

Comparative study of framework, criteria and criterion weighting of excellence models

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Summary

Purpose – This paper seeks to present a comparative study of framework, criteria and criterion weighting of 20 Excellence Models/National Quality Awards (EM/NQA), to identify their common features, contradictions and to propose suggestions for development and review of EM/NQA. It also aims to provide some clues to attain sustenance of business results.

Design/methodology/approach – This study is based on a literature review using the internet and research databases (Emerald and EBSCO). Nine generic criteria are identified and their relative importance within each model is computed based on scores given to their respective contents in the criteria/sub-criteria of each EM/NQA. The average relative importance of nine criteria, discussions with experts and the author's own experience helped to visualise the emerging scenario and suggest improvements.

Findings – EM/NQA frameworks have different shapes. Most EM/NQA start with the criterion "Leadership" and end with "Results". Ancient wisdom emphasises that the ultimate goal of business is the wellbeing of society. Although the criteria of EM/NQA are similar, the criterion weighting changes due to external environment and cultural factors. The study classifies nine criteria into core criteria, i.e. the need for survival, internal environment criteria, i.e. differentiators, and goodwill criteria, i.e. ensuring sustainability. The focus on goodwill criteria needs to be enhanced to ensure sustainable business growth.

Research limitations/implications – This study is an attempt to integrate the common learning/contradictions of EM/NQA and provide clues to achieving sustainability. Many EM/NQA custodian websites have limited information in the public domain. A periodic review of models made this study difficult. Future research may focus on studying the impact of criteria weighting in different countries/economic environments to enhance the effectiveness of excellence models.

Practical implications – The study may help the GEM council, custodians and managers to review EM/NQA and develop strategies for sustainable results.

Originality/value – This paper is based on a literature review, the author's own experience, and interaction with experts. It provides an analysis of 20 EM/NQAs, highlights the need for a universally acceptable model, and suggests emerging dimensions of excellence.

Keywords Business excellence, Quality awards, Performance criteria, European Foundation for Quality Management

Paper type Research paper

1. Excellence models

Excellence means perfection. Excellence lies in Nature. As one approaches perfection in work, one approaches excellence. In the famous book *In Search of Excellence – Lessons from America's Best-Run Companies*, Peters and Waterman (1982) gave many suggestions for the success criteria behind excellence. Later, many of the best run companies identified in their studies became unsuccessful. Thus, conventional management practices are not enough to ensure the long-term success of businesses. However, Peters and Waterman (1982) reminded the world that software criteria (systems, shared values, skills, staff and style) are often overlooked and more weighting is given to hardware criteria (strategy and

structure). Research on excellence (Dahlgard and Dahlgard-Park, 2005; Hermel and Remis-Pujol, 2003) indicates that a higher weighting should be given to organisational culture or the software criteria of Peters and Waterman (1982).

The organisational quest for excellence has resulted in various conceptualisations and paradigms (Hermel, 1997), and a global perspective is emerging through integration of various aspects of quality in excellence models (McDonald *et al.*, 2002). The first globally known excellence model was the Deming Prize, introduced by JUSE in 1951 (Union of Japanese Scientists and Engineers, 2010). The CAE Quality Award was the next, being introduced in 1984 in Canada (National Quality Institute, 2007). This was followed by the introduction of the Malcolm Baldrige National Quality Award (MBNQA) in the USA in 1987 (National Institute of Standards and Technology, 2009) and the Australian Quality Awards in 1988. The increase in international trade stimulated the development of ISO 9000 as an internationally recognised quality management standard in 1987. The European Quality Award (known as “European Excellence Award” since 2004), based on the European Foundation for Quality Management (EFQM) model, was established in 1991 (European Foundation for Quality Management, 2010). Simultaneously with Europe, several countries in Asia too evolved their own Quality Awards during the 1990s, mostly using the EFQM and MBNQA as their reference; for example India in 1994, Singapore and Japan in 1995, The Philippines in 1997, Fiji in 1998, and Thailand in 2001, etc. EM/NQAs have helped many organisations to improve their processes, customer and improvement orientations. MBNQA from the USA, EFQM Model from Europe and the Deming Prize from Japan are recognised worldwide and considered the mothers of other EM/NQAs (Bohoris, 1995; McDonald *et al.*, 2002; Hughes and Halsall, 2002; Miguel, 2001). The author has identified 100 excellence models and national quality awards (EM/NQAs) being used in 82 countries (Calingo, 2002; United Nations Economic Council for Europe, 2004; Mavroidis *et al.*, 2007; Talwar, 2008).

In literature review of 347 TQM surveys based research articles published between 1989 and 2000, Sila and Ebrahimpour (2002) argue because of lack of a universally accepted TQM model, many companies are putting their faith in the EM/NQA and using them as guidelines. More research is needed to establish the credibility of these models as effective approaches to achieve performance excellence. In study of 31 EM in Europe, Mavroidis *et al.* (2007) observe that recent changes in the NQAs in European countries are due to cross-cultural differentiations of the European Union countries. Besides, researchers have come out with some other approaches for excellence, for example the Self Assessment Model (Conti, 1997), the Kanji Business Excellence Model (Kanji, 2001), the Universal Business Excellence Model (Sharma and Talwar, 2007), etc. In view of the above, it was decided to undertake this study and propose suggestions for the development and review of EM/NQAs.

This paper is organised as follows: section 2 describes the research methodology. Sections 3 and 4 comparatively review the framework, criteria and criterion weighting of 20 EM/NQAs. Section 5 discusses the relevance of the core criteria, internal environment criteria and goodwill criteria identified in this study. Section 6 suggests the path ahead and presents the unfurling new dimensions of excellence, followed by the conclusion in section 7.

2. Research methodology

Although the Deming Prize, MBNQA and EFQM models are considered to be the mothers of most EM/NQAs, it has been observed that several EM/NQA are unique despite having many features of these models (Bohoris, 1995; Miguel, 2001; McDonald *et al.*, 2002; Hughes and Halsall, 2002; Tan *et al.*, 2003; Talwar, 2008). In addition, most custodians provide limited information regarding their respective EM/NQAs in the public domain. Keeping the above limitations in view, the 20 important and unique EM/NQA listed in Table I were identified for comparative study of their frameworks, criteria and criterion weighting.

This study is based on information gathered through extensive literature review using internet and research databases (Emerald and EBSCO). Many EM/NQA custodian websites

Table I List of excellence models/national quality awards in the comparative study

No.	Excellence model/NQA
1	Deming Prize, Japan
2	Malcolm Baldrige National Quality Award (MBNQA), USA
3	European Excellence Award (EFQM Model)
4	Australian Business Excellence Award (ABEA)
5	Canada Award for Excellence (CAE)
6	Japan Quality Award (JQA)
7	Singapore Quality Award (SQA)
8	Golden Peacock National Quality Award (GPNQA), India
9	Rajiv Gandhi National Quality Award (RGNQA)
10	National Quality Award (NQA), Brazil
11	National Quality Award (NQA), UK
12	National Industrial Quality Award (NIQA), Israel
13	National Quality Award (NQA), Belarus
14	Prime Minister's Quality Award, Malaysia
15	Fiji Quality Award (NQA, Fiji)
16	National Productivity Award (NPA), Mongolia
17	National Quality Award (NQA), France
18	Swedish Model for Performance Excellence (SIQMPE)
19	Thailand Quality Award (TQA), Thailand
20	National Quality Award (NQA), Hungary

have limited information in public domain. Periodic review of the models in line with the external environment evolution made this study even more difficult. Thus, comparative study has been done with the help of limited information. Future research may attempt to overcome some of these limitations. To cover comprehensively the criteria of 20 EM/NQAs, nine generic criteria – leadership, strategic planning, people, supplier/partner, customer, knowledge and information management, processes, society, and business results – are identified. Some models, such as SQA Singapore, NQA Fiji, TQA Thailand and NQA Brazil, do not have nine criteria. Thus, sub-criteria level details of the models were considered to arrive at the relative importance of various criteria within each model based on the scores given to their respective contents in the criteria/sub-criteria of their respective EM/NQAs. For example in SQA Singapore, “Society” comes under “Leadership” “and Suppliers/Partner” comes under “Processes” as their respective sub-criteria parts. Thus, their respective weightings were computed accordingly.

3. Comparative study of frameworks of excellence models

The frameworks of EM/NQAs display critical linkages amongst various criteria and present a roadmap to realising excellence. Although these frameworks have different shapes and linkages, in most of the models excellence starts with the criterion “Leadership” and ends with the criterion “Results”. The EFQM Model framework is widely used as the basis of most NQAs in Europe. The EFQM model is currently used in 26 countries (Koura and Yoshizawa, 2005). However in past few years, some European countries have made certain changes to their respective NQAs to enhance effectiveness (Mavroidis *et al.*, 2007), and more recently the EFQM model (Figure 1) underwent a major change in 2010 (European Foundation for Quality Management, 2010).

The Malcolm Baldrige National Quality Award (MBNQA) from the USA is another most commonly used framework (National Institute of Standards and Technology, 2009; see Figure 2). Searle (2005) reports that the NQAs of 53 countries are based on the MBNQA. The Thailand Quality Award uses this framework, but gives different criteria scores. Similar to EFQM, the Baldrige model framework also starts with the criterion “Leadership” and ends with the criterion “Results”, as shown in Figure 2. Several other NQAs – for example the Australian Business Excellence Award, the Japan Quality Award, the Singapore Quality Award, the National Productivity Award in Mongolia, the Brazil National Quality Award and

Figure 1 Framework of the EFQM model, 2010

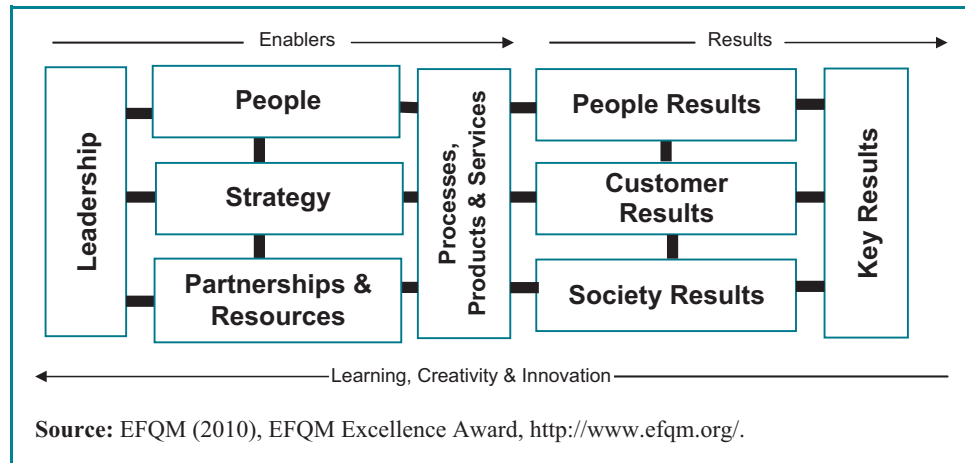
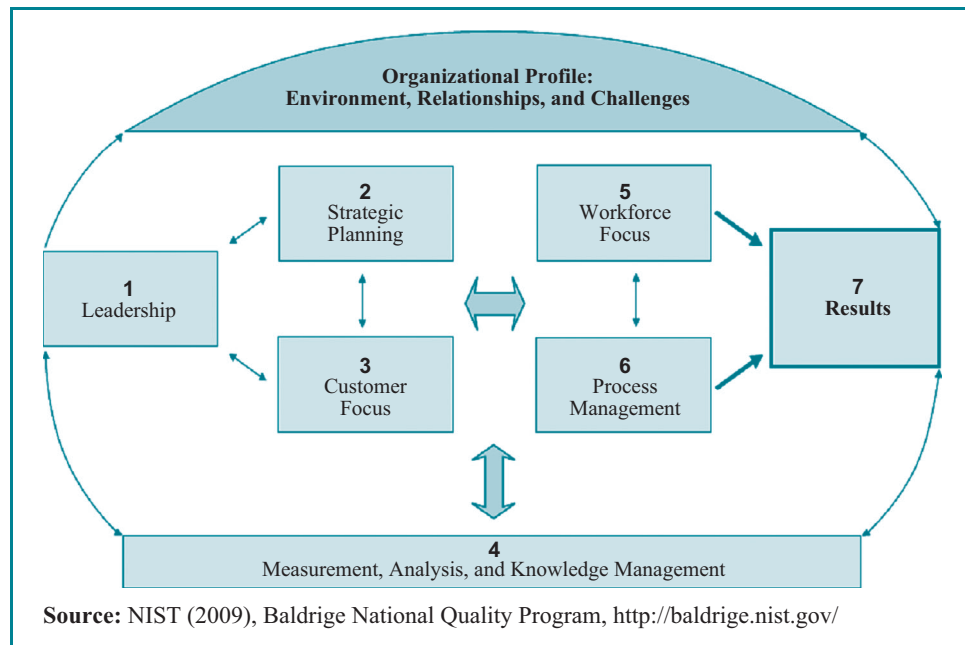


Figure 2 Framework of the Malcolm Baldrige National Quality Award, 2009-2010



the Fiji Quality Award, etc. – have their individual independent frameworks, but their focus remains similar to the EFQM and MBNQA models.

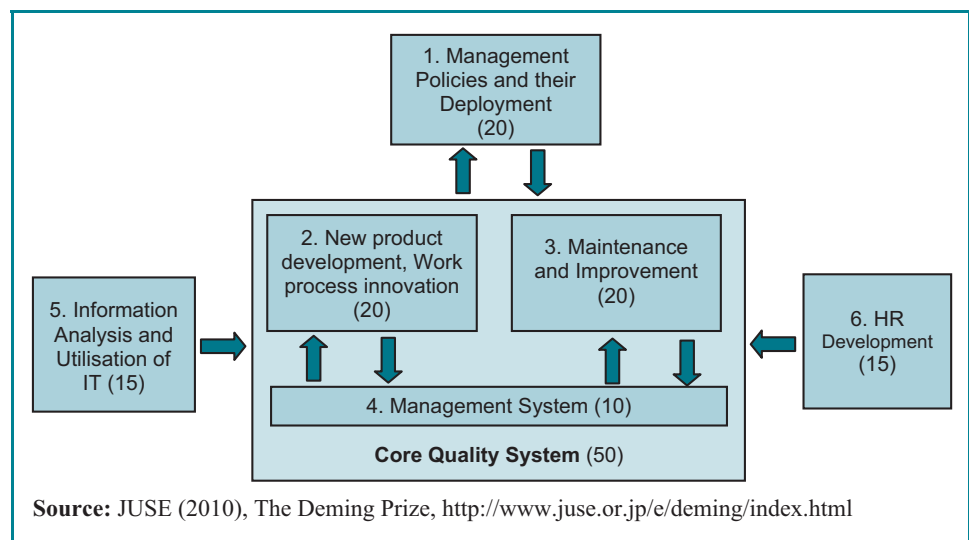
Unlike the above models, where excellence starts from Leadership, the Canada Award for Excellence's framework (Figure 3) indicates that the journey to excellence starts from "Principles for Excellence" and leads to "Overall Business Performance".

The Deming Prize is very different in its focus and framework *vis-à-vis* most of the other models. Evaluation criteria for the Deming Prize consists of three independent criteria – Basic Categories, Unique Activities and Role of Top Management – and these have an equal weighting of 100 points each. While the Deming Prize does not provide for any framework for its two major criteria – Unique Activities and Role of Top Management – the evaluation items and their linkage for "Basic Categories" is shown in Figure 4. It clearly shows that Deming Prize gives prime focus to "Core Quality Systems" instead of financial results focus of most of the other models.

Figure 3 Framework of Canadian Award for Excellence



Figure 4 Evaluation items of basic categories under the Deming Application Prize



Swedish Institute for Quality (SIQ) considers the customer as the ultimate purpose of business. It has developed the SIQ Model for Performance Excellence (Figure 5) based on 13 core values, seven criteria and 27 sub-criteria (Erikson, 2004), and the framework of the model starts with “Leadership” and ends with “Customer Satisfaction”.

The Prime Minister Quality Award of Malaysia (NPC, 2005) adds yet another dimension to the ultimate goal of business excellence. Although its framework starts with leadership, albeit defined differently (“Top management leadership” and “Management of quality”), its ultimate goal is results with respect to corporate responsibility, quality and operational business results, as shown in Figure 6.

As well as the above, some countries (such as India and Israel) use multiple models to recognise organisational excellence. India uses the EFQM model, the MBNQA and the Deming Prize as well as two independent national quality awards, namely the Golden Peacock National Quality Award (GPNQA) and the Rajiv Gandhi National Quality Award (RGNQA). Some Indian enterprises also use multiple models. For example Tata Group, one of the leading Indian business groups, uses the Tata Business Excellence Model, based on the MBNQA, to measuring excellence internally, and some of the Tata Group companies have won the CII-EXIM Bank Award for Business Excellence, which is based on the EFQM model. Further, Tata Steel has won both the CII-EXIM Bank Award and the Deming Prize. The key

Figure 5 The SIQ model for performance excellence

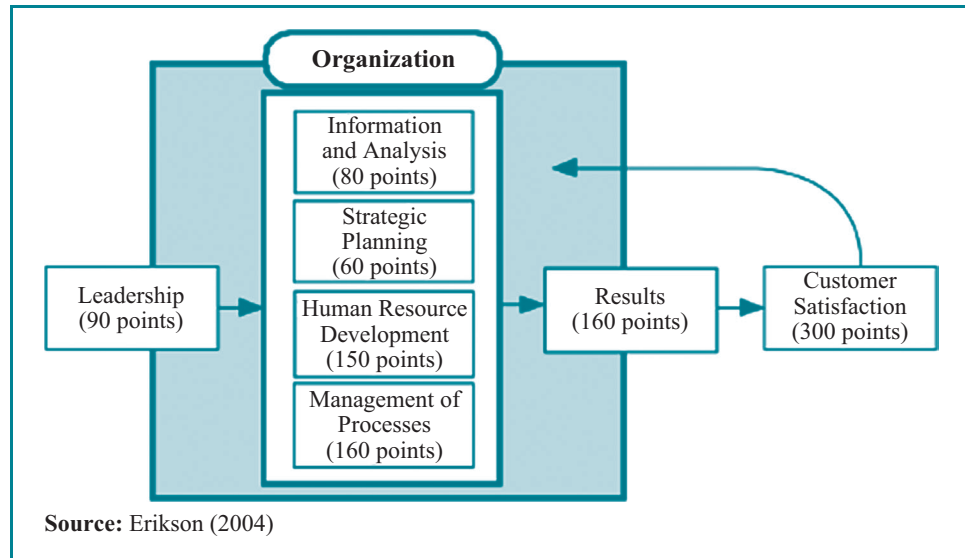
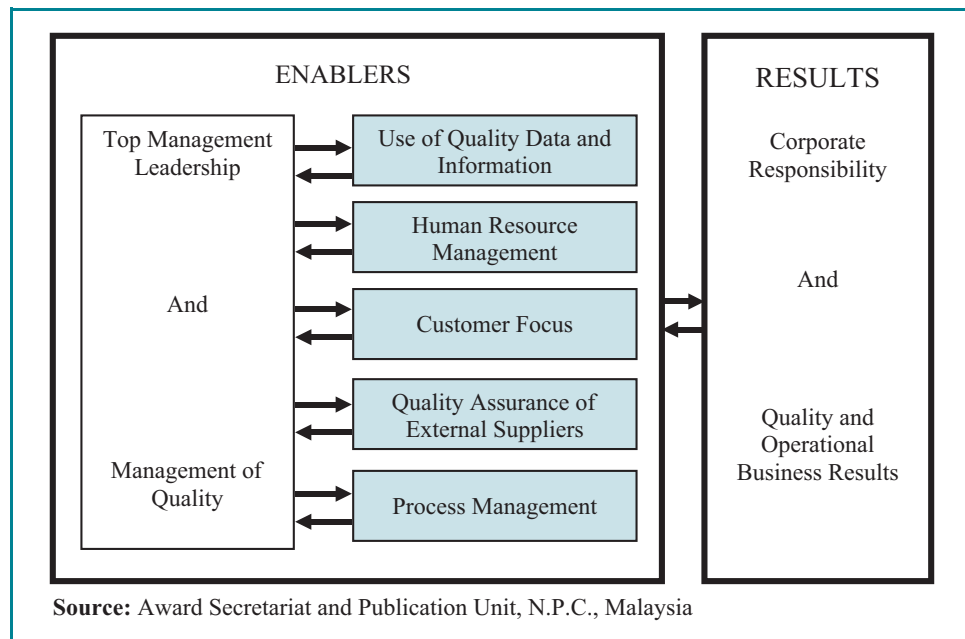


Figure 6 Framework of Prime Minister Quality Award of Malaysia



reason behind using multiple models is to get the benefits from the distinct inherent features of each model. Many automotive sector companies in India use a Japanese approach to excellence (e.g. the Deming Prize) to enhance their global competitiveness, and have become the suppliers of automotive components for global automotive manufacturers.

The Rajiv Gandhi National Quality Award (RGNQA), instituted by the Bureau of Indian Standards (BIS) in 1991, has some of Indian religious beliefs and social values as an integral part of its criteria. For example:

- leaders should exert authority with kindness;
- careful/calculated planning and ethical practices;

- cultural background for human resource management, team building, and employee training;
- Gandhi's teachings;
- selfless service to customers; and
- harmony and respect for nature, etc. (Tan and Khoo, 2002).

Israel also uses multiple models for recognising organisational excellence. The National Award for Quality and Excellence in Industries (NIQA), established by the Israel Association of Electronics and Information Industries along with the Israeli government, annually recognises small and large companies. Its criteria were first based on the MBNQA and have since been enlarged. Another quality award, the National Award for Quality and Excellence in Public Service Israel, instituted by the Quality and Excellence Division of Civil Service Commission of the Prime Minister's Office, is based on the EFQM model.

Several countries have developed their own models but have few details available in the public domain, for example the national quality awards of France, Belarus, Hungary, South Africa, New Zealand, Mexico, Korea, Greece and Vietnam, etc.

We may observe that the frameworks of EM/NQA indicate that most of them begin with the criterion "Leadership" and end with "Business Results". Some models look at quality, customer focus and corporate responsibility as their end objectives. In contrast, ancient wisdom emphasizes that the ultimate goal of business is wellbeing of society. Keeping this in focus, Universal Business Excellence Model identifies "Sustainable Success" as its ultimate goal (Sharma and Talwar, 2007). It will be interesting to glance at the variance in the criteria and their weighting in the various models in the forthcoming part of this study.

4. Comparative analysis of criteria and criterion weighting of 20 EM/NQAs

This part of the study presents the comparative analysis of the secondary data on evaluation criteria and their respective weighting in 20 important and widely accepted EM/NQAs. Secondary data obtained from websites of EM/NQAs and research papers is presented in Table II. Close scrutiny of this data indicates that most of the EM/NQA criteria are similar and seem to be well established internationally. Thus, an attempt has been made to look at the comparative weighting of each criterion within a model, in line with the research methodology for the following nine criteria:

1. *Leadership* – How the company achieves continuous improvement and performance excellence through the driving force of senior executives and with the involvement of every member of the organisation.
2. *Strategic planning* – How the company develops, communicates, implements and improves its policies and strategies to achieve performance excellence and strong competitive position.
3. *People* – How the company plans, develops, motivates and involves its human resources to achieve the maximum potential of its workforce.
4. *Supplier/partner* – How the company selects, develops, motivates and involves its suppliers/partners to use their maximum potential to meet the expected quality requirements.
5. *Customer* – How the company satisfies the needs and expectation of its customers through its products and services, understands customer and market information, and enhances customer relationship.
6. *Knowledge and information management* – How the selection, analysis and utilization of knowledge and information (financial, materials, technology, intellectual property and assets) within and outside the company and markets is carried out.
7. *Processes* – How the design, management, evaluation and improvement of the various processes are carried out to achieve product and service excellence.

Table II Comparative study of criteria and criterion weighting in the 20 EM/NQAs

Deming Prize (Japan)	A. Basic categories (100) – Management policies and their deployment (20) – New product development, work process innovation (20) – Maintenance and improvement (20) – Management system (10) – Information analysis and utilisation of IT (15) – HR development (15)
MBNQA (USA)	B. Unique activities (100) C. Role of top management (100) Leadership (120) Strategic planning (85) Customer focus (85) Measurement, analysis and knowledge management (90) Workforce focus (85) Process management (85) Results (450)
EFQM (Europe)	Leadership (100) Strategy (100) People (100) Partnerships and resources (100) Processes, products and services (100) Customer results (150) People results (100) Society results (100) Key results (150)
ABEA (Australia)	Leadership (180) Strategy and planning (100) Information and knowledge (100) People (160) Customer and market focus (150) Process management, improvement and innovation (160) Success and sustainability (150)
CAE (Canada) ^a	Leadership (100) Planning (100) Customer focus (170) People focus (170) Process management (170) Supplier/partner focus (50) Overall business performance (240)
JQA (Japan)	Leadership (120) Social responsibility of management (50) Understanding and interaction with customers and market (110) Strategic planning and deployment (60) Individual and organisational ability to improve (100) Value creation process (100) Information management (60)
SQA (Singapore)	Activity results (400) Leadership (120) Planning (80) Information (80) People (110) Processes (100) Customers (110) Results (400)
GPNQA (India)	Organizational leadership (120) Strategic planning (80) Information management (80) Human resource management (100) Process management (120) Employees' satisfaction (100) Customer satisfaction (150) Impact on society (100) Business results (150)

(Continued)

Table II

NQA (Brazil)	Leadership (90) Strategies and plans (90) Customer and society (90) Information and knowledge (90) People management (90) Process management (90) Results (460)
RGNQA (India)	Leadership (100) Policies, objectives and strategies (100) Human resource management (50) Resources (100) Processes (150) Customer-focused results (200) Employees' satisfaction (50) Impact on environment and society (100) Business results (150)
NQA (UK)	Leadership (100) Strategy (100) People (100) Partnerships and resources (100) Processes, products and services (100) Customer results (150) People results (100) Society results (100) Key results (150)
NPA (Mongolia)	Leadership (95) Information and information analysis (75) Productivity and quality strategic planning (60) Human resource development and management (150) Process quality management (140) Productivity and process quality performance (180) Customer orientation and customer satisfaction (300) Leaders' role in organizational quality management (100)
NQA (Belarus)	People role in quality management (90) Partnership development and efficient use of resources (110) Progressive character of quality management and methods, efficiency of QS function (150) Customer satisfaction with products, works, services quality (140) Products, works, services competitive ability, and exports (150) Influence on society, people satisfaction (120) Principal results of the enterprise (140)
PMQA (Malaysia)	Top management leadership and management of quality (200) Use of quality data and information (100) Human resource management (150) Customer focus (150) Quality assurance of external suppliers (50) Process management (100) Quality and operational/business result (200) Corporate responsibility (50)
NQA (Fiji)	Leadership (180) Strategy, policy and planning (100) Information and analysis (100) People (160) Customer focus (150) Process, products and services (160) Organisational performance (150)
NIQA (Israel)	Leadership for quality (150) Customer satisfaction (150) Ongoing improvement process (150) Real quality results (100) Quality infrastructure (100) Improving and utilising the human resources (100) Long-term actual results (250)

(Continued)

Table II

NQA (France)	Leadership (120)
	Policy and strategy(80)
	Personnel management (100)
	Partnership and resources (70)
	Processes (330)
	Customer satisfaction (110)
	Personnel satisfaction (70)
	Integration in the community (30)
	Operating results (90)
SIQMPE (Sweden)	Leadership (90)
	Strategic planning (60)
	Human resource development (150)
	Information and analysis (80)
	Management of processes (160)
	Customer satisfaction (300)
TQA (Thailand)	Results (160)
	Leadership (120)
	Strategic planning (80)
	Customer and market focus (110)
	Information and analysis (80)
	HR focus (100)
NQA (Hungary)	Process management (110)
	Business results (400)
	Leadership (120)
	Policy and strategy (80)
	People (120)
	Partnership and resources (90)
	Processes (140)
	Customer results (180)
	People results (90)
	Society results (30)
	Key performance results (150)

Note: Numbers in parentheses indicate the scores of the respective criteria

Sources: National Institute of Standards and Technology (2009), European Foundation for Quality Management (2010), Japan Quality Award (2010), National Quality Institute (2007), Singapore Quality Award (2007), Union of Japanese Scientists and Engineers (2010), SAI Global (2010), Tan and Khoo (2002), Golden Peacock Awards (2007), Djerdjouri (2004), National Quality Award of Brazil (2002), French Quality Award (2006), Tangsanga *et al.* (2002), Huli (2004), Karolina (2004), Koreshkov (2004), Erikson (2004), Laszlo (1997)

8. *Society* – How the company addresses the issues like corporate social responsibility, community involvement and environmental conservation.

9. *Business results* – How the performance results in two areas (namely financial and market results, and operational and productivity results) are reviewed and improved.

Each criterion/sub criterion of the 20 EM/NQAs was examined in line with the above definition of nine criteria to determine the relative importance of each criterion, with 1 being highest importance or maximum score and 9 being the lowest importance or minimum score among the nine criteria. If two or more criteria had same score in a model, they were given the same level of relative importance. For example, in the European Foundation for Quality Management (EFQM) model, criteria related to “People” have a maximum score of 200 (“People” and “People results”), “Customers” and “Business results” have next highest score of 150 each, followed by “Leadership”, “Strategic planning”, “Processes” and “Society” with equal scores of 100 each. Thus, “People” has been given highest relative importance of 1, “Customers” and “Business results” have a relative importance of 2 each, followed by “Leadership”, “Strategic planning”, “Processes” and “Society” with an equal importance of 4 each in Table III. Both “Knowledge and information management” and “Suppliers/partners” are covered under the criterion “Partnership and resources” of the EFQM model, and thus stay at the same relative importance of 8 each in Table III. A similar

Table III Relative importance matrix of various criteria in the 20 EM/NQAs

Framework criteria	Dining Fitzo (Japan)	MBNQA (USA)	EFQM (Europe)	ABEA (Australia)	C&E (Canada)	JCA (Japan)	SOA (Singapore)	GPQA (India)	RGQA (India)	PMQA (Malaysia)	NPA (Mongolia)	NQA (Brazil)	NQA (Finl)	SIGMPE (Sweden)	NQA (France)	NQA (Hungary)	NQA (Israel)	NQA (Thailand)	UK Excellence Award	NQA (Belarus)	Total value
Leadership	2	4	4	1	6	2	4	4	4	1	5	6	1	5	3	5	3	4	4	7	75
Strategic planning	3	6	4	6	5	6	6	8	4	9	7	7	6	7	6	6	7	6	4	5	118
People	5	2	1	2	1	4	2	1	4	3	3	3	2	4	2	1	5	2	1	1	49
Suppliers/partners	5	9	8	9	7	9	8	9	9	7	8	8	8	9	8	8	8	9	8	6	160
Customers	3	2	2	4	3	1	1	2	1	3	1	1	3	1	4	2	3	1	2	3	43
Knowledge and information management	5	5	8	6	9	6	6	6	4	5	6	5	6	6	7	7	6	6	8	9	126
Processes	1	6	4	2	4	5	5	4	2	5	4	4	5	2	1	4	1	5	4	2	70
Society	9	8	4	8	8	8	9	6	4	7	9	4	9	8	9	9	9	8	4	8	148
Business results	8	1	2	4	2	2	3	2	2	1	1	1	3	2	5	3	1	3	2	3	51

Note: 1 is the highest rank criterion (maximum score), and 9 is the lowest rank criterion (minimum score)

Source: Data for Canada taken from Puay et al. (1998). For others, the data were analysed through study of individual models based on available data, summarised in Table II

process was repeated for each EM/NQA. Since this comparison is done based on broad criteria/sub-criteria details, there is a scope for its fine-tuning using micro-level details of each criterion and sub-criterion. Nevertheless, comprehensive analysis of 20 EM/NQAs provides several new insights. To compute the average relative importance of each criterion, the relative importance given to them in 20 EM/NQAs is added and shown as the last column ("Total value") in Table III. The maximum score for a criterion in a model is given the highest relative importance of 1 and the minimum score for a criterion is given the lowest relative importance of 9. Extending the same logic, the lowest total value indicates the highest relative importance of the criterion amongst the 20 EM/NQAs, and vice versa.

In Table IV, average relative importance is computed as total value divided by 20 (i.e. the number of models studied). "Rank range" indicates the highest and lowest ranks given to each criterion amongst the 20 models in Table III. "Percentage score" indicates the lowest and highest score given to each criterion in the 20 models studied. Based on the average relative importance of each criterion, the nine criteria are classified into three groups:

1. *core criteria* – a must for survival;
2. *internal environment criteria* – the differentiators; and
3. *goodwill criteria* – ensuring sustenance (see Table IV).

The variation in absolute percentage score given to each criterion in the EM/NQAs reflects the impact of external environment (culture, social values, maturity level of the region/country, etc.). "Customer", "People" and "Business results" emerged as the three core criteria, account for about 50 per cent of the score in all EM/NQAs except the Deming Prize. The Deming Prize focuses primarily on internal environment criteria.

5. Discussions of the relevance of core criteria, internal environment criteria and goodwill criteria

Several studies point out that a focus on customers, employees and business results is a must for survival in the current economic environment. Increasing globalisation, rapid transportation, the information technology boom and improved communications have enhanced competitiveness and have further reduced the gap between developed and developing economies. The key concern of organisations is not just customer satisfaction, but customer retention. Though most corporate entities make profits, they are not able to retain even half of their customers. A *Harvard Business Review* study found that "companies could improve profits by at least 25% just by reducing customer defections by 5%" (Reichheld, 1990). Committed employees have a better understanding of an organisation's processes, products and customers, and thus increase the likelihood of customer satisfaction and loyalty. Jack Welch (1993) explains: "The three most important things you need to measure in business are customer satisfaction, employee satisfaction, and cash flow". Thus three – i.e. – customers, people and business results – may be regarded as universally accepted core criteria that are a must for survival.

The internal environment criteria (the differentiators) are Processes, Leadership, Strategic planning and Knowledge and information management. They have different weightings in various models, collectively accounting for about 40 per cent of the score in most EM/NQAs. These criteria build internal strength in the company and help in enhancing its competitiveness. With a prime focus on these criteria, Deming helped the ruined Japanese economy after the Second World War to stand up and compete with the West. Now, emerging economies are focusing on these criteria to enhance their competitiveness. In an empirical study, Seth and Tripathi (2005) have identified leadership, process management and strategic planning as critical success factors for 108 manufacturing companies in India.

Vedic philosophy and other religious texts emphasise that one should work for universal wellbeing. This inspires global society to help in realising that vision (Talwar, 2008). Similarly, when an organisation extends its focus to encompass society and the environment, the members of the organisation are inspired to share the dream of the organisation (Weymes,

Table IV Classification of criteria of BEMs based on their relative importance

Framework criteria	Total value ^a	Average relative importance ^b	Rank range	Percentage score	EM/NQAs giving highest rank	EM/NQAs giving lowest rank
<i>Core criteria – a must for survival</i>						
Customer	43	2.15	1-4	9-30	Sweden, Japan, Singapore, India, Brazil, Mongolia, Thailand	France, Australia
People	49	2.45	1-5	9-20	EFQM, Canada, UK, GPNQA (India), Hungary, Belarus	Deming (Japan), Israel
Business results	51	2.55	1-8	12-46	MBNQA, Brazil, Mongolia, Israel, Malaysia	Deming (Japan), France
<i>Internal environment criteria – the differentiators</i>						
Processes	70	3.50	1-7	9-20	Deming (Japan), France, Israel	MBNQA
Leadership	75	3.75	1-7	9-33	Fiji, Japan, Deming (Japan), Australia	Belarus, Brazil, Canada
Strategic planning	118	5.90	3-9	6-10	Deming (Japan), EFQM, UK, RGNQA (India)	Malaysia, GPNQA (India)
Knowledge and information management	126	6.30	4-9	6-10	RGNQA (India)	Canada, Belarus
<i>Goodwill criteria – ensuring sustenance</i>						
Society	148	7.40	4-9	0-10	RGNQA (India), Brazil, EFQM, UK	Almost all
Suppliers/partners	160	8.00	5-9	0-11	Deming (Japan), Belarus	MBNQA, Japan, Australia, India, Sweden, Thailand
Note: ^a TV; ^b (TV) ÷ /20						

2005). It is here that goodwill criteria play a key role in ensuring sustainability. The two goodwill criteria identified in this study are “Society” and “Suppliers/partners”. Unfortunately, these criteria have been consistently ignored and given little importance (a score of about 10 per cent) in most EM/NQAs. This is why, despite following EM/NQAs and achieving excellent financial results, several companies are still looking for new approaches to attain sustainable business results. Currently, core criteria account for about 50 per cent of the models’ scores as against mere 10 per cent for goodwill criteria. There is a strong need to realign the scores to various criteria to bring a balance to their respective weighting in order to attain sustainability. The recent changes in the EFQM model indicate a step forwards in enhancing the weighting of goodwill criteria. Future research may focus on exploring empirically the impact of the relative importance of various criteria on attaining sustainable growth.

6. Unfurling new dimensions of excellence . . .

A major problem with contemporary EM/NQAs is lack of a universally acceptable model. The variance between different models shows that these models are still passing through an evolutionary process. A major difference between most models *vis-à-vis* the Deming Prize is the hand-holding approach of the latter to building a culture to focus on “core quality systems”. In contrast, most of the other models see “business results” as the ultimate goal. The pursuit of economic growth alone has led to a deteriorating physical environment, unsafe workplaces, pollution, discrimination against certain groups in society, urban decay, and other social problems. There seems to be an imbalance between the social dimension and the focus of management. This imbalance leads to unsustainable results. Practising human values helps in overcoming this imbalance and leads to sustainability of results. A lack of focus on human values gives rise to the risk of the use of unethical practices to maximize short-term gains. Financial scandals at large multinational corporations such as Enron and WorldCom have brought the need for “ethical” management into focus.

While explaining the various dimensions of quality, Garvin (1987) suggested that a company can create a niche in the marketplace by focusing on only a few of the quality dimensions that competitors ignore. Very few products excel in all dimensions. This is equally applicable to EM/NQAs as well. These models have provided the niche to award winning companies in the past, but time has passed, their competitors have overcome their shortcomings. This had led to reduction in the quantum of benefits that award-winning companies have had over their competitors. Thus, new dimensions of excellence are unfurling to gain a niche. Acknowledging the dynamics of excellence, Peters and Waterman (1982) say: “There are no excellent companies. There are only companies striving to attain excellence”. An emerging focus on environmental concerns, inclusive growth, corporate governance and ethical practices, etc., in recent times is an indication of a paradigm shift towards the growing importance of goodwill criteria (Talwar, 2008). Thus, in future, the focus of EM/NQAs may shift to “sustenance of business results”.

The factors that make the success of business organisations long-lasting and sustainable need to be explored empirically. Koura and Talwar (2008) have identified some of these factors, such as universal wellbeing, adhering to the laws of nature, a global vision, a global society and the global cost of products and services, etc. Sharma and Talwar (2007) argue that business results should lead to the attainment of universal wellbeing, which will ultimately lead to sustainable success for an organisation. The changes in the 2010 version of EFQM model signify an increasing realisation of the importance of society. The weighting of the criterion “Society” increased from 6 per cent to 10 per cent. New fundamental concepts of the EFQM model – viz. “Leading by vision, inspiration and integrity”, “Achieving balanced results”, “Building partnerships”, and “Taking responsibility for a sustainable future” – have an increasing sustainability focus. In addition, the focus of sub-criteria is more explicitly towards human values such as practising ethics and transparency in the Leadership criterion, and sustainability in the Strategy criterion, etc. Thus, new dimensions of excellence towards the sustainability focus are clearly emerging,

and their impact on business will be visible in coming times. The above aspects need to be explored further in future research.

7. Conclusion

The significant changes to have occurred in past two decades – viz. the developments in information technology, the information explosion leading to fast-changing customer preferences/expectations, minority shareholder activism, growing employee aspirations, the emergence of oppressed classes, the increasing awareness of social equity, enhanced awareness of environmental concerns, public-private partnerships, changing demography, the global economic crisis, etc. – have had far-reaching implications on the business world. While the world grapples with issues pertaining to economic recession and climate change, excellence models cannot escape impact of the volatility and uncertainty sweeping many parts of the world. Thus, several changes in EM/NQAs have been witnessed in the recent past. In this study, we have comparatively reviewed the framework, criteria and criterion weighting of 20 EM/NQAs and identified “Customers”, “People” and “Business results” as the “Core criteria – a must for survival in business”; “Process”, “Leadership”, “Strategic planning” and “Knowledge and information management” as “Internal environment criteria – the differentiators in a competitive environment”; and “Society” and “Suppliers/partners” as “Goodwill criteria” for ensuring sustainability. The key task for a manager or EM/NQA custodian is to bring a balance in these three aspects to attain excellence. Though several initiatives have taken place in the past four decades to attain excellence, some of the software criteria (e.g. shared values, as identified by Peters and Waterman, 1982) have still not yet gained adequate focus.

Excellence models are expected to provide a direction to obtain sustainable profits, people and planet development. They need to bring business organisations closer to their truly final objective of long-run satisfaction of the needs and desires of all stakeholders and the global community. With the short-term focus, a company may achieve individual wellbeing but to attain sustainable success a company has to focus on universal wellbeing. To address the above issues and forthcoming challenges, custodians of EM/NQA have pool resources to learn from each other and formed the Global Excellence Model (GEM) Council. The members of the GEM Council are the guardians of Excellence Models across the world. This study may provide some inputs to the GEM Council and EM/NQA custodians to strengthen the global excellence movement. Simultaneously, it may help managers to enhance their effectiveness.

References

- Bohoris, G.A. (1995), “A comparative assessment of some major quality awards”, *International Journal of Quality & Reliability Management*, Vol. 12 No. 6, pp. 30-43.
- Calingo, L.M.R. (2002), *The Quest for Global Competitiveness through National Quality and Business Excellence Awards, Fiji, Sept 18-20*, Asian Productivity Organization, Tokyo.
- Conti, T. (1997), *Organisational Self-assessment*, Chapman & Hall, London.
- Dahlgaard, J.J. and Dahlgaard-Park, S.M. (2005), “In search of excellence – past, present and future”, paper presented at the International Conference on Quality (ICQ'05), Tokyo, 13-16 September.
- Djerdjouri, M. (2004), “National quality and business excellence awards in a developing country: the Fiji National Quality Award”, *The TQM Magazine*, Vol. 16 No. 2, pp. 120-4.
- Erikson, H. (2004), “Organisational value of participating in a quality award process: a Swedish study”, *The TQM Magazine*, Vol. 16 No. 2, pp. 78-92.
- European Foundation for Quality Management (2010), “EFQM Excellence Award”, available at: www.efqm.org/
- French Quality Award (2006), available at: www.mfq.asso.fr
- Garvin, D.A. (1987), “Competing on the eight dimensions of quality”, *Harvard Business Review*, Vol. 65 No. 6, pp. 101-9.

- Golden Peacock Awards (2007), available at: www.goldenpeacockawards.com/gpnqa.htm
- Hermel, P. (1997), "The new faces of total quality in Europe and the US", *Total Quality Management*, Vol. 8 No. 4, pp. 131-43.
- Hermel, Ph. and Remis-Pujol, J. (2003), "An evaluation of excellence: some main trends", *The TQM Magazine*, Vol. 15 No. 4, pp. 230-43.
- Hughes, A. and Halsall, D.N. (2002), "Comparison of the 14 deadly diseases and the business excellence model", *Total Quality Management*, Vol. 13 No. 2, pp. 255-63.
- Huli, A. (2004), "National excellence for quality of life in Israel", *Proceedings of the International Workshop on Best Practices in National Quality Award Schemes of UN Economic & Social Council, November*.
- Japan Quality Award (2010), available at: www.jqac.com/WebSite.nsf/NewMainPageE
- Kanji, G.K. (2001), "Forces of excellence in Kanji's Business Excellence model", *Total Quality Management*, Vol. 12 No. 2, pp. 259-72.
- Karolina, S. (2004), "From IIASA-Shiba Prize to National Quality Award – NMD", *Proceedings of International Workshop on Best Practices in National Quality Award Schemes of the UN Economic and Social Council, November*.
- Koreshkov, V. (2004), "Belarus experience with quality award and work on establishment of a CIS Quality Award", *Proceedings of the International Workshop on Best Practices in National Quality Award Schemes of the UN Economic and Social Council, November*.
- Koura, K. and Talwar, B. (2008), "Comparing the UBEM Vedic matrix and the TQM elements deployment model using principal component analysis", *The TQM Journal*, Vol. 20 No. 5, pp. 413-35.
- Koura, K. and Yoshizawa, T. (2005), "International development of quality award", *International Conference on Quality (ICQ'05), On-site Program & Abstract Collection, No. 0027, 267, Tokyo, 13-16 September*.
- Laszlo, G.P. (1997), "US and Canadian national quality awards: increased emphasis on business results", *The TQM Magazine*, Vol. 9 No. 5, pp. 381-3.
- McDonald, I., Zairi, M. and Idris, M.A. (2002), "Sustaining and transferring excellence", *Measuring Business Excellence*, Vol. 6 No. 2, pp. 20-30.
- Mavroidis, V., Toliopoulou, S. and Agoritsas, C. (2007), "A comparative analysis and review of national quality awards in Europe: development of critical success factors", *TQM Magazine*, Vol. 19 No. 5, pp. 454-67.
- Miguel, P.A.C. (2001), "Comparing the Brazilian national quality award with some of the major prizes", *The TQM Magazine*, Vol. 13 No. 4, pp. 260-72.
- National Institute of Standards and Technology (2009), "2009-2010 criteria for performance excellence", Baldrige National Quality Program, available at: <http://baldrige.nist.gov/>
- National Quality Award of Brazil (2002), available at: www.fpnq.org.br/
- National Quality Institute (2007), "Canada Awards for Excellence", available at: www.nqi.ca/caeawards/
- NPC (2005), "Prime Minister's Quality Award", available at: <http://dominoapp.npc.org.my/>
- Peters, T.J. and Waterman, R.H. (1982), *In Search of Excellence – Lessons from America's Best-Run Companies*, HarperCollins, London.
- Puay, S.H., Tan, K.C., Xie, M. and Goh, T.N. (1998), "A comparative study of nine national quality awards", *The TQM Magazine*, Vol. 10 No. 1, pp. 30-9.
- Reichheld, F.F. (1990), "Zero defections: quality comes to service", *Harvard Business Review*, January.
- SAI Global (2010), "2010 Australian Business Excellence Award", available at: www.sai-global.com/
- Searle, M. (2005), presentation by SAI Global, 13th Quality Summit of CII, India, 10-11 November.
- Seth, D. and Tripathi, D. (2005), "Relationship between TQM and TPM implementation factors and business performance of manufacturing industry in the Indian context", *International Journal of Quality & Reliability Management*, Vol. 22 No. 3, pp. 256-77.

- Sharma, A.K. and Talwar, B. (2007), "Evolution of Universal Business Excellence Model incorporating Vedic philosophy", *Measuring Business Excellence*, Vol. 11 No. 3, pp. 4-20.
- Sila, I. and Ebrahimpour, M. (2002), "An investigation of the total quality management survey-based research published between 1989 and 2000: a literature review", *International Journal of Quality & Reliability Management*, Vol. 19 No. 7, pp. 902-70.
- Singapore Quality Award (2007), available at: www.spring.gov.sg/Content/WebPage.aspx?id=88e309f5-37d8-48fb-9560-8a5f1237e72c
- Talwar, B. (2008), "Evolution of 'Universal Business Excellence Model' incorporating Vedic philosophy", PhD thesis, DOMS, Indian Institute of Technology, Roorkee, April.
- Tan, K.C. and Khoo, H.H. (2002), "Indian society, total quality and the Rajiv Gandhi National Quality Award", *Journal of Management Development*, Vol. 21 No. 6, pp. 417-26.
- Tan, K.C., Wong, M.F., Mehta, T. and Khoo, H.H. (2003), "Factors affecting the development of national quality awards", *Measuring Business Excellence*, Vol. 7 No. 3, pp. 37-45.
- Tangsanga, D., Bunyagidj, B. and Noisirisuk, S. (2002), "Country paper, Thailand", in Calingo, L.M.R. (Ed.), *The Quest for Global Competitiveness through National Quality and Business Excellence Awards, Fiji, September 18-20*, Asian Productivity Organization, Tokyo.
- Union of Japanese Scientists and Engineers (2010), "The Deming Prize", available at: www.juse.or.jp/e/deming/index.html
- United Nations Economic Council for Europe (2004), "National Quality Award Schemes", available at: www.unece.org/indust/sme/Q-national-award.html
- Welch, J. (1993), "Jack Welch's lessons for success", *Fortune*, 25 January, pp. 86-93.
- Weymes, E. (2005), "Organizations which make a difference: a philosophical argument for the 'people-focused organization'", *Corporate Governance*, Vol. 5 No. 2, pp. 142-58.

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