, tools, standards, strategies, environmental analyses, training, surveys, and research to manage and improve small businesses (Hewitt, 1997; Jarvis, Curran, Kitching, and Lightfoot, 2000, Collyer, 1996; Hamzah and Ho, 1994; Hansson and Klefsjo, 2003; Wessel and Burcher, 2004; Gulbro and Shonesy, 2000; Cagliano, Spina, Verganti, and Zotteri, 1998; Bilston and Sohal, 1995; McAdam and Fulton, 2002; Boon and Ram, 1998; Nwankwo, 2000; Anderson and Sohal, 1999; Davig, Brown, Friel, and Tabibzadeh, 2003; McNamee, and Greenan, and McFerran, 1999).

Other authors (and this paper) insist that quality initiatives must be integrated into the strategic management of organizations (Chandler and McEvoy, 2000, Fall; Pryor, Anderson, Toombs and Humphreys, 2007; Pryor, White, and Toombs, 1998; Pryor and , May-June, 1993; Butz, 1995; Garvin, 1988,). To further emphasize this point, Butz (1995, May, p.106) states the following about Total quality management:

“Many argue that TQM [continuous improvement] is already linked to the company strategy because most strategic plans include quality goals, TQM is led by the senior management team, and projects are chosen based on their importance in achieving business success. While all of this is true, it doesn’t go far enough. strategic planning and TQM must become a single process.”

The following pictorial further emphasizes the impact that the customer should have on the management of an organization and the extent to which strategic planning and quality initiatives must be integrated to achieve the required results.

Figure 1
Strategic Planning, The Missing Link



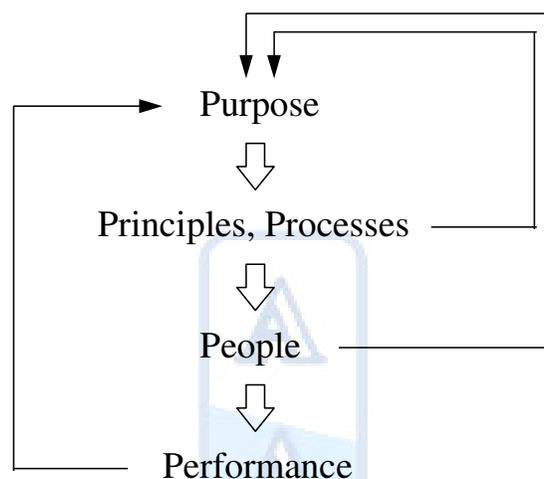
Source: Butz, H.E. (1995, May). Strategic planning: The missing link in TQM,” *Quality Progress*, Vol. 28, No. 5 pp. 105-108.

5P’s Model

While the Strategic management Model is a model which small business leaders should use for long-term survival and success, it does not include all of the elements of the 5P’s Model, developed by Pryor, White, and Toombs (1998). The establishment of strategic

direction and the strategic management model is included in one of five elements necessary for an organization to be successful. For mnemonic reasons, the authors call this element Purpose. The other four elements are Principles, Processes, People, and Performance. The 5P's Model and the alignment of the 5P's are depicted as follows:

Figure 2
The 5P's Model



Sources: Pryor, M. G., White, J. C., and Toombs, L. A., *Strategic quality management: A Strategic, Systems Approach to quality*, Thomson Learning, 1998.

Pryor, M. G., Anderson, D., Toombs, L. A., Humphreys, J. H. (2007). Strategic implementation as a core competency: The 5P's model. *Journal of Management Research*, 7(1), 3-17.

The arrows in Figure 2 depict the connection between strategy (Purpose) and structure (Principles as internal structures and Processes as external structures) and the influence of structures on employee behavior (People) and corresponding results (Performance). Strategy drives structure; structure drives behavior; and behavior drives results. The arrow from Performance to Purpose represents the feedback mechanism for guiding an organization toward its objectives. This feedback connection is essential to successful Strategic quality management. The primary motivation of the 5P's Model (an essential ingredient in Strategic quality management) is to guide an organization toward performance excellence, world-class status, and long-term survival. Metrics and measurements are vital to track status and gauge success in this endeavor.

Some elements of the 5P's Model are similar to the Strategic management Model previously mentioned. However, the individual five elements are not only important as individual elements. Their alignment is also important. The individual elements of the 5P's Model are discussed below:

Purpose

The purpose of an organization, in the 5P's Model, involves all the elements that constitute the strategic intention of the organization. This includes the organization's mission, vision, goals, and objectives, as well as strategies for achieving the vision, mission, and goals. Small

business leaders must establish the strategic direction and goals of their organizations as well as the strategies and tactics for achieving them. Since strategies drive structure (Chandler, 1962), Processes and Principles should be aligned with Purpose.

Principles

These are the guiding philosophies, assumptions, or attitudes about how the organization should operate and conduct business. They are the integrity base, ethics, and core values to which employees are expected to make a commitment when they are hired. These core values are the foundation for the way decisions are made and employees behave. Leaders of small businesses, especially family-owned small businesses, understand the principles upon which their organizations were founded and upon which they currently operate. However, they may or may not understand how to convey those principles to their employees or how to align principles with the other elements of the 5P's Model.

Processes

Processes are the organizational structures, systems, and procedures that are used to make the products or perform the services that the organization provides, as well as the infrastructure and rules that support these systems and procedures. Performance appraisal methods, communication patterns, and production systems are examples of processes. In small businesses, processes are generally defined by the people doing the job and are often not well documented. It is difficult to manage and improve (or even replicate) undocumented processes. Therefore, small business leaders should ensure that all processes are documented by checklists, process maps, or process flowcharts. Streamlined Processes that are well documented and Principles that are well communicated can drive behavior that is necessary to achieve Performance excellence.

People

They are the employees (individuals and teams) who perform work that is consistent with the Principles and Processes of an organization to achieve its Purpose. They are the active components through which work results are accomplished. Purpose, Principles, and Processes must be in place before People can be consistently effective. If small business leaders understand and can align Purpose, Principles, Processes, and People, they are more likely to achieve Performance excellence.

Performance

Performance encompasses all the metrics, measurements, and expected results that indicate the status of the organization and are used as criteria for decision making. Performance results are fed back into the strategic management process to provide a means of feedback and control. It is essential that small business leaders understand and establish measurement and feedback systems for their organizations long-term survive and profitability.

It is not enough just to understand and apply the elements of the 5P's Model separately. The 5P's must be aligned with each other in order to achieve maximum efficiency and effectiveness. For example, if organizational leaders want People to work in teams, they must set up Processes to reward team success, not just individual employee success. If one of the organization's core values (Principles) is performance excellence, then Performance must be evaluated and improved. In other words, metrics systems must be

developed that measure the right things—safety, security, quality, on-time delivery, etc.; baselines and targets must be established; actual results must be compared to targets; and the results must be fed back through the system so that Processes, products, services, and relationships can be improved. Using the 5P's Model, small business leaders *would* incorporate the Strategic management Model and *could* incorporate the use of award criteria and standards included in this paper to assess, manage, and improve their organizations.

QUALITY AWARD CRITERIA AND STANDARDS

As mentioned previously, there are many different types of award criteria and standards. The ones that are discussed in this paper are the Malcolm Baldrige National quality Award Criteria, ISO 9000, ISO 14000, and the Small Business Standard. In the web site for its Small Business Guide to Making Standards Work, the British Standards Institute (n.d.) notes that “All businesses can benefit from standards, from small local firms to global heavyweights. Through strategic standardization, market access, innovation and profitability are all given powerful support, while regulatory obligations can be met simply and effectively.”

Malcolm Baldrige National quality Award Criteria

The United States made its first national commitments to excellence in terms of quality, speed, and efficiency when President Reagan issued Executive Order No. 12552 in 1986 and Executive Order No. 12637 in 1988. The latter Executive Order gave the following definition of an organizational performance standard:

“Organizational performance standard means a statement that quantifies and describes the desired level of quality, timeliness, and efficiency of services to be provided by an organization.”

Then when the Malcolm Baldrige National quality Award (MBNQA) was established in 1988, the United States provided a management model or a management System that people can use to assess and operate their businesses with the expectation of excellence as the result. According to the MBNQA Criteria for Performance Excellence booklet (2009), the Baldrige Criteria strengthen U.S. competitiveness in three ways: (1) helping improve organizational performance practices, capabilities, and results; facilitating communication and sharing of best practices information among U.S. organizations of all types; and serving as a tool for understanding and managing performance and guiding organizational planning and opportunities for learning. The Criteria for Performance Excellence booklet (2006) further states, “The Criteria are designed to help organizations use an integrated approach to organizational performance management that results in:

- Delivery of ever-improving value to customers, contributing to marketplace success;
- Improvement of overall organizational effectiveness and capabilities; and
- Organizational and personal learning.”

In other words, the MBNQA Criteria can be used by small business leaders as a management model to systematically understand and manage all aspects of their business; as a tool to assess and improve their organization and its operations; and as a tool for benchmarking other organizations (especially MBNQA recipients) and learning from them.

The seven categories of the MBNQA Criteria are Leadership, Strategic Planning, Customer Focus, Measurement, Analysis, and Knowledge management, Workforce Focus, Process management, and Results. The Criteria are based on the following core values and concepts: visionary leadership, customer-driven excellence, organizational and personal learning, valuing employees and partners, agility, focus on the future, managing for

innovation, management by fact, social responsibility, focus on results and creating value, and systems perspective. To properly use the MBNQA Criteria for assessment or to strategically manage a business, one must understand each individual category of the Criteria and the core values and concepts upon which they are based as well as the necessity for alignment among the seven categories. However, the Criteria, core values, concepts, and framework are fully explained in the Criteria for Performance Excellence booklet previously mentioned. This booklet can be obtained from the web site of National Institute of Standards and Technology (NIST), an agency under the U.S. Department of Commerce or from the American Society for quality (ASQ) which assists in administering the Baldrige Award Program under contract to NIST. Therefore, these Criteria are available to any organization throughout the world which can access NIST or ASQ by internet or telephone (NIST, n.d.).

In addition to the United States of America, various continents, countries, states, cities and other governmental entities have excellence awards with criteria that are similar to the Baldrige Criteria for Performance Excellence. Examples are the European quality Award, the Deming Prize, the Japan quality Award, and the many U.S. state awards (e.g., Texas) simply utilize the Baldrige Criteria as the state criteria for performance excellence.

ISO and Other Standards

On the website for the International Organization for Standardization (2006) two ISO standards were referred to as "generic management system standards" because they can be applied to any organization, of any size, in any industry or sector of activity, whether outputs are products or services. These organizations may be business enterprises, healthcare organizations, government agencies, etc. The ISO website further clarified the word generic as meaning that any organization regardless of its scope of activity can establish a quality management or an environmental management system and can use the relevant standards of ISO 9000 and ISO 14000 as the basis for system requirements. management system was defined on the ISO website (ISOa, n.d.) as follows:

"Management system refers to the organization's structure for managing its processes - or activities - that transform inputs of resources into a product or service which meet the organization's objectives, such as satisfying the customer's quality requirements, complying with regulations, or meeting environmental objectives."

With the above definition of management system, small business leaders can then use ISO 9000 and ISO 14000 standards to help manage and improve their organizations.

ISO 9000

The International Organization for Standardization indicates that the ISO 9000 family of standards addresses quality management" which refers to what an organization does to fulfill: (1) the customer's quality requirements, and (2) applicable regulatory requirements, while aiming to (3) enhance customer satisfaction, and (4) achieve continual improvement of its performance in pursuit of these objectives (ISO b, n.d.).

In 2006, the International Organization for Standardization website stipulated that "ISO 9001:2000 is used if you are seeking to establish a management system that provides confidence in the conformance of your product to established or specified requirements" and "ISO 9004:2000 is used to extend the benefits obtained from ISO 9001:2000 to all parties that are interested in or affected by your business operations. Interested parties include your employees, owners, suppliers and society in general." There are similarities between the previously-discussed Categories of the MBNQA Criteria and the eight principles included in

ISO 9000: Principle 1 (Customer Focus); Principle 2 (Leadership); Principle 3 (Involvement of People); Principle 4 (Process Approach); Principle 5 (System Approach to management); Principle 6 (Continual Improvement); Principle 7 (Factual Approach to Decision Making); and Principle 8M (Mutually Beneficial Supplier Relationships). These principles are very important to small businesses just as they are to medium and large size businesses.

ISO 14000

The ISO 14000 family of standards is primarily concerned with environmental management. The website for the International Organization for Standardization (2006) indicates that this means two things: “(1) Minimize harmful effects on the environment caused by its activities; and (2) Achieve continual improvement of an organization’s environmental performance (http://www.iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000.htm). Like ISO 9000, ISO 14000 is a generic standard and is applicable to all organizations regardless of size, product or service, and type of organization or industry.

ISO 9000 and ISO 14000 are respectively quality and Environmental standards that can be used for assessment and compliance. Together they comprise a significant part of a sophisticated management model which can help ensure an organization’s long-term commitment to performance excellence and survivability. Today, many organizations require their suppliers to be ISO 9000 and/or ISO 14000 certified.

Small Business Standards

The Small Business Standard, developed by the management consultants with the Chartered quality Institute (CQI), is another business standard/model which could be useful to small businesses. On its website, CQI (2007) states: The Small Business Standard “has been designed for use in ventures such as micro businesses, small and medium size businesses. Where the term ‘management’ is used in relation to a micro business it may simply mean the proprietor.”

The Small Business Standard is divided into nine sections: (1) management responsibility; (2) Business reviews; (3) Customer care; (4) Staff and employees; (5) Work environment and processes; (6) Suppliers; (7) Documentation; (8) Preventing and correcting product or service problems; and (9) Records. While the standard is simplistic when compared with the Strategic management Model, the 5P’s Model, or the MBNQA Criteria, it has many of the key ingredients of an organizational management system. It would be a good starting point for leaders of small businesses who wish to systematically manage and improve their organizations (CQI, 2007).

On the website of the British Standards Institute, the following information is provided about the application of standards in small businesses:

Small . . . businesses can achieve real benefits from standards. Here (in the Small Business Guide to Making Standards Work) you will find the information and resources small . . . enterprises need to make the best possible use of, and contribution to, the standardization process. Used to best advantage, standards can: (1) eliminate inefficiencies in resource allocation; (2) improve speed to market and reduce risk; and (3) enable effective competition with larger organisations (British Standards Institute, n.d.).

CONCLUSION AND RECOMMENDATIONS

In order to improve their organizations and their operations, small business leaders should utilize various management models and standards in conjunction with quality initiatives and tools. In fact, they should integrate quality initiatives into the strategic management of their organizations. Management models suggested in this paper for use by small business leaders were The Strategic management Model, The 5P's Model, and The Malcolm Baldrige National quality Award Criteria. Using either or all of the three management models would benefit small business leaders who seek to manage their organizations from strategic, systems, and continuous improvement perspectives. In addition to the management models, three standards discussed were: ISO 9000 and ISO 14000, which were developed by the International Organization for Standardization, and The Small Business Standard, developed and distributed by the Chartered quality Institute. These standards all have key elements that would benefit small businesses and other organizations in terms of management from a strategic perspective, in terms of improving of their organizations and operations, and in terms of long term viability and profitability. The standards discussed are really management models, with ISO 9000 focusing on quality, ISO 14000 being an environmental standard, and The Small Business Standard serving as a simplistic adaptation of various quality criteria.

This paper is the theoretical basis for ongoing empirical research efforts to attempt to determine which models and standards are being utilized by small businesses that have been successful and profitable over the long term. The paper suggests that the 5P's Model is a more sophisticated model which integrates elements of other models, criteria, and standards and proposes additional elements as well as the alignment of all elements. Yet this sophisticated model can be easily understood and utilized by small business leaders. Case studies of small businesses are being developed as the authors seek to determine the extent to which quality improvement initiatives are being integrated into the strategic management of successful small businesses.

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