

# 27<sup>th</sup> EISIC University of Bergamo, Italy

ISBN 979-10-415-5220-7

# Is Quality off the agenda?

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Abstract: Modern Quality Management appeared in the 1920s and was particularly developed from the 1950s to the 1990s with quality control, quality assurance, Total Quality and eventually Business Excellence. First designed for industrial activities, it expanded into services from the 1970s. Thanks to a number of standards and management models, it enjoyed a fast growth from the 1960s to the early 2000s. Since the mid-2000s, it has, however, lost in popularity and been increasingly abandoned by companies. The key reason for that evolution seems to be that the various quality standards and models on the one hand no longer provide a competitive advantage to companies and on the other hand do not offer management principles and tools for companies to take up the challenges that have arisen in the economic, managerial, social and natural environments. This study first proposes an overview of Quality Management's development since its inception and second an analysis of its decline examining possible reasons for it. Finally, in a prospective manner, it proposes ways thanks to which Quality Management could be rethought and revived.

**Keywords:** Quality Management, ISO standards, Malcolm Baldrige National Quality Award, EFQM Business Excellence model, future of quality

### 1. Introduction:

Quality in its modern sense has been around for a century. Born in industry, it gradually expanded its scope to about all aspects of management, at least tentatively.

It has undeniably brought improvements in the management of economic activities, though more in terms of efficacy than efficiency. Quality has been considered as a founding pillar of performance and excellence (Dahlgaard J., Kristensen K., Kanji G., 1998; Oakland J., 2020; Porter L.J., Tanner S.J., 2004). From the 1920s to the end of the 20<sup>th</sup> cent, Quality models and techniques were developed and diffused through companies worldwide as the secret for business performance.

Quality Management enjoyed a regular development from the 1950s to the early 2000s, but it hit a ceiling in the mid 2000s and became a sort of 'has been'. Since 2005 it has suffered from a regular stagnation, slow decline and disinterest on the part of organizations. It seems that Quality Management has not been able to adapt to the disruptive evolutions and revolutions that have taken place in the environment in its broad sense over the last 20 years, and that will intensify in the foreseeable future. As a consequence, Quality Management has been superseded by new approaches, particularly the concept of sustainable and well-being enterprise.

The purpose of the paper is to propose an analysis of this rise and decline of QM, shed light on the reasons why, and see how QM could be revitalized in the present and future environment. We will first look the rise and development of Quality Management and its reasons. Then we will consider the nature and evolution of the main quality referentials. Finally we will examine the decline of Quality Management and devise some ideas for the evolution of the concept of Quality.

## 2. The rise and development of Quality Management

The issue of quality in the productive activities of man is not something new. The first prominent person who dealt with the problem is Aristotle in the 5<sup>th</sup> century BCE. In the *Categories* section of the *Organon* Aristotle defines quality ( $\pi oi ot \eta \zeta$  – poiotēs; the word *qualitas* in Latin was introduced by Cicero and is a calque of the Greek word) as an attribute of some thing, thing being here applied to an object as well as to a human being. With extraordinary premonition, he states that quality is conforming to some requirements, which is at the root of modern Quality Management (ex: Crosby Ph., "quality is conformance to requirements"). The word quality itself expresses this adequation. The Latin word *qualitas* is derived from *qualis* which is coupled with *talis* in the syntactic sequence (*talis...qualis*) expressing this adequation. So, quality has been around for at least 25 centuries.

# 2.1 Quality before Quality Management

Quality has always been a preoccupation of producers of all kinds. In the Middle Ages and until the 19<sup>th</sup> century, the very organization of trades aimed at ensuring the quality of the products made with the professional corporations and the master-apprentice relationship whose objective was to teach and transmit quality, the result of this process being symbolized by the apprentice's masterpiece.

Quality was then assured by the training and professional skills of the workers.

It is interesting to note that, in those days, as production was carried out as one-off products or small batches (i.e. low volumes of production), there was a close relationship between the supplier and the customer and a large customization of products according to the requirements of a single customer or a very small group of them. So, the idea of a bi-directional relationship between supplier and customer and a customized product to enhance customer satisfaction, which became popular in the last decades of the 20<sup>th</sup> century, was an ancient one.

Things changed in the 19<sup>th</sup> century. The Industrial Revolution brought about new production modes and capabilities. A mass production became possible as well as a standardization of products. This did not happen overnight of course, it is only towards the end of the century that they set in. This new industrial context is symbolized by Fordism and Taylorism. The idea of standardization was popularized by Henry Ford's famous statement about his Model T: "You can chose the color as long as it's black". Mass production was made possible thanks to the 'scientific methods' developed by Frederick Taylor (1911) pushing the division of labour (Smith's heritage) to its limits by organizing production along assembly lines applying the principle of 'one man, one task' and moving materials, not workers. As a result, productivity could increase tremendously and production costs reduced. Basically this mode of production is still practiced in many factories today (Martin J., Weill M., 2002). But a big problem remained unsolved, the quality of the product in the sense of conformance to specifications. Products were plagued with defects and there was no guarantee that it would work when it came out of the assembly line. To remedy this situation an inspection of the product was carried out before it was put in the market. It was the beginning of what would be called 'quality inspection', still practiced today. But this method created a number of problems. First it was not workable on a big production, second it implied extra costs so that a part of the cost gained by the production mode was lost in defects, third there was the issue of what to do with the defective product. It could be re-worked, if possible, otherwise it had to be rejected outright, which implied additional costs.

That is the reason why new approaches and techniques were needed.

# 2.2 From Quality Inspection to Total Quality Management

It is then in the 1920s that modern Quality Management was born.

The development of new high-risk products made the design and adoption of new techniques imperative. Of course, car accidents and train accidents, due to mechanical failures, were not uncommon, but their consequences were not so dramatic. But when the aeronautics industry, the oil and gas industry and, with the looming world war, the defense industry knew a fast development, risks increased dramatically. It was not possible to accept failures that would have catastrophic consequences.

The founding father of a new approach of quality problems was Walter A. Shewart (1931). He pioneered two methods that would structure Quality Management for decades. The first one was the use of statistical tools to control production processes, which gave rise to a new phase in the history of modern quality which was called *quality control*. With *quality inspection* the checking of the conformance to specifications takes place at the end of the production process, with the problems mentioned above. With *quality control* the monitoring takes place during the production process, permitting a quick reaction in case of deviations. The second one was the idea of what was to be called *continual* or *continuous improvement* considering the production process as a cycle (so first known as Shewart cycle), meaning that engineers and operators build on experience to do better each time a new cycle starts.

W.E. Deming built on Shewart's foundations and proposed 14 points to structure a quality policy putting the stress on statistical methods, training and improvement (Deming W.E., 1986). So we moved from *control* to *assurance* which was to dominate Quality Management for

decades to come. Quality had to be integrated upstream of the production process proper, that is before production starts, in order to *assure* that the output (product) is conforming to the requirements. This is a point that J.M. Juran particularly insisted on (Juran J.M., 1992). Deming refined the Shewart Cycle and developed the Plan Do Check Act (PDCA) model for continuous improvement.

At that point of development of Quality Management, it was realized that the conformance of the output was also dependent on elements outside the production process proper. So, the *control-assurance* approach was widened to the whole company. This was initiated by the JUSE in Japan with the *Company Wide Quality Control* and by A. Feigenbaum in the USA (Feigenbaum A., 1961).

This quality philosophy was developed and implemented, in an emblematic way by Toyota so that *Toyotism* became synonymous with it. Toyota also heralded such techniques as Just-In-Time, Kanban and Kaizen (J. Liker & M. Hoseus, 2008).

This was the start of Total Quality Management which would develop in the 1980s and 1990s encompassing all aspects influencing quality all along the value chain (Oakland J., 2020). The specificities of service quality were taken into account by adapted models such as SERVQUAL (Parasuraman A., Zeithaml V., Berry L., 1988).

# 2.3 The benefits of Quality Management

Originally Quality Management was invented to reduce variations within processes and products between what is planned and what is done. The goal was to tend and even reach 'zero defect', that is 'get it right the first time' for which the 6 sigma methodology can be used (Pande P., Neuman R, Cavanagh R., 2000). In a rather simple industrial process, in case of a failure, it is possible, most of the time, to stop the process and go back in order to remedy the cause of failure. But when a process becomes complicated with a of lot of activities which are dependent on others, this going back is not possible. So, the process must be in full control, hence the 6 sigma notion. This impossibility is a characteristic of a service delivery. The fact that the process unfolds in the presence of and very often in cooperation with the beneficiary, precludes any 'going back'. This is true of even simple processes. If a hairdresser cuts too much hair, there is no way to glue the hair back and start again. Consequently, aimed at zero defect is fundamental both for the effectiveness of the process and the quality of the output. It is undeniable that the reduction of defects and failures has been a great success of Quality Management. We just need to look back to the 1950s and 1960s to be convinced of it. In those days, we were never sure if the product would function as expected. Today, any customer would run away and wildly complain if a product did not function as it should.

One of the consequences of 'zero defects' is the reduction of the costs involved of operating the process and refitting a defective product, when possible, not to mention the loss of credibility of the company delivering the product or service. That is the reason why Philip Crosby could claim that quality was 'free'. When a process fails, there is the cost of identifying the cause of the failure, then the cost of eliminating the cause. When a product is defective, there is of course the cost of fixing the defect, but we must not forget that there was already the cost of making the product, so we have a double cost. It is then easy to understand that a multiplication of failures and defects is a sure road to bankruptcy and the loss of one's custom. The cost of non-quality strictly speaking (internal failure costs and external failure costs, ignoring the costs of appraisal and prevention) can represent 20 to 25% of revenues according to many studies pioneered by Philip Crosby (Interview in *Industry Week*, 19 June 1995).

A third significant benefit of Quality Management, although it was not central to it at the beginning, is customer satisfaction. The reduction in defects and in costs with its implication in

terms of price or more technically price-quality ratio affects customer satisfaction. With the development of Quality Management the issue of customer satisfaction became a key element. Based on a correlation between quality understood as meeting customer expectations and satisfaction, the hypothesis is that as quality increases, satisfaction increases. An increase in satisfaction implies an increase in customer loyalty, hence repeat purchases, and an increased attractiveness for new customers. In this way a virtuous circle is created.

In the later developments of Quality Management, the notion of customer satisfaction has been widened to stakeholders satisfaction or interested parties in the language of ISO. Stakeholders' satisfaction is the result of a compromise as the interests of the different stakeholders are more or less diverging. Consequently, the equation for a company delivering a product or a service is to tend towards a Pareto optimum.

These benefits brought about over the years with the development of Quality Management gave companies a way of differentiating themselves and gaining a competitive advantage through an increase in performance not only in financial terms, as classically measured, but also in organizational terms (process management), customer and stakeholder satisfaction, human resources development (learning and growth) that can be measured and monitored with for example Kaplan and Norton *Balanced Scorecard* (Kaplan R., Norton D., 1992 and 1996).

Therefore adopting a quality policy was a boon for companies, which can explain the attractiveness of quality standards and models.

# 3. Quality standards and models

We will examine in this section the characteristics and evolution of the main quality standards and models.

We will begin with the two best-known and most used quality standards; ISO 9001 and ISO 14001. Then we will consider the Malcolm Baldrige National Quality Award model and the EFQM Business Excellence Model.

# 3.1 ISO 9001

ISO 9001 is the oldest and most famous quality standard. At about the same time as the Malcolm Baldrige model was designed and launched, and a little before the EFQM model appeared (see below), the International Organization for Standardization walked in the footsteps of the UK standard BS 5750 and designed and published three standards devoted to quality management, commonly known as the 9000 series.

The motivation was the same in the three cases; provide tools to companies which wanted to enhance the quality of their operations and control them. The main technical difference was that, and still is, that the ISO standards offered the possibility of a certification of companies that was recognized the world over.

Originally ISO launched three standards about quality in 1987 with somewhat different objectives. The first one, ISO 9001, entitled *Model for quality assurance in design, development, production, installation, and servicing* had the widest scope. As the title indicates, it covered a company's activities from design to servicing, which is still, fundamentally, the scope of the present version of the 9001 standard. The second one, ISO 9002, entitled *Model for quality assurance in production, installation, and servicing*, excluded design as many companies were not involved in this aspect and only dealt with production. The third one, ISO 9003, entitled *Model for quality assurance in final inspection and test*, focused on metrology aspects.

The main innovation of these standards was that they focused on *Quality Assurance*, that is prevention before the production process starts, and not, as had been practiced for decades already, on correction (of defects and non-conformities) at the end of the production process. *Quality Assurance* (QA) became the mantra of Quality Management throughout the 1990s and the first years of the 2000s.

The revision of the standard in 1994, was a minor one, stressing the QA aspect.

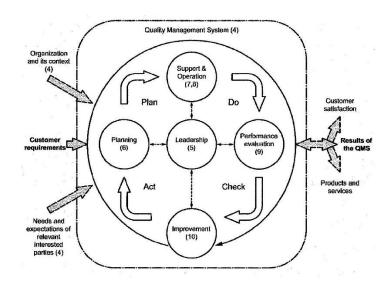
The third version of the standard brought about major changes. The first one was that the three standards were merged into a single one labelled as ISO 9001: 2000. The companies which were not involved in design could simply ignore the requirements referring to it. The second one was the stress on 'process management'. 'Process Management' was the key for moving away (rarely the case in reality) from the classic functional structure of the organization to an organization structured around a system of processes in which the company uses a number of inputs transformed by the set of processes into a number of outputs whose value is superior to that of the inputs. The third one was 'continuous improvement', not a new concept as dating back to the beginnings of quality management with Shewart and Deming, but not a prime preoccupation of companies at the time. 'Continuous improvement' also aimed at showing that management was not something linear but something circular as pioneered by Shewart. The fourth one was the emphasis put on customer satisfaction.

The 2008 version only brought cosmetic changes and as the ISO 14001 standard had begun to gather momentum, facilitated the combination of the two standards.

The 2015 version, which is currently the one in force , was intended as proposing a Quality Management System for meeting the management challenges of the 21<sup>st</sup> century.

'New' quality management principles were enounced. They are 'customer focus, leadership, engagement of people, process approach, improvement, evidence-based decision making, relationship management'. Actually, most of them had been around for decades under various denominations in Deming, Juran or Feigenbaum, notably the PDCA cycle.

The structure of the standard is represented in this way:



(Source: ISO 9001 Standard)

The notion of 'risk' is now clearly taken into account, but with a limited scope. Risks relate to dysfunctions, non-conformities or lack of improvement in the QMS. There is nothing about risks jeopardizing sustainability. The only place where the notion could be inserted is in (6.1.1.c) with "prevent or reduce undesired effects", but without any examples. In any case, the

words 'sustainability, sustainable or environment(al)' – in the natural sense are absent. In Note 2 of 4.1, the 'context' can be 'legal, technological, competitive, market, cultural, social and economic'. Obviously, the natural environment and everything that revolves around it, do not exist.

## 3.2 ISO 14001

The second ISO key standard for quality management is the ISO 14001entitled *Environmental Management Systems*.

The issue of sustainability, and environmental management, one of its aspects, emerged in the 1970s with the Club of Rome and the Brundtland Report. Nothing much happened until the 1990s when the Rio Earth Summit was held in Rio de Janeiro, the 1<sup>st</sup> COP on Climate Change took place in 1995 and the Kyoto Protocol was adopted in 1997. Since then movement has accelerated with the growing awareness of the lethal consequences of climate change, although the concrete actions taken are far from being sufficient just to mitigate them.

In the realm of management the issue of the natural environment was first tackled, like for quality in general, by the publication of the British Standard 7750 in 1992. ISO followed suit and in 1996 the first version of the ISO 14001 standard for establishing an environmental management system was published. This standard is not prescriptive in terms of targets but offers a framework to companies to set up an environmental management system to measure, control and improve their impact on the environment and meet the expectations of their stakeholders.

The first revision of the standard, which took place in 2004, only brought minor changes. The second revision in 2015 was much more far reaching, integrating, like ISO 9001, the management of risks, the cyclical philosophy and structure and the integration of the standard with the 9001standard in order to build a global system, (the same methodology was adopted for other standards as they were developed).

The structure of the standard follows the PDCA model and is process based.



(Source: ISO 14001Standard)

The EMS is described in 7 chapters: the context of the organization, leadership, planning (P), support (D), operation (D), performance evaluation (C), Improvement (A).

For the first time the objective of sustainability appears; the EMS 'contributes to the environmental pillar of sustainability' (1. Scope). This scope is wide as it concerns the 'environmental aspects that the organization can either control or influence considering a lifecycle perspective'. And, 'Environment includes air, water, land, natural resources, flora, fauna, humans and their relationships (locally, regionally and globally) and can be described in terms of biodiversity, ecosystems, climate or other characteristics' (3.2.7) Processes are used 'in order to avoid, reduce or control the creation, emission or discharge of any type of pollutant or waste in order to reduce adverse environmental impacts". Risks are defined as 'Potential adverse effects' (3.2.11). However, it is up to the organization to decide about the scope of its EMS, about the objectives (except the legally binding ones) and the means used to achieve them. Nevertheless, the standard is a great progress towards a new style of management that takes sustainability into account.

# 3.3 Other standards helpful for sustainability

Three other ISO standards can be combined with ISO 9001 and ISO 14001 to help companies build a global management system which can be a first step on the road to sustainability.

The ISO 45001:2018 standard is about *Occupational Health and Safety*, inspired by the OHSAS 18001 (1999) and the International Labour Organization's ILO -OSH 2001, which seems to be doing rather well, maybe because it has superseded OHSAS. But as its title indicates, it only concerns the employees of the organization. Its scope does not include the possible effects of the organization's policies on the people living near the organization.

The standard ISO 22000:2018 is about *Food Safety Management systems* inspired by the HACCP methodology, and does not seem to be very popular. It is probable that many companies still stick to HACCP. It can preserve users of the organization's products from adverse effects.

ISO 26000:2010 (not certifiable) on *Social Responsibility* clearly touches upon, though not head on, for the first time the concept of sustainability. Even if the word is not (yet?) in the title, only the phrase *social responsibility* is used, ISO states that "ISO 26000:2010 is intended to assist organizations in contributing to sustainable development" (3.1) as the representation of the standard shows.

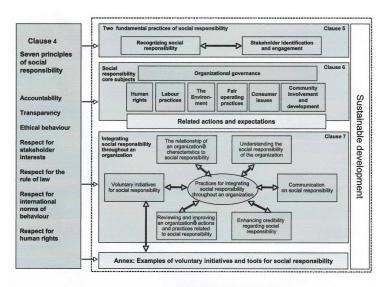


Figure 1 — Schematic overview of ISO 26000

(Source: ISO 26000 standard)

A distinction is made between *sustainable development* and *social responsibility* in 3.3.5. But there is no definition proper to the standard which only repeats the definition found in the Brundtland Report. As for *social responsibility*, it "has the organization as its focus and concerns the responsibilities of an organization to **society and the environment**. Social responsibility is **closely linked to sustainable development**. Because sustainable development is about the economic, social and environmental goals common to all people, it can be used as a way of summing up the **broader expectations of society** that **need to be taken into account by organizations** seeking to act responsibly. Therefore, an overarching goal of an organization's social responsibility **should** be to contribute to sustainable development". However, we do not quite see the differences discriminating 'social responsibility' from 'sustainable development'. They both have the same objectives, as highlighted in the quotation. And we can note a certain contradiction between the use 'need' and the use of 'should'.

The next paragraph states that "The principles, practices and core subjects described in the following clauses of this International Standard form the basis for an organization's practical application of social responsibility **and** its contribution to sustainable development. The decisions and activities of a socially responsible organization **can** make a meaningful contribution to sustainable development." 'And' somewhat contradicts 'should', which, in the last sentence is replaced by 'can'.

The last paragraph states that "The objective of sustainable development is to achieve sustainability for society as a whole and the planet. It does not concern the sustainability or ongoing viability of any specific organization. The sustainability of an individual organization may, or may not, be compatible with the sustainability of society as a whole, which is attained by addressing social, economic and environmental aspects in an integrated manner" (we highlight). This paragraph contradicts the first one. The last sentence is puzzling. The sustainability of an organization may go against the sustainability of society! There is obviously a logical flaw. There is quite of dose of uncertainty and obscurity in this section of the standard which can be a handicap rather than a help for organizations.

The adjective 'sustainable' appears in the chapter about *The Environment* (6.5.3) which covers pollution (6.5.4), resource use (6.5.5), climate change (6.5.6), protection and restoration of the natural environment (6.5.7).

It also appears in the chapter on *Consumer issues* (6.7) as Issue 3 on *sustainable consumption* (6.7.5).

All the recommendations obviously concern society as a whole.

It is impossible to know, of course, how many companies use ISO 26000, but we can wonder how useful it can be for organizations in the perspective of sustainable development.

## 3.4 Malcolm Baldrige National Quality Award

In his 1982 book entitled *Out of the Crisis* Deming urged American industrial companies to embrace quality management in order to regain competitiveness against Japanese industrial companies which throughout the 1960s had built up effective and efficient quality systems so that in the 1970s, they became without rivals in terms of organizational and product quality and invaded the world with their products.

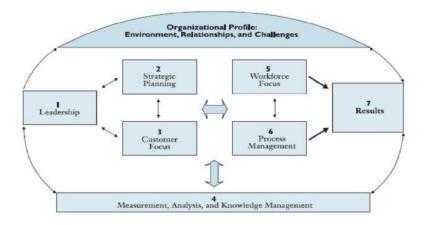
Dr Deming perfectly knew the challenge as he himself largely contributed to the adoption of Quality Management by Japanese companies in the 1950s through the Japanese Union of Scientists and Engineers (JUSE). The emblematic Japanese company that adopted quality

management was Toyota to the point that quality and Toyota became synonymous under the name of *Toyotism* with its management system based on *quality circles, kanban, Just-In-Time, reticular supply chains and kaizen*.

In 1987, the US Congress voted the Malcolm Baldrige National Improvement Act, under the auspices of the National Institute of Standards and Technology (NIST), bearing the name of Malcolm Baldrige who was the Secretary of Commerce at the time. The first Award was conferred in 1988.

The Award is based on a model which evolved with time.

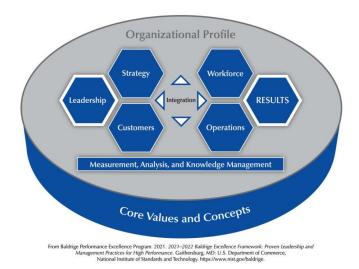
The original model is made up of 7 performance evaluation criteria, covering what was thought at the time as the source of differentiation and competitiveness for companies.



(source: NIST)

The approach is a systemic one, symbolized by the double arrows linking the 7 criteria, which was a break away from the classic vision of the structure of organizations and of strategic planning.

The current model is very similar to the original one, albeit with a somewhat different presentation. There are still 7 performance evaluation criteria, though not numbered, with names a little streamlined: *strategy* replaces *strategic planning* (*planning* had been out of fashion for some time), the word *focus* has disappeared but it does not mean that the action has, *process management* has been replaced by *operations*, which is probably regrettable as *processes* has always been fundamental in the structuring of 'operations', *environment* (which is not in the sense of 'natural environment' as we could be tempted to think today, but in the classic sense it has in the SWOT analysis, *relationships* and *challenges* have disappeared (They are integrated into the *organizational profile*), and everything bathes in the *core values and concepts*, which is vague enough to include anything. Finally, the double arrows have been replaced by a four-directional one symbolizing the integration of all the components. So, the changes have been cosmetic and there is a remarkable stability in the 'philosophy' and foundations of the model.



If we look at the New Baldrige Award Criteria for 2024 (NIST), this is what we find:

**Leadership**: How upper management leads the organization, and how the organization leads within the community.

**Strategy:** How the organization establishes and plans to implement strategic directions.

Customers: How the organization builds and maintains strong, lasting relationships with customers.

**Measurement, analysis, and knowledge management:** How the organization uses data to support key processes and manage performance.

**Workforce:** How the organization empowers and involves its workforce.

**Operations:** How the organization designs, manages, and improves key processes.

**Results:** How the organization performs in terms of customer satisfaction, finances, human resources, supplier and partner performance, operations, governance and social responsibility, and how the organization compares to its competitors.

It looks as if hardly anything had changed since the 1970s and early 1980s in the global environment, and particularly the natural one. It is therefore rather excessive, to say the least, to call them 'new', as there is hardly anything new compared to the original model. Even 'strategic planning' reappears. The only new inclusion with a potential of a different management approach is *social responsibility*.

Under the heading of *Community Engagement*, a note to the question "What are your results for societal contributions?", we are given some examples of "societal contributions: reduced energy consumption, use of renewable energy resources and recycled water, reduction of your carbon footprint, waste reduction and utilization".

In the '2023–2024 Baldrige Excellence Framework®', we have the only occurrence of the word 'sustainability' in the couple 'societal contributions and environmental sustainability' and some indications under the heading "Governance and Societal Contributions: Conservation of natural resources. Conservation might be achieved through the use of "green" technologies, reduction of your carbon footprint, replacement of hazardous chemicals with water-based chemicals, energy conservation, use of cleaner energy sources, or recycling of by-products or wastes".

All the recent challenges (remember the word has disappeared) companies, especially industrial ones are facing today (climate change and all its political, financial, social and natural

consequences) which, willy nilly, compels companies to radically alter their management principles and practices, are overlooked (Baccarani, Brunetti, Martin, 2021; Martin, Baccarani, Brunetti, 2022; Martin, Hung, Baccarani, Testa, 2024).

This may explain why the model and its Award has apparently fallen into disrepute among industrial companies as will be seen later.

# 3.5 The EFQM Models

In the wake of the Malcolm Baldrige National Improvement Act of 1987 in the USA, Europe, also realizing that European (in a wide sense) companies were not competitive against Japanese ones, embarked on a similar process.

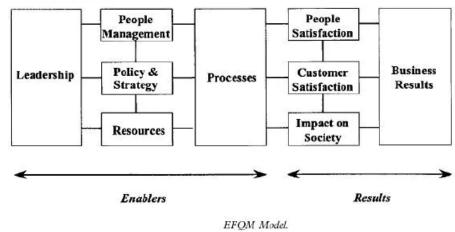
Contrary to the USA where the impulse came from the top, the European move was launched from the bottom. In 1988, 14 European CEOs decided to create a European Foundation for Quality Management by handing a Letter of Intent to the then President of the European Commission, Jacques Delors. The Foundation was created in 1989 with 67 members. Its mission was to promote a management model for quality evaluation and continuous improvement.

The model, designed by a group of experts, was launched in 1992 with a prize (the *European Quality Award*) rewarding the 'best' companies. From the start there were two categories: industry and services.

Like the Malcolm Baldrige, the model evolved with time and new awards were created for specific sectors of activity. Today the model is used well beyond the borders of Europe.

The original model is made up of 9 performance evaluation criteria. The criteria are structured in two groups: *enablers* (what companies must do) and *results* (what companies get). The weight between *enablers* and *results* is the same. The logic of the model is that *leadership* drives *people management* (i.e. the workforce), *policy & strategy*, and *resources*. They all are transformed through *processes* which produce *results*. The big difference with the Malcolm Baldrige model is that results are detailed whereas they are lumped together in the MB model. What comes out is that processes are at the centre of the working of the company's structure, which is a fundamental characteristic of Quality Management ("All work is a process. If you can't describe what you are doing as a process, you don't know what you are doing." Deming).

# EFQM Model 1992



(Source: EFQM)

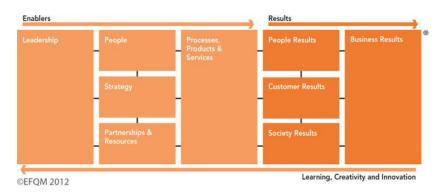
The model was revised in 1999. The significant difference is that to *resources* is added *partnerships* to put the stress on the integration of the supply chain (upstream and downstream) as a key contributor to quality. The cyclitic operation of the model is underlined by the contraflow arrow at the bottom.

**ENABLERS** RESULTS 50% 50% PEOPLE PEOPLE RESULTS 9% 9% KEY PERFORMANCE RESULTS LEADERSHIP 10% PROCESSES 14% **CUSTOMER POLICY &** RESULTS STRATEGY 20% 8% PARTNERSHIPS & SOCIETY **RESULTS** RESOURCES 6% INNOVATION AND LEARNING

EFQM Model 1999

(Source: EFQM)

A new version of the model was launched in 2012. The structure is still the same. Processes are to be understood as concerning both (physical) products and services. The cyclitic nature (contraflow arrow at the bottom) is enriched with *creativity* to emphasize 'continuous improvement'.



EFQM model 2012

(Source: EFQM)

The current model dates from 2020. The presentation is totally different. The presentation of the first versions of the model could give the impression that activities are linear, in spite of the addition of the contraflow arrow. The new presentation is built around three cores. *Direction* covers all the strategic aspects, *Execution* deals with operational aspects and *Results*, of course, with the performance (both 'hard' and 'soft') achieved. The systemic approach is highlighted (bi-directional arrows) and a methodology (the RADAR) is attached to each core. The global

inspiration is the classic PDCA cycle (*why, how, what*; The EFQM model, EFQM 2019), known since the days of Shewart in the 1920s.

DIRECTION

ORGANISATION

ORGAN

EFQM Model 2020

(Source: EFQM)

Although the visual presentation of the model may seem radically different and the vocabulary may be somewhat different, the content is in line with and the continuation of the previous versions of the model (Fonseca L., Amaral A., Oliveira J., 2021).

What about then the critical challenges that have become to the forefront of the political, social, economic and managerial debate, issues raised above about the MB Model? Like for the MB Model, there is very little about them.

In the EFQM Model guide (EFQM, 2019), there are some allusions to the issue of sustainability, but nothing specific. In the introduction there is a reference to UN Sustainable Development Goals and the UN Global Compact which are said to have "helped to shape this latest edition of the EFQM Model", but we have no information about how, and the model remains silent about those issues. There is just another mention in the "key stakeholders' perception" section. The adjective 'sustainable', but not the noun 'sustainability', appears in the model, but it must not be misunderstood as it does not have the meaning of its use today in the socio-economic discourse. It is used in the phrase "Create Sustainable Value for its most important Stakeholders". This means that "in most cases, customers are the target group for Creating Sustainable Value". So, it refers to actions that are auto-centred. "Society" is mentioned once (3.4) with the "contribut(ion) to development, Well-being and Prosperity".

The EFQM model 2025 remains unchanged. The words 'sustainability' and 'sustainable' have just been added in several occurrences here and there, but the concept has by no way become central (EFQM, 2024).

So, the picture is even bleaker, in this respect, than the MB Model. What will condition the future success, or mere survival, of companies in the coming years (and it has already started) is totally overlooked. Consequently, this model does not meet the requirements of the new type

of management that is needed with the new social, economic and natural environment. This may be an important factor that can explain the downward trend of companies applying for the Award (see below).

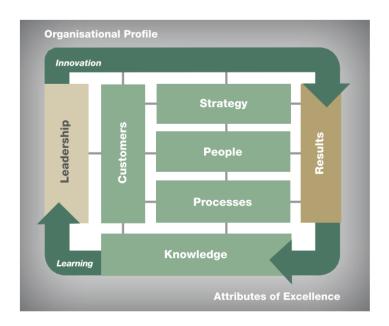
## 3.6 Other Business Excellence Models

There is a number of other national models which are used for specific countries and give rise to a prize, globally or for particular economic sectors.

Three of them can be mentioned: The Singapore Quality Award Framework, The Canadian Framework for Business Excellence and the Australian Business Excellence Framework. All these models are basically similar to the Baldrige and the EFQM models.

The Singapore Quality Award (SQA) framework consists of seven categories

- 1. Leadership
- 2. Planning
- 3. Information
- 4. People
- 5. Processes
- 6. Customers
- 7. Results



(source: Singapore Quality Award Framework)

The Canadian Framework for Business Excellence also consists of seven categories

- 1. Leadership
- 2. Planning
- 3. Customer Focus
- 4. People Focus
- 5. Process Management
- 6. Supplier Partner Focus
- 7. Business Performance

# Canadian Framework for Business Excellence – A Strategic Approach Overall Business Performance Leadership Planning Customer Focus Process Supplier/Partner Focus Principles for Excellence

The Australian Business Excellence Framework also covers 7 categories and is the only one to refer explicitly to sustainability:

- 1. Leadership
- 2. Customer and Market Focus
- 3. Strategy and Planning
- 4. People
- 5. Information and Knowledge
- 6. Process Management, Improvement and Innovation
- 7. Success and Sustainability



(source: Australian Business Excellence Framework)

We can note that, except for some minor variations in the words used, they cover the same categories.

We can now consider the fate of Quality standards and models.

# 4. The evolution of Quality standards and models

As we have seen, Quality standards and models enjoyed a growing popularity during the 1980s and 1990s, but have been on the way down since the 2010s.

## 4.1 The evolution of ISO 9001 certificates

The evolution of ISO 9001 certificates shows a pattern in three phases.

The first phase covers the period from the publication of the standard in 1993 to the year 2010 with a regular and constant increase in the number of certificates. The number of certificates granted increases from 46,571 in 1993 to 1,077,625 in 2010. This was the heyday of the standard.

The second phase covers the period from 2011 to 2017. The number of certificates stagnates just above 1 million. During that period, the standards clearly lost steam.

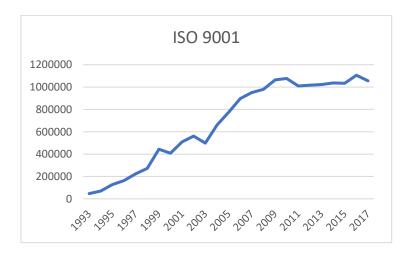
The third period is from 2018 to 2022. There is again an increase in the number of certificates (739,206 to 1,265,216) with a much lower rate of increase than during the first phase but with a significant 'recovery' between 2021 and 2022. We must, however be prudent in comparing this period with the previous ones as the mode of reporting changed in 2018 causing a big drop (30%) in the number of certificates. It appears that some companies still registered though having lost the certificate.

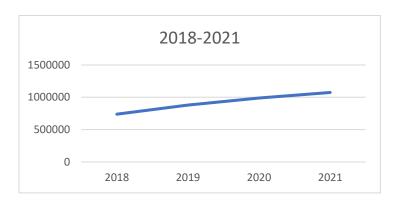
This overall picture needs to be qualified when we look at the situation in different parts of the world.

In North America, the curve has been flat or going down since 2006. In 2022, we find ourselves (after correction) in the same situation as at the end of the 1990s.

In Europe, there has been a slow, rather regular decline, since 2019 (about 12%).

So, the growth in the number of certificates after 2017 has been largely fed by Asian countries (the African contribution being marginal except for Egypt and South Africa, so is that of South America except for Brazil), although there was a stagnation between 2010 and 2015.





(source: ISO)

The general picture is that ISO 9001 lost steam during the second half of the 2000s, especially in the 'old' industrial countries where it all started. We will try and examine some reasons that can explain this phenomenon below.

## 4.2 The evolution of ISO 14001

ISO 14001 has followed an evolution similar to ISO 14001.

We can also make out three phases.

The first phase from 1999 to 2016 shows a rapid increase in the number of certificates from 13,994 to 346,296.

The second phase is the period 2017 - 2019 with a slight decline of around 2%.

The third phase shows a significant pick-up of around 50% over the 2020 - 2022 period, with the number of certificates (after correction) reaching about the same level as in 2016, and a jump to more than 500,000 in 2022.

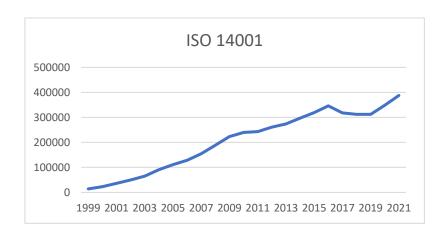
So it seems that the 'resistance' of ISO 14001 has been better than that of ISO 9001.

This general picture, like for ISO 9001, shows differences between different regions of the world.

North America enjoyed a steady increase throughout the 1999 - 2006 period, then a decrease from 2007 to 2010, then a pick-up but with a downward trend since 2011.

Europe presents a somewhat different pattern with, like North America, a regular growth from 1999 and 2010 and a stability since then with ups and downs.

Asia presents the same sort of pattern with a sharp growth until 2016 and stability with ups and downs since 2017.



(source: ISO)

Like for ISO 9001, the global picture is one of a steep growth until around 2016 and then a stagnation which does not bode very well for the future.

# 4.3 What has happened to MBNQA companies

The Malcolm Baldrige National Quality Award has now been given for 35 years, a global study of the recipients of the Award since 1988 reveals some interesting features.

Originally, as seen, the model and the Award attached to it was created for industrial companies. For this reason we will focus on them. With time its was widened to all sorts of service companies, which make up the majority of recipients (almost 60% excluding 'small businesses' which is a jumble of organizations) with a particular emphasis on health and education.

21 industrial companies have received the 'big' prize (i.e. coming top in the evaluation). First, it must be noted that there has been 13 years without the Award being given to an industrial company, particularly for the last 10 years (2013-2023), either for lack of 'credibility'

or, more significantly, lack of interest.

Second, 7 companies having received the Award have disappeared since because of bankruptcy, discontinuation or takeover. Obviously, excellence one day does not mean excellence the next. One company filed for bankruptcy and was then revived. One company was broken up into different units; somewhat ironically it is the one that got the first Award in 1988 (Motorola).

Third, when we look at the surviving companies' *Core Values and Concepts* today, 19 do not make any reference to quality. So it is clear that quality is off the agenda, at least in the companies' communication, the reality of practices being possibly different. Quality is no longer a preoccupation *per se*. Today's challenges go far beyond the issue of quality as is probably shown by the fact that 11 of them refer to sustainability and/or SDGs and ESG.

We can infer from those figures, at least with a global outlook, that on the one hand the model and Award do not guarantee any continuance of 'excellence' over time and on the other hand that they seem to have lost their attractiveness and usefulness for companies to meet the present challenges that they are facing.

# 4.4 The fate of the EFQM Awards

Between 1992 and 2022, 37 companies received the 'big' prize. There is a global balance between industrial companies (18) and service companies (19).

First, it is interesting to note that three of the founding members of the EFQM no longer exist, and one has changed status, and that only one ever got the Award. One company that got the Award no longer exists in the industry for which it got it.

Second, the Award, whether for industry or service was not given twice.

Third, although the Award was primarily intended for industrial companies, somewhat ironically, the first one was given to a service branch of Rank Xerox UK.

Five Awards have been given to companies outside Europe.

Today, ten companies have got some quality certifications and/or refer to quality in their statements about strategy and eight companies refer to sustainability.

There has been a constant trend of reduction in the number of Award finalists and winners (according to the data available) since a peak in 2007, with a sharp drop in 2008, which can be due to the financial crisis, a pickup in 2011, then a drop again till 2014, then a slight recovery and a decline again from 2017. Though it is difficult to interpret this for lack of exploitable data, it seems to indicate clearly that there is a loss of interest in the prize.

We can consider now some reasons which in our view can explain this decline in Quality Management.

# 5. Some reasons for Quality Management's decline

Although ISO was by far not the first to embrace quality management, its standards developed over, almost, the last 30 years are the best known and most used in the world.

As has been seen above, the fundamental standard for Quality Management, ISO 9001, enjoyed its heyday from 1993, when it was launched, to 2010 with a steady and regular increase in the number of certificates delivered. This was the time when two main factors prompted companies to get ISO 9001 certification. On the one hand, the certificate gave an undeniable competitive advantage and was used as a marketing tool, being posted everywhere, on the other hand, with the globalization of trade and the internationalization of supply chains, it was a necessity for companies, particularly in the emerging economies of the Far East, to be certified in order to be integrated into this globalization.

Since 2009, the number of certificates has been stable at best and declining at some periods. Two specific events during that period can explain a loss of steam, the financial crisis and the COVID pandemic which hurt many companies. We must note, however, that the bursting of the Internet bubble at the beginning of the 21<sup>st</sup> century did not affect the growth of the number of certificates.

We do not have, and it is probably impossible to have, an exhaustive study of the reasons why ISO 9001 lost its dynamics at the end of the first decade of the 21st century. But we can get some clues from sectorial and/or national studies. According to the data available, about 60,000 companies 'decertify' each year (Cândido C., Coelho L., Peixinho R., 2021). ISO (2014) itself acknowledged that decertification was growing at an average rate of 25%. It seems that economic under-performance is not an explicative reason as there is no significant difference between the performance of decertified companies and that of the companies that keep on being certified (Cândido et al., 2021). Then, if "it is unlikely that ISO 9001 decertification can be explained for economic reasons" (ibid), the reasons must be looked for elsewhere. One factor can be the 'bureaucratic' process of getting the certification. But this factor can only be limited in part because this bureaucratic characteristic has largely been rubbed out as the standard has evolved and in part because, with the accumulated experience, companies can do things better and quicker. So, it appears that the main motivation is a loss of interest in the certification, which does not necessarily mean a loss of interest in quality. This loss of interest is most probably due to the fact that the ISO 9001 certificate no longer gives a competitive advantage, nor an organizational advantage, as it is no longer a (strategic) means of differentiation. When everybody has the certificate, its value decreases to the point of becoming about nil. In today's context, a key reason for abandoning ISO 9001 certification, or simply not seeking it, is the widening gap between the requirements of the standard, which in spite of some evolutions fundamentally remain "quality assurance" rooted, and the requirements of the socio-economic and natural environment (see below).

Interestingly, the fate of ISO 14001 is very similar to that of ISO 9001, although it is by nature more environmentally oriented, which may be the sign that ISO is disconnected from today's environment in its broad sense, and the kind of performance indicators that are now needed.

The number of certificates grew steadily year after year from 1999 until 2019, and since then has known ups and downs with a global stagnation trend. The evolutions of the two standards are parallel.

Here again, studies on the reasons for decertification are not many. According to a study of Danish companies by Mosgaard M.A. and Kristensen H.S. (2020), the main argument for

discontinuing ISO14001 rests on a "cost-benefit consideration (...); there is no focus on ISO14001 from neither customers nor other environmental stakeholders. (...) [And they] have not found strategic value in ISO14001." Globally the reasons are similar to the ones identified for ISO 9001 by Cândido et al. It is noteworthy that the lack of strategic value is a key reason for abandoning ISO 14001. This corroborates the hypothesis that the standard does not bring solutions to the challenges of the present environment.

The study of the history of the Malcolm Baldrige National Quality Awards and the EFQM Awards, which have been restricted to industrial companies as the models and awards were created for them and also because they make up a homogeneous group whereas the category of services is a jumble of organizations with very different, and in some cases opposite objectives, tends to show a number of characteristics which raise questions about the value of the models and the behaviour of companies.

The fact that no industrial company has been awarded the MBNQA these last years may be the sign that either the candidates were not 'excellent' enough to be awarded the prize, but this is doubtful as a company would not embark on such an enterprise insufficiently prepared, or that companies no longer found any significant interest in this prize both in terms of the type of performance expected from them today and in terms of potential competitive advantage.

Another troubling fact about the MBNQA is the number of companies that received the prize and some years later found themselves in a state of bankruptcy. This could be due, of course, to a lack of perseverance but it could also be due to the ill-adaptation of the model to an economic environment that has radically changed since the model, which has only undergone minor revisions, was first designed.

The EFQM seems to have fared better as a balance has been kept between industrial companies and services. When looking at the list of recipients, however, we notice that the same company, under different guises (subsidiary, branch, sub-unit) appears several times. So, there seems to be a relative lack of 'fresh blood'. The overall picture of the performance of the EFQM is also blurred by the multiplication of categories and 'sub-prizes' over the years. This strategy has permitted the organization to put on a (rather) good face. It is probable that if the EFQM had stuck to it original strategic objective, it would have disappeared. In any case, the overall downward trend of applications for a number of years is not a good sign of the attractiveness of the prize. Like for the MBNQA, we may wonder about the relevance of the model in the new environment.

Both for the MBNQA and the EFQM, it is certainly significant that the majority of companies that were awarded the prize, and are still alive, do not mention quality today in their visions, missions and core values, and when they do, we get the feeling that it is something of secondary importance.

If we smooth the curves, whether for ISO standards or Total Quality models, renamed Business Excellence models (which is significant), it is clear that Quality Management, as embodied in these standards and models, enjoyed a great success from the end of the 1980s to the mid 2000s and since then has been on the way down.

Actually, at the end of the 1960s, about everything that could be said about Quality Management, had been said – we must remember that 'modern QM' was born in the 1920s – and applied with undeniable success, though with significant variations between countries and companies. We could then say that ISO standards and TQ models arrived too late. Japanese organizations had already embraced TQM in the early 1960s with *Company Wide Quality Control*, that is nearly 30 years before the Baldrige model. Moreover both ISO standards and TQ models failed to grasp the radical changes that clearly began to appear around the turn of the 21<sup>st</sup> century so that a gap widened between their requirements, which remained globally

based on principles from the 1950s and 1960s, and the new requirements of a revolutionized environment.

The initial purpose of Quality Management almost exclusively centred on industrial products, which was based on 'conformance to requirements', control of operations in order to reduce variations (i.e. non-conformities) and eventually eliminate them, was achieved by the end of the 1970s. For example, Toyota factories, even those in the US, were very close to *zero defect*. Success in services were much less convincing as production conditions are quite different from industry and so there was an inherent incompatibility between the original techniques tailored for industry and the expectations of a service environment (Martin J., Weill M., 2002). Quality referentials could somehow cope thanks to some adaptations but were never frank successes as regards the service sector.

Nevertheless, what is most certainly the fundamental cause of Quality Management's disrepute, as known until the mid-2000s, is the growing discrepancy between the various quality referentials and the conditions of the environment.

A key, probably *the* key element, is the relations between the economic and corporate environment and the natural environment.

The mode of economic development since the Industrial Revolution, symbolized by the *homo economicus* (Martin J., 2023) has gone hand in hand with considerable damage to the natural environment. The case of the use of fossil energies (coal, oil, gas) is emblematic. Their intensive use has led to the letting out of huge quantities of carbon dioxide into the atmosphere. This CO<sup>2</sup> causes a rise in temperature which alters the climate and consequently living conditions on earth. The results are on the hand more droughts in some places in the world and on the other hand more violent rainfalls in the form of storms and hurricanes in others which, with the rising level of seas, causes more floods. Consequently, huge tracts of land are becoming unlivable either due to scorching heat and lack of water or flooding and salinization (IPCC, *Climate Change* 2021, Sixth Assessment Report, 2021).

As a result, for industries and services, firms have to reengineer their production processes to do away with the use of fossil fuels, and for agriculture on the one hand there will be a sizeable loss of arable land, not compensated by the possibility to cultivate new land, and on the other hand agricultural produces and crops will have to be adapted as far as possible to new climatic conditions.

On a social plane, there will be huge and harmful consequences. The impact of climate change on agriculture will cause food shortages in several places in the world where inhabitants will not be able to survive. Consequently, this situation will cause huge migrations both within countries, when possible (e.g. where can people of Bangladesh go within their country when almost most of it is permanently flooded?), and internationally. Hosts and hosts of people will try to emigrate to countries where the conditions are more livable, that is essentially in Europe and North America. But these people, as we already see today, will not be welcome and stopped and sent back to their original countries. These migrations will obviously create intractable political and social problems feeding hatred, racism and causing the death of potentially millions of people.

Economics and management have tried to find solutions to face this completely changed environment. The key concept developed to do so is that of *sustainable development* putting the stress on the preservation of the natural environment, although some changes are already irreversible, and the wellbeing of populations or stakeholders in the language of management, with a new paradigm for organizing and operating firms (Baccarani C., 2024). In such a perspective, corporate performance cannot be based any longer on quantitative financial indicators, but on environmental, social and governance (ESG) indicators.

From the analysis of ISO quality standards and Total Quality models (even renamed Business Excellence) carried out above, it is clear that they have missed the rupture in the global environment and the turn towards sustainability. And it is not the attempt to develop a *Quality 4.0* (Oakland J., 2023) that can attack the evil at the root. The philosophical and theoretical reason for that is that all these standards and models fundamentally remain ingrained in the tenets of the *homo economicus* which are precisely responsible for the dire consequences that societies are facing now.

Quality Management, as we have known it until now, is something of the past.

# 6. How to revive Quality management?

Quality Management could be revived by re-focusing it on the human and environmental dimensions, meaning breaking away from the almost purely quantitative approach of QM (since the beginnings), ingrained, willy nilly, in the concept of *homo economicus* and move to a more qualitative approach putting forth the wellbeing of stakeholders and the preservation of the environment. In doing so, QM could be reconnected to the original Greek concept of  $\pi o \iota o \iota \tau \eta \varsigma$  (poiótēs) with its metaphysical and ethical sense. Then QM could become a powerful instrument for sustainable development.

It is then necessary to refocus QM on a redefinition of the purpose of the enterprise and the entrepreneurial and managerial actions that ensue.

'Quality' is in fact a polysemic word and takes on various meanings depending on whom practices it: for the producer, it is the fit with the organization's internal plans (Crosby's classic definition of *conformance to requirements*); for the certifier, it is the fit with the standard used as referential (the ISO approach); for the entrepreneur, it is the capacity to innovate in line with the requirements of the market (the *customer satisfaction* approach dating from Deming); for the management it is the capacity to express a leadership able to motivate people to give the most of themselves by doing willingly what has to be done (an organizational approach); for the clients/customers/consumers, it is the capacity to meet innovatively and aptly the needs perceived today while preserving the possibility to satisfy them in the future for oneself and for others (a stakeholder approach).

Quality, in short, is a term which encompasses purely quantitative elements as well as qualitative ones and ethical ones.

Originally, following the Industrial Revolution, the purpose and task of enterprises was to improve the material living conditions of people through the production of big quantities of goods in a profitable way. It can be said that such a purpose and task have been historically achieved, despite big differences in disposable income, and consequently in spending capacity, characterizing various sections of the population.

Subsequently, in a myopic vision, the changes that the capitalist production system has diffused in the community, above all after the second World War, have satisfied the expectations of a number of clients, in the richer part of the world, but at the cost of a profound environmental and climatic degradation, as well as intolerable social inequalities.

Such conditions, if not properly managed, lead to unsustainable situations for the community and the productive system, to the point of leading to the death of the enterprise as we know it (Csikszentmihaly M., 2003), due to the loss of its social legitimacy for existing.

In this context, the vision of a constrained quality for the enterprise and the client gradually moves from an obsessive compulsive consumption experienced in a dilated present (Augè M.,

2017) to a sustainable future and to social relationships harmonized in the long term, driving quality in the direction of that profound ethical sense that is in fact inherent to it.

Quality Management as known until today developed during the period when the basic principle of decision-making was economic rationality.

Along a completely linear and logical path, it has been based on a mechanistic vision of the enterprise. A vision according to which the enterprise is considered as a machine to produce profit through a mechanism which is totally manageable and controllable thanks to ever more sophisticated systems of measurement.

It has lately integrated, to a certain extent, the principles of sustainability, but only as elements of quantitative measures of certification in a behaviour of enterprises still stuck in the straitiacket of those measurements.

It has not been preoccupied by the radical mutation that the sustainibility approach requires and which is now a necessity. In other words, it has stopped at the surface of the problem not attacking it at its roots through a change of vision, of meaning, of purpose in which the enterprise does not appear 'forced' into the objectives of sustainable development, but presents itself as a propositional actor for the production and diffusion of wellbeing for the subjects and organizations with which it interacts.

The enterprise needs to operate in harmony with itself, internally, and in its relationships with others being aware that the wellbeing, including profit, depends on the wellbeing generated and diffused by others, including the environment and future generations. It needs to be an enterprise which does not live as an 'ego', but as a 'nos' manifesting itself as a living collective work of art (Conti T., 2006). It needs to be an enterprise that lives in harmony with the system in which it operates with the awareness that harmony is an irrepressible, generative and radiant force.

Thus, Quality Management will only have a future if it knows how to spread inside the organization a deep strategic orientation that supersedes the negative individualistic egotism which is purely self-centred, to affirm a 'positive egotism' with the desire of realizing oneself in pursueing one's own intentions, but through the wellbeing of others, which is in fact the real stance adopted by Adam Smith (1759). This is an orientation which recognizes the value of profit as a measure of the competitive force of the enterprise, but which does not consider it as a one-dimensional and divisive end and which acknowledges the wellbeing of all the stakeholders as the *raison d'être* of the enterprise because wellbeing is multi-dimensional and, like imagination, embraces the world.

In this transition, procedures and controls certainly keep their validity, as well as two key concepts of TQM: continuous improvement and the involvement of all (like for example in quality circles).

Quality Management can still help enterprises, not just to deliver ever better products but also to distribute wellbeing in a more equal way, preserve the environment, accompany mankind towards a fuller existence, and move from an evaluation of Business Excellence to one of Societal Excellence, in the sense that enterprises can excel (that is distinguish themselves from the mass), if there is, and to what extent, a contribution to society.

If, first, excellence meant delivering good products at an affordable price, today excellence means contributing to solving the problems of society.

Quality Management can then have a future as long as it abandons the footprints of the *homo* economicus to travel along new paths that the *homo* socialis will have to explore (Martin J., Baccarani C., Brunetti F. (2024).

# 7. Conclusion: Is there a future for Quality Management?

The short history of Quality Management and the evolution of the main quality referentials (ISO standards and Business Excellence Models) presented in this paper show that after a rather long period for Quality Management in general and a shorter one for ISO standards and TQM, then Business Excellence models, Quality Management has run out of steam. It is nowadays largely ignored, thought of as obsolete and abandoned by a growing number of organizations or even unknown by many a young manager. Quality Management is obviously on the way down.

There are some practical reasons for this decline, such as the bureaucratic nature of the referentials, albeit less and less so, the cost of a certification and its maintenance, the narrow technicality of some criteria.

However, the fundamental reasons are strategic ones. For decades, Quality Management was an effective, and most often efficient (Ph. Crosby's *Quality is free*), way of improving organizational performance and customer, then stakeholder, satisfaction. Thus, Quality Management, recognized by a variety of standards and prizes, gave companies a competitive advantage in the market. But, when the fundamental principles and tools of Quality Management had been internalized and when certifications of all hues, by reason of their inflation, had become a 'common currency', they lost their value and their power of differentiation. As a result, companies got disinterested in them.

Since the beginning of the 21<sup>st</sup> century, the overwhelming strategic reason has been a revolution, which had been brewing for years and which is now evident to everybody, in the economic, management, and consequently social environment. The challenges that companies are facing now and that will keep on being more acute are radically different from the ones of the second half of the 20<sup>th</sup> century. This revolution has been triggered off by climate change, and all that goes with it, consequential to the economic and management practices used since the Industrial Revolution in the 19<sup>th</sup> century. As Quality Management was founded on these practices inspired by the concept of *homo economicus*, the gaps and discrepancies between it and the new environmental conditions have increased and revealed the fundamental contradiction between Quality Management, as known since the 1920s, and the present and future environmental conditions.

It does not mean that the baby should be thrown out with the bathwater. We can still find some valuable insights in Quality Management, but they must be adjusted to new conditions. Therefore, the survival of Quality Management certainly relies on a change of paradigm, getting rid of the bonds of the *homo economicus* and embracing the concept of sustainability in all its aspects, particularly as a provider and diffuser of wellbeing inside and outside the organization. Maybe the word 'quality' itself should be changed so riddled as it is today in the minds of managers (some laugh when the word is used) with a number of outdated notions and techniques.

Let us hope that we will not definitely have to say about quality what Grouch Marx said about politics:

[Quality] is the art of looking for trouble, finding it, misdiagnosing it, and then misapplying the wrong remedies.

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