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# “The use and impact of Business Excellence Models on Organizations: The case of the Mexican Quality Award”

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*The use and impact of Business Excellence Models (BEM) based on National Quality Prizes has been widely recognized as a way of improving business processes among organizations. Some of the best known frameworks such as the Baldrige Model or the EFQM Model have proved to be effective as self-assessment tools. The information gathered through self-assessments and the experiences gained through quality award participations help organizations to improve performance. In economies like the Mexican one, the development and deployment of such frameworks may have not been as quick as in other economies. Despite strong international and local government's encouragement there is still a moderate participation of organizations in the Mexican Quality Award (MNC). It appears to be little information and awareness about the full usefulness of BEM to develop business improvement strategies and to improve overall performance in organizations.*

*In this context, the effective use of the MNC as a self-assessment framework can contribute to improve operations and develop business improvement strategies. Under this perspective, this paper reviews the evolution of the MNC and the factors that helped it to settle as a National Quality Reference. Based on a research with the Mexican Institute to Promote Total Quality (IFCT), the paper exposes the evolution of the MNC and provides insights of the use of the MNC in Quality Management initiatives in organizations. Then the paper discusses the relevance of the MNC related to the improvement of the quality of products and services and the competitiveness and innovation factors in which organizations are focusing nowadays. Finally, the conclusion of this paper shows evolution of BEMs and MNC and emphasizes the need of conducting further empirical research to investigate the best practices by winner organizations of the MNC, so that other organizations can follow their steps through the route to business excellence.*

## 1. INTRODUCTION

Business Excellence Models (BEM's) are quality-management frameworks based on organizational performance criteria that originated as a result of the evolution of TQM principles. The BEM's have played a significant role in the attempt to improve business among organizations, and these efforts are well documented with Quality Foundations that administer BEMs' across regions and countries\*. The models have evolved since their introduction in the late 80's; not only in their business-criteria but in the way they are deployed and used. In this context, organizations have learned from the use and practice of these frameworks to apply the BEM's for several purposes. The purposes vary depending on organization's priorities, and some of these purposes identified are award participation, self-assessment, business process improvement, measurement systems, and strategic planning [1]. This paper focuses on self-assessment and the business improvement approaches.

The BEMs have managed different categories to facilitate organizations assessing their own business in terms of specific criteria in their industry. Initially those categories were better suited for large public and private organizations. However, the necessity to include and expand BEM's to most industrial sectors encouraged Quality Foundations to develop the frameworks to other kind of organizations. Thus, the introduction of new categories to the frameworks such as health care, non-profit, education, medium and small organizations, helped to increase the use of BEM's. Figure 1 shows for instance that applications for the Malcolm Baldrige National Quality Award (MBNQA) have increased in the last years after having a setback in 1997. This increase may directly respond to the

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<sup>2</sup> See for instance websites of the European Foundation for Quality Management, the National Institute of Science and Technology, The Japanese Institute of Scientist and Engineers, the Canadian Quality assurance Institute, among others.

introduction of the new categories in the late 90's. Thus, it is reasonable to think that the use of BEM's may continue to grow as the Quality Foundations introduce changes to the frameworks to shape industry sectors or specific product and services.

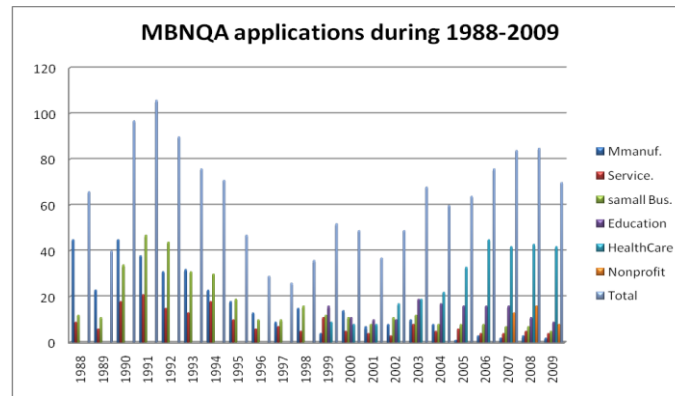


Figure 1: MBNQA applications during 1988-2009

Source: developed with data from [2].

This paper considers BEM's in general and pays attention to national model for competitiveness in Mexico (MNC). The National Model for Competitiveness (MNC) is currently managed by the Mexican Institute for Total Quality (IFCT) and the Ministry of Economy. This model has become a reference for private and public organizations, particularly those of mid and large sizes. The MMC is a non-prescriptive framework based on four major pillars; business results, strategic planning-thinking, understanding of key capabilities and execution [3]. The model is based on a deep strategic thinking based primarily on a competitive environment and an understanding of the organizations' internal capabilities. The MMC, similar to the EFQM and the Baldrige models focus on a results-approach to assess the performance of an organization. Then, it settles a strategic planning approach considering leadership and a customer-oriented approach.

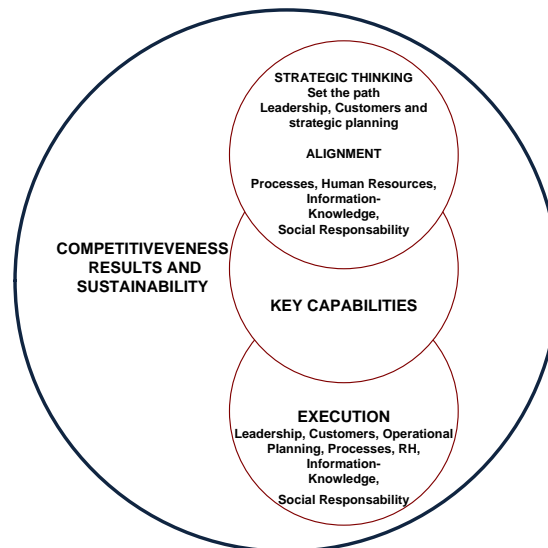


Figure 2: The Model for Competitiveness [3]. p.6

One of the key issues of this model is the understanding of key capabilities and the ability that leaders have to align them with key processes and their efficient and effective execution. Since this is a non-prescriptive model, several initiatives could be employed to accomplish the desired objectives for every stage. For example, for the results section a Balance Scorecard or the Baldrige's results criteria\* can be deployed. For the strategic thinking, there are

\* [4] and [5].

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two main issues considered: the way organizations set the plans and objectives and the deployment of strategies to accomplish such objectives. Several techniques and methods are also available in the literature to accomplish this process. In fact, it is the ability of the leaders of organizations to recognize those methods and techniques and to make them suitable for their own needs. The MNC tells how a successful organization looks like, but it neither provides nor suggests any particular quality-management tool to get to this point.

## **2. BUSINESS EXCELLENCE MODELS (BEM'S)**

### **2.1. EVOLUTION OF BEM'S**

Most of the BEM's have evolved across time reacting to internal and external changes produced by social, economic, and technological factors. The Baldrige Model is perhaps one of the frameworks that has evolved more consistently than any other model. The American Society for Quality (ASQ) and the National Institute for Science and Technology (NIST) have the responsibility to update it every year. The evolution of this framework is remarkable, see for instance [6], p.178 which provides a good study of the main changes of the model criteria. Since the Baldrige model was one of the first models used around the world, it was an example for many governments to develop their own quality frameworks.

BEM's were originally created as a quality frameworks based on performance criteria that were originally developed to encourage TQM principles and for assessing quality performance. This is congruent with a previous study of BEM's carried out by [7]. After the experiences that the first organizations had using the model, they started using the model for self-assessment specifically. In this way, the use of BEMs moved quickly from mere award participation to a more holistic approach, and they are now widely used for self-assessment activities [8], [9], [10].

*Self-assessment* provides organizations with a "picture" of their business processes on a regular basis, and helps to identify areas for improvements, but it requires discipline and objectivity to conduct the process and to interpret the results. Consequently, some organizations use external services to assure that the outcomes of this process accurately reflect the state of the business. Thus, self-assessment is widely accepted as a systematic and regular view of the organizations' activities [10].

The use of the BEMs to coordinate *improvement programs* derives from the fact that the organizations employ the self-assessment-process outcomes for quality improvement purposes. In this way, the identification of improvement areas for quality purposes is one of the main benefits of using self-assessment [8], [9], and [10]. The information, in the form of reports, is passed on to top management for its analysis and further use [11], but with no way to know further actions. The process ends with these reports, and consequently, it is the ability of top management to decide *what* areas are priorities and *how* to improve those areas through specific improvement programs. Thus, the success of this process may be limited to the correct interpretation of top management, and the available guidance to effectively use the self-assessment outcomes.

After using BEMs to identify improvement areas, organizations recognized the suitability of the models for *measuring organizational performance*. This recognition derives because of carrying out self-assessment and measuring key areas of the business. BEMs were not originally designed for measuring organizational performance; however, they present a broader view of performance, addressing many areas not considered in other approaches [12]. Therefore, there has been great interest in employing BEMs for developing performance measurement systems [9], [10] and [13]. There seems to be great interest in employing these frameworks in this area; however, there is a lack of defined methodologies and tools for accomplishing this objective.

*Strategic planning and decision-making is the last role that BEM's have adopted.* Since BEM's have not fully applied to this area, there is still little evidence about the true impact of models in developing and deploying strategies. [9] Suggested that outcomes from self-assessments should be able to support business plans at strategic and operational levels. Recent research [6] with some organizations suggests that some model criteria are more suitable to support strategic planning than other. For example, organizational effectiveness and customer results were of good value for organizations to support strategic analysis at some point. Other organizations found market and financial results valuable to set strategic objectives and future plans. This suggests that organizations may not have the same priorities in selecting the criteria that best support their strategic planning process. This will vary depending

on ongoing strategies, objectives, quality improvements, plans and the maturity level of managing self-assessments.

### 3 THE MEXICAN QUALITY MODEL

Since, the Mexican quality model or model for competitiveness (MNC) was influenced by the Baldrige model, it follows the patterns of a model focused on key elements such as customers, processes, and results. The MNC has followed the Baldrige style since the Mexican economic activity is strongly related to the US economy. In consequence some of the economic, quality and competitive models used in North America are similar for the countries in the region. It is important to mention that this model is strongly oriented to foster international competitiveness among Mexican organizations. This issue is remarkable as in recent years the Mexican competitiveness has been ranked lower by the World Economic Forum compared to previous years [14] and [15]. It is evident the necessity that Mexican organizations must not only to have a better performance, but to increase competitiveness as it may be the key to survive in the globalization.

The MMC is based on nine business criteria which are *customers, leadership, strategic planning, information and knowledge, people, processes, social responsibility and competitiveness*. The MNC suggests tackling every business criteria with three perspectives: focus, deployment, evaluation and improvement. It means that it has a systemic approach that should describe all interactions between processes with high level of detail. It also suggests addressing the level of competitiveness that those processes have compared with main competitors. The framework offers well balanced business criteria that cover virtually all areas of a modern organization. Finally, the MNC is based on six fundamental principles: *committed people, responsibility with society, process improvement & innovation, a systemic approach of the organization*.

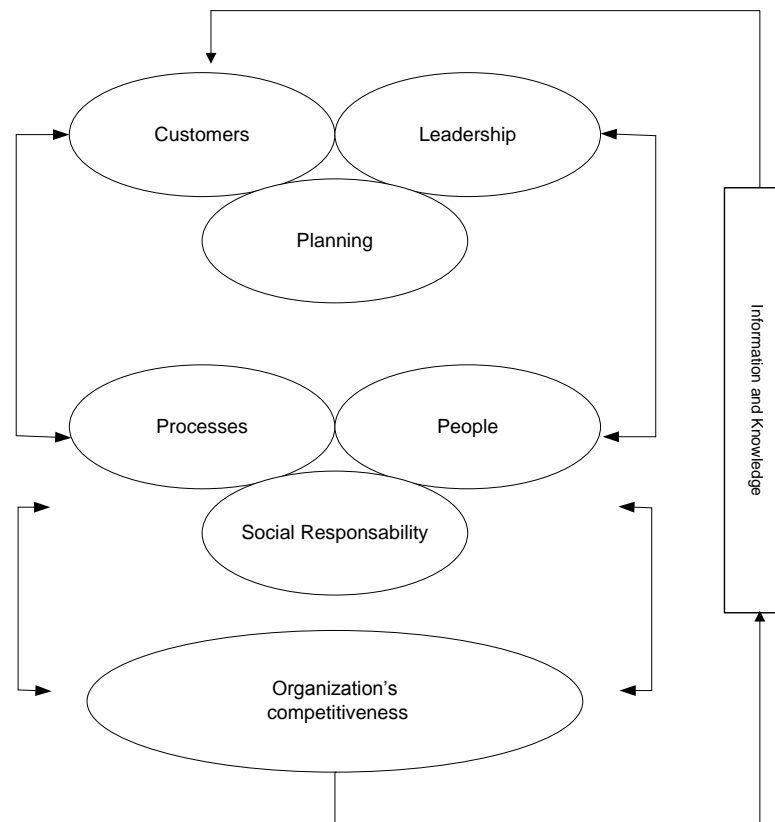


Figure 3: Business Criteria of the Model for Competitiveness [16]. p.8

The criteria and sub criteria of the model is showed in Table 1. Comparing the latest version of the model [16], with [17] and [18], it can be deduced that this model have had little changes in its structure and main business criteria. It is just until the revision of 2008 that the model had some changes. The latest version [3] shows the same business criteria but with slightly changes in structure, which in practical terms does not affect the fundamental concepts. It emphasizes the need to pursue organizations to have an innovative approach in the design of their products-services and to achieve high competitiveness among peers. However, it appears that the need to obtain a prize to market their products and services is one of the most important motives that organizations have rather than improving their product and services. This is congruent with the studies carried out by [19], who severely criticized BEM's for not improving quality of products and services.

Table 1: Business criteria for the MNC [16], p. 11

<b>Criteria</b>	<b>weight</b>
<b>1.0 Customers</b>	<b>100</b>
1.1 Knowledge of customers and markets	50
1.2 Relationship with customers	50
<b>2.0 Leadership</b>	<b>100</b>
2.1 Leadership	100
<b>3.0 Strategic Planning</b>	<b>100</b>
3.1 Strategic planning	50
3.2 Operational planning	50
<b>4.0 Information and Knowledge</b>	<b>100</b>
4.1 Information	50
4.2 Organizational knowledge	50
<b>5.0 People</b>	<b>100</b>
5.1 Working systems	40
5.2 People development	30
5.3 Quality of life	30
<b>6.0 Processes</b>	<b>100</b>
6.1 Product and service design	50
6.2 Process management	50
<b>7.0 Social Responsibility</b>	<b>100</b>
7.1 Ecosystems	50
7.2 Community development	50
<b>TOTAL SCORE FOR PROCESSES</b>	<b>700</b>
<b>8.0 Competitiveness</b>	<b>300</b>
8.1 Customer results	75
8.2 People results	75
8.3 Society results	75
8.4 Shareholders results	75
<b>TOTAL SCORE</b>	<b>1000</b>

Several mid and large size organizations have won the Mexican quality award since its introduction, but the majority of Mexican organizations have been ignored till recently. The categories for participation have expanded, but it was until 2007 that the authorities acknowledge the importance of creating a MNC specifically for Small and Medium size organizations [20]. There still also a lack of model criteria for non-profit, health care and educational organizations which should be produced urgently to tackle this specific market. Although these organizations participate with the general model of the MNC, it is complicated to adapt the model criteria to the needs of such organizations. Then, it becomes necessary the awareness of these model among organizations and the development of specific frameworks by industries.

#### **4. DEPLOYING THE MNC AND THE IMPROVEMENT STRATEGY**

##### **4.1 SELF-ASSESSMENTS OUTCOMES AND IMPROVEMENT STRATEGY**

The following approach was developed to serve as a guide for organizations that used the MNC, and may be applied to other BEM's. The deployment of the MNC has to be led by top management and the relevant strategy/quality management departments, as well as with the support of external consultancy if needed. It also requires detailed planning for every stage involved that need to be tailored based on particular needs, culture, and the availability of resources. It is also necessary to review the application process [17], p. 16 to match it with the deployment process suggested by:

#### *1 Diagnostic organizational situation: determining the needs*

The first step is to conduct a diagnostic of the organization and an analysis of the external environment. This will help to determine the needs and the role and objective of deploying the MNC. This decision should be linked to current strategic goals, that is, the requirements in terms of business results. See [22] who suggest how to establish a quality maturity level for organizations.

#### *2 Tailor and complement the MNC model criteria*

It might be necessary to tailor the MNC model criteria to government regulations, product/service issues, culture, industry in which the businesses are in, etc. These factors should be considered carefully to assure that *model criteria* are relevant to the organization. We mentioned already that the MNC is limited and general to most kind of organizations. It is also very important to consider the current maturity level of quality that organizations so that the correct tools and techniques and set realistic goals are selected.

#### *3 Deploy the MNC*

This process is concerned with the deployment of the MNC model through a series of logical steps as suggested in [21]. Some authors, consultants, and quality foundations provide comprehensive support for this stage, so, it is recommended that organizations make the best of it. Since this is a critical stage, it is recommended that organizations seek professional advice and assistance.

#### *4 Conduct internal/external business intelligence (BI)*

This stage refers to the task of looking for and selecting several sources of information that can provide key parameters/data in benchmarking, industry tendencies, financial/economic data/facts, and product/service demands. The accuracy and relevance of this information will depend on organizations' needs, and specific requirements to areas of the organization. It is very important to allocate the appropriate resources to look for the data and transform it into business knowledge. The organization should also consider the adequate infrastructure in terms of information technology and the qualified human resources to construct this framework.

In addition, there should be considered the structure of internal indicators that can help to support development and innovation of product and services. There are some valuable resources of information that can help organizations in issues of benchmarking, case studies, best practices, etc. Other sources of internal analysis may come from self-assessments outcomes and feedback.

#### *5 Analyze self-assessments and BI*

This step refers to the analysis and discussion of self-assessments and business intelligence and should take place at a business strategy level. It is necessary that people involve know very well the business improvement and strategy agendas, so that they make the best decisions. Since the top management makes final decisions, they must know the information in detail to support the decision-making with objective analyses of self-assessments and BI.

#### *6 Construct the business improvement strategy agenda*

This is the factual formulation of a detailed strategy and action plans to improve key processes at operational levels. It is also concerned with the selection of quality improvement initiatives (e.g., lean, six sigma, BPR, ISO 9000 series, statistical process control, etc.) that tackle the specific issues emerged from stage 6.

This process should be included in the business strategy agenda and be monitored at all times to ensure that business improvement objectives are met. The full process should also be synchronized with self-assessments and business strategy reviews as suggested in [9].

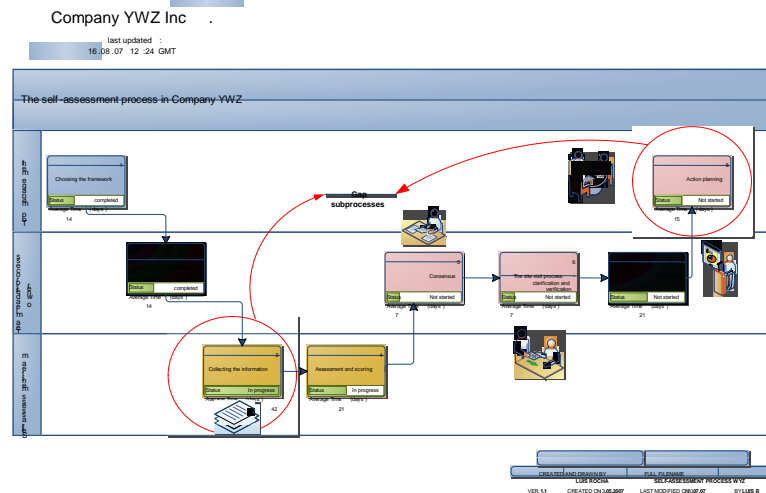


Figure 4: Deployment of a self-assessment process. Source: developed from [21], p.173.

## 5. SUMMARY

### 5.1 CONCLUSIONS

The role of BEM's since their introductions has been analyzed, and five maturity stages have been identified: award-participation, self-assessment, improvement approach, performance measurement, and the strategic-decision making approaches. In this regard, the MNC has had few changes since its introduction till recently, and it appears that some organizations focus exclusively on an award-participation approach. The MNC is focused on a competitiveness and innovation approach of the design of product and services. Though the structure of the model seems to be logic, there is a need to rethink the specific drivers in the model that lead to offer high quality products and services that bring competitiveness.

The deployment of the self-assessment process for the MNC is suggested in six steps that and it considers some of the problems that can be encountered. This approach is suggested to be taken with the advice of professional assistance since it is very common to have pitfalls in this kind of processes. It is also worthy to mention that the MNC has not been marketed enough among organizations to invite to submit applications. In this regard Quality Foundations should work in this direction with innovative frameworks that show the potential benefits that organizations can have when deploying them.

### 5.2 FURTHER RESEARCH

Further research can be carried on in the way organizations manage and administer all information and business knowledge generated from the deployment of the MNC. This not only will help them in future improvement programs and decision-making in these issues, but also, it can help other organizations to use best practices and to become competitive. In addition, it could be investigated a specific industry (selected companies) to see the real benefits of the use and deployment of the MNC for this group. Finally, further research is necessary to identify needs of particular group of organizations (e.g., health-care, non-profit and education) in order to develop appropriate frameworks for them.

### 5.3 CLOSING COMMENTARY

The use of BEM's like the MNC and other quality management initiatives provide a range of benefits for business improvements. They have been increasing in popularity and have a positive effect on organizations [23], p. 17. Organizations usually have a better understanding of their performance [21], p. 268, and consequently may take actions to improve it. Evidence from this article suggests that managers, practitioners and quality foundations are happy with this approach and are willing to continue with it. The challenge is to effectively translate these frameworks into improvement actions and tacit benefits. More importantly, BEM's may not be for all organizations

despite claims of Quality Management Foundations such as IFCT, NIST-ASQ, EFQM or other. The principles are general and most organizations can benefit from them, but the approaches and resources involved may vary. In addition, the investments required and the long term commitments may not suit all organization's needs. Consequently, it is recommended that organizations seek professional advice before embarking on any quality management initiative to understand their real needs. This may allow for better chances to get the right approach and to avoid potential pitfalls.

Discipline and good decision-making is necessary to successfully deploy the MNC or other BEM's. The time has seen many quality initiatives and fads to come and go, some of them in the word of experts "successful or unsuccessful". However, it can be argued that no single quality management initiative, model or framework can guarantee success to any organization at any level. Ultimately, it is the ability of leaders and top management commitment to effectively translate any frameworks and strategies into real benefits.

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