

## ***A Systematic Literature Review of Malcolm Baldrige National Quality Award (MBNQA) in Organization***

Ojakma Sihar Panaili Tumanggor<sup>1</sup>, Humiras Hardi Purba<sup>1</sup>

<sup>12</sup>Industrial Engineering Department, Universitas Mercu Buana, Jakarta

*Email correspondence: [ojakmasp@gmail.com](mailto:ojakmasp@gmail.com)*

---

### **ABSTRACT**

In today's free-market economy, increasingly fierce market competition for organizational goals requires all parties to be able to produce the best products or services in; winning the competition is the main responsibility of management. The National Quality Malcolm Baldrige (MBNQA) for evaluating performance in all organizations, which is used to evaluate performance in organizations. Successful application of Malcolm Baldrige's Quality Framework criteria in organizations. The Malcolm Baldrige National Quality Award (MBNQA) is a method to improve overall organizational performance and continuously (continuous improvement) by using measurements and providing feedback on overall organizational performance in providing quality products and services. The MBNQA not only can be implemented in the industry but spread to several sectors such as hospital service, hotel, education, public service, etc. Implementing of MBNQA in Healthcare increases management quality achieved. Workforce Focus 74.3%, Operation Focus 75.6%, Results 75.6%, have a significant relationship with sub-category two to sub-category seven MBCfPE as a variable. The software system can produce an estimated score for each analysis approach Approach, Deployment, Learning and Integration (ADLI) for each requirement successive values of 91.73% and 86.79%. the threat to service with 56.11% for FKTP ISO and 64.68% for FKTP.

**Keywords:** Malcolm Baldrige Quality Framework, Performance, Strategic Determinants

---

### **1. Introduction**

In 1987 the United States introduced MBNQA quality management and was first introduced by the Deming Prize. Where the flow of information is very important because the quality of management is needed by every country, especially Indonesia. Requests and quality information are urgently needed in Indonesia in terms of education, agronomy, health, manufacturing, and so on. For now, quality is still not maximally provided in the world of education because many still think that quality is not needed. Along with the increasing and development of information and technology, people in Indonesia are increasingly concerned with quality over quantity. In the world of education, especially universities, the quality level of students is highly prioritized because it will determine the quality of the tertiary institution to be accredited either medium or badly from the State Accreditation Board. Especially in Indonesia, there are still many universities whose accreditation is very low due to ignorance of the quality of students, college lecturers, and departments that support these universities. So that the quality of education at universities in Indonesia is still too slow the process of improvement or handling. Improvement of quality and management in this technological era of globalization is very much needed because it greatly influences the progress and strength of an organization.

After reviewing the winners' application summary documents, we found that the government/nonprofit organisations had the same strong customer focus found in the manufacturing, health care and education industries. However, their focus on strategic planning is greater, and they concentrate less on measurement, analysis and knowledge management

(MAKM). We suspect that these communities and differences in organisational concentration could result in relatively different effectiveness of the MBNQA model. Organisations would benefit from better understanding how to implement quality management (QM) practices outlined in the MBNQA model to maximise their results.

This research is the first empirical study that provides a new, in-depth and holistic examination of the causal relationships underlying the MBNQA model within a municipal government. Based on contingency theory, we compare our results with prior research across industries such as manufacturing and health care. It contributes to the validation of the

MBNQA model in a government environment, and to the contingency perspective in the QM field. The insights gained from this study also contribute to the development of best practices in QM. Considering the significant and practical implications of the application of the MBNQA model in different industries, this study is essential for several reasons. First, the results have the potential to provide a view to the direct results drivers within a government organisation. Second, while all categories are important at some level, knowing the differences between their contributions can foster better allocation of resources and efforts. Third, the findings allow government organisations that are starting quality initiatives to target initial efforts towards those areas with the most significant return. Fourth, knowing the commonalities and differences in the effectiveness of the Baldrige categories across different industries can help organisations achieve their full quality potentials by avoiding unnecessary losses resulting from not contextualising QM practices to specific industries.

## 2. Methodology

The systematic literature review is a method that adopts researchers believe the belief that it is very important to carry out a systematic assessment in all scopes and to understand the previous research that has a higher level of previous work as well as the many fields that have not implemented quality management to provide future research improvements.

The purpose of this literature review is to provide a systematic presentation that has been published in all international journals and local journals in Asia, especially in Indonesia in 2003 - 2019, to get the most commonly published ideas in the MBNQA field and to explore gaps in each theme in the regional industry in Asia

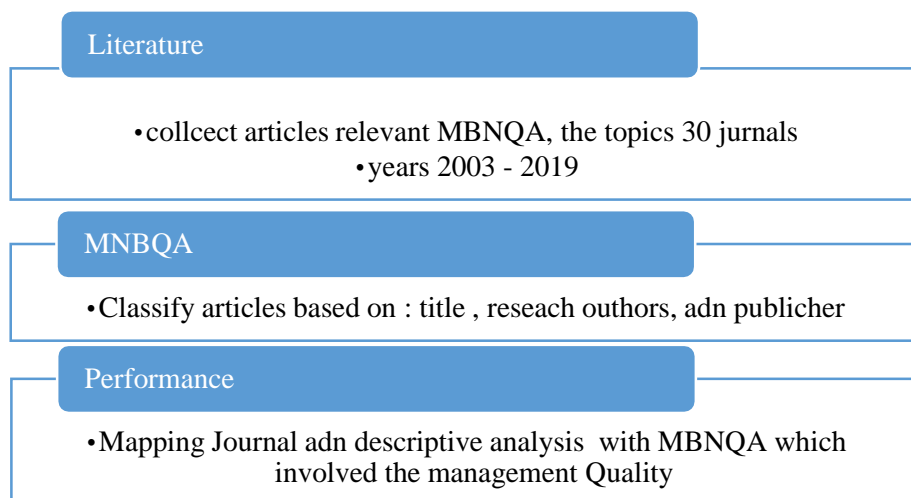


Figure 1. Study Framework

### 3. Result and Discussion

The results in this section from the literature review and content analysis are presented to answer the research questions, as shown in table 1. The MBNQA not only can be implemented in the industry but spread to several sectors such as hospital service, hotel, education, public service, etc. Implementing of MBNQA in Healthcare increasing management quality achieved (Amiman et al., 2012)• Workforce Focus: 74.3%,• Operation Focus: 75.6% Results: 75,6%, (Rudjito et al., 2010 ) have a significant relationship with sub-category two to sub-category seven MBCfPE as a variable, (Industri, 2013) The software system can produce an estimated score for each analysis approach Approach, Deployment, Learning and Integration (ADLI) for each requirement, (Helmi, 2018) successive values of 91.73% and 86.79%. the threat to service with 56.11% for FKTP ISO and 64.68% for FKTP.

The identification of literature will be identified from various perspectives. In MBNQA, all members of the organization or company must participate in quality performance or control at each process in an organization that will have an impact on long-term success. The implementation of MBNQA in the company will have a positive impact on the company and its employees.

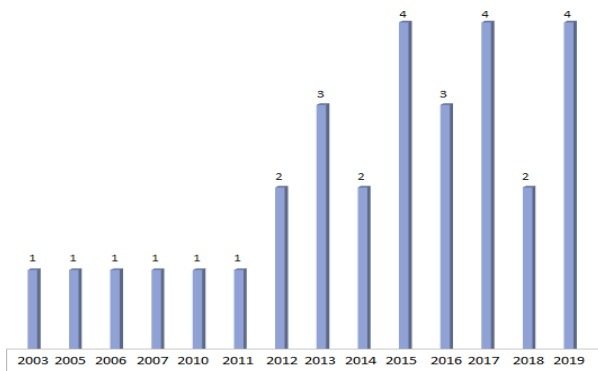


Figure 2 The Focus of year of Publication

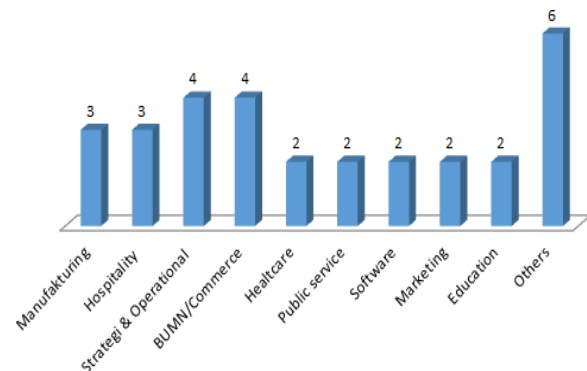


Figure 3. The focus of the Industry

Figure 3 Distribution of BNQA in Trade commerce and Operational service companies Strategy to beat the Manufacturing industry. In this case, MBNQA is more developed in the trading world because it prioritizes quality management. In connection with economic growth and scientific advances, it then slowly appear in its application in manufacturing companies, especially to reduce ignorance of quality so that every organization, whether in the product or service line and public service, will provide the best quality and reduce errors.

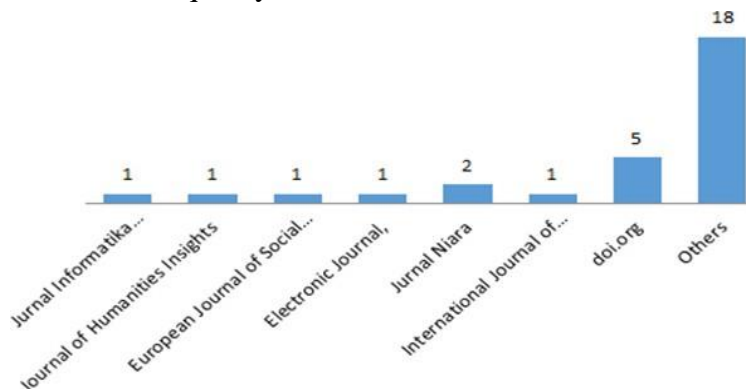


Figure 4. The Focus of the number of Publishers

Figure 4 shows that doi.org Publisher was most frequently searched during the 2003-2019 period (Figure 4). This is evident in identifying the paper, at most be the number of publisher doi org. The author suggests researchers use International Journal as a reference in collecting reference sources in research. Because doi.org is also a reputable journal publisher

### A. Strengths and Weaknesses Analysis

After identifying these various articles, it can be concluded that the implementation of MNBQA provides many benefits for organizations in agencies, namely as follows: 1) Quality management is seen as a very useful tool in quality improvement, 2) is the key to prosperity and is the long-term strength of an organization or a country, 3) Make it easier for managers to make decisions, 4) form a good system in managing products, services, human resources, and relationships with customers, 5) Increase organizational efficiency, 7) Improve consumer services and public services

### B. GAP in Current Research and Agenda for Further Research

In today's technology and globalization, the MNBQA method is more widely used for improving quality management. Where the opportunity for further research is that MNBQA can be used in Apart from its advantages, it turns out that MNBQA implementation has weaknesses. But as for the weakness of this method, the company is trapped in the confusion of answering every question in order to get a high score

### C. Relationship between MNBQA and Industry 4.0

In the current era of globalization, the MNBQA approach is more widely used to measure quality management and service. An opportunity for further research is that MNBQA can be used in the implementation of performance measurement of the management of an organization or a country, which can add to the long-term strength of the country. This is a gap in implementing the current MNBQA method, and finally, researchers are able to apply it to operational activities in the country. industry or in organizations.

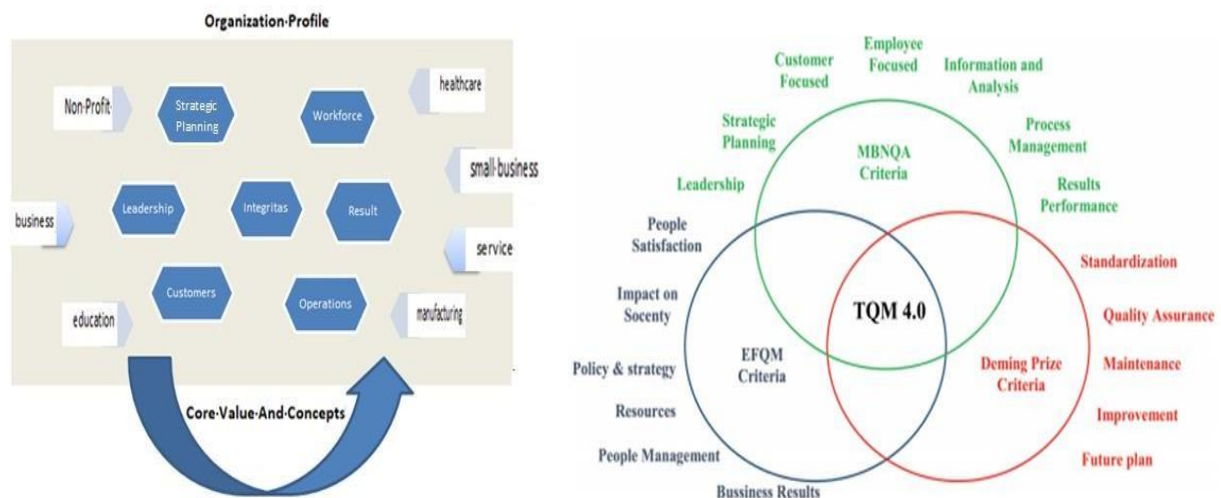


Figure 5. The Framework for Developments MBNQA associated with the Industry 4.0

Baldrige's best performance criteria is a framework that organizations can use to improve quality. The seven categories used as award criteria are: (1)Leadership: Checking whether senior executives direct the organization and how the organization carries out its responsibilities to the public and acts as a good citizen.(2).Strategic Planning: Checking whether the organization has made its strategic direction and how to determine the key action plan..(3) Customer and Market Focus: Examining how the organization decides market and customer needs and expectations; build relationships with customers; and how to find, satisfy, and retain customers..(4)Measurement, analysis, and knowledge management: Analyzing management systems, effective management applications, improving data and information to support organizational processes and management system performance.. (5)Human Resource Focus: Analyze how the organization is able to support its workers in building individual potential and how its workers can follow organizational goals.(6)Process Management: Checking how the

process of designing, managing, and improving important aspects of production and delivery, as well as other supporting processes, is carried out (7) Business Results: Analyze organizational performance and its improvement in key business areas, which include customer satisfaction, financial performance, and market share, human resources, supplier and relationship performance, operational performance, and government and social responsibility. This category also looks at the organization relative to its competitors.

The era of the industrial revolution 4.0 is an absolute and unavoidable phenomenon. Transformation and Innovation must be owned by the Company to be used as a strategy to face the industrial revolution 4.0, this is developments that do not hinder the company being founded. Total Quality Management (TQM) is very influential in a very competitive advantage in Industrial Revolution Era 4.0. Application of criteria with future research, urgently need it to be able to realize organizational performance and to combine criteria with digital-based process improvement, equipment need to be installed with sensors and manufacturing automation process connected via internet network so that any abnormalities in the production process can occur identified in real-time so we can do it quickly. repair actions to build superior quality management

#### **4. Conclusion**

The results showed that the complexity of information retrieval tends to affect the number and types of performance indicators. Various information such as data, costs, waste, satisfaction, web applications, supply chain improvements, etc., consultants are varying metrics. Studies relating to performance metrics vary widely in terms of objectives and research; therefore, the results may also differ, resulting in different types of performance indicators. The literature in this paper shows that studies focus on MNBQA to improve satisfaction, better service, education, products, SCM, business processes, maintenance, decrease cases in environmental problems, are used to identify quality control management targets, increase productivity, safety indicators, and even prototypes for best organizational performance. This information has limitations, some of which are published in local journals, not published in international journals, and only a few articles provide opportunities for further research. For future research, there is to develop an effort to improve the quality of an important function to justify that the MNBQA is already running and affects every aspect of the industry, be it education, hospitals, health, and manufacturing, which affects the quality of management, which represents a specific performance assessment for the organization's sustainability performance improvement.

#### **Acknowledgment**

The article was reviewed and published with the support of a lecturer at the University of Mercu Buana, Jakarta, as the first author and has worked on this paper to fulfill the task of the Performance Management and Improvement System Masters in Industrial Engineering.

#### **REFERENCES**

- A, F. R. F., Indrayanto, A., & Siswandari, W. (2019). *Quality Performance of UNSOED Dental Education Hospital Based on the Criteria of Malcolm Baldrige*. 5(1), 280–287.
- Alomairy, M. (2016). The effect of Baldrige performance excellence program on organization ' s innovation / dynamic capabilities. *Electronic Theses and Dissertations, 2016*, 2004–2019.
- Arawati, A., Ahmad, M. S., & Muhammad, J. (2009). An Empirical Investigation on the Impact of Quality Management on Productivity and Profitability: Associations and Mediating Effect. *Contemporary Management Research, 5*(1), 77–92. <https://doi.org/10.7903/cmr.1177>
- Arifin, Z. (2011). Rancang Bangun Perangkat Lunak Performance Dashboard Evaluasi Kinerja Karyawan Rumah Sakit Umum Pemerintah Dengan Metode the Malcom Baldrige National Quality Award

- (Mbnqa). *Jurnal Informatika Mulawarman*, 6(3), 108–118.
- Ayuningtyas, D., Tambunan, S., Bachtiar, A., Masyarakat, F. K., & Indonesia, U. (2005). Penilaian Mutu Rumah Sakit Tugu Ibu Dengan the Malcolm Baldrige National Quality Award Tahun 2005. *Universitas Stuttgart*, 08(04), 191–197.
- Dsouza, S. C., & Sequeira, A. H. (2012). Application of Malcolm Baldrige Quality Framework to Enhance Performance in Healthcare Organisation. *SSRN Electronic Journal*, April. <https://doi.org/10.2139/ssrn.2037944>
- Dwi Indra Prasetya, Handoko, F., & Vitasari, P. (2019). Pengukuran Kinerja Perusahaan Jasa Transportasi Niaga Darat Menggunakan Metode Baldrige Excellence Framework (Studi Kasus pada PT. Galena Perkasa Sidoarjo). *Jurnal Teknologi Dan Manajemen Industri*, 5(2), 12–18. <https://doi.org/10.36040/jtmi.v5i2.275>
- Fahma, F., Zakaria, R., & Sajiwo, M. H. (2011). Pengukuran kinerja perbankan menggunakan kriteria malcolm baldrige national quality award (Studi kasus pada PT.Bank XYZ). *Perfoma : Media Ilmiah Teknik Industri*, 11(2), 85–94.
- Farzadnia, E., Hosseini, Z., Mandra, V., & Riahi, A. (2017). Study of Hospital Quality Management and Improvement Rates in the Hospitals. *Journal of Humanities Insights*, 1(1), 7–11. <https://doi.org/10.22034/JHI.2017.59549>
- Ghosh, S., Handfield, R. B., Kannan, V. R., & Choon Tan, K. (2003). A structural model analysis of the Malcolm Baldrige National Quality Award framework. *International Journal of Management and Decision Making*, 4(4), 289–311. <https://doi.org/10.1504/IJMDM.2003.003996>
- Helmi, K. (2018). pengukuran Kinerja Organisasi berdasarkan Kriteria Malcolm Baldrige Di Fasilitas kesehatan Tingkat Pertama Non perawatan Kota Surabaya. *Jurnal Ilmiah Kesehatan Media Husada*, 6(2), 215–226. <https://doi.org/10.33475/jikmh.v6i2.40>
- Heryenzus & Suali. (2018). The Effect Of Service Performance Wth The Malcolm Baldrige Approach To Satisfaction Of BPJS Health Patients In The Kota Batam Regional General Hospital. *Jurnal Konsep Bisnis Dan Manajemen*, 5(1).
- Heryenzus, H. (2019). Pengaruh Kinerja Pelayanan Dengan Pendekatan Malcolm Baldrige Terhadap Kepuasan Pasien Bpjs Kesehatan Pada Rumah Sakit Umum Daerah Kota Batam. In *Jurnal Niara*. <https://journal.unilak.ac.id/index.php/nia/article/view/2112>
- Heryenzus, & Suali. (2018). Analisis Pendekatan Malcolm Baldrige Terhadap Kinerja Rumah Sakit Umum Daerah Kota Batam. *Seminar Nasional Ilmu Sosial Dan Teknologi*, 1, 79–84.
- Hussein, M. I. M. (2019). Availability of the Requirements of the American Malcolm Baldrige National Quality Award (MBNQA) in Diyala Electric Industry. *Tanmiyat Al-Rafidain*, 38(124), 105–122. <https://doi.org/10.33899/tanra.2019.164124>
- Industri, J. T. (2013). Sistem Perangkat Lunak untuk Internal Assessment Malcolm Baldrige Criteria For Performance Excellence (kriteria 1 -kepemimpinan) \* Aryadi Septerawan Prawira, Sugih Ariyanto, Cahyadi Nugraha. *Jurnal Online Institut Teknologi Nasional Oktober*, 1(2).
- Jannah, E. M., Rahman, A., & Yuniarti, R. (2019). *Pengukuran Strategi Bersaing Kinerja*.
- Ladzani, W. (2016). Benchmarking the South African Excellence Model against worldclass best practice business Excellence Models. *Environmental Economics*, 7(4), 8–19. [https://doi.org/10.21511/ee.07\(4\).2016.01](https://doi.org/10.21511/ee.07(4).2016.01)
- Lawrence, N. A., & Hammoud, M. S. (2017). Strategies to Implement the Baldrige Criteria for Performance Excellence. *International Journal of Management Excellence*, 9(1), 1040. <https://doi.org/10.17722/ijme.v9i1.341>
- Lazaros, A., Sofia, A., & George, I. (2017). Malcolm Baldrige National Quality Award (MBNQA) dimensions in Greek Tertiary Education System. *KnE Social Sciences*, 1(2), 436. <https://doi.org/10.18502/kss.v1i2.912>
- Peng, X., & Prybutok, V. (2015). Relative effectiveness of the Malcolm Baldrige National Quality Award categories. *International Journal of Production Research*, 53(2), 629–647. <https://doi.org/10.1080/00207543.2014.961207>
- Rakhmawati, Y. (2018). Analysis Performance of Hospital Based Criteria Malcolm Baldrige in RSUD dr. Iskak Tulungagung Post-Determination of Accreditation Level Plenary. *Journal for Quality in Public Health*, 1(2), 8–15. <https://doi.org/10.30994/jqph.v1i2.14>
- Rudjito, R., Daryanto, A., Mangkuprawira, S., & Achsani, N. A. (2010). Keterkaitan Kategori Kepemimpinan Dengan Enam Kategori Lainnya Dalam Malcolm Baldrige Criteria for Performance Excellence (Mbcfpe) Pada Badan Usaha Milik Negara. In *Jurnal Manajemen & Agribisnis* (Vol. 7, Issue 2, pp. 97–114).

- Tippe, S. (2013). Kinerja Perusahaan Pt Baramulti Sukses Sarana Dengan Menggunakan Teknologi Pengukuran Malcom Baldrige Dalam Rangka Penyesuaian Di Perusahaan Batubara Yang Berkelas Dunia Di Indonesia. *Jurnal Sositeknologi*, 12(28), 290–319. <https://doi.org/10.5614/sostek.itbj.2013.12.28.4>
- Utomo, A. P., & Murti, H. (2016). Perancangan Model Pre Assesment Manajemen Kinerja Universitas Menggunakan Kriteria Malcolm Baldrige ( Studi Kasus : Universitas Stikubank Semarang ). *Infokam*, 1, 28–34.