



27 EISIC – 2024

Measuring management commitment impact to quality strategy implementation in Mexico City Public Notaries.

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Abstract: This paper contributes to knowledge in the field of quality management in Public Notaries segment of Mexico City, proposing an instrument to identify the relationship between managerial commitment and quality management system. A review of the literature on strategic planning, administrative practices, managerial commitment, legal aspects, leadership, and quality management was carried out. An instrument was designed, validated and applied to measure the behaviors of managerial commitment, with quality strategy execution. It was applied to a sample of notaries in Mexico City, carrying out the compilation, analysis and statistical treatment of the results. Main findings: a) the instrument allows analyze the level of commitment and its impact in quality strategy execution; b) Notaries that have started a quality system implementation process, have better business strategy execution; c) managers and middle managers, who have made the commitment and involve their staff, and allow and encourage their contributions to quality system, impact positively business strategy execution.

Type of paper: Case study.

1. Introduction

The authors have worked for more than 30 years on projects related to Quality Management, from different conceptualizations expressed by TQM models and standards such as ISO 9001 in its different versions in public and private organizations. In all cases of Quality Management System implementation where we have participated, the “Commitment” factor of the management teams has always been present, as a fundamental element to achieve the application of the strategy defined for this purpose and obtain positive results in the work scheme that this implies.

The above motivated this work on an analysis of manager’s commitment with a business strategy, when it incorporates the implementation of a quality management system. The present work seeks to delve into the causes why strategic planning is not executed in organizations as originally designed. Kaplan and Norton identified the lack of execution of what was planned as a factor that prevents organizations from being successful, and they propose specific actions to carry out. (Kaplan and Norton, 2008).

A factor observed in professional practice, if leaders do not show their interest and visible commitment to define specific operational plans, particularly in implementation and maintenance of quality management

system, participating actively with their peers and collaborators in execution, following up on compliance with plans and key result indicators, providing feedback to correct the course in case of deviations. It is difficult to achieve the planned goals putting ISO9001 certificate continuity at risk, increase complaints and disagreements of clients, which can lead to losing customers and market share, with the consequent economic impact on the business.

A Quality Management System (QMS) is a way of working through which an organization ensures the satisfaction of its customers' needs. For which it plans, maintains and continuously improves the performance of its processes, under a scheme of efficiency and effectiveness that allows it to achieve competitive advantages. (Yáñez, 2008)

For the implementation and operation of a quality management system, the involvement and commitment of senior management is essential, as indicated in the ISO 9001:2015 standard in section 5.1.1. Leaders should identify and implement strategies that provoke their involvement and commitment. This is applicable in public and private organizations, such as the case of Mexico City (CDMX) Public Notaries, a place where various legal procedures are carried out, to maintain their competitive position, some of them, have decided to certify themselves in the ISO 9001:2015 standard (ISO, 2015).

This work is a quantitative correlational research. An instrument was created to identify the relationship between commitment to the strategy by senior management members and its impact on plans execution, for the implementation and operation of the quality management system, in the notarial field of CDMX, specifically and operationally defining the key behaviors and administrative actions that manifest commitment and their relationship with the objectives obtained.

The research objective is to measure the degree of relationship between two variables raised in the hypothesis, "The commitment of managers favors the execution of the implementation and operation strategy of the quality management system in the notaries of the CDMX"

It is a non-experimental applied research, according to (Hernández Sampieri et al., 2010). "They are studies carried out without the deliberate manipulation of variables and in which the phenomena are only observed in their natural environment and then analyzed". Also coinciding with the point of view of (Vara Horna, 2012) "it has more value if its results provide options to solve problems and if they contribute to increasing the arks of scientific knowledge", given that the results can be used immediately by people interested.

Although there has been a lot of research on topics related to this work, such as strategic planning, leadership and commitment of employees, topics on which there is a wide catalog of books. It is not vast the research on the commitment of managers with the strategy, particularly for the implementation of the quality management system, so it is a descriptive, quantitative, correlational design.

2.1 Bibliography selection

For the purposes of this research, the topics studied were planning, leadership, quality and organizational commitment, as well as the legal requirements of notarial work. The following authors and works were consulted: Kaplan and Norton in 1996 published *The Balance Score Card* (Kaplan and Norton, 2006). They created a revolution in companies, of which many only adopted the indicator control board as a visual tool for accountability rather than the methodology. To this day, continue to be the planning methodology most used by many industries in the world. Throughout their work with companies, they identified that many of the plans remained that way, just plans not executed. In their book *Execution Premium* (Kaplan and Norton, 2008), they developed specifically this concept. Where they report results

of studies that reflect that between 60 and 80% of organizations fail to comply with the plans proposed in their strategic maps (Kaplan and Norton, 2008, p. 22), and 73% of companies achieve outstanding performance when they clearly communicate their strategy and strategic indicators (Kaplan and Norton, 2008, p. 24). The only element in common in all the studied companies, where “Premium Execution” has been achieved, is the presence of a committed and capable leader, who directs the process and involves in all the stages.

From the leadership perspective, research is wide and a significant number of books have been written in which the authors agree, that the leadership of managers is a key element for achieving the goals of an organization. Identifying the leadership styles allows us to understand the behavior of collaborators and the culture of the organization.

Kouzes and Posner in “The Leadership Challenge” developed a methodology where they operationally and clearly defined the essential qualities of leaders. Exemplary leadership practices and the commitments for each of them, with observable behaviors that must be perceived by leaders’ collaborators. The fifth practice is “Modeling the Way” where the expected behaviors are: having clarity of values and congruence of actions, leading by example and commitment to established objectives (Kouzes and Posner, 1999).

For a significant number of managers it seems that their work ends with the definition of strategies, because not in all cases they are involved in the execution, except to ask for results every end of the month and repress due to the gap between the goals and the results achievements.

Regarding the leadership perspective for quality, we have identified that the application of quality concepts begins with the work on statistical process control created by Walter A. Shewhart, developed for AT&T's Bell Telephone Laboratories. Edward Deming took these concepts as a basis for optimizing process costs, he defined a 14-step methodology for an efficient quality system implementation, where management commitment is one of the pillars to achieve it. (Deming, 1989).

Joseph Juran in his book “Juran and leadership for quality: a manual for executives” (Juran, 1990) senior managers should personally be the leaders and members of the highest quality councils in the leadership structure for quality (Juran, 1990) where, for strategic quality management, the participation of top management is required, to an unprecedented degree. (Juran, 1990).

Philip Crosby states in his book “Quality is Free” that problems in business come from poor management and not from bad workers. He developed a tool to identify the degree of understanding and involvement of senior management in the process, which is reflected in the “Quality Management Maturity Chart.” For him, what is important is the participation of managers, not just support. If managers do not demonstrate their commitment to execution by actively participating, the results are unlikely to be satisfactory. (Crosby, 2009). ISO9001 2015 establishes the requirements that this leadership be effective and demonstrate participation and commitment to compliance with the standard (ISO, 2015).

Although several authors described the importance of top management commitment, few works specifically study the characteristics and behaviors of people who lead quality processes in organizations. We identified several works related to this topic. Lawrence G. Hrebiniak conducted a series of studies with Gartner Group Research Center, based on a survey of more than 240 managers involved in the execution of strategies, with the purpose of knowing what the main obstacles were, in order of importance, for the process of executing strategies in their organizations. The results of two surveys coincide in classifying the following, as the most important obstacles to the execution of the strategy:

- Inability to manage change effectively or overcome internal resistance to change.
- Attempt to execute a strategy that conflicts with the structure.

- Poor or inadequate information sharing between individuals or business units responsible for strategy execution.
- Lack of commitment from leaders.
- Unclear communication of responsibility and/or accountability for implementation decisions or actions.
- Poor or vague strategy
- Lack of ownership of a strategy or execution plans among key employees.
- Lack of guidelines or a model to guide strategy execution efforts.
- Lack of understanding of the role played by organizational structure and design in the implementation process.

Hrebiniak identifies that making strategies work is more difficult than designing them. Solid plans falter or fail due to a lack of execution expertise, which often means that strategies are not carried out successfully. “Make Sure The Strategy Works” (Hrebiniak, 2005)

In the book, “Companies that Stand Out” Jim Collins presents results of a study on a group of companies, where he identifies obstacles for achieving the strategy: lack of ownership, commitment and little concern for action, which has to do with the fact that managers are not committed to the strategy. They are not practical, nor diligent, and they do not know how to define the route or the best path to achieving results with the execution of the strategy; and on the other hand, the collaborators involved in the execution do not understand the strategy and consequently contribute little with their work to obtaining important results of the execution. (Collins, 2006)

In their article “Turning Great Strategy into Great Performance” Michael Mankins and Richard Steele published in August 2005 in Harvard Business Review magazine, highlight restrictive factors as disengaged top management, ineffective leadership, lack of resources, poor strategy communication, lack of clarity in actions for execution, definition and responsibility, organizational structure and culture of silos and lack of adequate performance monitoring. (Mankins and Steele, 2005).

Meyer and Allen have investigated and documented aspects of commitment in the workplace their model has three components: (Meyer and Allen, 1997)

- Affective; It refers to an emotional attachment on the part of the employee to the organization, they feel proud to be part of the organization;
- Permanence commitment refers to a material attachment on the part of the employee to the organization; the employee remains in the organization because he or she expects to be rewarded for the investments made.
- Normative commitment, which is a feeling of obligation on the part of the employee to remain in the organization for all the benefits obtained.

In the Wharton Executive Education Programs taught by L. Hrebiniak, a survey was applied to 200 managers with responsibilities for strategy execution, in order to identify obstacles or challenges to the strategy execution process in order of importance; using the same list used in the Wharton-Gardner survey (Wharton-Gardner, 2005). In eighth place is “Lack of sense of ownership of the strategy or execution plans by key personnel.” Identified as something close to the commitment to the strategy object of this research. Although similar topics were discussed, they do not investigate the commitment factor in the issue of leadership for the implementation and operation of the quality management system, nor the execution of the strategies.

2.2 Data collection instrument

For data collection, the use of the questionnaire was defined, considered a classic procedure in the social sciences for obtaining and recording data, “it consists of a set of questions, normally of various types, prepared systematically and carefully, about the facts and aspects that are of interest in a research or evaluation, and that can be applied in varied ways.” (García Muñoz, s.f.)

2.2.1 Questionnaire design

Herzberg who developed the theory of two factors to determine motivation in work environment, this is mainly due to two types of factors: Hygienic that cover aspects such as supervision, interpersonal relationships, benefits, safety at work, remuneration, company policies and administrative practices and, Motivational recognition, the work itself, responsibility and growth seem to be related to job satisfaction. (Chiavenato, 1976), so defining the factors to measure is a determining task.

Two dimensions were defined on which information will be obtained: managerial commitment and strategy execution, according to IBM, “Dimensions are categories of data used to organize and select data for retrieval, monitoring, and analysis.” (IBM, n.d.).

It was established to use the Likert scale "because it is one of the best-known methods to measure the variables that constitute attitudes by scales", given 5 options for responses, with two positive responses, always and almost always, one neutral, indifferent and two negative, occasionally and never. (Hernández Sampieri et al., 2010, p. 286)

From its philosophy, the scale uses statements or propositions, that is, statements, on which the individual has to express himself, under the assumption that the attitude exists, the responses of the participants will be based on their agreement or disagreement with the propositions, as long as they are related to the attitude that is intended to be measured

For this case 20 items were raised with statements that describe administrative practices and actions, as well as key behaviors related to work variables, where items 1, 2, 3, 10, 11, 12, 13, 14, 15, 16 and 17 correspond to commitment of managers with the strategy to implement and operate the quality management system, corresponding to the independent variable. Questions 4, 5, 6, 7, 8, 9, 18, 19 and 20 correspond to the execution factor of the strategy as it was designed to obtain the planned results, which correspond to the dependent variable.

Questionnaire items for information collection	
Management Commitment	Strategy Execution
1. Is there a formal and documented process to carry out strategic planning?	4. There is a documented quality policy that is communicated to interested parties, as well as procedures and records for the operation.
2. Are documented work plans prepared with defined goals and objectives, and monitored at least monthly?	5. I am personally involved in the design of the strategy, communication and monitoring its compliance.
3. Is there a documented process for evaluating the performance of all personnel?	6. I participate directly in carrying out specific actions to eliminate obstacles that prevent the achievement of the strategy.

10. Do I make decisions in accordance with the principles, values, policies, procedures and standards rather than the cost they imply?	7. I participate as an auditor of the quality management system.
11. Are employee's point of view taken into account when developing business strategies?	8. I actively participate in meetings for analysis and problem solving.
12. Do I make difficult and/or unpopular decisions to ensure the effective execution of the company's business strategy?	9. I am convinced of the business strategies and I make visible my commitment to fulfill them.
13. Are there consequences in place for failure to meet goals, as well as lack of adherence to principles, values and procedures?	18. I show genuine appreciation and interest in my collaborators, listening to their concerns and understanding their perspectives in an empathetic way.
14. Do I model my behaviors to the team, being consistent in my daily actions?	19. I take responsibility for my team's results and coordinate the development of action plans to correct.
15. Do I ensure that the economic, material, technical and human resources are available to carry out the work to achieve goals?	20. I report results at least once a month to senior management on the progress of the strategy.
16. Do my collaborators feel that they contribute to a shared purpose?	
17. Do I periodically congratulate and recognize my collaborators for their achievements and progress?	

2.2.2 Sample selection

The analysis of a sample allows inferring conclusions that can be generalized to population study with a certain degree of certainty, where a stratified random probabilistic sample determines the strata that make up a study population to select and extract the sample from them. A stratum is understood as any subgroup of analysis units that differ in the characteristics to be analyzed in an investigation. (Ávila Baray, 2006)

“The study population is a set of cases, defined, limited and accessible, that will form the reference for the selection of the sample, and that meets a series of predetermined criteria where, for any research study, samples or subgroups of populations and on rare occasions, the total population or universe” (Arias Gómez and Villasís Keever, 2016, p. 202)

This was a stratified random sample of Public Notaries located in Mexico City, which have a quality system, regardless of whether or not they have a current ISO9001:2015 certificate. The current Mexico City Notarial Law determines in 233 the number of authorized Public Notaries, so the offer of services is limited to this regulation, where only a small percentage has a quality management system.

The target personnel were the first three organizational levels of Public Notaries as general directors, and the levels that report directly to them, whose position title is generally Sr. Lawyer responsible for modules with the generic position of Manager; Lawyers. Jr. with the generic title of department heads. This nomenclature is assigned in a general way regardless of the size of the organization and title of the position in each case.

For the purposes of the pilot test, it was determined to apply 40 surveys to participants, who must possess the attributes desired to measure in the target population, and for the final questionnaire the sample was 20 people, this is within the range of 15 to 30 questionnaires recommended by Corral. (Corral, 2009)

2.2.3 Validity and reliability

To define instrument suitability, we established the following criteria: ensure concrete and focused on aspects of interest for “managerial commitment” and “execution of the strategy” dimensions, clarity of items wording, internal coherence, non-induction in the answers and appropriate language for people to whom it is directed. The reliability coefficient should be in the range of 0 to 1 and its validity 95%.

The validation of the instrument was carried out through expert judgment (content validity) in the thematic areas prior to application. For this specific instrument, three technical experts were chosen for validation with the following criteria:

- An industrial psychologist expert in organizational change to assess whether the questions meet the aspects to be evaluated with emphasis on the topic of managerial commitment;
- An engineer with a master's degree in quality, expert in strategic planning to assess whether the questions meet the aspects to be evaluated with emphasis on strategy commitment;
- A Public Notary from Mexico City to assess whether the questions were pertinent to the notarial field where the final instrument will be applied.

2.3 Data analysis

The procedure for data analysis was carried out with the application of descriptive statistics to carry out parametric analysis using: Measure of central tendency, Frequency distribution, Correlation coefficients, Linear regression, Analysis of variance among other analysis tools. (Hernández Sampieri et al., 2010)

Minitab software was selected to explore the data, performing the descriptive statistical analysis of each study variable, evaluating the reliability and validity of the instrument, and performing the inferential statistical analyzes regarding the hypotheses raised for results presentation.

For this work, the responses were collected automatically in a Google spreadsheet where, once the questionnaire receipt period was over, they were converted to Excel and the data processed by entering the corresponding formulas. The reliability of the questionnaire sample was obtained through Cronbach's alpha coefficient method, where the instrument reliability index: is 0.99541052 with an internal consistency of $0.9 \leq \alpha$ Excellent.

Because it is a correlational type of research, a parametric analysis was carried out to develop the Pearson correlation, to analyze the relationship between two variables measured at one level, and later a linear regression model was developed. According with the assumptions that the universe has a normal distribution, the level of measurement of the variables is by intervals or ratio.

2.4 Results.

In order to have a first idea and graphically visualize the behavior of the variables “Commitment” and “Execution”, a scatter diagram was done, shown on the next page, which was created by adding the total of the responses received for each factor in each questionnaire.

Subsequently, the correlation coefficient was calculated with its confidence interval. The correlation coefficient result was $r = 0.641$ with a 95% confidence interval of .301 to .837. This result allows us to quantify the correlation between the “Commitment” and “Execution” factors studied.

Observing the scatter diagrams and the result of the correlation coefficient, we considered to carry out a linear regression analysis, for identify a model that describes the identified behavior.

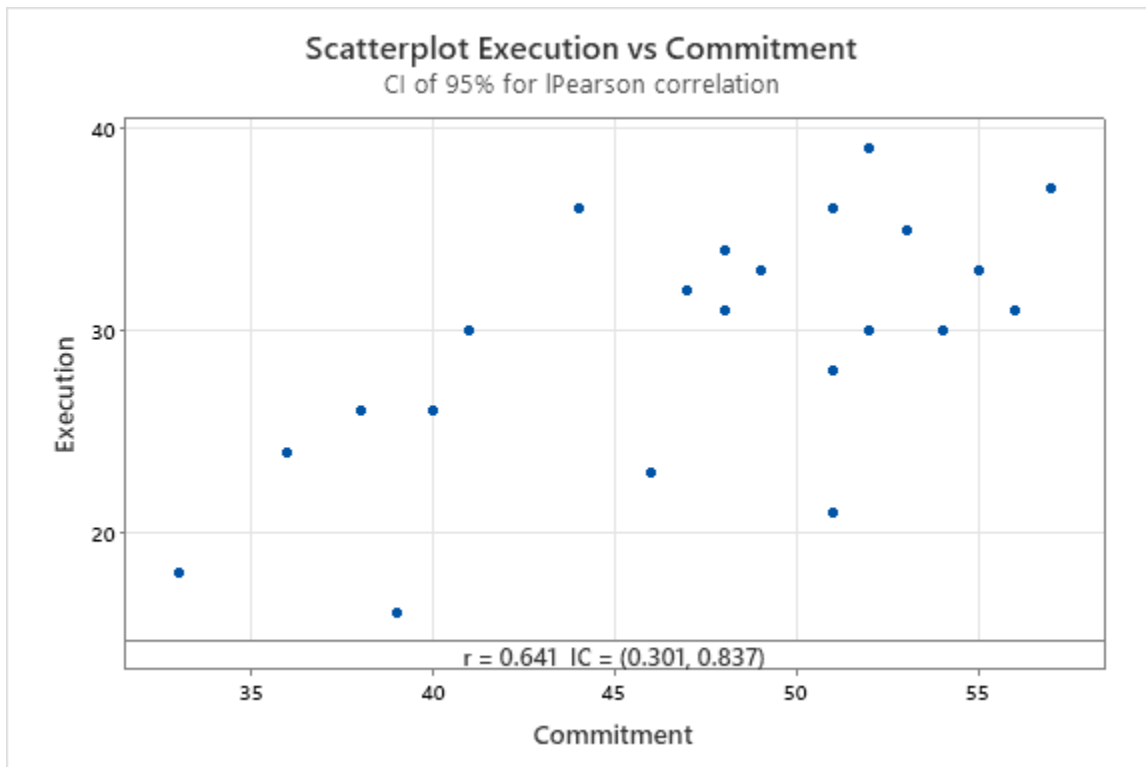
The equation was posed according to the regression model that is under the generic scheme of “ $y=mx + b$ ”, which already applied to this case is “ $Execution = 2.151 + .5780 Commitment$ ”, where 2.151 is the slope of the line. It is a simple model that could be sophisticated in future researches.

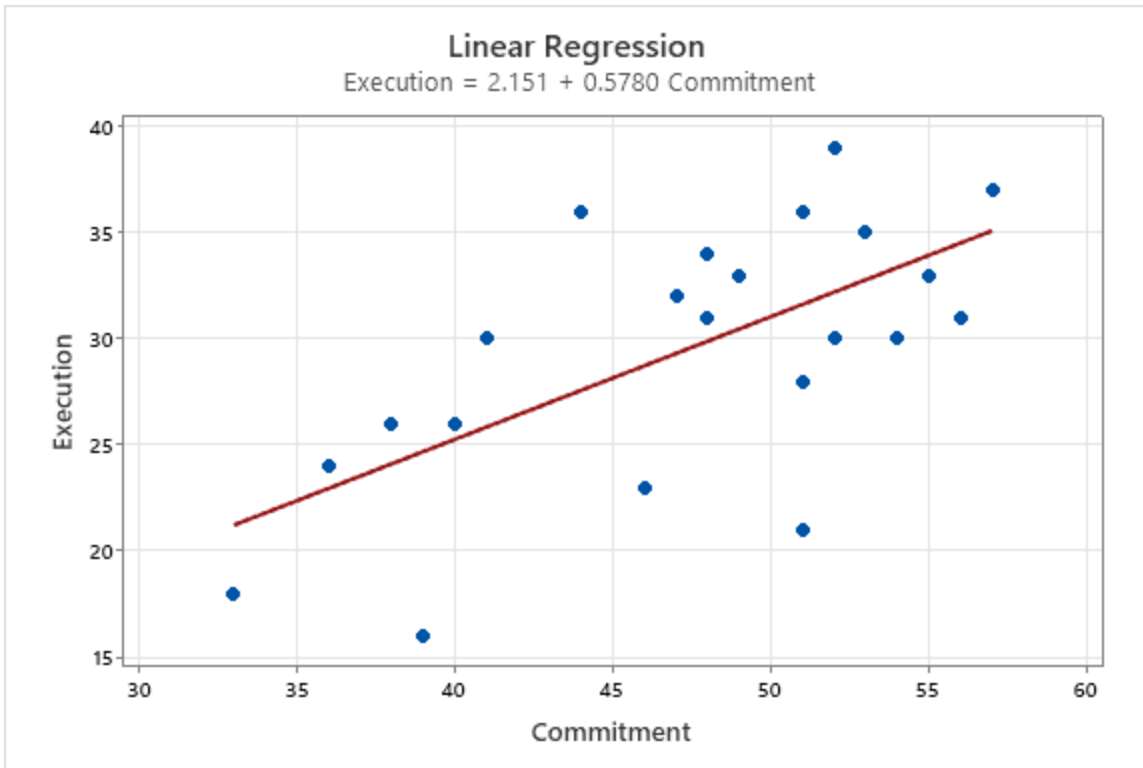
It provides us with a basic idea of the effort to do during the implementation of a strategy that considers carrying out the implementation of a quality management system, especially when it implies a profound change in a work scheme, where the performance of operational activities routinely executed for a long period is privileged.

We performed the Analysis of Variance to validate that the slope of the regression model is not zero.

Variance Analysis

Fuente	GL	SC	MC	F	P
Regresión	1	330.321	330.321	13.96	0.001
Error	20	473.179	23.659		
Total	21	803.500			





The equation shows us that for this particular case, it is necessary to increase the “Commitment” by 5 units, to increase the “Execution” by 2.89 units, coupled with the effort to sustain the progress achieved as seen below:

Execution = 2.151 + .5780 Commitment							
Commitment	30	35	40	45	50	55	60
Execution	19.49	22.38	25.27	28.16	31.05	33.94	36.83

This makes us think over on what we have observed during our professional practice and the bibliography consulted for this work, in relation to the need for a solid commitment in management teams, to achieve the execution of quality strategies in organizations.

We concluded based on the results, there is a correlation between managerial commitment and implementation and operation of a quality system, in this sample of Mexico City Public Notaries participating in the study, considering the definition of actions that affect the execution and the behaviors that demonstrate senior management's commitment to the strategy. However, until now we had not been able to quantify it.

It confirms what was of interest to verify, how it was observed empirically in professional practice; managerial commitment is a key element for achieving organizations objectives. Where the application of two critical factors such as administrative management and leadership come together in a concrete way. Where the application of administration principles, specifically in relation to specific systematic activities that ensure the execution, deployment and monitoring of actions that contribute to strategic objectives achievement as well as the manifestation of visible behaviors of leadership commitment. Because they are desirable behaviors, they should be part of the organizational culture and be measured in organizational climate surveys as a factor to be evaluated. The tool could be used for leadership diagnosis, as part of 360°

individual and group performance evaluations, where managers have the possibility of receive feedback on the perception of his performance, especially on the topic of managerial commitment, from immediate boss, peers and key partners as well as collaborators for elaborate management development plans. To the extent that leaders have a visible commitment to the strategy execution, the organization will meet its objectives and increase its competitive advantages in a sustainable way in the long term.

2.5 Conclusions

In light of the results obtained, the expected correlation between management commitment to implementation and operation of quality management strategy was confirmed as a determining factor through specific visible behaviors perceived by collaborators. The tool developed in this research could be used for diagnosis and personal improvement plans establishment. It could contribute to improve the performance of executives in their managerial work, if used as a self-assessment and 360° evaluation tool, to generate concrete improvement actions on specific aspects, which allow them to improve individual, collaborators and organization performance as a whole.

Mexico requires leaders committed to the growth and development of the country, according to the IMCO 2022 (Mexican Competitiveness Institute) competitiveness report. Mexico ranks 37th out of 43 countries evaluated, with a decrease of six places, going from 31st place in 2018 to 37th place. in 2022. (IMCO, <https://imco.org.mx/indices/indice-de-competitividad-internacional-2022/>, 2022). Organizations with efficient and effective senior management contribute to the generation of nation's wealth.

To the extent that managers improve the administration of their organizations, develop strategic plans and commit to the execution of the defined strategies, the desired results will be obtained and they will contribute to economic development, generation of quality jobs with decent salaries and to reduce existing Mexico poverty, which according to INEGI is 55.7 million people. (INEGI)

Having a quality management system certified under the criteria of the ISO9001:2015 standard, contributes to improve the competitiveness of organizations. According to the ISO Organization, Mexico ranks 25th out of 194 countries with 7,969 certificates, far away of first place in the world China with 426,716. In Mexico City, there are 233 Public Notaries, 21 have been certified, less than 10%. (ISO.org, 2021).

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