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APPLICATION OF MALCOLM BALDRIGE QUALITY FRAMEWORK TO ENHANCE PERFORMANCE IN HEALTHCARE ORGANISATION

ABSTRACT

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In a free market economy, achieving the highest performance and thereby the organization's goal is the ultimate responsibility of management. Quality awards schemes have been increasingly promoted by governments, public, and private organization with intention of promoting and motivating quality management practices. The literature review indicates that the quality management is a key for a competitive advantage and essential ingredient for effective performance in the organization. The research paper examines the appropriateness of applying Malcolm Baldrige Model to enhance performance excellence in healthcare organization. The results of questionnaire provide potential benefits to enhance service quality and performance excellence. From the study it is inferred that determining performance excellence continues to be a challenge. It is evident that applying Malcolm Baldrige Quality Framework Criteria for healthcare organization could be the starting point for a regular strategic planning process within the organization and could ensure continuous improvement in performance excellence. The study concludes in a set of recommendations to ensure implementation and successful application of Malcolm Baldrige Quality Framework criteria in the healthcare organization considered.

Keywords: *Malcolm Baldrige Quality Framework, Performance, and Healthcare Organization.*

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Introduction

The Oxford dictionary describes an organization as “an organized body of people with a particular purpose”. Organizations, whether business, government or non-profit, play an important part in satisfying the complex and changing needs of the society. In doing so, organizations bring together their human, capital, financial, physical and information resources and produce products and services that meet the needs of the society. Performance management, a relatively new concept to the field of management, in its simplest form involves all activities that are put in place by an organization to ensure that its goals are consistently being met in an efficient and effective manner. Performance management can focus on the performance of an organization, a department in the organization, a process to produce a product or service or an individual or group of employees (McNamara, 1997). Managing performance helps to maximize the contribution of both individuals and teams in an organization. While helping to identify key issues and organizational priorities, effective management of individuals and teams will result in the organization achieving high levels of organizational performance (Armstrong & Baron, 2004). As with any industry, the healthcare industry is also under extreme pressure from the challenges it faces. These challenges include rising costs, reduced profitability and increasing inefficiency and patient expectations. There is also increasing pressure from competitors, governments and regulatory bodies to constantly improve performance, quality, safety and access and drive organizational excellence (Microsoft, 2008). This requires that the health care industry also focus its attention on maintaining standards of care in addition to the areas of business, quality and management, making it difficult for healthcare organizations to use ‘off the shelf’ systems and methods for measuring and managing performance both at individual and organizational levels. Also, the industry being service driven, many of the current performance management tools and methods which work well in other industries may

not be directly applicable to the healthcare industry. Performance management in health systems becomes more difficult due to several factors including the lack of effective methods for enhancing performance, lack of leadership, accountability and line management as well as poor strategic planning. An appropriate model for managing performance in the healthcare industry should be flexible, adaptable and responsive to changes in the healthcare industry. There is a need for strategic determinants to improve Service quality and performance was the crux of this paper. This paper expected to serve as a practical implementation of strategic determinants for the transformation of service quality, and specifically improving the performance and to develop performance excellence strategies. These strategies will need to promote continuous performance improvements in quantity, quality and equity of service provision.

Literature Review

Some of the popular contributions for managing the performance are Malcolm Baldrige National Quality Award (MBNQA), European Foundation for quality management (EFQM) and the balanced score card (BSC). The Balance score card (BSC), frame work lack basic guidelines for selecting performance measures and complexity in financial and customer perspectives. Neely et al. (1995), state that there is a serious flaw is the absence of competitiveness dimension in this framework, which is also outlined by Fitzgerald et al. (1991). The balanced scorecard also shows a lack of consideration to the measurement of human resources, employee satisfaction, supplier performance, product/service quality and environmental/community perspective (Brown, 1996; Lingle and Schiemann, 1996; Maisel, 1992). The system of performance measurement, if properly designed and implemented, will focus organizational efforts on to a common purpose by directing everyone's attention into a set of key goals and objectives. Furthermore, it will constitute the basis to encourage the appropriate behaviours, assess individual and team performance and reward significant contributions towards quality. Dabholkar et al., (1996) developed retail service quality scale taking into account retailing service quality dimensions and developed five dimensions, which are personal interaction, policy, physical aspects, reliability and problem solving. Sureshchandar et.al., (2001), identify twelve dimensions of quality management for service organization which includes, top management commitment and visionary leadership, human resource management ,technical system, information and analysis system, benchmarking, continuous improvement, customer focus, employee satisfaction, union interventions, social responsibility, servicescapes, and service culture. Finally, to measure or assess the performance and service quality, a comprehensive system is necessary.

Organizational performance excellence means different things to different organizations (Prescott, 1998). According to Robson (1988), the absence of a comprehensive and integrated practical model has caused the demise of many efforts to introduce organizational performance excellence. Therefore construction a definition of organizational performance excellence seems to be quite a challenging task (Kanuft et al., 1991). Samson and Challis (1999) state that the world's truly excellent companies illustrate definite observable patterns. These patterns include: a single, integrated improvement strategy, a conscious focus on using a set of fundamental principles of management to guide behaviour in their organization, active management of performance, linking rewards for all employees to organizational performance, benchmarking themselves against other leading companies and setting corresponding stretch goals and most importantly, linking together the elements of strategy, actions and operations, performance and rewards in powerful, sensible ways. Rhinesmith (1966) is of the opinion that no business can excel and succeed without a proper business strategy, which must be translated into appropriate policies, processes, structures, procedures and plans of action. This implies that the integration of these elements into an efficient and effective management system is a prerequisite for corporate success and also the foundation of a global strategy. Marquardt (1999) identifies the elements of business success and refers to what he calls "global competencies", which he defines as a "a strategic mastery of identified global business skills, an ability to operationalise key global concepts, and a mastery of global competitive and organizational dynamics." These have been further defined as follows: describing the forces behind the globalization of business, recognizing and connecting global market trends, technological innovation and business strategy, identifying issues essential to effective strategic alliance, farming day-to-day management issues, problems and goals in a global context, thinking and planning beyond historical, cultural and political boundaries, structures, systems and processes; creating and effectively leading worldwide business teams, and establishing a functional global organizational structure.

Against the background of premises formulated by different scholarships, and for the purpose of this study, organizational performance excellence, therefore, can be conceptualized as a goal, based on corporate culture,

values and belief systems (mindsets), underlined by an integrated framework and fundamental strategic determinants. These strategic determinants provide the foundation stones on which an organization committed to excellence can build its strategic competitiveness (Denton & Campbell, 1999). It is internationally accepted that excellence models provide potential benefits for organizations to enhance service delivery and performance excellence. Excellence models identify organizational accepted theoretical frameworks and recognized criteria (strategic determinants) for performance excellence. They provide organization-wide assessment and create a conceptual framework for the way organizations can strategically position themselves.

Malcolm Baldrige Model

The dimensions of Malcolm Baldrige National Quality Framework includes leadership, strategic planning, customer focus, measurement, analysis, and knowledge management, workforce focus, process management, and results. These dimensions are termed as seven categories and points.



Figure: 1 Malcolm Baldrige National Quality Award (MBNQA) Model

Source: US Department of Commerce National Institute of Standards and Technology

Leadership:

As for any management innovation or change, strong and committed leadership is essential for successful quality programmes (Deming W.E.1986; Flynn et al 1994). Leadership provides the energy and motivation for continuous improvement and innovation (Beer, 2003). In MBNQA, leadership is defined as the guidance and visible

participation that senior leaders provide in setting organizational values, directions, performance expectations and social responsibilities (US DoCNBS 2003).

Strategic Planning:

This dimension represents the relationship between an organization's quality planning and the overall organizational strategy (Deming W.E. 1986; Juran, J.M., 1993). In order to achieve quality excellence, quality improvement plans must be fully integrated into the corporate competitive strategy (Barclay, C.A., 1993). Strategic quality planning should address development and deployment of action plans, along with clear priorities, and required resources.

Customer and Market Focus:

This dimension examines the effectiveness of an organization's key processes for knowledge acquisition concerning current and future customers and markets. The organization must have formal processes to research the ever-changing market conditions, customer requirements and expectations, and new approaches to improve customer relationships and satisfaction (Steeple, 1992).

Measurement, Analysis and Knowledge Management:

This dimension is the newest dimension among the MBNQA criteria. It evaluates an organization's processes to measure its performance in terms of the scope, validity, and management of relevant data and information. It also measures the effectiveness of the firm's processes for information and knowledge management (US DoCNBS. 2003).

Human Resource Focus:

Achieving and maintaining high levels of quality depend on the effective use of human talents and abilities (Steeple, 1992). Human resource focus addresses key practices that the organization uses for creating and maintaining a high-performance workplace through developing, empowering and rewarding employees (US DoCNBS. 2003).

Process Management:

This dimension evaluates an organization's systematic approaches to value creation and quality management processes. It includes the quality of product/service design, manufacturing process, and product variance reduction (US DoCNBS. 2003).

Business Results:

This dimension is an overall score for quality management that measures results of customer focus, products and services, financial and market outcomes, human resources, organizational effectiveness, and governance and social responsibility (US DoCNBS. 2003).

Table 1: MBNQA criteria, 2008

Sl. No.	Category (variables)	Category points
1	Leadership	120
2	Strategic planning	85
3	Customer focus	85
4	Measurement, analysis, and knowledge management	90

5	Workforce focus	85
6	Process management	85
7	Results (Performance outcomes)	450
	Total points	1,000

Source: US Department of Commerce National Institute of Standards and Technology

Thus, in a free market economy, achieving the highest performance and thereby the organization's goals is the ultimate responsibility of management. Performance needs to be managed to ensure that the organization is meeting its vision and goals. The Malcolm Baldrige healthcare criteria provide a system perspective for healthcare organization to achieve the organizational performance excellence. The system criteria which include leadership, strategic planning, customer focus, measurement, analysis, and knowledge management, workforce focus, process management, and results. Quality awards schemes have been increasingly promoted by Governments, public, and private organization with intention of promoting and motivating quality management practices. In reviewing the literature, MBNQA elements are useful in evaluating the healthcare organizational performance. As stated above using a MBNQA elements to manage performance has the advantage of improving organizational performance by measuring what matters to the organization, increase focus on strategy and results, improve communication and monitor organization's performance against future strategic goals. This study develops an evaluation framework based on the MBNQA criteria and creates a system approach to measure the performance of healthcare organizations.

Data Collection Procedure

The population covers administrative level employees of twelve healthcare organizations of southern India. The study population was large and unwieldy; contact with the respondents, therefore had to made in different locations at their convenient timings. In order to achieve sampling uniformity the respondents at administrative level consists of 76 departmental heads, 38 administrative staff, 13 nursing superintendents, and 3 medical superintendents considered through purposively sampling technique. The survey questionnaire consist of 119 statements on likert scale, ranging from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. Out of 250 questionnaires, 130 were obtained in complete with a response rate of 52 percent. The validity of the instrument was obtained by experts and piloted for a small group of respondents and reliability by cronbach's alpha. The analysis was done using SPSS package.

Results and Discussion

Table 2 represents the MBNQA criteria were used to assess the performance excellence in healthcare organizations. MBNQA criteria consists total of 119 statements on likert scale for assessing quality performance were ranging from 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree. Respondent's ratings were averaged for each criteria (A) of MBNQA. The average rating was converted into MBNQA points with reference to its maximum points.

Figure 2 represents performance excellence in Healthcare organizations. The Healthcare organization, five has highest MBNQA points (831 points) and lowest found for the Healthcare organization six (552.52 points).

Table 3 represents the Strategic Determinant Analysis of MBNQA model. The Leadership accounted highest for H5(101.76/120),lowest for H6(75.36/120), Strategic planning accounted highest for H1(73.78/85),lowest for H6(30.6/85), Customer Focus accounted highest for H1(74.12/85), lowest for H6(57.12/85), Measurement, Analysis, and Knowledge Management accounted highest for H1(78.3/90), lowest for H6(57.12/90), Workforce focus accounted highest for H1(74.97/85) lowest for H6(42.67/85), Process Management accounted highest for H1

(73.78/85), lowest for H6 (41.31/85), and results accounted highest for H5 (384.3/450), lowest for H6 (254.7/450).

Table: 2 MBNQA points for Case Healthcare organizations

MMP	A1	H1	A2	H2	A3	H3	A4	H4	A5	H5	A6	H6	A7	H7	A8	H8	A9	H9	A10	H10	A11	H11	A12	H12
120	4.2	100	4.3	103	3.9	92.64	3.7	88.56	4.2	102	3.1	75.36	3.8	90.24	3.6	86.16	3.9	93.36	4	96	3.9	93.12	4.1	99.12
85	4.3	73.8	4.2	72.1	3.4	57.29	2.3	39.78	3.9	66	1.8	30.6	3.1	52.87	2.8	47.77	3.9	66.3	4.1	69.36	3.9	66.13	4	68.68
85	4.4	74.1	4.3	72.8	3.9	65.79	3.7	62.73	4.2	71.1	3.4	57.12	3.7	63.41	4	67.32	4	68.68	4	67.83	3.9	66.98	4.2	70.55
90	4.4	78.3	4.3	76.5	3.8	67.86	3.4	61.02	4.1	73.6	2.8	50.76	3.7	66.24	3.7	66.96	4	71.28	4	72	4	72.18	4.1	74.52
85	4.4	75	4.2	70.7	3.7	62.9	3.1	52.02	3.7	63.6	2.5	42.67	3.3	56.78	3.5	58.82	3.9	66.64	4	67.32	4	67.83	4.1	69.36
85	4.4	74.5	4.3	73.1	3.8	64.77	2.8	46.75	4.2	70.7	2.4	41.31	3.5	59.33	3.5	58.82	3.8	65.11	4	67.83	4	67.49	4.1	69.36
450	3.7	335	3.8	341	3.6	324	2.7	246.6	4.3	384	2.8	254.7	3.3	300.6	3.2	289.8	3.7	332.1	3.9	352.8	3.5	313.2	4	359.1
1000.0		810.5		809.0		735.3		597.5		831.0		552.5		689.5		675.7		763.5		793.1		746.9		810.7

Source: Survey Results

Note:

MMP = Maximum MBNQA points (1000)

(Leadership =120,

Strategic planning =85,

Customer focus =85,

Measurement, analysis, and knowledge management =90,

Workforce focus =85,

Process management =85,

Results=450.

A1 –A12= Average score of MBNQA Criterion on a scale of 1-5

H1 –H12= Total MBNQA points for case Healthcare organizations

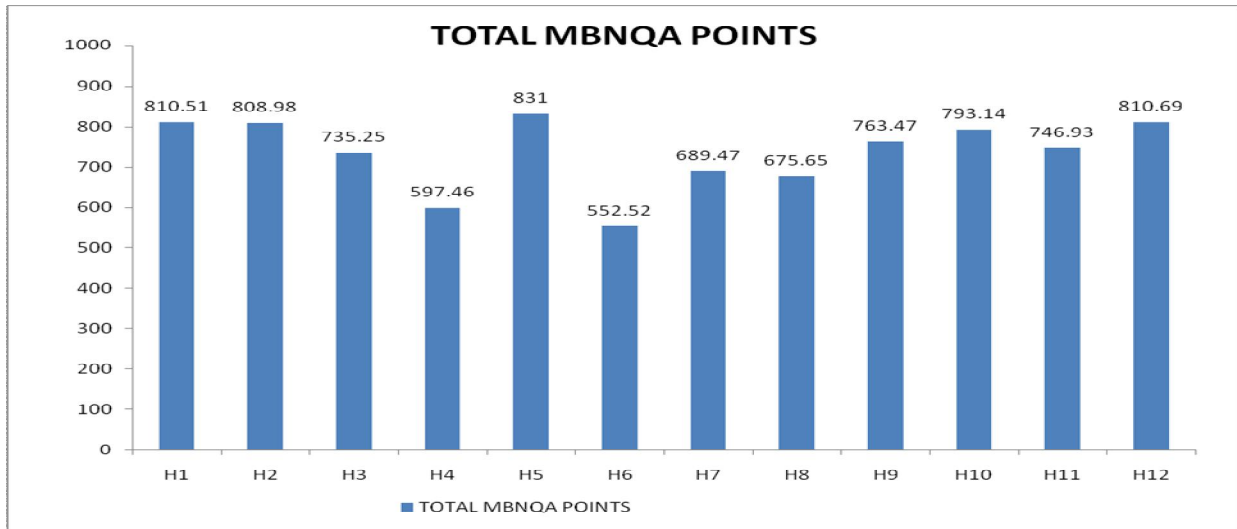


Figure: 2 The performance excellence in healthcare organizations

Source: Survey Results

Table: 3 Strategic Determinant Analysis of MBNQA Model

	120	85	85	90	85	85	450
	L	SP	CF	MAK	WF	PM	PO
H1	100.08	73.78	74.12	78.3	74.97	74.46	334.8
H2	102.7	72.08	72.76	76.5	70.72	73.1	341.1
H3	92.64	57.29	65.79	67.86	62.9	64.77	324
H4	88.56	39.78	62.73	61.02	52.02	46.75	246.6
H5	101.76	65.96	71.06	73.62	63.58	70.72	384.3
H6	75.36	30.6	57.12	50.76	42.67	41.31	254.7
H7	90.24	52.87	63.41	66.24	56.78	59.33	300.6
H8	86.16	47.77	67.32	66.96	58.82	58.82	289.8
H9	93.36	66.3	68.68	71.28	66.64	65.11	332.1
H10	96	69.36	67.83	72	67.32	67.83	352.8
H11	93.12	66.13	66.98	72.18	67.83	67.49	313.2
H12	99.12	68.68	70.55	74.52	69.36	69.36	359.1

Source: Survey Results

Note:

Maximum points of MBNQA Dimensions:

Leadership =120, Strategic planning =85, Customer focus =85, Measurement, analysis, and knowledge management =90, Workforce focus =85, Process management =85, and Results=450.

H1 –H12= Codes of Participating Healthcare organizations

Recommendations and Conclusions:

The application of the Malcolm Baldrige Model Criteria ensures the corporate performance excellence profile of case healthcare organisations. The corporate performance excellence profile enables the healthcare organisation to assess its organizational performance objectively against a number of internationally recognized criteria, identify the strengths of the organization, single out areas for improvement and set improvement plans in action. There were six healthcare organisations (50 percent) had more than 750 MBNQA points, judged to be performing at golden level. The rich experience and knowledge of quality management available with healthcare organizations really provide lessons to other service organizations in achieving superior performance.

This was a first study of its kind in the healthcare organizations and could be considered as a baseline study determining the current organizational performance excellence levels of the organization. In the light of the results of this study, it is recommended that follow-up studies should be conducted to establish tables of comparison and changes in the performance excellence levels. Studies to examine the qualitative and quantitative nature of the strategic determinants for assessing performance excellence introduced in this study must be encouraged.

Evidence of effectiveness of the application and excellence models in healthcare organisation is still lacking. There scope the extensions this research work considering “contextual factors” in addition to the Strategic Determinants used in MBNQA framework. Further research should consider examining the qualitative and quantitative nature of the strategic determinants for measuring performance excellence and requires the extensive research on performance excellence models should be done in changing healthcare business environment.

References:

- ARMSTRONG, M., AND BARON, A. 2004. Managing performance: performance management in action. London: Chartered Institute of Personnel and Development.
- BARCLAY, C.A., 1993. Quality strategies and TQM policies: empirical evidence. *Management International Review*, 33, 87-98.
- BEER, M. 2003. Why total quality management programs do not persist: the role of management quality and implications for leading a TQM transformation. *Decision Science*. 2003, 34, b 623-642.
- BROWN, M.G. 1996. Keeping Score: Using the Right Metrics to Drive World-Class Performance. Quality Resources, New York, NY.
- DABHOLKAR, P.A. 1996. Consumer evaluation of new technology-based service operations: an investigation of alternative models. *International journal of research in marketing* 13/1:29-51.
- DEMING W.E. 1986. Out of crises. Cambridge, MA: MIT Press.
- DENTON & CAMPBELL 1999. Strategic repositioning: The fundamentals. Goodwood. NBD
- FITZGERALD, L., JOHNSTON, R., BRIGNALL, T.J., SILVESTRO, R. AND VOSS, C. 1991. Performance Measurement in Service Businesses. The Chartered Institute of Management Accountants, London.
- GRYNA, F.M. 1991. The quality director of the '90s. *Quality Program* 24, 51-54.
- JURAN, J.M., 1993. Why quality initiatives fail. *Journal of Business management*. 14, 35-38.
- KANULF, E. B., BERGER, R.A. AND GRAY, S.T. 1991. Profile of excellence: Achieving success in the non-profit sector. San Francisco: Jessy -Bass Publishers.
- LINGLE, J.H. AND SCHIEMANN, W.A. 1996. Balanced Score Card to strategy gauge: is measurement worth it. *Management Review*, March: 56-62.
- MAISEL, L.S. 1992. Performance measurement: the Balanced Score Card approach. *Journal of Cost Management*, 5/2:47-52.
- MARQUARDT 1999. Global advantage- How world class organizations improve performance through globalization. Houston: Gulf Publications.
- MCNAMARA, C. 1997. Performance Management Basic Concepts. Available at http://www.managementhelp.org/perf_mng/perf_mng.htm.
- MICRO SOFT CORPORATION. 2008. Map Point in the Healthcare Industry: Today's Challenges in the Healthcare Industry. available at www.microsoft.com/mappoint/industries/healthcare/hea_challenges.mspx
- MOULLIN, M. 2002. Delivering Excellence in Health and Social Care. Open University Press, Buckingham.
- MOULLIN, M. 2004. Evaluating a health service taskforce. *International Journal of Health Care Quality Assurance*, (17/5).
- MOULLIN, M. 2005B. Defining PM – should the definition include stakeholders. *Perspectives on Performance*, (4 /3) :17.
- NEALE, J. M. AND LIEBERT, R.M. 1986. Science and Behaviour. An Introduction to methods of research, 3rd ed. New Jersey: Prentice -Hall International, Inc.
- NEELY, A., GREGORY, M. AND PLATTS, K. 1995. Performance measurement system design: a literature review and research agenda', *International Journal of Operations & Productions Management*, (15 /4):80-116.
- OVRETVEIT, J. 2000A. Total quality management in European healthcare. *International Journal of Health Care Quality Assurance*, (13/2):74-79.
- PESCOTT, B.D. 1988. Creating a world - class organization: Ten performance measures of business success. London: Kogan page.
- RHINESMITH S.H. 1996. A manager's guide to globalizations. Six skills for success in a changing world. ASTD: McGraw-Hill.
- ROBSON M. 1988. The Journey to excellence. Wantage: M.R.A. International Ltd.
- SAMSON, D. AND CHALLIS, D. 1999. Patterns of Excellence: The new principles of corporate success. London: Biddles Ltd., Guildford and King's Lynn.
- SCHONBERGER, R.J. AND KNOD, E.M. 1997. Operations Management, 6th ed., Irwin: Chicago, IL
- STEEPLES, M.M., 1992. The Corporate Guide to the Malcolm Baldrige National Quality Award: Proven Strategies for Building Quality into Your Organization. Business One Irwin, Homewood, IL.

SURESH CHANDAR G.S., CHANDRASEKHARAN R., AND R.N.ANANTHARAMAN. 2001. A conceptual model for total quality in service organizations. *Total Quality Management*, (12/ 3):343-363.

US DoCNBS, 2003,U.S department of commerce national institute of standards and technology, Malcolm Baldrige National Quality Award criteria for performance excellence, Washington, DC.