

# Implementation of the Quality Management System and Development of Organizational Learning: Case of Three Small and Medium-Sized Enterprises in Morocco

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**Abstract**— The profusion of studies relating to the concept of organizational learning shows the importance that has been given to this concept in the management sciences. A few years ago, companies leaned towards ISO 9001 certification; this requires the implementation of the quality management system (QMS). In order for this objective to be achieved, companies must have a set of skills, which pushes them to develop learning through continuous training. The results of empirical research have shown that implementation of the QMS in the company promotes the development of learning. It should also be noted that several types of learning are developed in this sense. Given the nature of skills development is normative in the context of the quality demarche, companies are obliged to qualify and improve the skills of their human resources. Continuous training is the keystone to develop the necessary learning. To carry out continuous training, companies need to be able to identify their real needs by developing training plans based on well-defined engineering. The training process goes obviously through several stages. Initially, training has a general aspect, that is to say, it focuses on topics and actions of a general nature. Subsequently, this is done in a more targeted and more precise way to accompany the evolution of the QMS and also to make the changes decided each time (change of working method, change of practices, change of objectives, change of mentality, etc.). To answer our problematic we opted for the method of qualitative research. It should be noted that the case study method crosses several data collection techniques to explain and understand a phenomenon. Three cases of companies were studied as part of this research work using different data collection techniques related to this method.

**Keywords**—Changing mentalities, continuous training, organizational learning, quality management system, skills development.

## I. INTRODUCTION

THE learning is one of the concepts that are increasingly being treated in management sciences. The fact of taking a considerable interest in this concept is manifested by the influx of studies and the profusion of the literature that concerns it. It should be noted that theories distinguish between individual learning and organizational learning within firms, while considering the former as the source of the other. Today, companies around the world are seeking to be ISO 9001 certified. This implies that companies must implement

the QMS. It is an important project which requires, for being set up, a set of competences to accompany the change that it will bring to the organization and to the running of the companies, sometimes companies that do not have the required skills are trying to develop learning through the training and qualification of their staff. In addition, the ISO 9001 standard affects a large part of the requirements that companies must respect in order to develop their skills. As a result, the development of skills and learning are demanding and companies are forced to develop skills by developing training plans using well-defined engineering.

The question is: Does the implementation of the QMS by companies promote the development of organizational learning? On the basis of this general problematic, we can ask a set of sub-questions which will constitute the research axes of this work. They are as follows:

- What is the nature of learning developed within the QMS?
- Does developed learning have an impact on business operations?
- Does developed learning as part of the QMS have an impact on the minds of individuals in the company?

The main objective through this research work is to study the impact of the implementation of the QMS on the development of learning within companies. Through this research, we also aim to study the impact of developed learning on the functioning of organizations and on the mentalities of people working in the company.

## II. THE RELATION BETWEEN NORMATIVE REFERENCE AND ORGANIZATIONAL LEARNING

### A. The Adoption of ISO 9001 and the Conventional Approach

Lewis [14] and Schelling [23] define conventions as modes of apparent coordination to deal collectively with the delicate situations that an actor alone cannot deal with. Conventions help to understand certain types of standard behaviors that actor can choose to comply with [6]. The fact of being in accordance with the general choice of the other persons is considered by the said actor, who made this choice, as a means to maximize his utility. On the other hand, his free choice, without going back to the general choice of others, will not necessarily be right. In this sense, [6] claims that rational mimicry is the source of the convention.

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Concerning the subject of quality and its relation with the concept of the convention, [6] shows that the evaluation of the quality, whether on the part of the client or on the part of the supplier, results from a convention called "Qualification Convention". In the case where the customer is too demanding, he will never be satisfied because of his bad appreciation of the said quality. In addition, in the case where the supplier provides a product (or service) of lower quality, this will lead to its exclusion from the market because it will lose all his clients. In relation with the issue of quality qualification, [6] argues that the setting of a quality level acceptable by the concerned parties and also its qualification comes from a convention that all stakeholders must respect in order to benefit from the advantages that supposedly be drawn from this convention.

Several criticisms have been made about the adoption of the ISO 9001 standard, whether by practitioners or by researchers. Some companies have admitted that the implementation of this standard has not gone beyond the stage of certification, that is to say, it does not have a real contribution in terms of product quality development, customer satisfaction or the development of managerial practices. In this sense, [21] supports the idea that managers consider the certification process to be expensive; because these managers are divided on the existence of a return of investment and also on the duration necessary for such a return. For its part, [2] considers that it is not surprising that the support of the quality demarche is rather superficial.

Contrary to a continuous improvement approach, there are cases where the implementation of the certification process and the adoption of the ISO 9001 standard has been imposed by the main client of an organization. This requirement may be made by a client to all of its suppliers. These include small and medium-sized enterprises (SMEs) making the majority of their turnover with this client [11]. Therefore, the main reason for adopting the ISO standard is not necessarily to improve the quality of the products (or service) provided by the companies, but the motive is a mimetic behavior as all competitors do the same in front of the requirements of their client. This means that the companies, adopting the standard, try in this sense not to be negatively different from their competitors [11]. In this perspective, any company anticipates the behavior of its competitors, which pushes it to adopt the standard and engage in the certification process. In the same vision, [21] found that certification is not a positive differentiator for companies. However, non-certification is a negative differentiating factor, especially in business-to-business relationships [11]. Generally and also regarding to this perception of the norm, the organisms decide to adopt the standard and to obtain the certification to follow the current and thus not to distinguish themselves negatively. This creates a ripple effect that is self-reinforcing with the increase in the number of certified organisms; clients are demanding certification from their suppliers. In turn, the latter demands it from their suppliers and so on [11]. In the same perspective, [4] stated that organisms do not seek an ISO 9000 organization, but in fact they only seek certification. So, the goal is to obtain the ISO

label as an external image in front of their partners. In such a case, the actors of an organism will behave in such a way as to satisfy the standard's provisions in order to be compliant with the requirements of the partners. On the other hand, they do not consider this standard as a means that will improve the efficiency of their management system as well as the quality of their products (or services). It should be noted that this vision remains relative because the circumstances have changed and the managerial contexts are undergoing profound changes. The launch of a QMS implementation process differs from one organism to another. It all depends on the way it is approached as well as the perception of the leaders regarding to this process. In fact, certification alone should not be an end in itself. The organisms must go beyond this stage; they are then called to go beyond to aim for the achievement of the performances possibly accessible thanks to the implementation of the QMS. This is because the ISO 9001 standard, itself, advocates that companies be included in a continuous improvement approach. Therefore, any company must proceed with the implementation of actions that are supposed to lead to the achievement of the objectives already defined in the context of its strategic policy, hence the need for companies to carry out actions that will develop learning and the skills of their collaborators.

#### *B. Constructs of Organizational Learning and Relationship to Process Performance*

A multiplicity of debates has been conducted by several researchers about the subject of performance and its nature. The performance of a process can be understood on the basis of its outputs, as it transforms incoming elements into outgoing elements. It should be noted that there is no unanimity on the indicators that make it possible to understand the concept of the performance. For example, the ISO 9001 standard does not determine the measurement indicators to be used, while it presents measures, analyzes and improvements to be adopted and implemented [3]. In this sense, the performance of a process depends mainly on its nature; it depends also on what the managers consider to be an element representing the performance of this same process. We can give the example that is stipulated by the standard, it is a measure of the performance of the QMS. This measure can be carried out by the enterprise through the monitoring of the information that is inherent to the customer's perception of the level of satisfaction of his requirements [3]. However, if this measure proves satisfactory for understanding the performance of the business process, it should be noted that other indicators are essential to follow the evolution of the other processes. For example, to monitor the performance of the production process, indicators such as productivity, unit cost, number of rejects, etc. can be used. In relation to the subject of performance measurement, one can cite the example of the prospective scorecard proposed by [7]. To understand the notion of performance in an organism, this table is based on four major aspects namely learning, processes, customers and finance.

It should be noted that one of the objectives of an

enterprise, which has implemented a quality demarche, is to perpetually improve its products (or services). To achieve this goal, the enterprise must be interested in the processes having as outputs the said products (or services). This logic leads to focusing primarily on the efficiency and effectiveness of each process, identifying its added value in the organization and aiming to improve its performance across the different adopted practices and measures. This will necessarily lead to the development of the overall performance of the organization [25].

To update work procedures and instructions and to improve process efficiency, operational learning can play a key role. The latter is strongly correlated with these actions [10]. Such practices are usual during the implementation of quality demarche. They are essential because they can play a major role in improving the performance of the processes and thus that of the organization as a whole [3].

### III. COMPLEMENTARITY BETWEEN THE TWO TYPES OF ORGANIZATIONAL AND INDIVIDUAL LEARNING

Individual learning means the process through which a member of an enterprise learns; this depends on the acquisition of other knowledge, particularly through experience or continuous training.

#### *A. Theoretical Vision on Individual Learning and Organizational Learning*

The research on human behavior was the initial framework in which the learning issue was studied. Behaviorists were the first to analyze individual learning by basing their research on the notion of "stimulus-response". Human behavior is explained by a mechanistic schema, that is, by what is called the conditioning mechanism.

The cognitive approach considers the contributions of behaviorists as being very limiting concerning the concept of learning. This approach presented another vision of learning, it is a change related to the knowledge. In this logic, the individual plays a vital and active role in the process of knowledge development. One example is the research carried out by Piaget [19]. For the latter, learning implies that the individual changes his mental representations. He distinguished between two learning processes, accommodation and assimilation. The first process depends on the evolution of intelligence, thus requiring a modification of mental representations and previously learned knowledge; this to deal with the new data that appeared. On the other hand, the process of assimilation corresponds to the integration of a set of data as well as the enrichment of the reflection patterns, without however calling them into question.

After a definition of these constituent processes, the question that arises then is that of the content of this learning. In this sense, [15] presented a chain of transformation of data into skills. In fact, data are something that shows people the existence of things that change into a set of information. These are first organized, and then classified to evolve and become an explicit or tacit knowledge.

Language or description is the mean by which explicit

knowledge can be transmitted. Conversely, tacit knowledge integrates a multiplicity of schemas, beliefs, mental representations and cognitive elements, as well as defining people's perception of the world [17]. This presents a great difficulty in expressing this tacit knowledge. These can be transmitted in particular by practice. However, metaphors and analogies can also play their part in this process of transmitting tacit knowledge. A distinction of tacit knowledge was made by [20], which assumed the existence of tacit knowledge related to the context and also those inherent to the practice.

The first type is a set of values and tacit norms that are more or less distributed and disseminated, while the second type depends on knowledge learned through practice. Mack [15] claims the idea, through the transformation chain he has established, that knowledge and skills are produced by learning. Sonntag [26] defined the last phase determined by [15] which relates to the production of skills as patterns of thought and action for choosing, gathering and practicing knowledge, skills and attitudes indispensable to solve a problem.

It should be noted that there are different levels of learning that theorists in this field have determined and specified. In this context, we can cite for example [8] which developed a model based on operational learning and conceptual learning. The first type of learning is about obtaining the know-how; the latter requires a physical capacity for action. While the second type of learning involves the apprehension and coherence of knowledge. In the same sense, Schein [22] made a distinction between three levels of learning. In the first place, he cited the acquisition of knowledge, that is, the insertion of new information into knowledge systems. Secondly, it is the acquisition of skills and "behavioral routines". In this case, there is an obvious link with the behaviorist approach. It is a slow learning process, but it creates new routines and habits that ensure persistent learning. The last level of learning, cited by [22], relates to the emotional learning associated with the concept of "classical conditioning".

Initially, the notion of learning was mainly applied to the individual. Thereafter, [9] stated that this notion has been transposed to the business world. This paved the way for renewed research on this learning concept. After this recrudescence of the importance given to this concept, it should be noted that this has favored a profusion of theoretical writings as well as an abundance of empirical studies regarding it (concept of learning). However, organizational learning is one of the most challenging concepts to identify and understand. For this, we note an abundance of definitions that have been given to this notion of organizational learning. For example, [9] defines organizational learning as "a collective phenomenon of acquisition and elaboration of skills that, more or less deeply, more or less sustainably, modifies the management of situations and the situations themselves". Senge [24] defines it as follows: "In learning organizations, individuals constantly improve their ability to create the desired results, new ways of thinking arise and develop continuously, the collective vision grants a significant margin

of freedom, and people are constantly learning how to learn better".

Levitt and March [13] presented their definition of organizational learning as follows: "Organizations learn when they integrate the consequences of history into the procedures that guide their behavior". We can add the definition proposed by [1] which is as follows: "An organism learns when it acquires information in all its forms, whatever the means (knowledge, understandings, know-how, techniques and practices)".

It should be noted that several authors (such as [17], [13], etc.) consider that there is a complementarity between the two organizational and individual learning. In this sense, [12] argues that both cognitive and behaviorist learning approaches have an orientation to be surpassed in order to move towards a new perception of the individual process led by the actors of the organizations. This process can be defined as a combination of behavioral and cognitive changes.

#### *B. Complementarity between the Two Organizational and Individual Aspects of Learning*

The relationship between the two apprenticeships, individual and collective, is strongly associated with the notion of organizational learning. This link, of which we spoke, is strongly defended by the authors of this domain. Nevis [16] considers that an organism learns from the actors that belong to it. We can say, then, that individual learning is at the root of collective learning. We can cite in this way [24], which asserts the existence of a close relationship between individual and collective learning through the concept he called "personal mastery". The latter is defined as a "discipline of learning and personal development that finds its source in competence and talent" [5]. It promotes the development of the level of actors by helping them to overcome the accumulation of knowledge and improving their learning abilities. This mastery remains indispensable for both types of organizational and individual learning. Argyris and Schön [1] also share the same vision. As a result, they claim that individual learning is a foundation for the organizational one and the latter supports individual learning in turn.

Other notions can be related to organizational learning, such as that of "routine". For example, [13] considers this notion of routine as the result of the experience gathered by the actors of the organization. These authors define the routine as follows: «The generic term routine encompasses the forms, rules, procedures, conventions, strategies, and technologies from which organizations build and operate. It also encompasses the structure of beliefs, paradigms, codes, cultures and knowledge that support, elaborate, and contradict formal routines and are transmitted in the organization through individuals». This transmission is, of course, through the sharing and relationships between the various actors of the organization. In the same way, [18] is also based on the notion of the "spiral of knowledge". At the level of this spiral, the diffusion of knowledge is carried out thanks to a conversion of knowledge. This process of conversion consists of four essential phases that are intimately linked. These phases lead, together, to a

transformation from tacit to explicit and from the individual to the collective. The two main phases of the spiral of knowledge are externalization and interiorization. The first is to express what is not expressible through a symbolic and figurative language so that it becomes explicit, while interiorization is relative to the opposite operation, which translates the explicit into implicit. The explicit knowledge is transmitted in the organization, later they translate into tacit knowledge which will be part of the routines and mental representations of the actors. The third phase is that of the meaningful combination of going from explicit to explicit. The fourth and final phase is socialization, which depends on the process from tacit to tacit.

Argyris and Schön [1] base their organizational learning approach on a diversity of concepts such as that of routine and theories of action. These are composed of two types, the first is related to the norms and reference values of the organization, and the second is inherent to the action strategies integrated into the routines. Through this idea that we have just presented, we can say that organizational learning becomes possible in the case where the actors of an organization, who have some problematic, proceed to an inquisition under the general policy of their organization.

As a result, the actors detect the differences between the desired results and the results obtained; on the basis of this they proceed to the modification of their organizational practices. Learning, triggered by this inquisition, has an organizational aspect in case it fits into the reflexive models of the actors. We can distinguish between two major learning levels; the first is in simple loop and the second in double loop.

Learning in a simple loop is learning that does not call into question the values of an organization. It is simply an adaptation to the changes in the context. The actors, by a change of the strategies of action, face the different gaps observed. Therefore, it can be said that the main feature of this level of learning is reacting to changes in the environment by the actors in an organization. It is a learning that is restricted and unproductive [5]. Contrariwise, double loop learning leads to a modification of the action strategies as well as the underlying values and paradigms of these strategies. Then, a fact of feedback links values and paradigms to the observed effects of an action. Therefore, it can be described as double-loop learning in the event that the actors initiate an inquisition as part of their organization's overall policy, and these results in a change in values and organizational action strategies. Contrary to learning in a simple loop, which is limited, double-loop learning allows organizations to question their values and their organizational actions.

The relationship, which links continuous training and the development of learning within companies, is influenced by several factors such as, for example, the profile of managers, the context of the company, the approach of adopting the QMS, etc. This approach can be proactive or reactive. Adopting QMS in a proactive way has positive effects on the skill level of people in the enterprise, mentalities, values, strategies etc. This means that the learning developed according to this approach leads to a change in practices,

methods, organization, etc. On the other hand, adopting this system in a reactive manner may not have a significant impact either on the skills of the people in the company or on their mentalities. This relationship can be schematized as follows:

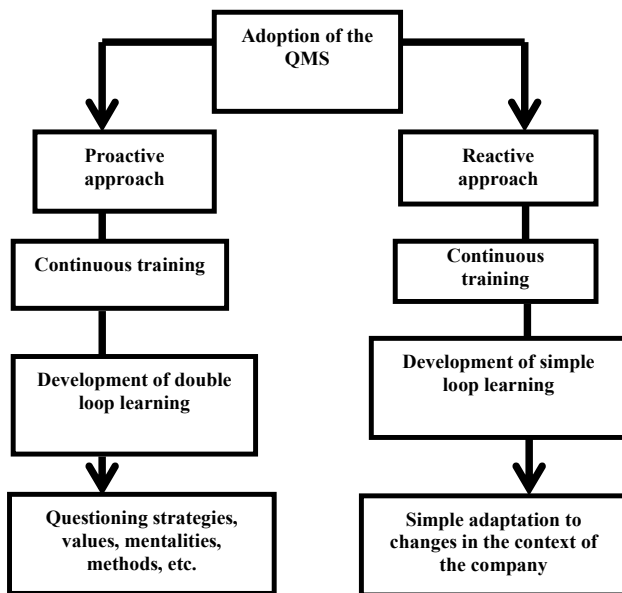


Fig. 1 Link between continuous training and learning depending on the approach of adoption the QMS

#### IV. RESEARCH METHODOLOGY: THE QUALITATIVE APPROACH

Several investigative techniques are used in qualitative research. This is a method that helps the researcher to study a particular subject in depth based on the behavior and the perception of people that were interviewed in surveyed companies. It is also based on their opinions regarding the subject studied of course. This research method could result in ideas or hypotheses that can help the researcher to understand how an issue is perceived by his interlocutors. It can enable him to also understand all the other options related to the same question studied.

##### A. Justification for Choosing the Case Study

To study certain domain such as strategy, change process, decision making, etc. several authors have used the case study method.

Several actions must be performed by the researcher adopting the case study method. The writing of the case study requires the researcher to formulate the research problem as a first step. The latter must be broken down into a set of sub-questions called research axes. The next step is the collection of data. Then, the researcher must go to the stage of analysis and interpretation of the data collected. The final step is a reflection of the researcher in relation to the case study he has done.

It should be noted that the case study method crosses several data collection techniques to explain and understand a phenomenon. The researcher can combine the technique of interviews with the technique of the analysis of the internal

documents of the studied organisms and also with the technique of the observation while taking advantage of his presence within the organism subject of its study.

##### B. Data Collection Techniques

Data collection is a crucial tool of research in management's field. The researcher can use this to obtain the empirical data necessary to complete his research.

This research work was based on three data collection techniques:

- Conducting interviews with the director and with some managers (the head of quality management, the HR manager, etc.)
- Observation within the company. Our presence within it allowed us to make several observations, to note them and to use them in the analysis;
- Analysis of the internal documentation of the companies studied, especially some training plans and also some training engineering reports.

#### V. SEARCH RESULTS

##### A. Presentation of the Studied Companies

**Company X** was created to ensure the packaging and marketing of fresh eggs under a brand known on the Moroccan market. These eggs are packaged and delivered to the wholesalers and supermarkets. The delivery of a safe and good quality product is a major concern for the general direction of Company X.

Since its creation, the **Company Y** is intended to operate in the sector of ovo-products. It is renowned for its responsiveness, quality and flexibility to adapt to customer requirements, needs and expectations.

**Company Z** was created for the purpose of marketing food products. It should be noted that the needs and expectations of customers are at the center of this company's preoccupations, which is why it has improved its responsiveness and quality in order to satisfy them.

By discretion and for reasons of confidentiality, we did not mention the names of the companies studied.

##### B. Development of Organizational Learning in the Companies Studied

The Company Y is an enterprise where there is a development of organizational learning. She is now in a stage where she tries to capitalize on the experiences, the knowledge and the technical knowledge acquired as part of the quality demarche. Initially it began mostly with general and very basic training. Little by little, the training is oriented towards very pointed and precise elements, precisely to follow the evolution that sees the organization and also to answer the needs of its good functioning. In this sense, the General Director of Enterprise "Y" told us the following:

«Today with the QMS, everything is already referenced. We capitalize a little more on the technical capital and the knowledge we have. There is, I believe, a whole chapter on the preservation and processing of information in the standard. So today, even more people

are exploiting this information and this capital that belongs to society. In addition to this, there is for the learning side all the training part that was, I would say in quotation marks, imposed by quality management for people who have shortcomings in some domain».

All companies that have implemented a QMS are obliged to proceed with the development of continuous training plans. It should be noted that registrations and preservation, imposed and carried out, ensure a certain capitalization of the knowledge of the company "Y". This helps the latter to exploit them later, either from former people or from new people. This is a very interesting advantage for this company to ensure the continuity of its operation.

The development of organizational learning necessarily has taken place at the level of companies implementing the QMS, as the standard requires these companies to establish the necessary training plans. This on the basis of their real needs and also on the basis of the skills identified. In this regard, the HR manager of Enterprise "Y" told us:

«If the quality management does not allow developing knowledge, it will not contribute to the development of the company. We proceed by the diffusion of the information, the reflection on the gaps and the formation in all of the processes and the search for the solutions at the same time. We are learning and asking for advice from all people in our company».

We mentioned earlier that the development of training plans is based on identified needs. The way to do this is that the manager of each process carries out interviews with his collaborators. From the information obtained, he determines the need and informs the HR manager. This is a general practice that is used by most companies that adopt the quality demarche. In this sense, the HR manager of the company "Y" added:

«We establish training engineering according to the meetings of the managers, who transmit information by intranet concerning the collaborators who work in the company. It's all about the notes of meetings».

Organizational learning is developing at all levels of the organization. Continuous training is a major way to improve this learning. People are trained according to their need, and also according to their activity and mission. All trainings are always planned. We have already pointed out that this is done through the development of training plans. These are based on the information provided by process managers, describing exactly the needs of their teams. In this regard, the general director of Enterprise "Y" affirmed:

«As I just mentioned a moment ago, there was a lot of training for all our employees, and even for the working class. Everyone today, receives training on the part that is missing»

The second studied company "Z" has started a major project of change of all its organizational aspects by setting up the QMS. In fact, it required developing the learning and competency of its various collaborators. This development of learning was done in a setting where it is imposed by the norm. It requires people to be qualified and trained as needed.

By adopting the standard, this company has implemented a learning process that is unique to them and answers to their expectancies. Indeed, it is necessary to invest in this learning process in order to achieve the objectives previously retained.

The implementation of the QMS at the level of the company «Z» has led to the elaboration of plans for continuous training. They have a crucial role in developing learning and staff competence. It should be mentioned that the adoption of the quality demarche has played a key role at the level of this company in terms of improving its skills and the evolution of its organization and learning. The company "Z" has been certified for a few years. This duration is enough to guide the training process towards more specific and more essential elements for the smooth operation of its organization, especially the operation of its processes. In this context, the general director of Enterprise "Z" affirmed:

«In fact, I inherited a number of people who worked at the time when we were in a traditional commercial district in Casablanca, thanks to the quality management these people have a little higher their level, they have done training and they have tried to hang on, because we start talking about the quality in our company and everyone has to understand, that is like " a train that passes and which we try to hang on by all possible ways. There are many people who do not know a few years ago what quality means, but today they can keep you a parlance that is completely correct, so for me it raised the level undeniably».

In fact, the quality demarche is a systemic one, that is to say, it affects all levels and all the collaborators of the company. This has actually happened at the level of enterprise "Z", since there were, initially, people who did not have certain necessary knowledge, but who subsequently improved their level in order to follow the evolution of their company. So, the company "Z" decided to involve them and federate them around its project, qualifying them and training them because they have, nevertheless, some experience allowing them to hang on and do not leave the company.

Continuous training is the essential basis of the learning process of any company that has implemented the QMS. Its training needs are determined through the identification of the skills required and also through all the information reported by the process managers. On the basis of all this, well-structured and well-planned training plans are established, taking into account the current and future expectancies of the company. In this regard, the quality manager of the company "Z" has declared:

«As part of the implementation of the QMS, of course we enrolled in a training system. We have set up annual training plans that cover all the processes of course. Each year, the pilots of each process lead meetings or do interviews with all collaborators in the process, they define the need for training for all the collaborators on the basis of these interviews, they define the necessary trainings and they communicate them to the general direction after study and according to the objectives which were fixed during the year. Finally and according

to the priorities, we determine the formations that will be realized during the year and the formations that will be postponed for the next year».

The several trainings provided have led to a change in the mentality of company's staff. The people become more and more involved in the company and they understand the value of its projects, especially if the managers carry out relevant and effective communication in this context. The QMS, by its very nature, involves all the people in the company. This is one of the unifying projects that any company can use. As a result, people cling, integrate and get involved in the projects of their company and defend its interests. In this sense, the HR manager of the company "Z" has declared:

«Quality management has brought a lot to the staff.

Before, the staff does not know how to become familiar with the work and do not even know what is the purpose of the activity of our company. When quality management has arrived, staff knows what they are required to do. Before, the staff did not have this perception and they do not understand this».

So, as we said before, the arrival of quality management modifies mentalities and people's perception of certain changes taking place in the company and certain decisions. People's behavior also changes to more involvement around the company's projects. Providing them with all the information, involving them in decision-making, qualifying them and training them, are actions that can completely change the behavior, mentalities, perceptions and attitudes of the people in the company. Such actions and conditions may occur during the implementation of QMS in the enterprise, providing that the manner in which this system is initiated is relevant.

The need for training changes more and more, according to the evolution of the system, according to the objectives and expectancies of the general management and according to the requirements of the daily running of the organization. In this context, the logistics manager of the company "Z" has declared:

«Quality is a very wide field, there is always new knowledge that is acquired, that in relation to the daily work as well as the training that is done in a regular way. So, there is everything that is acquired through contact with reality and all that is learned through the formations. An update is done at the end of the year, if there is something that is serious very quickly we proceed, but if there are things that are not urgent they are done slowly and without problems».

In the company "X", it was essential to develop learning in order to achieve the organizational change generated by the adoption of the quality demarche. New practices and management methods are adopted by the company, so many other elements change at the level of the organization; this must be accompanied imperatively by the rise in competence of the people of the company. In this sense, the quality manager of the company « X » has stated the following:

« ISO 9001 refers to the qualification and training of the company's human resources. This shows that an

important learning process is favored by the implementation of the QMS».

With the implementation of the QMS, a large process of formalization is initiated at the level of the organization. Thereafter, managers proceed to the sensitization and the training of the people on the procedures, on the ways of working, etc. From the beginning of the implementation of the system, there is a clear requirement to train all people in the company; especially those affecting the quality of the product. This obviously develops learning within the organization. If you want to be more competitive, more efficient, you have to put in place an effective learning development process.

### *C. Types of Learning Developed in the Context of the Quality Demarche*

Training, which is the basis of learning in the organizational, is not done in a random way. So, people are trained on the elements they lack so that they can subsequently realize what is expected of them, all that is to be able to achieve the predefined goals and the desired level of performance. This shows that the nature of the learning developed is previously known, since this is done from needs that are well identified. In this sense, the quality manager of the company "Y" has declared the following:

«There is sensitization and there is training, everything depends on each process, because there are training that are global, technical training and training on safety, on quality ... it depends on the need of the person».

On the basis of the statement above, we can say that there are several types of learning that develop at the level of organizations that have adopted the quality demarche. We can cite, for example, technical, conceptual and environmental learning, etc. However, everything depends on the needs of each team and by each process.

Continuous training is, as we have said before, the basis of learning development in the enterprises. It is done according to a well-defined engineering, which takes into account the expectancies and the real needs of the company. At the level of the company "Y", continuous training is among the essential actions that are used to develop learning. In this sense, the General Director had stated:

«Among the actions carried out, I would say again is training. Training plans are drawn up at the level of our company, it is supported by the national agency for the promotion of SMEs (NAPSMEs) or we call out, at our expense, foreign trainers to do very advanced training on some axes of our production process»

Moreover, this has also been confirmed by the quality manager, who has said:

«Among the actions carried out by our company to develop organizational learning, I can mention mainly the training».

At the level of the company "Z" and at the beginning of the implementation of the QMS, the continuous training aims for the elements that have a general appearance. Subsequently, it is more specific and more precise elements that are the subject of this training, because it is necessary to follow the evolution

of the system especially if it is part of a continued improvement approach. It should be noted that priorities and urgent elements are taken into consideration in training plans. The elements, which are less urgent, can even be postponed to another date on the basis of the objectives defined by the general direction. People are trained to develop work methods and practices with the aim of improving the organization and achieving the predefined goals. In this sense, the HR manager of the company "Z" has said:

«When quality management arrived, it brought a lot of new things to our society. The Staff is told that there is a need for good hygiene practices, for example. The fierce competition has pushed us to engage in the quality demarche to give staff the necessary knowledge and so that we can be among the first on the market. The knowledge that the quality management has brought to the staff will enable it to reach the performance levels desired by the general management. But, if the staff is not trained it will always remain limited to a knowledge that is traditional. The traditional method will not allow us to achieve our goals».

The way in which people communicate, circulate documents and share information and any instructions that concern work are some of the elements on which people can be trained. So, we can say that there are several types of learning that develop with the implementation of the QMS.

It should be noted that the training covers elements of a general nature, on technical elements, on organizational elements, on managerial elements, etc. It is the basis of learning that develops at the level of companies adopting the quality demarche. It is an apprenticeship that touches all aspects and all levels of the organization. In this sense, the general director of the company "Z" has declared the following:

«Before, in the company "Z", there were not many corporate executives unlike today, now there are many those having the level of studies of Bac+5 and Bac+4. At the beginning we started with the "B.a.-ba", that is, we trained people on the most basic techniques, so we started with small formations. But later, we have programmed very specific and very technical training that will be provided throughout the year and in many fields. We worked on many axes; we worked on human resources, finance, commercial, logistics... Just for anecdote, today the logistics is managed in the company "Z" by a former deliveryman. The latter, by being trained, he is updated about quality management and he is now managing the department, this just to tell you the training effort that we have made».

As we mentioned before, the training starts at the beginning with some very general elements because people should gradually become familiar with, especially those who do not have the required skills in relation to the planned changes. Then, little by little, the system develops, mentalities change and needs improve. Therefore, the training must also follow this evolution and must then move towards very precise and very relevant elements. This is confirmed by the quality

manager of the company "Z", he has declared the following:

«Without training we can't even set up the QMS, we had to upgrade the entire team. The QMS requires a set of assets in order to communicate the same language. So it is necessary first of all to identify the need and to train people before setting up the system. We have a cell quality, what is the purpose of this cell? It's triggering the discussions and reflections that will help to improve and look for weaknesses and seek solutions for every problem in society».

In the company "X", several types of learning are developed as part of the QMS. We can first mention technical learning. For example, the first principle of quality is customer orientation; to succeed the QMS, you have to find, understand and put in place tools for listening to the customer. In addition, the customer's first request is a product that must be of quality and at a lower cost. So that's why you have to technically qualify the people in the company so that they can understand all the tools to use. It is for this reason that technical learning is one of the first types of learning that develops with the implementation of QMS. In this sense, the HR manager has stated the following:

«In fact, there is an internal training plan as part of the QMS. People focused on job-training. When we talk about job-training, it's training that helps staff do their job and do it right. So, we have adopted this type of training to improve the technical skills of our staff. This gave a great benefit to our company».

In addition to technical learning, there is also managerial learning that develops in turn. The arrival of quality management pushes managers to change their mindset. We go from a simple performer or a simple technician to a real manager, who knows how to federate people, who knows how to communicate with them, who knows their need for training, etc. So, it is a real leadership that develops at the level of the organization, which leads people to constantly take into account the objectives of the company.

There is also intelligent learning that could develop in the QMS context. It is an apprenticeship that involves taking into account the costs of non-quality hidden in the company. This is where the QMS really becomes heavier and more efficient; for example, the people in the company are aware of the elements that can disrupt the profitability of their process, they also ask themselves questions about how they work, about process optimization, and so on.

#### *D. The Importance of Evaluating the Effectiveness of the Training Provided and the Capitalization of the Knowledge Acquired*

Any company, adopting the quality demarche, must register all actions related to the knowledge and know-how acquired as part of this demarche. It must also proceed to the on-the-spot evaluation and delayed evaluation of training provided according to previously established plans. These elements can be considered as the basis of a system for managing this acquired knowledge. In this context, the HR manager of Enterprise "Y" has told us:



«We have a knowledge management system. Among the means, the registration is done through the attendance cards, the on-the-spot assessment sheets of the last training, and the delayed assessment after 6 months of training, etc.».

So, the purpose of this evaluation of training is to see whether it is effective or not, whether it has satisfied the desired expectancies or not. In this regard, the quality manager of Enterprise "Y" has told us:

«We do an on-the-spot and delayed evaluation. An on-the-spot assessment is just after the training and a delayed evaluation after certain duration, to see if this training is effective or not. We proceed to the necessary registrations, there is a record of the people, information on the participants and the trainers and we obtain a copy of the support of this formation. On the basis of all this we proceed to the evaluation».

The evaluation of training is essential in order to ensure its effectiveness and also to have an idea about its impact on the running of the organization. It is done because there are objectives that are already retained and that must be achieved. Therefore, there is a try to qualify people to achieve these goals. It is primarily the Human Resources (HR) process manager that is responsible for this evaluation mission. Through the information he obtains, he first builds up a general idea about the skills of people, then he establishes a list of tasks for each of the collaborators. In this regard, the General Director has stated:

«It is human resources management (HRM) that deals with that. After each training there is an assessment of the person's knowledge, to see if what he has acquired is well assimilated. For each collaborator or for each worker, there is a list of tasks that he does as well as his knowledge. So in the versatility grid we can play on that».

From the list of tasks, the HR manager elaborates a grid of versatility, especially in the small and medium sized enterprises (SMEs) managers play a lot on this issue of the versatility of their employees. Therefore, they can assign to people tasks other than those he usually perform, this of course in case of a need and also for the purpose of ensuring the smooth running and continuity of the operation of the organization.

Several means and actions are provided by the company "Z" to develop learning. A quality cell has been created and its role is to ensure the proper running of the organization and to think about solutions for any type of problem, even solutions that concern the subject of continuous training. So, several actions or means are granted to the learning process, either in terms of financial means, or in terms of material means, or in terms of technical means, etc. The quality manager of the company "Z" has declared in this sense:

«There are significant financial means, which are given to the company to establish the training plans. We have given a budget that is very important for the training over the past four years. There is a local with all the necessary audio-visual means. The company even gives

time for those who want to take courses outside. We have frankly all that is necessary. Our general direction encourages the development of learning within society».

This statement by the quality manager shows the interest given by the general direction of company "Z" to the question of training. The latter is the major tool used by the company to develop learning within it. This ascertainment, that training is of great importance and that it is considered to be the essential element in the policy of developing knowledge and skills, is confirmed by the HR manager of enterprise "Z", who has thus affirmed:

«We made training plans. The training plan is established according to the staff's needs. We do interviews for each process and we determine that need and then we develop the training plan. We can't develop the training plan without previously conducting interviews».

The training process is relevant because it is done through training plans; these are based on the real needs of the company and its staff. Training is not done in a random way. It is pre-planned. Indeed, it is provided according to a well-defined engineering and it tries to satisfy the expectancies and objectives of the general direction, but according to the needs identified and the skills identified.

Concerning company "X", several actions are implemented to develop organizational learning. First, there are annual training plans; these plans are developed in a thoughtful manner, based on identified needs and well-defined engineering. Each manager determines the training needs of their employees, which helps to carry out specific training and also to develop the skills of people in the company. Training partnerships are also among the actions undertaken by this company to develop learning. These partnerships are held mainly with strategic suppliers, who train people on important elements such as equipment, etc. In this regard, the quality manager has affirmed the following:

«The first action is represented in the annual training plans. Regarding the second thing, there is the partnership that has been made with strategic suppliers and suppliers of strategic equipment. For example, these providers come once a year to train people and to make a general diagnosis. So, we have two essential actions, training plans and training partnerships».

It is worth remembering that there are other actions that are essential to improve learning. First of all there is the will of the leaders to go forward, which must be real and permanent. There is also the involvement of managers; since they know the reality of the organization's processes, we need to listen to their views on the conception of the learning process. A third action depends on planning; if there is no planning this process can be led to failure. In fact, the QMS by its nature allows to promote the recording and preservation of knowledge acquired through training. Thus, a certain capitalization of knowledge can be ensured through all the means provided by the system. In addition, trainings are also evaluated to determine their effectiveness in relation to their impact on the running of the organization, so that could help

the company to achieve good results. In this regard, the quality manager has stated:

«All the training that is done is formalized; we record the people who benefited from the training, the days and the hours of training, the trainers, the on-the-spot and the delayed evaluation of training in order to rule on the effectiveness of training. So everything is recorded and formalized».

In fact, organizational learning is improving significantly thanks to quality management. This improvement affects the organization in a global way; that is, all hierarchical levels are concerned. Thus, the people of the company are trained and qualified; this could help them to perform their tasks and missions well. In addition, there is always an effort to develop the versatility of people who are working at the company. Therefore, good results could be achieved whether it is economic, financial, commercial, social, partnership, etc. the principle is that each process will improve its contribution in the organization by seeking the continuous improvement which is recommended by the QMS.

## VI. CONCLUSION

The implementation of the QMS within companies promotes the development of several types of learning and impacts the running of their organizations.

The results of this research have shown that there is indeed a development of learning in the context of the quality demarche. This development is on the one hand favored through the normative aspect of the QMS. On the other hand, it is promoted through the development of continuous training plans based on the well-defined needs of the company's staff and on the basis of engineering which is well defined by the company.

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