

MANAGEMENT MODELS AND QUALITY INITIATIVES IN SMALL BUSINESS

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Abstract

In order to improve their organizations and their operations, small business leaders should utilize various management models and standards in addition to 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, et al were The Strategic Management Model, The 5 P's Model, and The Malcolm Baldrige National Quality Award Criteria. 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 Institute for Quality Assurance.

Introduction

Creators of small businesses provide the entrepreneurial spirit that is essential for the economic well being of a nation and the free enterprise system itself. They 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.

This paper suggests that understanding and using various management models, standards, and assessment tools, in conjunction with quality concepts and tools, is necessary for a business to survive and flourish over the long term. Quality initiatives will help businesses: (1) Document and improve business 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 the Strategic Management Model, the 5 P's Model, the Malcolm Baldrige National Quality Award Criteria and other standards and criteria.

Quality Initiatives

Managers who wish to implement quality initiatives should study quality concepts and tools developed and popularized by Deming (1986, 1939), Juran (1995, 1993, 1992, 1989, 1988), Crosby (1994, 1984, 1979), Ishikawa (1985, 1982), Pryor, White, and Toombs (1998, 1993) and others. In order to understand Quality initiatives, one must first understand what Quality is. From his book, "Out of the Crisis," one can summarize Dr. Deming's definition of Quality as "meeting or exceeding your customer's expectations and requirements that are determined or modified through continuous communication between customers, front-line associates, and

management.” Dr. Juran (1995) says, “Quality is fitness for use.” Crosby’s definition of Quality states: “Quality is conformance to requirements, not goodness (Crosby, 1979).” Neither Deming, Juran, nor Crosby specifically addresses processes and relationships in their definitions of Quality. Of the three experts, only Deming includes a focus on customers. None of the three focus on value. This paper will use the following definition of Quality proposed by Pryor (Pryor, White, Toombs 1998: 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 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) and 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 5 P’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.

Management Models

Throughout the years, large organizations have been more likely than small organizations to utilize strategic management models and strategic planning concepts for several reasons: (1) Large organizations often have strategic planning departments, more people who encountered management models and strategic concepts when they completed their management or other business degrees, more money to spend on training, and large competitors who are strategically-focused and (2) Small organizations are often family-owned; small business leaders are often more focused on day-to-day operations as opposed to strategic management systems; they have less money to spend on training; and their competitors generally operate the way they do – without using management models and implementing improvement systems which could significantly improve their organizations.

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 a Strategic Management Model (Pryor, White, and Toombs, 1998, Pryor and Toombs, 1993) whereby small business owners or managers understand and utilize elements of Strategic Management to manage their business.

Chart 1 - Strategic Management Model



Source: Mildred Golden Pryor and Leslie A. Toombs, *Total Quality Management*, Center for Excellence, A Partnership between Raytheon E-Systems and Texas A&M University-Commerce, Texas, 1993.

The Strategic Management Model elements include 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 Chart 2.

Chart 2 - Strategic Management Model Elements

Strategic Management 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 from Hitt, Ireland, and Hoskisson (2004); Pryor, White and Toombs (1998)

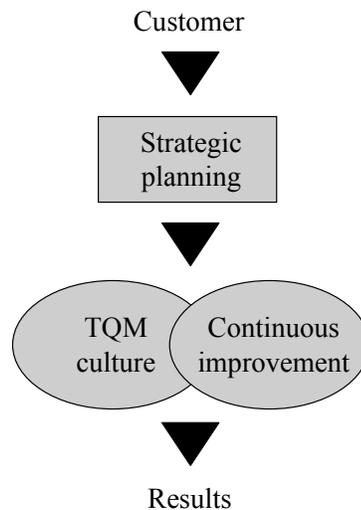
Various authors have suggested that strategic management or strategic planning is essential for quality initiatives to be successful (Deming, 1986; Juran, 1988; Crosby, 1994). Many authors suggest using a variety of business excellence models, criteria, theories, tools, standards, strategies, environmental analyses, training, surveys, and research to manage and improve small businesses (Hewitt, 1997; Jarvis, Curran, Kitching, and Lightfoot, 2000, Yusof and Aspinwall, 2000; Collyer, 1996; Boulter and Bendell, 2002; Lindsay and Preston, 2000; Temtime, 2004; Mazany, 1995; Hamzah and Ho, 1994; Tannock and Krasachol, 2000; 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 (Pryor, White, and Toombs, 1998; Pryor and Toombs, 1993; Pryor and Cullen, 1993; Butz, 1995; Garvin, 1988, Chandler and McEvoy, 2000). To further emphasize that Quality initiatives must be integrated into the strategic management of an organization, Butz (1995: 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.

Chart 3 – Strategic Planning, The Missing Link

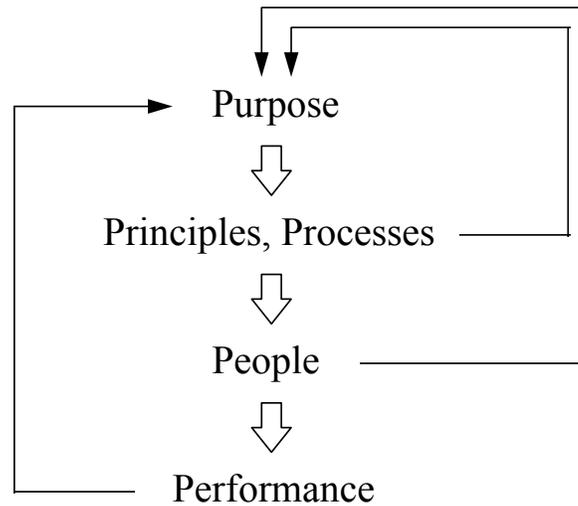


Source: Howard E. Butz, Jr., “Strategic Planning: The Missing Link in TQM,” *Quality Progress*, Vol. 28, No. 5 (May, 1995), pp. 105-108.

Five P’s Model

The Strategic Management Model is only one of many concepts or models which small business leaders should use for long term survival and success. The 5 P’s Model, developed by Pryor, White, and Toombs (1998) considers the establishment of strategic direction and the strategic management model to comprise only 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 5 P’s Model and the alignment of the 5 P’s are depicted as follows:

The 5 P's Model



Source: Pryor, Mildred Golden, White, J. Chris, and Toombs, Leslie A., *Strategic Quality Management: A Strategic, Systems Approach to Quality*, Thomson Learning, 1998.

The arrows 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. There is a common saying that if something is not measured, it cannot be improved. The primary motivation of the 5 P'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 5 P'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 5 P's Model are discussed below:

The **Purpose** of an organization, in the 5 P'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 and mission. 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 are the guiding philosophies, assumptions, or attitudes about how the organization should operate and conduct business are the organization's Principles. 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 5 P's Model.

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 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 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.

Malcolm Baldrige National Quality Award Criteria

When President Reagan issued Executive Order No. 12552 in 1996 and Executive Order No. 12637 in 1988, the United States made its first national commitments to excellence in terms of quality, speed, and efficiency. That 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 (2004), 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 (2004) 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 and Market Focus, Measurement, Analysis, and Knowledge Management, Human Resource Focus, Process Management, and Business 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 (including small businesses) which can access NIST or ASQ by internet or telephone.

States within the U.S., other countries, various cities and other governmental entities have established excellence awards with criteria that are similar to the Baldrige Criteria for Performance Excellence. Many U.S. state awards (e.g., Texas) simply utilize the Baldrige Criteria as the state criteria for performance excellence.

Quality Standards

Two ISO Standards are referred to on the website for the International Organization for Standardization (2004) as "generic management system standards" . . . because they can be applied "to any organization, large or small, whatever its product, including whether its 'product' is actually a service, in any sector of activity, and whether it is a business enterprise, a public administration, or a government department. The ISO website (2004) goes on to state: "Generic also signifies that no matter what the organization's scope of activity, if it wants to establish a quality management system or an environmental management system, then such a system has a

number of essential features for which the relevant standards of the ISO 9000 or ISO 14000 families provide the requirements.” The ISO website (2004) defines “Management System 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.”

Using 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

According to information on the website for the International Organization for Standardization (2004), “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.” A similarity exists between the previously-discussed Categories of the MBNQA Criteria and the following 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 8 - Mutually Beneficial Supplier Relationships.

ISO 14000

ISO 14000 is a family of standards that are primarily concerned with environmental management. The website for the International Organization for Standardization (2004) says 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. 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.

Small Business Standard

The Small Business Standard (IQA, 2004), developed by the members of the Management Consults Register of the Institute of Quality Assurance (IQA), is another business standard/model which could be useful to small businesses. On its website, IQA (2004) states:

“The Small Business Standard is a basic standard for quality management systems in micro, small, or medium sized businesses where certification is not a requirement.” The standard is divided into nine sections which are: (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 5 P’s Model, or the MBNQA Criteria, it has many of the key ingredients of an organizational management system. It would certainly be a good starting point for leaders of small businesses who wish to systematically manage and improve their organizations.

The Small Business Standard is distributed on the web free of charge. In addition, IQA has on its website an evaluation tool (The Evaluator) which small business leaders, et al can also use free of charge to evaluate where their organizations stand in terms of management and performance excellence.

Conclusion and Recommendations

In order to improve their organizations and their operations, small business leaders should utilize various management models and standards in addition to 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, et al were The Strategic Management Model, The 5 P’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 Institute for Quality Assurance. 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 national Quality Criteria to better serve small businesses.

Future empirical research efforts should attempt to determine which models and standards are being utilized by small businesses that have been successful and profitable over the long term. This research should include a case study of a small business for which quality improvement has been integrated into the strategic management of the firm.

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