



QUALITY MANAGEMENT SYSTEMS: RELATIONSHIP BETWEEN SYSTEM FAILURE AND THE REASONS FOR ITS IMPLEMENTATION

Author: Estela Soler Capdevila

Tutor: Juan Carlos Bou Llusar

**GRADO EN ADMINISTRACIÓN Y DIRECCIÓN DE EMPRESAS
AE1049 – TRABAJO FINAL DE GRADO
CURSO 2015 - 2016**

INDEX

| | |
|---|-------|
| 1. Introduction..... | p. 04 |
| 2. Reasons for the implementation of a QMS..... | p. 06 |
| 2.1. Intrinsic motivation | p. 06 |
| 2.2. Extrinsic motivation | p. 09 |
| 3. QMS implementation process | p. 12 |
| 3.1. Implementation of QMS in companies intrinsically motivated..... | p. 14 |
| 3.2. Implementation of QMS in companies extrinsically motivated | p. 15 |
| 4. Perception of employees | p. 17 |
| 5. Empirical Study..... | p. 22 |
| 5.1. Methodology | p. 22 |
| 5.2. Sample | p. 24 |
| 6. Results..... | p. 25 |
| 7. Conclusions | p. 30 |
| 8. References | p. 34 |
| 9. Bibliography..... | p. 39 |
| 10. Annex I. Questionnaire 1 | p. 40 |
| 11. Annex II. Questionnaire 2 | p. 42 |

INDEX OF TABLES

| | |
|---|-------|
| Table 1: Institutional Theory..... | p. 10 |
| Table 2: Implementation Phases | p. 14 |
| Table 3: Results of Regression Models Predicting the effect of Motivation on Company's Results | p. 27 |
| Table 4: Results of Regression Models Predicting the effect of Motivation on Implementation | p. 27 |
| Table 5: Results of Regression Models Predicting the effect of Implementation on the Employee's Results..... | p. 28 |
| Table 6: Results of Regression Models Predicting the effect of Motivation on on the Employee's Results..... | p. 30 |

INDEX OF FIGURES

| | |
|---|-------|
| Figure 1: Chain Reaction | p. 07 |
| Figure 2: Market Gains | p. 07 |
| Figure 3: Cost Savings | p. 08 |
| Figure 4: Hypothesis..... | p. 22 |
| Figure 5: Correlation between internal and external motivation according to the organization | p. 26 |
| Figure 6: Correlation between internal and external motivation according to employees | p. 29 |

1. INTRODUCTION

In recent decades, in the business world has become evident the need to implement activities focused on quality improvement, not only to products or services, but also to people, both employees and customers. Consequently, the activities focused on quality management have been gaining an increasing importance. The management systems emphasize the quality orientation of the company towards customer satisfaction, both internal and external; increase the quality of products and services offered; and improve processes and procedures necessary to develop them. These characteristics have increased the importance of the concept of Total Quality Management (TQM), since the quality has become an attribute of differentiation against the competition and a key factor that customers take into account when selecting a product or service.

According to Miller (1996) we can define the TQM as "a continuous process by which top management follows the necessary steps to ensure that all members of the organization make efforts and activities to establish and achieve equal or superior standards to the requirements and expectations of its customers, both external and internal." A distinctive feature of the Quality Management is the importance acquired among companies around the world regardless of their size or sector. The main reasons are: the response to new business challenges; the rapid globalization of markets that increases competition; the greatest requirement from customers, because they have variety of offers and they demand oriented quality meet their needs; accelerating progress and technological change, which decreases the life cycles of products; and the success they have achieved the above forms of quality management.

Along with these advantages, another factor that has driven the use of Management Systems (QMS) is the benefits it brings. According to Garvin (1984) the GCT allows companies to obtain internal benefits such as the improvement of productivity due to a reduction in rework and waste products leading to a reduction in production costs, lower costs of warranty and product availability, so service costs would be reduced. Also it is affirmed that through the use of a QMS external benefits or income (Garvin, 1984; Rust, Zahorik and Keiningham, 1995) are achieved.

It manages to increase customer satisfaction resulting in an improved corporate reputation, improved retention rate of customers, and attracting new consumers. These factors increase market share, creating economies of scale based on experience and

increasing the value and relative prices of products and services offered. The combined effect of reduced costs and increased revenue translates into increased profits for the company.

Despite these advantages, not all companies that implement a system of total quality management end up getting these benefits. The reality is that in many cases the implementation of QMS fails and does not provide a real increase in profits to the company. In some cases, not even a substantial improvement in the quality of their products or services. Many studies have focused on describing the TQM and its benefits, size or activities and requirements arising from the QMS. There have been very few who have carefully analyzed the cases of failure and the reasons that have led to a failed result.

The objective of this study is to investigate the causes of failure of the implementation of a total quality management system. This is intended link the results obtained by a company with the implementation of a QMS with the main reasons that led him to the use thereof. It will be analyzed the motivation that led many companies to implement a system of TQM and relationships between the different motivations and the mode to implement the quality system will be established. In addition, relations between motivation and the benefits achieved will also being sought.

Finally, it will be analyzed the connection between the initial motivation and performance of employees, defined as the degree of participation, motivation and internalization of the principles of quality. In order to analyze this relationship, this report is divided into two large blocks organized as follows: In the first part of the text will be discussed a theoretical review primarily focused on the two opposite types of motivation, extrinsic and intrinsic, which may lead a company to make the decision to implementing a QMS. Then, according to the types of motivation exposed the will be described the implementation process and mechanisms of introduction of the system in the company. To the end this block, will be presented the possible results obtained by the company according to the degree of internalization and the perception of the employees in relation to the activities and concepts of TQM and of the system that has been implemented in their organization.

In the second part of the report, a brief empirical study on the information discussed above will take place, which will allow us to test the relationship between failure and the reason for implementing a QMS in some specific cases. On the one

hand, through the directors of various companies information will be obtained of the initial reasons of implementation, as well as the mode of implementation of the system. On the other hand, via a questionnaire realized to the employees will be analyzed the results obtained on these, and the relationship between participation and motivation and their opinion on the reasons that prompted his company to use a QMS.

2. REASONS FOR THE IMPLEMENTATION OF A QMS

Taking a decision always can be affected by two types of motivation: extrinsic and intrinsic. It is understood by extrinsic motivation that which has been generated by external influences the individual, that is, the motives for action are alien to it. By contrast, intrinsic motivation lies in the individual and the desire to seek new challenges, to analyze the ability of oneself and acquire new knowledge (Ryan and Deci, 2000). In this case, the motivation is driven by the interest or pleasure in the task.

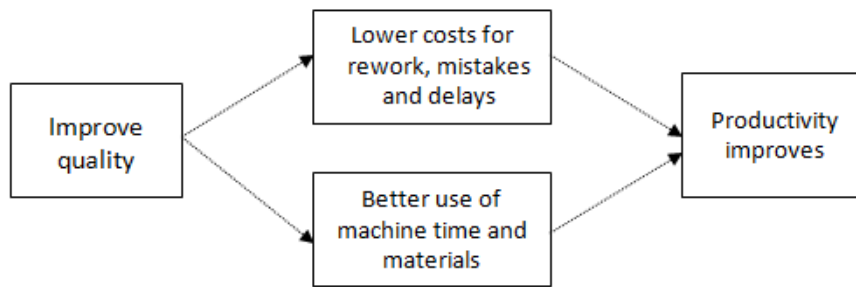
2.1 INTRINSIC MOTIVATION: TQM relationship models and results

The main internal reasons for which the organization decides to implement a QMS are related to the initiative of management, improving the relationship between employees and managers, for economic reasons such as reducing costs and waste or as a base for implementing more advanced quality management models (Carmona, Suarez, Mora and Perriñez, 2015). Similarly, the management team of an organization may decide to implement a QMS in order to increase the efficiency of the company. In this case, we speak of intrinsic motivation, because the benefits of quality orientation are understood and, in order to improve the company chooses to the implementation of a system of TQM. In this way, improve business efficiency is simple. If the market is studied and unexploited quality niches in the market, advantage is achieved reduce costs and increase market share (Garvin, 1984). Consequently, profits increased considerably.

Since the increased importance of quality, there have been many studies showing how implementing a QMS able to increase productivity, profits and business efficiency in the long term (Christiansen and Lee, 1994; Hendricks and Singhal, 1997, 1999; Easton and Jarrell 1998). The benefits of implementing the TQM are both financial and operational and commercial (Carmona, Suarez, Mora and Perriñez, 2015). In 1982, Deming published its famous "Chain Reaction" quality, whereby it

determined that quality improvement has two effects: first, errors and mistakes in the production line go down, descending consequently the costs by reprocessing. The second effect is the increase in efficiency in the use of both materials and time-machine. As a result, increased productivity is achieved. (See Figure 1).

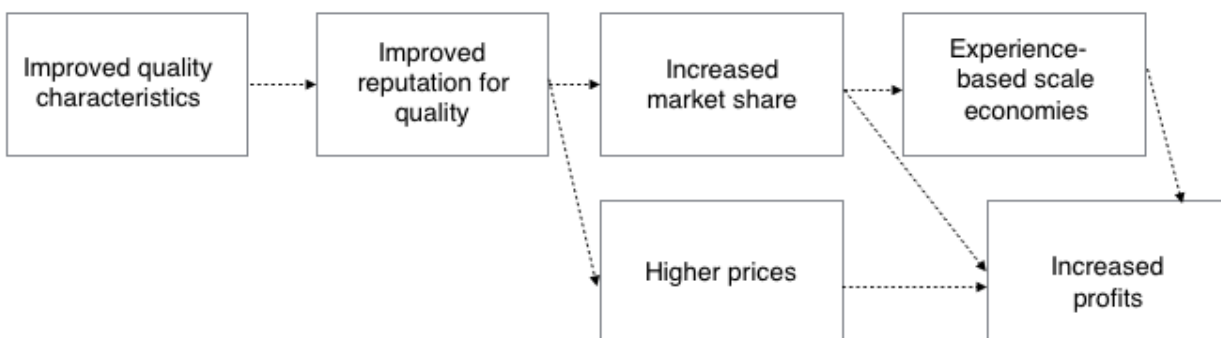
Figure 1: Chain Reaction



Adapted from E. Deming (1982)

David Garvin (1984) also showed how quality orientation can increase profits and reduce costs. From their point of view, improve quality increases reputation for quality (see Figure 2). First, this allows to attract new customers and increase market share. It also allows to set higher prices given a product of better quality. Consequently, this makes it possible to establish economies of scale based on experience and continuous improvement, which would increase economic benefits.

Figure 2: Market Gains

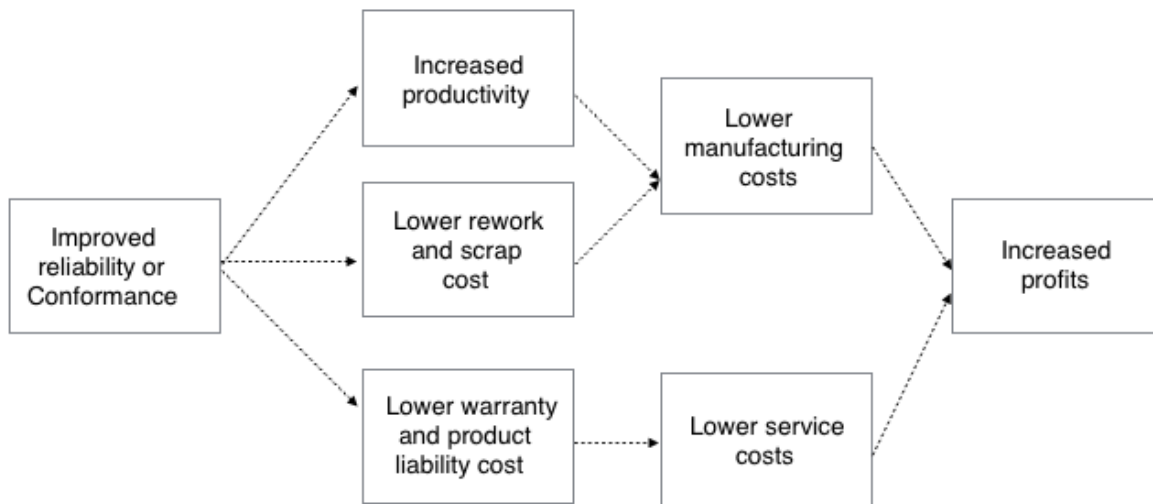


Source: D. Garvin (1984)

Similarly, increased reliability and conformity of products and services have three distinct effects: Improve productivity, save costs and reduce waste and rework

costs by guarantee. According to Garvin, these three conditions lead the company to reduce production costs and service, enabling an increase in profits. (See Figure 3).

Figure 3: Cost savings



Source: D. Garvin (1984)

Finally, we can emphasize the study of Rust, Zahorik and Keiningham (1995) that, based on a financial perspective, analyze the return on the expenses in quality (ROQ). It also determines that the benefits for quality improvement are mainly given in two ways: on the one hand, the company improves its ability to attract new customers. And on the other hand, the most satisfied clients with the products and services become loyal customers and increase their consumption. In addition, it should be noted that current customers buy more than new customers (Rose, 1990), and that the cost of getting a new customer is greater than the cost of a sale to an existing customer (Peters, 1988). In conclusion, the presented models indicate that the relationship between TQM and results depends on several variables. Second, we must also take into account external variables that focus on the image and positioning of the company. It is, for example, increased reputation and improving corporate image that will attract new customers.

In summary, previous studies indicate that those companies who willingly and without being forced to decide to implement a QMS, have the objective to achieve such benefits. It aims to improve business efficiency, in order to increase profits, create better quality products and satisfying customers in greater degree.

2.2. EXTRINSIC MOTIVATION

In many cases the decision to implement a QMS is not related to an intrinsic motivation but for reasons other than the organization determined by external contingencies. In this case the use of mechanisms TQM is determined by extrinsic motivation. External reasons may be very different: to increase market share, improve the image and reputation of the organization or respond to pressures of competition or by the Government (Carmona, Suarez, Mora and Perriñez, 2015). But generally, companies that have this kind of motivation seek to increase their legitimacy, instead of using the TQM as a tool for improving business profitability. In this way, they aim to improve their position in society and meet the established social norms.

In the business environment, there are pressures that prompt companies to carry out certain actions or plans to take concrete decisions or develop specific strategies. Institutional theory (DiMaggio and Powell (1983); Meyer and Rowan (1977) and Meyer and Scott (1983)) explains and classifies these environmental pressures. These pressures can lead an organization to implement a QMS for reasons beyond without the conviction or commitment of the business management to improve productivity.

The institutional theory suggests that companies carry out similar actions motivated by external forces, which leads to a tendency towards institutional isomorphism, namely, companies tend to accept and implement admitted and entrenched institutional formulas reference in their environment. In relation to this trend Powell and DiMaggio (1983) found two types of isomorphism affecting the business sector, competitive isomorphism, ie, market competition puts pressure on organizations to similarity, and institutional isomorphism, whereby companies also compete for the political and institutional legitimacy (see Table 1).

Table 1: Institutional Theory

| COERCIVE PRESSURES | MIMETIC PRESSURES | NORMATIVE PRESSURES |
|---|--|---|
| <ul style="list-style-type: none"> • Other organizations • Expectations of society <p style="text-align: center;">↓</p> <ul style="list-style-type: none"> – State laws and regulations – Collective agreements of unions and social agents | <ul style="list-style-type: none"> • Uncertainty in the company • Ambiguity in the sector <p style="text-align: center;">↓</p> <ul style="list-style-type: none"> – Public opinion – Performance of industry leaders | <ul style="list-style-type: none"> • Professionalization <p style="text-align: center;">↓</p> <ul style="list-style-type: none"> – Education system – Professional associations – Performance of consultants. |

Source: Compiled from Powell and DiMaggio (1983)

Likewise, Powell and DiMaggio (1983) identified three mechanisms by which the institutional isomorphism can occur. First we find the **coercive pressure** that derives mainly from both formal and informal pressures that other organizations exert over a particular company; as well as the pressures of meeting the expectations of society. Thus, the state, through laws and regulations, social partners and trade unions through collective agreements and negotiations and the supranational organizations through guidelines and recommendations put pressure on organizations that require them to act in a particular way.

Therefore, these coercive pressures specifically the policies and requirements of government and other institutions responsible for quality force organizations to implement QMS. At the same time, the fact that many other company in the industry have a quality certification or implement systems based on TQM translates into extrinsic motivation to carry out this activity.

These pressures are given in both cases of adoption of QMS, like ISO 9000, and the implementation of standards related to Human Resources or other organizational areas. We find a good example of coercive pressure on studying Hoque (2003) which analyzes the impact and incidence of "Investors in People Standard" (IIP). The author shows that the impact of this accreditation has been limited since some companies have used to increase their recognition, simply carrying out some changes to ensure accreditation. Similarly, Ram (2000) analyzes and that in many cases companies attach importance to IIP accreditation for being an effective marketing resource.

Secondly we find the **mimetic pressure** arising mainly from uncertainty and ambiguity. When an organization does not have clear goals, has not properly defined action plans, does not understand technology or organizational environment involves

uncertainty, it tends to imitate or copy other organizations that seems more successful and have more legitimacy.

In this case, favorable public opinion to compliance with quality standards and compliance with these by industry leaders would create extrinsic motivation that would force a company to implement a QMS.

The latter mechanism of the Institutional Theory is the **normative pressure** resulting from the professionalization. We can define professionalization as the collective struggle of members of an occupation to establish the conditions and methods of their work and guide the future professionals through legitimacy (Liang, 2007) and to establish a knowledge base and legitimizing autonomy at work (Larson, 1977; Collins, 1979). Consequently, two aspects of professionalism are a source of isomorphism: the fact that universities hold education and standing on a cognitive base and the rapid growth of professional networks that include organizations.

Therefore, professional associations or consultants through the recommendations of a professional nature and the norms and values that have been established as appropriate in relation to the concept of quality can determine the performance of an organization in relation to the GCT. Likewise, the education system or contact with other professionals could result in an extrinsic motivation to implement a QMS.

In conclusion, institutional theory supports the hypothesis that the search for legitimacy can push companies to implement a Quality Management System even without being committed to it. Which will have a negative impact on the implementation process and lead to the failure to achieve the benefits of the system.

To avoid this taking of impulsive decisions or forced by external factors, organizations should always take into account that it is not about making the most investment possible in quality or trying to cover every aspect of this, ie, the end should never be to offer the highest quality possible. On the contrary it is about investing the right amount in the right place, not to become in a company with financial difficulties suffered by its focus on quality and excessive spending on customer service.

Also, the company should not forget that is not just about make surface changes to imitate successful organizations with strategies based on quality. But must understand and develop the cultural and structural principles of the organization to successfully bet on investing in quality.

This leads us to believe that intrinsically motivated companies get better results from the implementation of a QMS since they are committed to a greater extent and carry out properly the necessary changes for the new orientation towards quality. From this idea appears the first hypothesis to contrast in the report:

H1: The effect of QMS on the results is higher in the case of companies intrinsically motivated.

If the hypothesis is true, we can say that organizations that implement a system of quality management in order to increase performance, reduce costs or improve their performance in quality among others, will get higher or more positive results than companies that implemented the system pressured by their environment.

3. QMS IMPLEMENTATION PROCESS

While the decision to implant a QMS and the motivation that drives this decision are important, previous literature has also shown that the mode of implementation is also a key factor that may determine the ultimate success of TQM (Tang, Chen and Wu (2010), Warwood and Roberts (2004) and Lawler (1994)). The implementation of the new quality-oriented system must be correct in order to achieve significant and positive results. Several analysts have reflected in their studies that many organizations have not benefited from the SGC by mistakes made in the implementation stage system (Nutt, 1986, Klien and Sorra, 1996). The purpose of this study is to analyze if there exists a relationship between such failures and why the company decided to focus on quality.

The study realized by Hendricks and Singhal (1998) shows that companies with more mature TQM implementation experience greater sales growth. And also get more significantly improve the cost that companies with less mature implementation of TQM. In the same way the analysis performed by Naveh and Marcus (2005) concludes that the implementation mode, both installation and use of a QMS influences the results. Also, Taylor (1995) in a study that relates the attitude, behavior and commitment of senior management with ISO 9000, concludes that obtaining or no profit can be attributed to the level of management commitment towards the implementation of the standard. Also suggests that the degree of understanding of the purpose of ISO 9000 may affect not only the implementation of it, but also the chance to go beyond the

focus on quality in the long term. Therefore, understanding the ultimate goal of a QMS is crucial and very important previous step in the process of implementing.

In the cited study by Naveh and Marcus (2005), the authors define a correct implementation of the QMS as one that successfully develops two phases: the installation and use of the system.

The first phase, the **installation** consists of preparing and developing system concepts to be implemented, for example ISO 9000, EFQM excellence model, etc. In addition, in this phase the set of rules to follow is established, the quality policy is determined, responsibilities are specified and necessary documentation is required. In turn, the installation process consists of two steps: 1) external coordination, which aims to align the system requirements with the needs and capabilities of customers and suppliers and other key stakeholders and 2) the internal integration, which refers to the adaptation of the QMS to the situation and actual practices, standards and processes of the organization.

But the system installation is not enough; the next step is the **use**. This phase consists of two dimensions: 1) daily use, ie, the daily application of standards and written norms, until they become a fully integrated in the routine process of the company. 2) And use as a catalyst for change. This means that the implemented QMS will become the base for the new orientation of the company. If the system becomes a catalyst for change, the company will understand the TQM as a new opportunity in which to continue investing, through which it get continuous improvement of various aspects of business activity.

Depending on the degree to which the company follow these phases and complete it properly, will get a more or less satisfactory result. Now, we can relate the mode or degree of implementation of the QMS with the initial reasons that led the company to implement a system of TQM. Therefore, the various motivations influencing the company entail different results (Table 2).

Table 2: Implementation Phases

| | INTRINSIC MOTIVATION | EXTRINSIC MOTIVATION |
|------------------------------|---|--|
| EXTERNAL COORDINATION | The company aligns the needs of stakeholders with the capacities of the QMS | The company implements the most visible practices, regardless of the needs of stakeholders |
| INTERNAL INTEGRATION | The company adapts the QMS with their actual processes, practices and standards | The company only implements some activities and practices, regardless of their current situation |
| DAILY PRACTICE | The company applies the standards and rules written daily | Only basic requirements and standards are usually applied, popularly before audits |
| CATALYST FOR CHANGES | The implemented QMS is the basis for the new orientation of quality and the company continues investing in it | The company abandons the established standards and norms and returns to the previous routine |

Source: Compiled from Marcus and Naveh (2005)

3.1 IMPLEMENTATION OF QMS IN COMPANIES INTRINSICALLY MOTIVATED

It has been shown that those companies that decide to move toward quality in order to increase efficiency improve profits and gain competitive advantage work harder in the process of implementing the system of TQM (Kennedy and Fiss, 2009). The basis of this relationship is found in the fact that seeing a problem as an opportunity facilitates and improves the chances of action and results in a greater effort to properly implement the system (George et al, 2006).

If the exposed phases are completed correctly the QMS will be implemented properly and, in principle, without any serious errors that prevent achieving its objectives, benefits and improvements. To better understand this relationship between the four phases exposed by Naveh and Marcus (2005) and the implementation of the QMS we can establish a correlation between each phase and the various causes that may fail to implement a system TQM according to the study by Miller and Cangemi (1993). For example, if the organization does not maximize its relationships with

suppliers external coordination phase will not be completed, which will lead to complications in the expected final results. In the same way if managers do not develop properly their task of leadership and direction, if not empower decision to work teams or fail to overcome resistance to change from employees, the phase of internal coordination will not take out properly preventing that QMS installation is complete and effective. Moreover, there are several errors that can relate to the phases of system use. If the company can not control or measure the effects of the implemented system or has not sufficiently developed its vision of quality, daily use standards and quality standards will not be adequate. Finally, an important cause that fails TQM implementation according to Miller and Cangemi (1993) is the orientation of the company in the short term. With this temporary vision is impossible conveniently complete the dimension of the quality system as a catalyst for change, since no results, improvement or further investment is expected in long-term quality.

To successfully perform the implementation of the QMS completing all phases properly, the company will have achieved a successful internalization of the concept of quality and related practices. There will be assimilated information and subsequently had transformed into knowledge that apply for a specific purpose (Knight and Liesch, 2002). And good results will be achieved given the great entrepreneurial effort, which will be reflected in the involvement of management, participation of all employees, the creation of working groups and quality circles, the change of the fundamental organizational values, etc. Along with a correct integration of the system are fundamental long-term vision and commitment to change and improvement (Warwood and Roberts, 2004).

3.2 IMPLEMENTATION OF QMS IN COMPANIES EXTRINSICALLY MOTIVATED

In contrast, organizations motivated by the pursuit of legitimacy, make superficial changes to imitate other successful companies with strategies based on quality. By not changing the fundamentals of the organization do not get positive results (Rust et. al, 1995). Similarly, another cause of negative results in the implementation of quality system derives from the investment poorly managed quality. Therefore, the company must study its current situation, its processes and procedures as well as the real needs of its customers to invest in those aspects the appropriate quality. But in many occasions, instead of this analysis companies allocate their

resources and efforts to cover all dimensions of quality. The result of this malpractice is an unnecessary investment of capital in customer service or on the product itself, which brings more losses than benefits.

Also, in many cases the organizations that implement a QMS by the environmental pressure and to gain legitimacy, see certification or approval of their system as an end in themselves. These companies do not really change their activity and after audits continue with the practices and models from previous work. This is a consequence of the lack of vision on the part of company executives who do not understand the focus on quality as a strategy or a competitive advantage. In this case, organizations simply understand the quality certification as a key survival factor in the industry. Therefore, this thought is motivated by fear which is always a negative view (Senge, 1990).

In other cases, the desire to imitate other successful companies' causes that the organization only copies certain activities directly linked with the TQM or those simpler. This phenomenon is known as "imperfect imitability" (Barney, 1986). Extrinsically motivated managers decide to implement specific practices in their organization, those more visible, usually related to the technical part of the quality. Instead, as shown by the study of Powell (1995), it is the combination of more ambiguous and intangible activities with those more structured and visible what brings the success of the SGC. Behavioral factors, acceptance of change, motivation to improve, the commitment of leaders or the corporate effort are some of the key success factors. Equally the involvement, motivation and participation of employees in TQM is critical to the success of the system (Powell, 1995; Flynn, Schroeder and Sakakibara 1995).

All of this leads us to consider that those organizations intrinsically motivated will endeavor more in the process of implementation. And as a consequence, they will have better results. By contrast, extrinsically motivated organizations that suffer institutional pressures will carry out a more limited implementation of the QMS and get worse results or not get their benefits. In order to test this relationship properly, we propose the following hypothesis that relates the initial motivation to the degree of adequacy and commitment to the process of implementing the system:

H2: The QMS implementation process will be better and will be conducted with a greater degree of commitment to those companies intrinsically motivated.

That is, if the hypothesis is confirmed we will be saying that companies seeking to improve their efficiency and reduce costs through a quality management system, are more committed to the development and implementation of the system. This means that in the end they get more positive benefits or results that the organizations extrinsically motivated.

4. PERCEPTION OF EMPLOYEES: Degree of internalization, participation and motivation

Although in the preceding paragraph shows that the correct implementation of the QMS is very important in terms of its technical parts, for example, a perfect external coordination and integration with current practices of the company, adequate daily use is required the rules and standards set, etc. Previous literature also emphasizes the importance of the human part of a QMS. If it does not consider the employees or they do not understand or fail to internalize the principles of quality culture system performance they will also be undermined.

The International Organization for Standardization bases ISO 9000, ISO 9001 and other related on seven basic principles of quality management, among which is the "commitment of the people". This principle shows the importance of involving all employees of the various organizational levels in the SGC for it to be effective and efficient. Similarly, the "people" and "result in people" are criteria that are part of the known EFQM Excellence Model. We can also refer to the well-known work of Edwards Deming, "Quality, Productivity and Competitiveness: the exit of the crisis" (1986) to check the importance given to company personnel in the process of implementing a QMS. Among his 14 points for the transformation of the industry Deming devotes several points to the human side of the organization. Deming stresses the importance of implementing job training and integration of all employees by eliminating barriers between departments. He also indicates that the objective of leadership from the direction should be to help people and discard the fear so that everyone can work effectively for the company. On the last point, Deming says it is essential to involve the entire organization to carry out the transformation towards the culture of quality. Thus, in relation to employees the degree of participation in quality practices, the motivation

for carrying them out and the degree of internalization of the culture of quality are also variables that affect the benefits obtained by the practices of TQM.

The basis of TQM programs is to empower and give responsibility to the employees for them to control the quality. To do this, they are trained in the use of resolution techniques and troubleshooting and offer the tools necessary to carry out these tasks. For example, this is the main function of Chapter 6, Human Resources Management within ISO 9001. In this chapter, are explained the requirements related to the human capital of the organization. First, is manifested the responsibility of management to provide the resources necessary for the proper implementation and maintenance of QMS. The training of personnel is also required, through training plans, and maintenance by evaluating the efficiency of the training offered. In the same way within this chapter, ISO 9001 also establishes requirements in relation to the work environment. Management must continually search for optimal environmental conditions to ensure proper implementation of the system, not only the proper performance of the products.

Similarly, the EFQM Excellence Model specific its two principles related to human capital in various areas to address. In relation to Chapter 3, People, Model establishes aims to facilitate for all employees the contribution of creative ideas and innovations and let them show their skills and capabilities that create a continuous improvement based on the intelligent use of knowledge. To do this, the areas to be addressed or the relevant tools that the company can use go through an effective communication system, rewards programs and appropriate recognition, development of skills and competences of all workers, etc. Already in relation to the results, EFQM states Criterion 7 People Results. The organization must determine the degree of job and personally satisfaction of workers who make up the organization and their level of motivation in relation to their job. For this, the Model itself establishes indicators to measure these variables in order to know the achievements of employees, their involvement, etc.

Like the responsibility and the power given to the workforce, another basic pillar of the GCT is the inclusion of all employees in the quality management culture. To do this become indispensable communication, motivation and participation in relation to all practices of the implemented QMS.

We can understand therefore that the **participation** of the entire organization is one of the key activities for the successful implementation of the QMS. Participation at the organizational level is defined as "a process that uses the input of employees to increase their commitment to the success of the company" (Robbins, Judge and Cambell, 2010, p. 180). The basis of this definition is that employees will be more committed to the company and satisfied with their work if their decision-making power is increased and is given autonomy in the tasks carried out. In addition, Robbins et al (2010) identify three methods with which to influence employee participation: 1) participative management, all employees have some power of decision, 2) participative representation, all employees participate through small representative groups and 3) quality circles, ie, groups of workers who meet to analyze, discuss identify and implement corrective actions on quality issues in their areas. This shows that the QMS strengthen the participation of employees through their involvement in decision-making, process definition, problem solving and quality control. In addition, it attempts to increase the participation of all workers from building teams with targets on the quality area. This is the previously mentioned quality circles, committees and quality improvement teams, which powers the relationships between employees from different departments in order to achieve continuous improvement of quality practices.

But it is also important the reason why employees participate. In cases where managers impose participation and involve some workers compulsorily in certain activities of TQM, employees will not be really motivated. In addition they will not understand the function and quality culture that seeks to establish and, therefore, will not come to internalize its principles. By contrast, success will get employees to voluntarily participate in the new practices. To do this, there are several variables that enhance or hinder the participation of workers in the TQM (Yeh, 2003), among which stands out the degree of "self-efficacy" submitted by employees. This variable will determine their participation because when employees see themselves more capable to carry out TQM related activities, more motivated they will be to participate (Yeh (2003) and Shea and Howell (1998)).

Regarding the **motivation** we can define it as "the process that explains the intensity, direction and persistence of an individual effort towards achieving an objective" (Robbins, Judge and Cambell, 2010, p. 140). As in participation, there are also ways in which managers can influence to increase intrinsic motivation and satisfaction of workers and, consequently, increase their willingness to participate in quality management. Among the main variables are the organizational structure and

particularly the job design (Lawler, 1994) because to better conditions and working facilities more likely that the employee wishes to help the organization and increase productivity. As already mentioned, it is also crucial positioning at the lowest level possible the power of decision. Together with these variables the GCT also increase the motivation through various tools. Both the requirements of ISO 9001 and EFQM criteria related to human part pursue grant greater power of decision to employees. The aim is to increase their involvement and their motivation to continually improve those tasks performed. The goal is that all employees feel part of the TQM's practices and they can implement corrective actions in their workplace, seeking continuous improvement. For the same purpose, the SGC establish systems of recognition and rewards to enhance employee satisfaction and increase the reasons and motives to strive and work according to the culture of quality.

Participation and motivation are not only closely linked together but also directly related to the **degree of internalization**. To understand this concept we refer to SECI Model, created by Nonaka and Tkeuchi (1995), which analyzes the creation and transfer of knowledge in organizations. This model shows that internalization is a process which transforms the explicit knowledge, structured information that can be encoded, in tacit knowledge, becoming an intangible element difficult to express, that forms part of individual knowledge and becomes a valuable asset for organization.

Therefore, when a worker feel intrinsically motivated to carry out the activities of the SGC, he will decide to participate voluntarily in its implementation and development. Consequently, the worker will own and settle the principles of quality culture in their way of thinking and acting in the organization. At that time the rules, processes and quality procedures cease to be explicit knowledge that the organization provides the employee to be tacit knowledge, because there will be internalized rules correctly, and will become part of their experience, values and beliefs so they will determine the way they act. Thereby, greater internalization of standards and quality practices could lead to further implementation of the components of TQM (Fotopoulos and Psomas, 2009; Psomas, Fotopoulos and Kafetzopoulos, 2010).

In a study conducted by Webley and Cartwright (1996), where they analyzed the underlying psychological part of TQM's practices, the authors conclude that there are nine major psychological processes that lead to the QMS to be implemented correctly among workers: Identification, internalization, instrumentality, consensus, rationality, group dynamics, development, equity and equality. Between these

processes highlight the identification, process that allows all employees to share a common purpose and engaged in making business objectives (Webley and Cartwright, 1996), and the internalization. Both concepts are closely related, since so that the workers share a common purpose and they are identified and oriented towards the same goals and objectives, should be a proper internalization of corporate values and beliefs. Similarly, after an empirical study on a sample of hotels with the Q Certification (Mark of Quality Tourism from the Institute of Spanish Tourism Quality (ICTE)), Tarí, Heras-Saizarbitoria and Pereira (2013) concluded that the degree of internalization has a positive effect on profits obtained by the implemented QMS.

In summary, previous studies in the field of TQM indicate that there is a direct relationship between employee motivation and degree of voluntary participation in practices related to the QMS. And at the same time it is clear that both concepts significantly influence the level of internalization of the culture of quality by all employees of the organization. Being the acceptance and understanding of the principles crucial for the successful implementation of the system and to achieve positive results that improve the productivity and efficiency of the company TQM.

In short, the main idea we draw is that those most committed companies with the implementation and development of the QMS get results on the employees most positive that organizations that implement the system quickly, partial or with a low level of interest or commitment. In this connection the third hypothesis we will check in the next block of the report is extracted:

H3: The most committed companies with the development and implementation process of the QMS achieve better results on employees than companies less interested and committed with the implementation of the system.

Finally, by linking all the data analyzed in the report we arrived at the general idea that those companies originally intrinsically motivated obtained at the end of the development process and implementation of the system TQM more positive results on workers. This leads us to make a final hypothesis to check whether or not there is such a relationship:

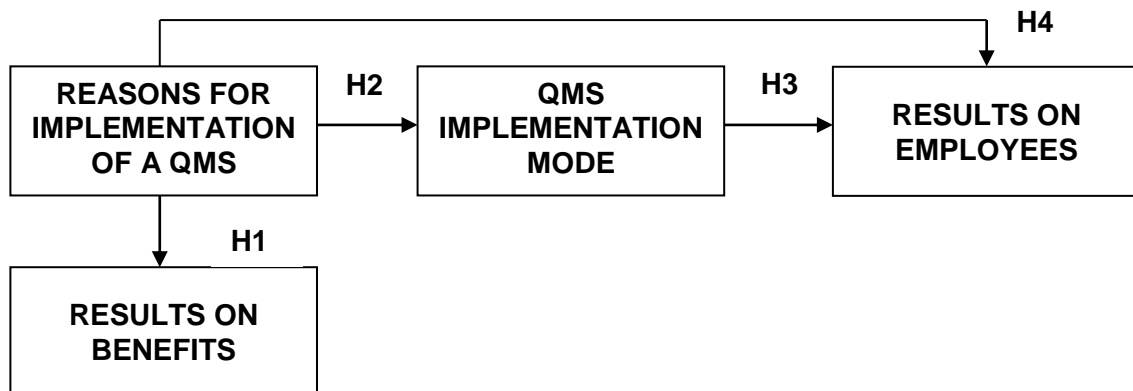
H4: Intrinsically motivated companies will have better results on employees than those originally motivated extrinsically.

That is, if the hypothesis is true, we can say that those companies seeking to improve their efficiency or economic performance achieve that their employees are more motivated and willing to participate in a greater degree and continuously in the system of quality management. Which would lead them to greater internalization of quality practices and understand their benefits, unlike workers in those organizations originally motivated externally.

5. EMPIRICAL STUDY

To check if the conclusions drawn during the theoretical review are true, below we proceed to undertake an empirical study. The aim is to test the four hypotheses proposed and determine if there are significant relationships between motivation, implementation and results.

Figure 4: Hypotheses



5.1 METHODOLOGY

For the empirical analysis we have been conducted two different studies using two separate questionnaires. The first of them is intended to gather information about the initial motivation that prompted organizations has bet on a QMS and mode of implementation. The second questionnaire mainly aims to obtain information about the results of the QMS in relation to employees and the degree of internalization of quality practices.

Study 1

The data relating to the first questionnaire (see Annex I) have been obtained from a previous study (Escrig, et al. 2014) aimed to analyze good management practices in organizations with a recognition by EFQM Excellence Model. In order to

use such data for this study have been selected various questions included in the official questionnaire.

First, to measure the initial reasons that involve the implementation of QMS, the organizations value the importance that had eleven reasons. The items have been taken from previous research on quality management and excellence (Taylor, 1997; Poksiska, et al. 2010; Heras, et al. 2006; Casadesús and Heras, 2005; and Ghobadian and Gallear, 2001). The reasons to value are presented as statements and can be classified between internal reasons, for example: *Improve competitiveness, improve the quality of products or services, etc.*, and external, for example: *Getting grants of public administration, continue management trends imitating others, etc.* The items are measured by a Likert scale with five levels of response (1 is equal to nothing important and 5 being very important). Since the variable to be measured is the degree of influence for each reason in the decision to implement a QMS and how the items are statements, the scale measures the degree of agreement or disagreement of the respondent.

To explore the benefits arising from the use of the EFQM Excellence Model respondent is asked to assess the improvement in results in relation to four main areas: customers, people in the organization, society and key results of the organization. In this question again the measurement scale is type Likert with five levels showing different degrees of achievement of the proposed improvements in the four items. In this measuring scale 1 is equal to improve not achieved and five improvements achieved permanently.

Finally, to measure whether the organization conducted a successful implementation of the QMS, the respondent must show their degree of agreement or disagreement with seventeen claims regarding the four phases of implementation that we have established as optimal: installation, formed by the internal integration and external coordination, and use, made up of daily use and use as catalyst for change (See section 3. QMS implementation processes).

To do this, have been adapted items extracted of several previous studies as Naveh y Marcus, 2005; Miyazawa and Yoshida, 2010; Taylor and Wright, 2003; Tucker et al. 2007; Kaynak and Hartley, 2008; Santos y Álvarez, 2008; Powell, 1995; Martínez y Martínez, 2012. The sixteen items are presented as statements, such as: *In meetings of the Committee issues of quality and excellence are reviewed; the use of the model*

has led to changes in the way things are done in your organization, etc., and they are divided according to the four phases of development and implementation. The measurement scale is type Likert with five levels allowing to show the degree of agreement or disagreement with the statement proposed. On this scale, 1 is strongly disagree and 5 strongly agree.

Study 2

The second questionnaire (see Annex II) is aimed at analyzing the results of the SGC on employees, through measuring their degree of participation, motivation and internalization of the principles and practices of quality. In this case the items have been taken from a study by Tang, Z., Chen, X. and Wu, Z. (2010), in which the authors investigate individual-level determinants of participation in the activities of GCT. In the corresponding question they are presented fourteen statements divided into the three categories mentioned, for example: *In my area of work I am always looking for ways to prevent errors, my participation in continuous improvement activities related to quality reduces quality costs, get involved in continuous improvement and quality activities is nice, etc.* The scale of measurement used is type Likert with five levels, by which the respondent can show their degree of agreement or disagreement with the statements.

Finally, in order to know the opinion of employees on the reasons that led their organization to implement a QMS, we use again the first question presented in the first questionnaire. In this case, through the Likert scale of five levels, we ask the worker to indicate the degree of importance that he believes the reasons presented in the different items had, showing their degree of agreement or disagreement with each of them.

5.2 SAMPLE

Study 1

For the first part of the research focused on the initial motivations that led to the implementation of the QMS and the mode of development and implementation thereof, the first questionnaire was conducted on a sample of 180 Spanish organizations that on March 13, 2013 had a seal of excellence. The sample is selected in proportion to the population of each of the different labels of excellence. Also, they are represented the following economic sectors: services, healthcare, manufacturing, education and

nonprofit organizations. Also, the sample includes companies of different autonomous communities. (Escrig et. Al., 2014).

Study 2

To analyze the results of employees has been measured their levels of motivation, participation and the degree of internalization of the principles of quality. In addition, information has been obtained about the importance that employees believe their organization awarded to different external and internal reasons at the time of implementing its QMS. To facilitate research we focus on a particular organization, the Hotel Intur Catellón. This hotel has the "Q" Tourist Quality granted by the Spanish Institute for Quality Tourism for 17 years.

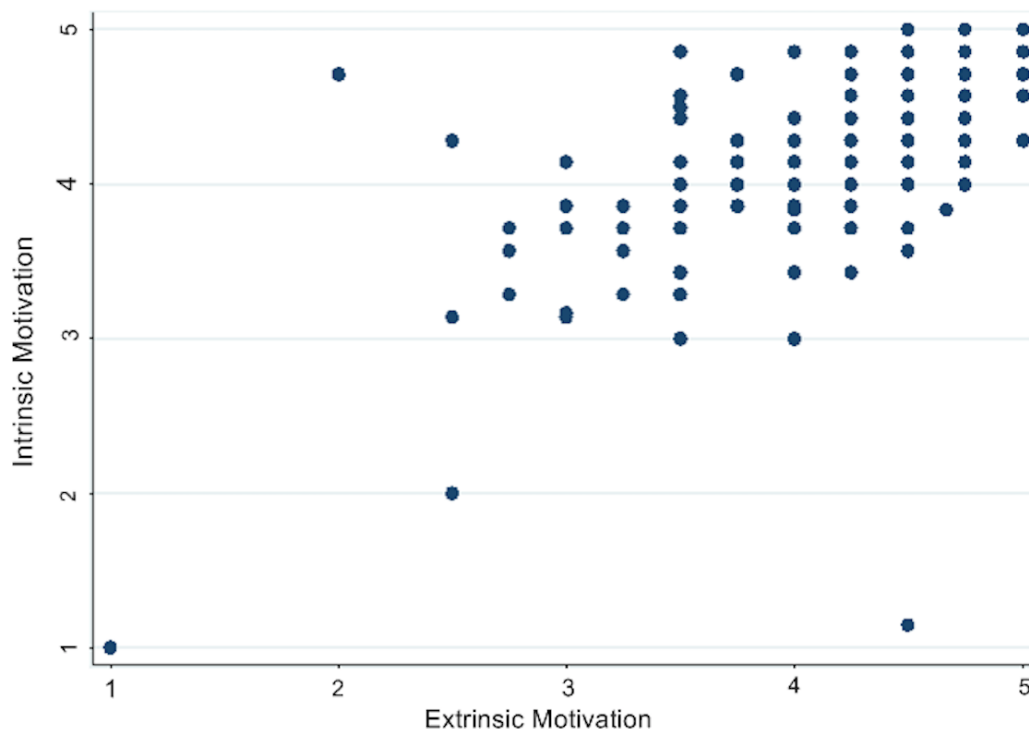
We carry out the second questionnaire to 30 workers in the hotel. Also, we conducted the questionnaire used in Study 1 to the person responsible of quality in the organization was also carried out.

6. RESULTS

Study 1

In order to classify the companies in the sample as motivated internally and externally motivated have been analyzed values for these variables obtained by the companies in the sample. Figure 5 shows the correlation between internal and external motivations. Quickly we see that most companies give a similar importance to both types of reasons so there is a high correlation between them ($p = 0.5918$) and, based on these results, we can affirm that there is no incompatibility between internal and external reasons for implementing the QMS. The companies that implemented a QMS for internal reasons also attached importance to external. This indicates that companies do not choose between one or the other. By getting these results we can not identify several groups of companies according to the importance of internal, external or both reasons. Based on these results it was decided to analyze the relationships between internal and external reasons and results using a regression analysis.

Figure 5: Correlation between internal and external motivation according to the organizations



Relationship between QMS and results

Table 3 shows the results of the regression analysis between the two types of motivation with the results at the business level. This analysis corresponds to the hypothesis 1 and 4 of the investigation, which refer to:

H1: The effect of QMS on the results is higher in the case of companies intrinsically motivated.

H4: intrinsically motivated companies will have better results on employees than those initially motivated extrinsically.

Table 3: Results of Regression Models Predicting the effect of Motivation on Company's Results

| | Results on Employees | Results on Customers | Results on Society | Key Results |
|-----------------------------|------------------------|------------------------|-----------------------|-----------------------|
| Intrinsic Motivation | 0.3438097* (0.1067505) | -0.0646374 (0.1016637) | 0.1372955 (0.1416759) | 0.0462127 (0.950388) |
| Extrinsic Motivation | -0.226379* (0.0958054) | 0.2093758* (0.0912402) | -0.057263 (0.1280657) | 0.0110384 (0.0853024) |

Standard errors are in parentheses

n = 180

* p ≤ 0.05

Table 3 shows that internal motivation is not significant in relation to the results on customers, society and key results for the company. Regarding the external motivation, there is empirical evidence that it has a positive effect on the results on customers. Again, the results are not significant in relation to the results on society or on key results. In summary the hypothesis 1 is not confirmed since most companies internally motivated not improve key results of the organization.

Regarding the hypothesis 4, there is empirical evidence to say that intrinsic motivation positively and significantly affects to the results on the employees. And extrinsic motivation negatively affects them. Overall, the hypothesis 4 is confirmed, since when more internal motivation, better results in people. Overall, hypothesis 4 is confirmed, if there is more internal motivation are obtained better results in employees.

Relationship between reasons for the deployment and implementation of the QMS

To test the hypothesis 2 and understand the relationship between initial motivation and development process and implementation of the QMS, again has been performed a regression of these variables.

Table 4: Results of Regression Models Predicting the effect of Motivation on Implementation

| | Externally Coordinated | Internally Integrated | Daily Use | Catalyst for Changes |
|-----------------------------|------------------------|------------------------|-----------------------|-------------------------|
| Intrinsic Motivation | 0.0346958 (0.0866894) | 0.3591194* (0.1371574) | 0.05755 (0.0764381) | 0.2088957* (0.0836709) |
| Extrinsic Motivation | 0.012559 (0.0789959) | -0.1462088 (0.124985) | -0.001773 (0.0696544) | -0.1602363* (0.0762453) |

Standard errors are in parentheses

n = 180

* p ≤ 0.05

Table 4 shows that intrinsic motivation, despite positively affect the four phases of implementation, it is significant only on the phase of internal integration and catalyst for change. Therefore, companies internally motivated coordinate better the principles of quality management with their actual practices. And besides, it is likely to continue investing in quality in the long term. By contrast, extrinsic motivation has a negative effect on three of the four phases, although the effect is only significant on the last one. Therefore, there is empirical evidence to say that extrinsic motivation has a negative effect on long-term performance of the company in relation to quality. In summary, these results confirm the hypothesis 2 of the research.

Relationship between the implementation process and results of employees

Finally, to test the hypothesis 3 we have made a regression relating the four phases of the implementation process with the results obtained on employees (Table 5).

Table 5: Results of Regression Models Predicting the effect of Implementation on the Employee’s Results

| | Results on Employees | |
|-------------------------------|-----------------------------|-------------|
| Externally Coordinated | 0.3041763* | (0.1174218) |
| Internally Integrated | 0.0467666 | (0.0567569) |
| Daily Use | 0.1633392 | (0.1354569) |
| Catalyst for Changes | 0.0065783 | (0.1049995) |

Standard errors are in parentheses

n = 180

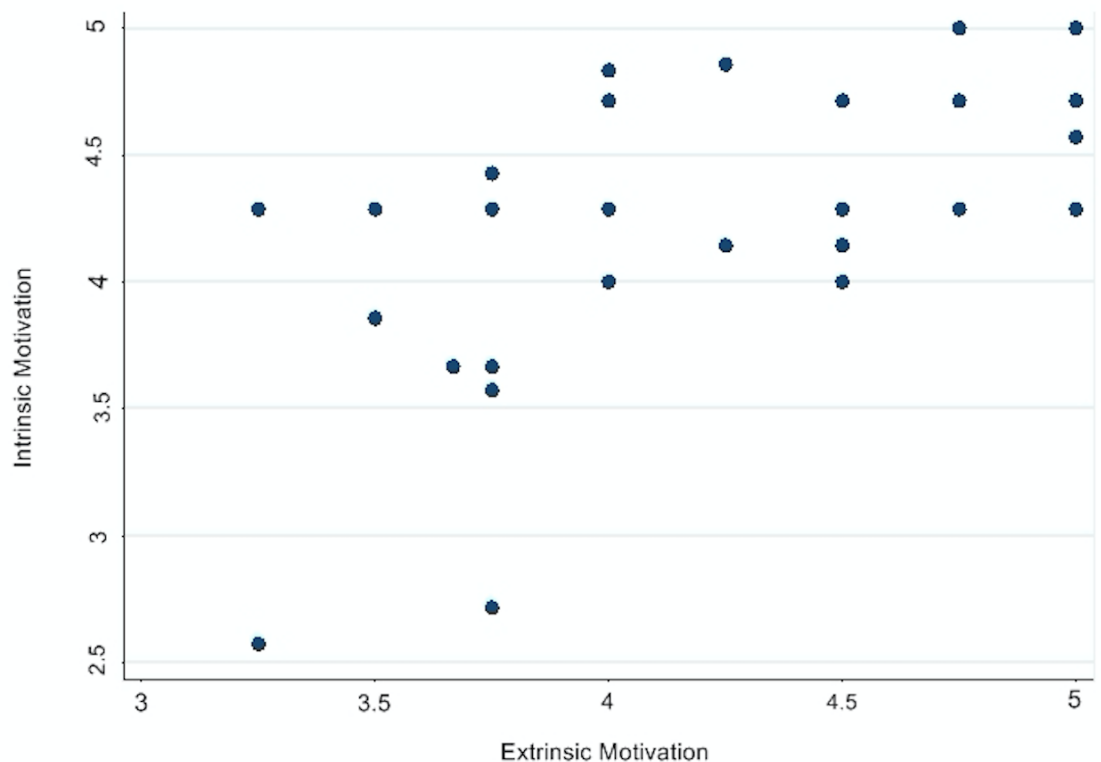
* p ≤ 0.05

Table 5 shows that all phases have a positive effect on results in relation to employees, although only is significant the external coordination. Hence, there is empirical evidence to say that if organizations hold a good external coordination in implementing the QMS get more positive results on employees. These results partially confirmed hypothesis 3, only for the case of external coordination.

Study 2

In order to classify employees of the sample according to their opinion on the main motivation of their company, we have analyzed the values for these variables obtained by the workers of the sample. Figure 6 shows the correlation between internal and external reasons, from the perception of employees. Quickly we find that most respondents granted a similar importance to both types of reasons, so there is a high correlation between them ($p = 0.5687$). Based on these results, we can say that employees do not perceive a key reason that carries his company to bet on quality. By getting these results we can not identify several groups of employees according to the perception of the initial motivation of their organization. Consequently it was decided to analyze the relationships between internal and external reasons and results on employees using regression analysis.

Figure 6. Correlation between internal and external motivation according to employees



Relationship between motivation and behavior of employees

Table 6 shows the results obtained by performing a regression relating the opinion of employees on the factors that motivated the organization and the three variables chosen as representing their behavior in quality management. It is noted that

despite the fact that both types of motivation positively affect motivation, participation and internalization, only in some cases this effect is positive. The results indicate that intrinsic motivation has a positive effect on the degree of employee involvement. In addition, a greater degree of internal motivation, employees internalize in higher level the principles and practices of TQM. Likewise extrinsic motivation has a positive effect on the three variables, although only affects significantly the degree of internalization.

Table 6: Results of Regression Models Predicting the effect of Motivation on Employee's Results

| | Motivation | Participation | Internalization |
|----------------------|----------------------|------------------------|------------------------|
| Intrinsic Motivation | 0.223786 (0.1829824) | 0.4802161* (0.1470986) | 0.3339334* (0.1425478) |
| Extrinsic Motivation | 0.132983 (0.7531738) | 0.1510569 (0.1610426) | 0.5658706* (0.1560604) |

Standard errors are in parentheses

n = 30

* $p \leq 0.05$

7. CONCLUSIONS

Study 1

From the data obtained from the first study we conclude that for most organizations both internal and external reasons are important when taking the decision to implement a QMS. Companies want to improve their effectiveness, the quality of their products and reduce their costs as well as improve its legitimacy in the market or carry out the same practices than its competitors. These results contrast with the ones obtained in the study of Carmona et. al. (2016). The authors conclude that truly the internal motives drive the implementation of QMS greater extent than external motivations. Perhaps these conflicting results are given by differences between the samples chosen in both studies.

Still, we determine that there is relationship between initial motivation and results. Intrinsic motivation positively affects the results in employees, while extrinsic motivation negatively affects them. That is, those companies that implement a QMS mainly to improve efficiency, productivity or reduce costs get more positive results on their workers than those who yield to the pressures of the environment.

Also notable that extrinsic motivation is positively perceived by consumers. External motivation positively influences the results in customers. This is logical if we think that organizations implement a quality management system in response to the consumer demands (coercive pressure). In some way, customers are demanding certain standards and quality practices and they react positively when companies respond effectively to these demands. These findings correspond in part to the confirmations made by various studies (Lee, 1995; Jones, 1997 and Singels, 2001). Based on empirical studies various authors conclude that internally motivated organizations obtain better results.

On the contrary, the conclusions disagree with the results obtained by Tarí, Heras-Saizarbitoria and Pereira (2013). The authors claim that intrinsic motivation positively affects the daily use of quality standard. While our results, despite showing a positive impact it is not significant.

In relation to the phases of implementation and system development of the TQM, we can conclude that companies intrinsically motivated primarily perform better internal integration phases and catalyst for change. Companies with higher degree of internal motivation better integrate the QMS with its practices, processes and current standards. In addition, at higher degree of intrinsic motivation more will continue to focus on quality in the long term, implementing more complex and complete Quality Management Systems. These results are consistent if we think that internal motivations are based on the desire to improve the effectiveness, productivity and economic performance. If the organization has a greater interest in improving its internal situation will also be interested in maintaining these results and, therefore, continue to focus on quality in the future.

In contrast, extrinsic motivation negatively affects the final stage of implantation. Those organizations with higher degree of external motivation not use the SGC to change their business and probably will not continue to invest in long-term quality or will do so to a lesser extent. This is logical if we think that external reasons are mainly based on copying to other companies and increase legitimacy in the competitive market. In a situation of pressure, organizations implement the QMS to obtain benefits quickly. These companies seek to improve its position and image in the short term, so it is logical that they stop focusing on quality as no longer feel the pressure of the environment. Those organizations with higher degree of external motivation not use both the SGC to change your business and probably will not continue to invest in long-term quality or will do so to a lesser extent.

Similarly, these conclusions match the findings of Hendricks and Singhal (2001). These authors analyze how different factors affect the results in quality. Among others, they conclude that companies with a higher degree of maturity of implementation of TQM and implementation processes performed better, experience more positive results.

In summary, regarding the impact of the correct implementation of the system, we have verified as the correct development of the four phases positively affect employees results in more or less significantly. This is consistent with previously conducted several studies (Christiansen and Lee (1994), Ittner and Larcker (1996), Hendricks and Singhal (1997) and Easton and Jarrell (1998)). Several authors provide evidence that effective implementation of the QMS allows achieving positive results, not only on employees but also on various economic and financial indicators.

Study 2

Based on the data obtained from the second study we can say that as organizational level, employees also grant a similar importance to the external and internal reasons. This leads us to think that communication in the field of quality is adequate, since employees know, at least generally, the reasons why the company has opted for a QMS.

Concerning the effect of motivation on employee behavior we also get to interesting conclusions. First of all, the internal motivation of the organization has a significant positive impact on employee participation. Organizations looking to increase productivity or efficiency get that their employees are more involved in the quality activities.

The results also allow us to conclude that both types of motivations positively affect the internalization of the principles of quality. Perhaps the fact that employees are motivated, regardless of the nature of this motivation, provokes always easier to convert explicit knowledge in tacit. So employees more easily settled principles of quality based on any kind of motivation. These results contrast with those obtained by Nair and Prajogo (2009). In his study of the internalization of ISO 9000, the authors conclude that there is a positive relationship between companies internally motivated and internalization of the Standard. On the contrary, they found no significant impact of external motivation on the degree of internalization.

Likewise our results contrast with those obtained by Tarí, Heras-Saizarbitoria and Pereira (2013), in an empirical study in various hotels with the "Q" Quality Tourism certification. These authors conclude that hotels driven to focus on quality based on internal reasons tend to internalize more the norm.

We can also highlight the importance of these data in relation to the results achieved through the SGC. The study by Flynn Schroeder and Sakakibara (1995) states that organizations have different degrees of quality performance given various variables. Among others, the authors emphasize the involvement of employees as a determinant factor of performance and results obtained. In the same way, the article by Wardwood and Roberts (2004) concludes that the participation of employees is among the five most influential factors in the implementation and operation of a QMS. All this, together with the results of this study, allow us to conclude that companies motivated to a greater degree by internal factors, will get greater participation of employees. Consequently QMS will have higher performance and better results.

In general and answering the initial question that this study sought to answer, we can say that the initial motivation of the organization is in part related to the results finally obtained. Although not so directly as we might imagine, it is true that focusing on quality based on internal reasons will be more beneficial. A greater degree of internal motivation better results on employees, better development of the internal integration of the QMS, more likely to continue investing in quality in the future and greater participation and internalization by employees. By contrast, although the external motivation also has a positive impact on several variables, this is offset by the negative effect it has on others.

8. REFERENCES

- Barney, J. B. (1986). Organizational Culture: Can it be a source of sustained competitive advantage?. *Academy of Management Review*, 11 (3), 656 - 665.
- Carmona, M. A., Suárez, E. M., Calvo, A. and Perriñez, R. (2015). Sistemas de gestión de la calidad: un estudio en empresas del sur de España y norte de Marruecos. *European Research on Management and Business Economics*, 22, 8 - 16.
- Casadesús, M. y Heras, I. (2005). El boom de la calidad en las empresas españolas. *Universa Business Review*, 7 (3), 90 – 101.
- Christiansen, J.S. and Lee, W.Y. (1994). Total quality management and corporate performance: an empirical investigation. Working Paper, Ford Motor Co. and Kent State University.
- Collins, R. (1979). *The Credential Society*. New York: Academic Press.
- Deming, E. W. (1982). *Out of the Crisis*. Massachusetts: Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Deming, W. E. (1986). *Out of the crisis*. Cambridge, MA: MIT Center for Advanced Engineering Study.
- DiMaggio, P. J. and Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147 - 160.
- Easton, G.S. and Jarrell, S.L. (1998). The effects of total quality management on corporate performance: an empirical investigation. *Journal of Business*, 71 (2), 253 - 307.
- Escrig, A.B. (coord.) (2014). Buenas prácticas de gestión en las organizaciones con Reconocimiento a la Excelencia. Castellón: Grupo de Investigación Excellentia: Calidad, Innovación y Personas, Universitat Jaume I.
- Flynn, B. B., Schroeder, R. and Sakakibara, S. (1995). Determinants of quality performance in high - and low - quality plants. *Quality Management Journal*, 2 (2), 8 - 25.
- Fotopoulos, C. and Psomas, E. (2009). The use of quality management tools and techniques in ISO 9001: 2000 certified companies: the Greek case. *International Journal of Productivity and Performance Management*, 58 (6), 564 - 580.

- Garvin, D. (1984). What does 'product quality' really mean?. *MIT Sloan Management Review*, 26 (1), 25 - 43
- George, E., Chattopadhyay, P., Sitkin, S. B. and Barden, J. (2006). Cognitive underpinnings of institutional persistence and change: A framing perspective. *Academy of Management Review*, 31, 347 - 365.
- Ghobadian, A. and Gallea, D. (2001). TQM implementation: an empirical examination and proposed generic model. *The International Journal of Management Science*, 29 (2001), 343 - 359.
- Hendricks, K.B. and Singhal, V.R. (1997). Does implementing an effective TQM program actually improve operating performance? Empirical evidence from firms that have won quality awards. *Management Science*, 43 (9), 1258 - 1274.
- Hendricks, B. K. and Singhal, R. V. (2001). Firm characteristics, total quality management, and financial performance. *Journal of Operations Management*, 19, 269 - 285.
- Hendricks, K.B., and Singhal, V.R. (1999). *The long-term stock price performance of firms with effective TQM programs*. Atlanta, GA: Working Paper, Georgia Institute of Technology
- Hoque, K. (2003). All in All, it's Just Another Plaque on the Wall: The Incidence and Impact of the Investors in People Standards. *Journal of Management Studies*, 40, 543 - 571.
- Heras, I., Arana, G., & Casadesús, M. (2006). A Delphi study on motivation for ISO 9000 and EFQM. *International Journal of Quality & Reliability Management*, 23 (7), 807 – 827.
- Ittner, C. and Larcker, D. F. (1996). Measuring the Impact of Quality Initiatives on Firm Financial Performance. *Advances in the Management of Organizational Quality*, 1, 1 - 37.
- Jones, R., Arndt, G. and Kustin, R. (1997). ISO 9000 among Australian companies: impact of time and reasons for seeking certification on perceptions of benefits received. *International Journal of Quality & Reliability Management*, 14 (7), 650 - 660.
- Kaynak, H. & Hartley, J. L. (2008). A replication and extension of quality management into the supply chain. *Journal of Operations Management*, 26, 468 – 489.
- Kennedy, M. T. and Fiss, P. C. (2009). Institutionalization, Framing and Diffusion: The logic of TQM adoption and implementation decisions among U.S. hospitals. *Academy of Management Journal*, 52 (5), 897 - 918.

- Klien, K. J. and Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of Management Review*, 21, 1055 – 1081.
- Knight, G. A. and Liesch, P.W. (2002). Information internalisation in internationalising the firm. *Journal of Business Research*, 55, 981 - 995.
- Larson, M. S. (1977). *The rise of Professionalism: A sociological analysis*. Berkeley: University of California Press.
- Lawler, E. E. (1994). Total Quality Management and employee involvement: Are they compatible?. *Academy of Management Executive*, 40 (1), 68 - 76.
- Lee, T. (1995). The experience of implementing ISO 9000 in Hong Kong. *Asia Pacific Journal of Quality Management*, 4 (4), 6 -16.
- Liang, H., Saraf, N., Hu, Q. and Xue, Y. (2007). Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management. *MIS Quarterly*, 31, 59 - 87.
- Meyer, J. W. and Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83, 340 - 363.
- Meyer, J. W. and Scott, W. R. (1983). *Organizational Environments: Ritual and Rationality*. California: Sage.
- Miller, R. L. and Cangemi, J. P. (1993). Why Total Quality Management Fails: Perspective of Top Management. *The Journal of Management Development*, 12 (7), 40 - 50.
- Miller, W.J. (1996). A working definition for total quality management (TQM) researchers. *Journal of Quality Management*, 1 (2), 149 - 159
- Naveh, E. and Marcus, A. (2005). Achieving competitive advantage through implementing a replicable management standard: Installing and using ISO 9000. *Journal of Operations Management*, 24, 1 - 26.
- Nonaka, I. and Takeuchi, H. (1995). *The knowledge-creating company*. New York: Oxford University Press
- Nutt, P. C. (1986), Tactics of implementation. *Academy of Management Journal*, 29, 230 – 261.
- Peters, T. J. (1988). *Thriving on Chaos*. New York: Alfred A. Knopf.

- Poksinska, B., Pettersen, J., Elg, M., Eklund, J., & Witell, L. (2010). Quality improvement activities in Swedish industry: drivers, approaches, and outcomes. *International Journal of Quality and Service Sciences*, 2 (2), 206 - 216.
- Powell, C. T. (1995). Total Quality Management as competitive advantage: A review and empirical study. *Strategic Management Journal*, 16, 15 - 37.
- Psomas, E.L., Fotopoulos, C.V. and Kafetzopoulos, D.P. (2010). Critical factors for effective implementation of ISO 9001 in SME service companies. *Managing Service Quality*, 20 (5), 440 - 457.
- Ram, M. (2000). Investors in People in small firms: case study evidence from the business services sector. *Personal Review*, 29 (1), 69 - 91.
- Robbins, S. P., Judge, T. A. and Campbell T. T. (2010). *Organizational Behaviour*. England: Pearson Education LTD.
- Rose, S. (1990). The Coming Revolution in Credit Cards. *Journal of Retail Banking*, 12, 17- 19.
- Rust, R., Zahorik, A. and Keiningham, T. (1995). Return on Quality (ROQ): Making Service Quality Financially Accountable. *Journal of Marketing*, 59, 58 - 70.
- Ryan, R. M. and Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55 (1), 68 - 78.
- Santos, M. L., & Álvarez, L. I. (2007). Innovativeness and organizational innovation in total quality oriented firms: The moderating role of market turbulence. *Technovation*, 27 (9), 514 – 532.
- Senge, P. M. (1990). The leader's new work: Building learning organizations. *Sloan Management Review*, 32, 7 - 23.
- Shea, C. M. and Howell, J. M. (1998). Organizational antecedents to the successful implementation of total quality management: A social cognitive perspective. *Journal of Quality Management*, 3 (1), 3 - 24.
- Singels, J., Rue'l, G. and Van de Water, H. (2001). ISO 9000 series certification and performance. *International Journal of Quality & Reliability Management*, 18 (1), 62 - 75.
- Tang, Z., Chen, X. and Zhengwen, W. (2010). Using behavior theory to investigate individual-level determinants of employee involvement in TQM. *Total Quality Management*, 21 (12), 1231 - 1260.

- Tarí, J. J., Heras-Saizarbitoria, I. and Pereira, J. (2013). Internalization of quality management in service organizations. *Management Service Quality*, 23 (6), 456 - 473.
- Taylor, W. A. (2003). A longitudinal study of TMQ implementation: factors influencing success and failure. *Omega*, 31 (2), 97 - 111.
- Taylor, W. A. (1995). Senior executives and ISO 9000: Attitudes, behaviours and commitment. *International Journal of Quality & Reliability Management*, 12 (4), 40 - 57.
- Tucker, A. L., Nembhard, I. M., & Edmondson, A. C. (2007). Implementing new practices: An empirical study of organizational learning in hospital intensive care units. *Management Science*, 53 (6), 894 - 907.
- Warwood, S. J. and Roberts, P. A. (2004). A Survey of TQM Success Factors in the UK. *Total Quality Management*, 15 (8), 1109 - 1117.
- Webley, P. and Cartwright, J. (1996). The implicit psychology of total quality management. *Total Quality management*, 7 (5), 483 - 492.
- Yeh, Y. (2003). TQM implementation. Implementing a sustainable TQM system: employee focus. *The TQM Magazine*, 15 (4), 257 - 265.

9. BIBLIOGRAPHY

- Collins, R. (1979). *The Credential Society*. New York: Academic Press.
- Erel, E. and Ghosh, J. B. (1997). ISO 9000 implementation in Turkish industry. *International Journal of Operations & Production Management*, 17 (12), 1233 -1246.
- Gadenne, D. and Sharma, B. (2009). An investigation of the hard and soft quality management factors of Australian SMEs and their association with firm performance. *International Journal of Quality & Reliability Management*, 26 (9), 865 - 880.
- Grant, W., Shani, R. and Krishnan, R. (1994). TQM's Challenge to Management Theory and Practice. *Sloan Management Review*, Winter, 25 - 35.
- Hackman, J. R. and Wageman, R. (1995). Total Quality Management: Empirical, Conceptual and Practical Issues. *Administrative Science Quarterly*, 40, 309 - 342.
- Nair, A. and Prajogo, D. (2009). Internalisation of ISO 9000 standards: the antecedent role of functionalist and institutionalist drivers and performance implications. *International Journal of Production Research*, 47 (16), 4545 - 4568.
- Patti, A. L.; Sandra, J. H. and Fok, L. Y. (2001). Investigating organizational quality management maturity: an instrument validation study. *International Journal of Quality & Reliability Management*, 18 (9), 882 -899.

10. ANNEX I

Next the questionnaire used to perform Study 1 is presented.

Good Morning. The aim of the following questions is to know the reasons why in many cases the quality management systems not provide the expected results and analyze whether this is related to the initial reasons for implementing the system. We guarantee complete confidentiality regarding the information provided. The study do not has profit but merely research. **Thank you for your cooperation.**

IDENTIFICATION OF THE ORGANIZATION

- How long ago approximately that your organization is involved in an initiative related to the "Q" tourist quality?
_____ Ages (1)

PART 1. INITIAL MOTIVATIONS AND RESULTS

A) In this question we analyze the reasons that have led your organization to implement the quality management system. So, we asked the degree of importance of the following reasons to use this system in your company.

| | Not Important | Very Unimportant | Somthing Important | Important | Very Important |
|--|---------------|------------------|--------------------|-----------|----------------|
| 2. Meet the demands of customers or other external agents | | | | | |
| 3. Improve efficiency in internal processes (cost reduction, productivity improvement, etc.) | | | | | |
| 4. Improving the image of the organization to all its stakeholders, as a marketing-tool | | | | | |
| 5. Improvement of quality of products and / services | | | | | |
| 6. Foster a participative style among employees (and ensure better motivation, sense of belonging, etc.) | | | | | |
| 7. Improve competitiveness | | | | | |
| 8. Implement a new management model | | | | | |
| 9. Improve financial performance | | | | | |
| 10. Obtain grants of public administration | | | | | |
| 11. Advancing Quality Management beyond ISO certification | | | | | |
| 12. Follow trends in management imitating others | | | | | |

B) Trying to delve into the benefits that have reported the use of the QMS, we ask you to assess whether the following results have improved since it started using it. To do this, use the following scale:

| | Not achieved 1 | Little improvements achieved 2 | Improvements achieved partially 3 | Improvements largely achieved 4 | Improvements fully achieved permanently 5 |
|--|-------------------|-----------------------------------|--------------------------------------|------------------------------------|--|
| 13. Improving outcomes in relation to customers | | | | | |
| 14. Improving outcomes in relation to people in the organization | | | | | |
| 15. Improving outcomes in relation to society | | | | | |
| 16. Improvement of the key results of the organization | | | | | |

PART 2. MODE OF DEVELOPMENT AND IMPLEMENTATION

| C) In this question we intend to measure the degree of commitment and interest in the development and implementation process of the management system implemented in your organization quality. To do this indicate the degree of agreement or disagreement with the following statements, using the following scale: | | | | | |
|---|----------|----------------------------|-------|----------------|---|
| Strongly disagree | Disagree | Neither agree nor disagree | Agree | Strongly agree | |
| 1 | 2 | 3 | 4 | 5 | |
| EXTERNAL COORDINATION | | | | | |
| 17. In your organization there are strategic plans that take into account customer needs, supplier capabilities and needs of any stakeholder | 1 | 2 | 3 | 4 | 5 |
| 18. In your organization to develop the strategy is used information about best practices of other organizations (benchmarking) | 1 | 2 | 3 | 4 | 5 |
| 19. Your organization develops alliances with partners/suppliers that allow improving processes and the customer/supplier chain. | 1 | 2 | 3 | 4 | 5 |
| 20. In your organization mechanisms are used to identify the information needs of stakeholders | 1 | 2 | 3 | 4 | 5 |
| 21. In your organization market research, customer surveys and other interest groups surveys are used to determine their needs and expectations for products and services | 1 | 2 | 3 | 4 | 5 |
| INTERNAL INTEGRATION | | | | | |
| 22. The use of QMS has been the result of an analysis of the outcome and internal processes rather than obey external pressures | 1 | 2 | 3 | 4 | 5 |
| 23. The information obtained in the self-assessment previous to the system implementation is considered in the development of the strategic plan | 1 | 2 | 3 | 4 | 5 |
| DAILY USE | | | | | |
| 24. At meetings of the direction committee are reviewed issues related to the quality/excellence | 1 | 2 | 3 | 4 | 5 |
| 25. There is an annual report on the management of quality/excellence (or a section in the annual report) | 1 | 2 | 3 | 4 | 5 |
| 26. Management participates in the process of quality improvement collaborating with implementation (set improvement groups, facilitate communication, motivate and train employees, etc.) | 1 | 2 | 3 | 4 | 5 |
| 27. In the strategy of the organization are defined annual improvement targets, agreed with the personnel, specifying those responsible, timing and prioritization of activities | 1 | 2 | 3 | 4 | 5 |
| 28. The employees are involved in improving the quality (through improved equipment, suggestion programs, etc.) | 1 | 2 | 3 | 4 | 5 |
| 29. It is formed continuously to employees on the principles of quality and excellence and teamwork | 1 | 2 | 3 | 4 | 5 |
| 30. The organization creates databases with the information generated by its activity (service failures, satisfaction of stakeholders, etc.) for analysis (histograms, etc.) and learn | 1 | 2 | 3 | 4 | 5 |
| 31. In your organization indicators of all key processes are implemented and established performance targets | 1 | 2 | 3 | 4 | 5 |
| CATALYST FOR CHANGE | | | | | |
| 32. The planning of improving the quality/excellence it is integrated into the overall planning of the organization | 1 | 2 | 3 | 4 | 5 |
| 33. The use of a quality system has led to changes in the way things are done in your organization | 1 | 2 | 3 | 4 | 5 |

11. ANNEX II

Next the questionnaire used to perform Study 2 is presented.

Good Morning. The aim of the following questions is to know the reasons why in many cases the quality management systems not provide the expected results and analyze whether this is related to the initial reasons for implementing the system. We guarantee complete confidentiality regarding the information provided. The study do not has profit but merely research. **Thank you for your cooperation.**

PART 1. RESULTS ON EMPLOYEES

A) In this question we intend to measure the degree of motivation and participation of employees in relation to the activities of quality and continuous improvement made in the organization. To do this indicate the degree of agreement or disagreement with the following statements, using the following scale:

| Strongly disagree 1 | Disagree 2 | Neither agree nor disagree 3 | Agree 4 | Strongly agree 5 | |
|---|---------------|---------------------------------|------------|---------------------|---|
| MOTIVATION | | | | | |
| 1. Often I present ideas and suggestions for quality improvement without waiting for additional rewards | 1 | 2 | 3 | 4 | 5 |
| 2. Find ways to improve how activities are performed in the organization is part of my job | 1 | 2 | 3 | 4 | 5 |
| 3. In my area of work I am always looking for ways to prevent errors | 1 | 2 | 3 | 4 | 5 |
| 4. I often make suggestions to improve the work of my workspace | 1 | 2 | 3 | 4 | 5 |
| PARTICIPATION | | | | | |
| 5. Engage in continuous improvement activities related to quality is a good idea | 1 | 2 | 3 | 4 | 5 |
| 6. I like the idea of participate in continuous improvement related whit work-quality | 1 | 2 | 3 | 4 | 5 |
| 7. Engage in continuous improvement and quality activities is nice | 1 | 2 | 3 | 4 | 5 |
| 8. Assuming that it is necessary that I became involved in continuous improvement activities related to quality, I intend to get involved in them | 1 | 2 | 3 | 4 | 5 |

B) Trying to delve into the results of the implementation of the quality system on employees, we intend to measure with this question the degree of internalization of its principles and practices. To do this we ask you to indicate the degree of agreement or disagreement with the following statements using the following scale:

| Strongly disagree 1 | Disagree 2 | Neither agree nor disagree 3 | Agree 4 | Strongly agree 5 | |
|---|---------------|---------------------------------|------------|---------------------|---|
| INTERIORIZATION | | | | | |
| 9. My participation in continuous improvement activities related to quality improve quality results | 1 | 2 | 3 | 4 | 5 |
| 10. My participation in continuous improvement activities related to quality increases the satisfaction of internal and external customers | 1 | 2 | 3 | 4 | 5 |
| 11. My participation in continuous improvement activities related to quality reduces quality costs | 1 | 2 | 3 | 4 | 5 |
| 12. My participation in continuous improvement activities related to quality reduces errors | 1 | 2 | 3 | 4 | 5 |
| 13. It is a moral obligation for me to participate in continuous improvement activities related to quality work | 1 | 2 | 3 | 4 | 5 |
| 14. I can get involved with the tasks and activities of continuous improvement and quality although there is no one to tell me exactly what to do | 1 | 2 | 3 | 4 | 5 |

PART 2. MOTIVES OF IMPLEMENTATION

| C) In this question we analyze the reasons that have led your organization to use a quality management system. So, we ask you to indicate how important you think that had the following reasons when implementing quality system: | | | | | |
|---|----------------------|-------------------------|---------------------------|------------------|-----------------------|
| | Not Important | Very Unimportant | Somthing Important | Important | Very Important |
| 15. Meet the demands of customers or other external agents | | | | | |
| 16. Improve efficiency in internal processes (cost reduction, productivity improvement, etc.) | | | | | |
| 17. Improving the image of the organization to all its stakeholders, as a marketing-tool | | | | | |
| 18. Improvement of quality of products and / services | | | | | |
| 19. Foster a participative style among employees (and ensure better motivation, sense of belonging, etc.) | | | | | |
| 20. Improve competitiveness | | | | | |
| 21. Implement a new management model | | | | | |
| 22. Improve financial performance | | | | | |
| 23. Obtain grants of public administration | | | | | |
| 24. Advancing Quality Management beyond ISO certification | | | | | |
| 25. Follow trends in management imitating others | | | | | |