

## **Collaborative practices and the management of the triptych cost - quality – time**

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### **Abstract :**

Collaborative practices are designed to create consistency and compliance in both the activity in the performance of the organization. The management of triplet - cost quality time is at the heart of organizational performance, hence the importance of treating the effect of collaborative practices on the management of these three dimensions. Modes of articulation between cost, quality and time depend largely on the business model and therefore collaborative practices emerged within the organization. We therefore propose a conceptual framework that presents the elements of reflection that allows us to understand the development of this approach to knowledge management and its potential role in the management of the triptych cost - quality - time. Similarly we wonder about the complementarity between sustainable development and management triptych in the performance of the company.

**Keywords:** Triplet cost - quality - time; management; collaborative practice; human capital; Knowledge Management, Sustainable Development.

### **Introduction:**

In a highly scalable and turbulent environment, it is the adaptability of organizations that determine their future. Obviously, in this economy, the organization sets objectives to ensure its success and achieve its improvement strategy and evolution taking into account the environment in which it operates. It is to succeed in its mission adapting permanently to its environment and improving its processes for managing operational and technical processes. Thus the management has become a vital requirement for competitiveness and sustainability of organizations.

It is for this reason that the management has refocused its methods on quality control, cost estimating and scheduling delays. The purpose of quality is the constant desire to adapt to beneficiaries of the proposed organization. Thus,

the quality can be defined as the ability to achieve business objectives. These evolving concepts that depend on industrial developments and economic movements. In this context, the competitiveness of the organization depends largely on good terms of quality, cost and time.

At the organizational level, and to focus on the concept of quality, this defines an accountability framework based on the three management: quality, cost, time. In these circumstances, morally qualified as cooperation, trust, sharing and exchange attitudes give rise to new forms of management which is a prerequisite for action. The economic world turns to triptych management of these three elements as a response to this need for continuity and resistance to global competitiveness.

Collaborative practices are designed to create consistency and compliance in both the activity in the performance of the organization. Since the

strategic design of the business model to its declination in terms of business processes, cost management triplet - quality time is at the heart of organizational performance. Hence the importance of addressing the impact of collaborative practices on the management of these three dimensions.

The development of managerial practices related to knowledge management aims to develop skills in collaboration and teamwork. This represents a fundamental competitive challenge for all organizations. It should, in a specific context, to consider the elements involved in the development of collaborative work to try to understand how these approaches foster a collaborative management that addresses these three dimensions: cost, quality and time.

Therefore, quality is now built with the objective of enhancing individual investment in the Proceedings of collective mobilization. This is to give importance to the individual share in the project to improve quality. Indeed, the management unfolds in collective mobilization simultaneously in individual membership organization in the project. Thus, players must comply with the values of an action oriented to the collective success.

This work aims to propose a conceptual framework that presents the elements of reflection that allows us to understand the development of this approach to knowledge management and human capital and their potential role in the management of the triptych cost - quality - time. This is to support the various elements needed to understand how the functions in the organization gain efficiency and realize the promotion of growth and competitiveness in the light of the development of collaborative work.

In this context, we will begin, first time, wonder about the different elements that allow us to understand the role that quality can play in organizational performance, and define the objectives of a quality approach in addressing its approach practice to promote the development and sustainability of the organization. In a second step, we will outline the importance of collaboration in the management of quality in extending this concept to the management of cost and time, and then explain the effect of knowledge management and human capital on acquisition of skills to the challenges of collaborative work and therefore the management cost triptych quality time. Similarly we wonder about the complementarity between sustainable development and management triptych in the performance of the company.

## **1. The management triptych cost - quality - time : concepts and definitions:**

### **1.1. Organizational foundations of the concept of quality:**

It is well known that ancient civilizations were based on the art and craft to sustain and improve the quality of production in companies. However, the new management methods identified new problems concerning the management of organizations: it is more specifically the quality management which is now part of the history of management.

Thus the widely accepted definition to determine the contours of the concept of quality is one that indicates the ability of a product or service to meet the needs of users. Indeed, the concept of quality has evolved from a technical approach to a new approach that customer satisfaction must be maintained in the future as an ongoing quality improvement. In the first approach is the emphasis on the technical standards to be met, while in the second it is the loyalty that is put forward.

In practical terms, the quality can be internal and external. Internal quality improvement corresponding to the inner workings of the organization, its purpose is to develop ways to best describe the organization, identify failures and limit. The beneficiaries of the internal quality are the members of the organization by adopting a participatory approach. In contrast, the external quality corresponding to the satisfaction of all external partners. This is to provide a product or services that meet the needs of beneficiaries to retain them. The beneficiaries of the external quality are also all external partners.

The deeper meaning of organizational vision that can support this way of perceiving the quality gives real substance to an organizational approach that underpins this goal. For his part, Mintzberg (1982) argues that improving the quality conceals a rather disparate set of issues.

The organizational approach to quality process results in an improvement to the resolution of non- quality it requires a participatory approach where all staff must be involved. The quality improvement allows the organization to work in better conditions with various parties; this translates into a relationship of trust and an opportunity to collaboration. It is, however, an effort involving the entire organization and leading mostly to organizational changes.

According Maisonneuve (2014) so it is a continuous improvement in the overall performance that ensures a competitive advantage.

The improvement is a permanent principle of the concept of quality. This means that quality is a long-term project whose objective is to address the failures as early as possible. In other words, quality is defined in terms of data requirements from outside to control all modes of organization. In this regard, the reconsideration process for a new look at the organization becomes inevitable. In this sense, and according to Mintzberg (1982), organizational transformations that follow a quality approach are often difficult to grasp. Therefore, management of quality is still a movement which takes into account several organizational factors. In this perspective, the approach to quality does not affect the relationship between the players in the team, but it requires a change in organizational perspective.

Alter (2000) showed that the attachment type of organization depends very much on the policy on economic and financial considerations. Thus the organizational point of view, the quality itself becomes the sole principle of action around which the entire organization and its stakeholders must come together. It is a way of engaging organizational improvements in several dimensions and functions.

### **1.2. The total quality management:**

The purpose of total quality management through the development of a "quality spirit" shared by all. And as the concept of total quality management means the implementation of a project organization based on a quality approach involving all members of the organization to meet its beneficiaries in terms of quality, cost and time. Aim for total quality is to keep a constant desire to improve processes and services that contribute to the functioning of the organization.

For Sekula (1985), quality implies a system that integrates the efforts within an organization to develop total quality. The latter consists of technical, administrative and economic dimensions that must be taken into account for developing a design quality shared by all. Therefore, quality is what gives satisfaction, while total means that each function uses all its resources to improve the quality and improving the workings of the organization.

The philosophy of quality management, namely in its broadest sense manage quality, costs and deadlines, is movement that promotes the search for the highest quality in any organization. This approach began in the 80s; this is a time that coincides with the remarkable growth of the Japanese economy. It is the management style of a

focus on excellence in product or service to satisfy the customer or user organization.

In fact, during the 80s, the movement towards quality is increasing and the mobilization of the various members of the organization is at its peak. And engagement in this way managed to join all members in this process. By the early 90s, the concept of total quality management appeared to emphasize the true strategic modes namely technical and organizational measures concerns. Gomez (1994) believes that the problem is that the quality unscientific becomes a creed management. This is why the total quality appears more as a mode that gives rise to improvements in the organization of highly innovative work such as the type of organization to adopt to implement a more consistent and comprehensive total quality.

According Kelada (1991), quality planning requires a good understanding of the needs of the customer and the service rendered. This requires a clear understanding of the mission of the organization with an accurate diagnosis of the current state. Finally, we must have a vision that determines where you want to drive the organization to complete this process.

### **1.3. Performance criteria: improve quality, control costs, and shorten:**

Improve quality, control costs and shorten are the key performance criteria, and at the same time the objectives of each organization. However, the consistency of this triptych is generally problematic because it is difficult to satisfy them all. So it appeared the notion of quality in its broadest sense to become an objective to streamline the business.

Quality, as well as any other activity in the organization, reduces the cost of non-quality. It therefore appears around the quality management a necessary integration of a time and cost, as well as the pursuit of quality. An organization is so efficient with the resources it implements the management of the triptych quality, cost, time, and allowing it to position themselves in a market, which gives a margin ahead of the competition.

Adaptation to the environment is a sign of an organization performance in the upheaval that appears with the crisis, the quality is a matter of communication and reflection. The transition to total quality concept seems easy as it is to extend this concept of quality in all activities. This is to consider all the elements within the organization follow the rules for determining the quality, with the goal of customer satisfaction. The introduction of these principles in the organization reflects a

change to the management of the organization in all its dimensions.

This process involves several technical and operational elements, placing the relations between the different members of the organization at the center of concerns. It has now become classic triptych consider cost - quality - time goal of streamlining the process. Thus the aim of this system is to clarify the role that can take high-quality research, and organizational mechanisms suited for this purpose.

And procedures and behaviors serve organizational goals for integration of individual contributions to the organization. Through the recent policy of quality improvement, it no longer becomes a matter of professional expertise or compliance with administrative rules. However, it will depend more on cooperation mechanisms among stakeholders, and therefore their acceptance to enter into such a set of practices.

Which aims to optimize processes, it is useful to adopt an approach of quality management whose objective is to obtain a broad mobilization of members of the organization. If the participation of all stakeholders is oriented towards customer satisfaction, this gives the best performance in terms of profitability and organizational outcomes. This design has become an imperative of competitiveness, sustainability and development. It is based on an eternal rule of satisfying the customer by delivering products and services. Finally, the quality management can analyze and interpret the observations based on a system of profound knowledge. Among the major keys to success, the participation of all members of the organization, the use of ICT in all functions of the organization, as well as collaborative work.

## **2. The collaborative work and its role in the management triptych quality, cost, time:**

### **2.1. Management of human capital:**

Managing human capital must also be a priority with respect to quality management in general. Processes on which this system is based human capital management apply equally to the management processes that management skills. In this sense, the human dimension is thus at the center about the success of the organization. It is based on the continuous improvement of the activity.

The objective, as stated Zara (2004), is to make the intelligent organization emerge manageant collective intelligence. In our information society, this new governance will provide a collective performance than the sum of individual performances. Manager collective intelligence involves more than a change; it is a social innovation (Zara 2004).

The quality management can no longer focus solely on the production process and design, but takes into account the quality of the relationship and cooperation between members of the organization. Total Quality is the result of a policy which tends to the permanent mobilization of all stakeholders for effective functioning, relevance and coherence of its objectives, while remaining consistent with its human capital.

So it is important to develop the human and social capital of an organization, it can increase its capacity for innovation and adaptation. It is the quality of social relationships maintained within an organization, extended to its partners, which determines its performance and capacity management.

### **2. 2. Knowledge Management:**

The performance of an organization depends directly on the professional skills, experience and individual strategic knowledge. These different types of knowledge are rarely shared by all staff. The organization must introduce knowledge management (KM) which is a set of tools and methods to identify and capitalize on knowledge to the particular organization and dissemination.

According Segrestin (2004), Knowledge Management provides cognitive support of all members based on the technology and what it offers in terms of conditions for the open use of knowledge should be distinguished, in fact, the tangible knowledge contained in databases (documents) and tacit knowledge that is the knowledge, expertise and skills of all players. Those are the resources of an organization that allow dynamism, work and synergy of different actors.

Therefore, the issues of quality are numerous and should consider the different dimensions. First of all knowledge must be mobilized around the project quality. Very often, quality circles are organized, they are designed to analyze the observed dysfunctions and propose corrective actions. Recall that all personnel actions must be oriented with the aim to provide the best service.

The digital network is directly related to the brain according to technical and organizational

procedures (MoulierBoutang, 2007). Communities of practice address the need to share knowledge by playing a crucial role to enhance the sharing and learning. Similarly they participate in accelerating cycles feedback and learning. This is a boon to implement pooling services and control costs and time: sharing of expenses and organization of major public events; standardization of methods, tools, and an approach to knowledge sharing.

In this sense, the organization is much more like a living organism that constantly generates new ideas around which people gather and organize. Therefore, the development of cooperative relationships and collaborations is inseparable from the concept of knowledge management. This is of course to have the necessary technical resources and also to develop cooperation and sharing with partners and stakeholders. This is undoubtedly competitive factors of the organization.

On a personal level, we can adopt attitudes to facilitate the creation of trust. They all tend to establish better communication and sharing. But this is not enough, because the trust is not just a matter of attitude. It also builds on fundamental knowledge to the collaboration. This way of sharing skills promotes sustainable management of knowledge and the emergence of various forms of collaborative work that has its roots in learning actors and influences their common practices.

### **2.3 . Collaboration and social dynamics of trust:**

The key question in organizations is how much work. This requires a constant effort to find the knowledge or relationships that enable them to perform this work (Alter, 2000). The social dimension is at the level of shared beliefs and values. Encouraging interaction between members within communities the quality of exchanges is increased and developed social ties among members.

The collaboration focuses on trade in synchronous or quasi-synchronous. Therefore, collaborative activities enable them to implement mutual trust to develop intelligence and capacity for collective action. It should create an internal environment in which members of the organization can be involved in the achievement of its objectives (G.MAURY & C. Mull, 1999). Indeed, the leaders will choose to base their organization on trust and learn to invest in the collaboration. They will therefore accept this strategy by adapting the

management system and developing a sense of collective responsibility.

Social cohesion increases motivation and strengthens the bonds of trust between members of the organization. The motivation of the team is essential and it is a source of energy for the membership of both members of the organization as stakeholders (Jolivet, 2003). It is the sense of belonging to a community that gives meaning to the actions of individuals.

Communities of practice meet the need for knowledge sharing and exchange among its members. In this sense, communities of practice play an essential role in maintaining social cohesion of the organization. They reduce the cost and significantly reduce the various cognitive biases. At the heart of a community of practice, innovation is that which is born of continuous improvement and collaboration tools restore it a new impetus.

They redefine the relationships of the organization with its environment and deepen social relations. They maintain the social capital within the organization to learn from the mistakes of a mutual way and allow a sufficient opening on the environment to foster social innovation.

For anything related to interactive communication and collaboration, dissemination of information using collaboration platforms provides learning resources to the user. That is why the development of trust in organizations, and thus its ability to adapt and innovate, through the mastery of these tools.

The new technologies of communication and collaboration also help promote a culture of trust, which is a boon to implement pooling services and control costs and time: sharing of expenses, knowledge sharing, organization common events and standardization of methods and tools. According to Castells (2001), the network consists of a diverse organization is constantly changing as it adapts to the environment. It is therefore to develop a culture of trust that allows you to change and adapt the organization to its environment.

### **3. The complementarity between sustainable development and management triptych in the performance of the company:**

A business is successful when resources it implements are justified, effective and durable, and allowing it to position themselves in a market.

Often the pressure to meet deadlines and cost leads to sacrifices in terms of quality, and this often leads to additional costs and delays in important planning. This is a very common organizational problem sacrificing quality to achieve targets in terms of cost and schedule.

In today's economic environment, cost pressure is enormous, once you start to focus on the cost, it can become all that we care.

Businesses are continuously confronted with choices in their actions or decisions:

- Make the products or services on time, but with an additional cost
- Do it cheaper but may be at the expense of quality
- Save on costs or time but degrading working conditions.

This can be shown by a triangle that takes the following form:



### Quality time and costs

This triangle of uncertainty is often a source of endless discussion and division teams. Indeed, the choices vary depending on the circumstances and often lead to inconsistencies in the guidelines that are given to teams. And because the ideal situation to optimize simultaneously the three parameters does not exist.



The Pyramid of respect (from the principles of Lean Management) provides an answer to unite teams around simple principles and give managers a rule to act and decide on a daily basis. The

decision or action is prioritized. This triangle is as follows:

- Security and the environment: it is respect for the environment and people in the company (premises, equipment and personnel). It is trivial that the environmental and all other company is to first observe the individuals within the company.
- Quality: the respect of customers who pay for a given level of quality. Do not do it, it is not meet its commitment. In addition, the quality not necessarily will result in future costs (recovery, lower prices to compensate). What is to create a product or a service you have to redo it or can not be sold?
- The period: it is also the respect of customers. A cheaper but still lagging behind will eventually be replaced by a competitor or substitute the more reliable time. The acceleration of flow makes the timeliness increasingly important to customers. Again, the delay is often the source of significant future cost overruns (express transport, delivery loss of market ...).
- The cost: it is the respect for shareholders to ensure the sustainability of the company. It is also the result of the mastery of his process.

Done safely and in an environmentally responsible as possible to master the quality, cost and improve over time.

Many businesses have priority over the deployment of environmental policies. Thus, when the process is launched on safety and the environment, improvements in quality, time and cost appear as a logical sequence.

The opposite approach is to seek to optimize costs in priority generally results in degrading working conditions, product quality or service, on time. The results announced are perfect but they appear difficult to achieve. In the medium and long term there is a disincentive for individuals, not as high rates of disruption to cope with emergencies.

Measuring the performance of an activity must take into account performance indicators (quality, cost, time) and indicators of achievement in terms of sustainable development for sustainable results:

- Sustainable development is a process that is not expensive and gives rise to profits in

the future. It's time to change behaviors and attitudes in favor of actions for sustainable development, and not blame the companies to have a financial and utilitarian vision of sustainable development. That sustainable development takes the form of more sober and practical common sense: do more with less, reduce waste and reduce comfort zones. Many logical synonymous with real savings and quick to implement for a business. In a second step, those who place a strategy for sustainable development at the heart of their model are also those who innovate, develop their business, treat their reputation, unite their employees ... and most importantly create value. The most invested in developing sustainable businesses have succeeded in large majority to demonstrate the profitability of their efforts.

- Only now has the ability to act in this direction with the necessary power: indeed, only companies have the discipline and strength necessary deployment. Firstly, because it is in their interests, and second, because the company is no stranger to change with strength and speed organization. She joined as indicators of performance, quality, time, and cost by continually improving for decades.

Social networks allow rapid deployment and large-scale actions that militate in this direction. The effort is minimal and can easily lend a turbo products and services as good at the same price, but cleaner. From this perspective, sustainable development will have every opportunity to spread with the essential to solving power problems.

Performance is the primary motivation of any company, formerly expressed only in terms of profitability (financial performance), comes today not only in terms of cost, as in Taylor's time, but also according to other criteria such as quality, time and innovation. (Dixon, 1990) and (Lebas,1995). Purely financial representation of the performance is increasingly challenged (Lorino, 1995). Moreover, companies are constantly seeking to improve this performance. This evolution of the concept of performance is part of the changing market environment , especially reversing the ratio of supply and demand classically described in three phases

(Dupont , 1998) ( Welsh , 2000) and ( Giard , 2003):

- 1945 - 1975: demand exceeds supply; the world of performance is monocriterioncentered on costs (Ardoin, 1986);

- 1975 - End of the 80s: the supply demand balance and the excess; performance becomes Multi (Roy, 1985), focused on quality triptych, cost, time;

- Early 90s - Today: supply far exceeds demand; performance criteria are increasing, with new aspects such as marketing, communication, innovation, customization, after-sales service.

To these appeared in 90s are added in recent years, the revival of the movement of CSR (Corporate Social Responsibility) (Gond and Dejean, 2002), which still brings a different kind of performance: performance social, societal, ethical and environmental.

### **Conclusion:**

Hence the triptych management is the basis of competitive organizations. In the context of heightened global competition, quality within the company has become an imperative for survival and development. Total Quality is a management philosophy, it is a set of detailed insofar as all functions and all the staff involved in this process of continuous improvement that the organization offers technical terms of products or services.

The quality approach is a change project that requires the involvement of all members taking into account the socio-cultural dimension within the organization. Change management by quality in a cultural context is a complex process. The quality approach is a management system, can not ignore the diversity of cultures and the psychological and social data.

Improving the performance of organizations and the major changes that they cause, require an approach of change and adaptation. This adaptation often involves the continuous improvement of business processes, which is the heart of this new philosophy is total quality management.

Improve performance with the introduction of ICT and collaboration tools enable rapid information sharing, and optimal use of information technology in the management of the organization promotes the reduction of cost, time and improve quality.

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