THE IMPACT OF NATIONAL AND INTERNATIONAL QUALITY AWARDS ON TOTAL QUALITY MANAGEMENT

Miriam Jankalová

Abstract

Management literature, marketing strategies or corporate policies apply the word "quality" so frequently, as if nobody had doubt about the meaning of this term. The approach of one's side about the quality of service must not be the same as the approach of any other side. That are the reasons for which is the quality assessment such subjective and an understanding of the basic concepts such controversial. In the past 10 or 20 years, a few companies have radically transformed their business performance. Many of the concepts and methods they have used are now collectively called "total quality" or "total quality management", what according to Juran include business transformation, performance excellence, business excellence and six sigma. We should mention here, that in any discussion of total quality it is useful to understand the generic term "total quality management" as "the vast collection of philosophies, concepts, methods and tools, which are now being used throughout the world to manage quality", but at its core it's a management approach to long-term success through customer satisfaction. Various people, various opinions. Such approach is possible by definition and understanding of the terms "quality" and "total quality management" too.

One of the most useful trends in the past decade has been the self-assessment activities of many companies throughout the world. Companies worldwide are using the criteria of the Malcolm Baldrige National Quality Award, the European Quality Award, the Deming Prize and many other national quality awards (Ludwig Erhard Preis in Germany, Národná cena za kvalitu SR in Slovakia and so on) to assess their current performance against a reasonable set of guidelines for total quality. A very import step in this process is to first understand one's own organisation's performance level and compare it to the performance level of another organisation. The paper describes the fundamental problem, also the impact of national and international quality awards on total quality management.

Keywords: quality, management, Total quality management, success, awards

JEL classification: M19, O31

1. Introduction to the Total Quality Management

In the past two decades, many organisations throughout the world have been under tremendous pressure. In global competitive markets, *quality* has become the most important single factor for success and during these years there has been an increasing global emphasis on *quality management*. Many companies have found that all their radical restructuring, reengineering, downsizing and numerous quality programs may have helped them survive, but they still do not have a distinctive quality advantage. Reimann, then Director for Quality Programs, National Institute of Standards and Technology, U.S. Department of Commerce, in testimony to the U.S. Congress, stated this clearly [2]: "There is now far clearer perception that quality is central to company competitiveness and to national competitiveness." In others' words, quality management has become the competitive issue for many organisations and according to J. M. Juran: "Just as the twentieth century was the century of productivity, the twenty-first century will be the quality century". Nevertheless, what is quality and what means the "generic" term "total quality management"?

Wadsworth, Stephens and Godfrey explained the term "quality" in their publication Modern Methods for Quality Control and Improvement, as follows [3]: "For starters turn to an available dictionary and read the definition of quality. It probably includes some of the following in its definition:

- degree of excellence, or general excellence (. . . has quality),
- attribute of faculty (. . . has many good qualities),

- relative nature, character, or property."

Shewhart argues that quality is often best described as "qualities", that it is quantifiable, from this perspective, but that there is both an objective and a subjective side to quality.

The International Standards Organisation (ISO) defines quality as: "Quality: degree to which a set of inherent characteristics fulfils requirements, with the following notes:

Note 1: The term "quality" can be used with adjectives such as poor, good, or excellent.

Note 2: "Inherent" means existing in something, especially as a permanent characteristic.

In further clarification of this definition, "requirement" is defined as: *need or expectation that is stated, generally implied or obligatory.*

Various people have also defined the term "quality" over many years and we should mention here the definition according to Crosby, Deming, Feigenbaum, Juran ... But the meaning of the word "quality" could not be closed in such definition, that will provide a few steps how to adopt and accept the quality. In our view, quality means [2]:

- 1. Those *features of products* which meet customer needs and thereby provide customer satisfaction. In this sense, the meaning of quality is oriented to income. The purpose of such higher quality is to provide greater customer satisfaction and, one hopes, to increase income. However, providing more and/or better quality features usually requires an investment and hence usually involves increases in costs. Higher quality in this sense usually "costs more".
- 2. Freedom from deficiencies freedom from errors that require doing work over again (rework) or that result in field failures, customer dissatisfaction, customer claims, and so on. In this sense, the meaning of quality is oriented to costs, and higher quality usually "costs less" (see Figure 1).

Product features that meet customer needs	Freedom from deficiencies
Higher quality enables companies to:	Higher quality enables companies to:
Increase customer satisfaction	Reduce error rates
Make products saleable	Reduce rework, waste
Meet competition	Reduce field failures, warranty charges
Increase market share	Reduce inspection, test
Provide sales income	Shorten time to put new products on the
Secure premium prices	market
·	Increase yields, capacity
The major effect is on sales.	Improve delivery performance
,	
Usually, higher quality costs more.	Major effect is on costs.
,, <u>G</u> , , , , , , , , , , , , , , , , , , ,	,
	Usually, higher quality costs less.
	3 1 41 3 2000
1	I I

Figure 1: The meanings of quality [2]

In the past 10 or 20 years, a few companies have radically transformed their business performance. Many of the concepts and methods they have used are now collectively called "total quality" or "total quality management", what according to Juran include business transformation, performance excellence, business excellence and six sigma. In the view of the Union of Japanese Scientists and Engineers (JUSE, a summary of their thinking is provided by the diagram in Figure 2), total quality management is a management approach that strives for the following in any business environment:

- under strong top-management leadership, establish clear mid- and long-term vision and strategies,
- properly utilize the concepts, values and scientific methods of TQM,
- regard human resources and information as vital organizational infrastructures,
- under an appropriate management system, effectively operate a quality assurance system and other cross-functional management systems such as cost, delivery, environment and safety.
- supported by fundamental organizational powers, such as core technology, speed and vitality, ensure sound relationships with customers, employees, society, suppliers and stockholders,

- continuously realize corporate objectives in the form of achieving an organisation's mission, building an organisation with a respectable presence and continuously securing profits.

We should mention here, that in any discussion of total quality it is useful to understand the generic term "total quality management" as "the vast collection of philosophies, concepts, methods and tools, which are now being used throughout the world to manage quality", but at its core it's a management approach to long-term success through customer satisfaction. By the way [1], it is possible to achieve only then, if are known the customer requirements and is secure their continually measuring and evaluation

Various people, various opinions. Such approach is possible by definition and understanding of the terms "quality" and "total quality management" too. Take a look at the fundamental problem of this paper, also at the impact of national and international quality awards on total quality management.

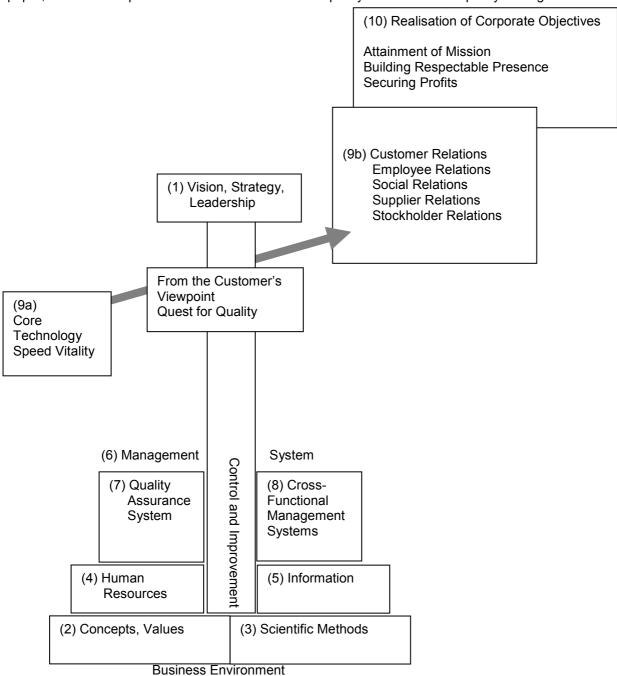


Figure 2: The overall picture of TQM in the view of the Union Japanese Scientists and Engineers [3]

2. The impact of national and international quality awards on TQM

One of the most useful trends in the past decade has been the self-assessment activities of many companies throughout the world. Companies worldwide are using the criteria of the Malcolm Baldrige National Quality Award, the European Quality Award, the Deming Prize and many other national quality awards (Ludwig Erhard Preis in Germany, Národná cena za kvalitu SR in Slovakia and so on) to assess their current performance against a reasonable set of guidelines for total guality. A very import step in this process is to first understand one's own organisation's performance level and compare it to the performance level of another organisation. This benchmarking is one of the most important trends in modern quality management. When asked by Boardroom Reports if there was a single most import thing a company could do to change the company culture and achieve remarkable results, the then-chairman of Ford Motor Company, Donald Peterson, answered [3]: "Each company must find out which other companies in the world are best in that industry. Then, each company must benchmark operations against the most efficient - and most profitable - foreign and domestic businesses ... those that do - such as Xerox - have had incredible results." Peterson went on to explain that at Ford, "we began by comparing our manufacturing processes, design, marketing, financial management and quality, with the best of the Japanese operations. Comparisons should be based on speed, capital investment, wasted effort, number of employees, and any other yardstick with which the company can measure both its own and other operation. The next step is to get managers in the key departments to acknowledge that another business is doing all or part of their job better. That becomes easier when the CEO says that he looks on the benchmarking as an opportunity, not as criticism. Good managers are energized by that challenge. Next, send groups of managers to visit the companies with the superior operations."

During 1991, the U.S. General Accounting Office (GAO) completed a study of Malcolm Baldrige National Quality Award winners and site-visited companies. The GAO studied carefully the relationship between quality management activity and success and profitability. In early 1995 the National Institute of Standards and Technology of the U.S. Department of Commerce issued a new report contrasting the stock market success of the Malcolm Baldrige National Quality Award – winning companies with average companies. The results were convincing. The Malcolm Baldrige National Quality Award recipients as a group have outperformed the Standard & Poor's 500. The recipients achieved a 362-percent rate of growth versus a 148-percent rate of growth for average companies.

In what consists the basic concept of the business success?

In the view of the Deming Prize Committee total quality management is a set of systematic activities carried out by the entire organization to effectively and efficiently achieve company objectives so as to provide products and services with a level of quality that satisfies customers, at the appropriate time and price. In other's words:

- "Systematic activities" mean organized activities to achieve the company's mission (objectives) that are lead by strong management leadership and guided by established clear mid - and long-term vision and strategies as well as appropriate quality strategies and policies.
- "Carried out by the entire organisation to effectively and efficiently achieve" means to involve everyone at all levels and all parts of the company so as to achieve the business objectives speedily and efficiently with the least management resources. This is accomplished through an appropriate management system that has a quality assurance system at its core, and it integrates other cross functional management systems such as cost, delivery, environment and safety. The respect for humanity value encourages the company to develop human resources which uphold its core technology, speediness and vitality. The company maintains and improves its processes and operations, and uses appropriate statistical techniques and other tools. Based on facts, the company manages its business by rotating the management cycle of PDCA (plan, do, check and act). The company also rebuilds its management system by utilizing appropriate scientific methods and information technology.
- "Company objectives" refer to securing appropriate profit for the long term through satisfying customers consistently and continuously. Also, they encompass improving the benefit to all stakeholders including employees, society, suppliers and stockholders.
- "Provide" refers to activities from producing "products and services" to handing them off to customers, including surveys, research, planning, development, design, product preparation, purchasing, manufacturing, installation, inspection, order-taking, sales and marketing, maintenance, after-sales services and after-usage disposal and recycling.

- "Products and services" include manufactured products (finished products and parts and materials), systems, software, energy, information and all other benefits that are provided to customers.
- "Quality" refers to usefulness (both functional and psychological), reliability and safety. Also in
 defining quality, influence on the third parties, society, the environment and future generations
 must be considered.
- "Customers" include buyers but also users, consumers and beneficiaries.

Total quality management is also mechanism joined all the people and all kinds of things with the purpose to achieve and to obtain such level of quality that satisfies customers. On other side the quality award models, as a fundamental model for awarding of the national and international quality awards, highlight customer satisfaction, workforce empowerment and increased productivity. This follows from the structure and fundamental principles of the quality models.

In summary, the purpose of the quality award models was and still is to help improve quality and productivity by:

- helping stimulate companies to improve quality and productivity for the pride of recognition while obtaining a competitive edge through increased profits,
- recognizing the achievements of those companies which improve the quality of their goods and services and provide an example to others,
- providing specific guidance for other organisations that wish to learn how to manage for high quality by making available detailed information on how winning organisation were able to change their cultures and achieve eminence.

References

[1] JANKAL, R.: Selected aspects of quality management in the area of telecommunication services. *Journal of Information, Control and Management Systems*, 2003, roč. 1, č. 2, s. 35 - 40. ISSN 1336-1716

[2] JURAN, J. M. – GODFREY, A., B.: *Juran's quality handbook*. 5. vyd. Singapore: McGraw-Hill, 2000. ISBN 0-07-116539-8

[3] WADSWORTH, H. M. – STEPHENS, K. S. – GODFREY, A. B.: *Modern Methods for Quality Control and Improvement.* 2. vyd. New York: John Willey & Sons, 2002. ISBN 0-471-29973-1

[4] ZOLLONDZ, H. D.: Lexikon Qualitätsmanagement. 1. vyd. München: Oldenbourg Verlag, 2001. ISBN 3-486-24316-0

Ing. Miriam Jankalová, PhD., University of Žilina, Faculty of Operation and Economics of Transport and Communications, Univerzitná 1, 010 26 Žilina, Slovakia E-Mail: Miriam.Jankalova@fpedas.uniza.sk

The paper was elaborated within the grant VEGA 1/0709/08.

Lektoroval:

Doc. Ing. Milan Hutyra, CSc.