Productivity study in a department store in Villahermosa, Tabasco, Mexico, for the proposal of a development model

Estudio de la Productividad en una tienda departamental en Villahermosa, Tabasco, México, para la propuesta de un modelo de desarrollo

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Abstract

The measurement of productivity in organizations is imperative since it is essential to know the tangible and intangible resources that are available and, at the same time, to know weaknesses and adopt the necessary measures to improve them. For this, the appropriate tools must be available, so the present study used a comprehensive productivity measurement tool with that of a self-diagnosis questionnaire, as its name indicates, this tool seeks to perform an analysis of the productivity comprehensively, that is, encompassing all factors relevant to productivity and competitiveness. It seeks to represent the results of the department store studied quantitatively, and with the data obtained, place the organization within an already established frame of reference and classify it according to the parameters of world-class or less. In addition, it is planned to support the establishment by granting improvement proposals that help correct its most fragile aspects, as well as improve its highest aspects under the continuous improvement approach.

Resumen

La medición de la productividad en las organizaciones es imperativa, puesto que es indispensable conocer los recursos tangibles e intangibles con los que se cuenta y a la vez, conocer debilidades y adoptar las medidas necesarias., para mejorarlas. Para esto, se debe contar con las herramientas apropiadas, por lo que el presente estudio se utilizará una herramienta de medición integral de la productividad con el uso de un cuestionario de autodiagnóstico, como su nombre lo indica, esta herramienta busca realizar un análisis sobre la productividad de manera integral, o sea, que abarca todos los factores que sean pertinentes a la productividad y a la competitividad. Se busca representar los resultados de la tienda departamental estudiada de forma cuantitativa, y con los datos obtenidos colocar a la organización dentro de un marco de referencia ya establecido y clasificarlo según los parámetros de clase mundial o menor. Además, se planea apoyar al establecimiento otorgando propuestas de mejora que ayuden en la corrección de sus aspectos más frágiles, así como mejorar sus aspectos más elevados bajo el enfoque de mejora continua.

Productivity, Competitiveness, Measurement

Productividad, Competitividad, Medición

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Introduction

Without innovation, there is no competitiveness in the globalized world in which there is also an updating of skills, abilities, technology, and knowledge in all senses.

The ability of a company to offer a product or service meeting or exceeding the expectations of its customers, through more efficient management of its resources than other companies in the same sector is of the utmost importance when we talk about competitiveness, which lies in knowing how to manage the company's resources, increase its productivity and be aware of market requirements. Competitive advantage is based on "productivity" and the factors that determine it within the company; Due to this, it is necessary to know that productivity is the relationship between the product obtained through a production system of goods and/or services and the resources used to obtain it, that is, its efficient use or the relationship between the results obtained concerning the resources used and the time it takes to get them.

The department store on which this study is based is a national store mostly aimed at middle-class people and the one that has the greatest advantages over other stores in this range, since its competitive advantage is very important for this company that They are referred to as the value that a company manages to create for its customers, and that exceeds costs.

These competitive advantages can be improvements that give an added value to the product, such as, for example, the distribution process being more efficient, a price that exceeds the offer of the competition, among other aspects that allow the company to have characteristics for that the client prefers it over companies that offer the same product. The measurement of competitiveness implies determining the components or factors that generate it and their degree of impact, which make the company more and more productive.

Methodology

The methodology for the investigation is represented graphically in figure 1, where the different phases that were followed are listed:

1. Emergence of the idea.

2. Research protocol.

3. Structuring of contexts.

4. Structuring of the reference frameworks.

5. Measurement instrument design.

6. Obtaining the diagnosis.

7. Development model design.
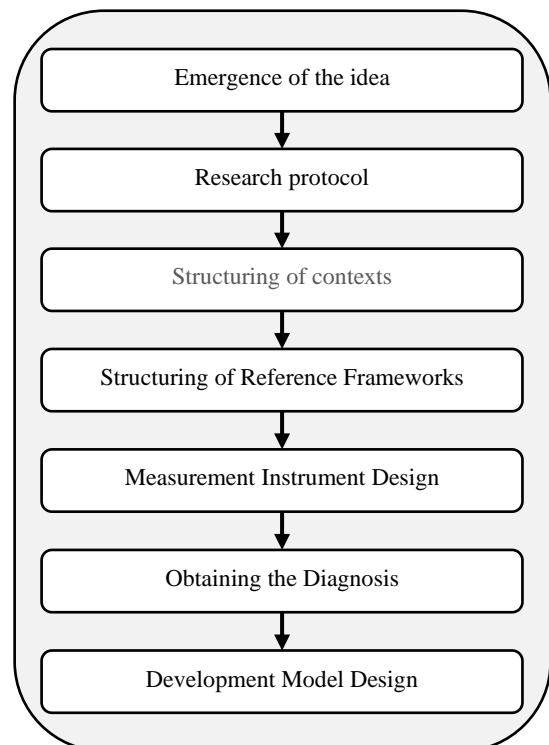
Figure 1 Research methodology
Source: Author's perception

Instrument to use

The purpose of the measuring instrument used for this research is to obtain information regarding the progress made in the total scheme of the company, and in turn to be useful as a self-diagnosis, considering the elements and factors that generate productivity, focusing on the participation of intellectual capital (collaborators).

Said information will be managed confidentially.

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To fill out the Instrument, the researcher will mark across the boxes in the column corresponding to the degree of progress achieved in the company, considering the systemic approach. As far as possible, the interviewee must show physical evidence to support their answers.

Each of the elements considered to integrate them into the instrument is described below:

1. Customer Satisfaction: This module examines the effectiveness of the systems to know, anticipate, and exceeding the complete requirements and needs of the customers, before, during, and after the delivery of the products, and how it builds and strengthens an integral relationship and positive with your customers.

2. Leadership: This module examines the role and direct involvement of top management as the main "leader" of the continuous improvement process toward Total Quality. His vision and commitment are also analyzed in the way he designs, inspires, implements, and evaluates the culture, through the participation of the staff and the operation and projection in the long term.

3. Staff Development and Intellectual Capital Management: This module examines the institution's systems and practices for identifying, nurturing, and optimizing staff potential; how he designs his positions, his work systems, compensation and recognition schemes; training systems, in the development of skills and attitudes; and the promotion of health, well-being, satisfaction and motivation of the staff, as well as the Management of Intellectual Capital.

4. Information and technology management: This module examines how data and information are designed, selected, and managed, as well as how data and information analysis and reliability are performed, and technology management.

5. Strategic Planning: This module examines the planning process, as well as how you develop your strategies and define your strategic objectives to improve your overall performance and competitive position. How it establishes and deploys, based on strategic planning, its objectives, and plans, is also analyzed.

6. Process management and improvement: The fundamental elements of the Quality, Environmental Protection, and Industrial Safety Management System are examined; the design, planning, control, improvement, and standardization of key and support processes and how the company continuously evaluates and improves them.

7. Impact on society: This module examines how the company makes continuous improvement efforts in its physical, social, or economic environment so that other companies and institutions in its community can develop their Total Quality programs.

8. Results: This module analyzes the interrelationships between the company's key indicators and the value created by the quality maturity of its processes and systems; personnel and suppliers in the internal value chain and for its clients, the sectors of influence, and society, in its social value chain.

The structural design of the Instrument is made up of questions, those necessary to obtain a comprehensive overview of the system concerning each element. Each question is evaluated on a range of 0 to 100, with the researcher subjectively assigning each progress grade.

Figure 2 General design of the measurement instrument
Source: Author's perception

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Description of the process for measurement

One of the main reasons for selecting this company was its accessibility, not only physical proximity but also internal contact with it. The process to follow consisted of three steps.

First, it was necessary to contact the managers of each department of the company using contacts as intermediaries. It was sought to schedule dates on which the measurement instrument was applied. Finally, a suitable date was found for the interview and how would be.

Second, before the start of the interview, two things were clarified to the interviewees, one is that the information that would be provided would be entirely for academic use and that, therefore, it has total confidentiality, in the same way, the details of the project were clarified and that the results shown by the instrument will be shared as well as the proposals for improvement.

Finally, for an adequate interpretation of the data obtained, a system of averages will be used. First, the average of each criterion in each instrument will be obtained, for example, the average of the criterion of (1) Customer satisfaction will be obtained, then of the criterion of (2) Leadership, and so on eventually until the averages of the eight criteria are obtained. . To finish this part, a general average of the department will be obtained by calculating an average of the averages of each criterion and, depending on the result, it will be positioned in the following classifications:

- 80-100 World Class.

- 66-80 Proficient.

- 45- 60 Trustworthy.

- 25-40 Development.

- 0-20 Initial.

This same step will be repeated with the rest of the departments.

At the end of this step, the results will be grouped under two profiles: by work center and by evaluation criteria. For the calculation of the profile by work center, the average of the general averages of each department will be obtained, this result will be classified in the same way. The following will be the profile by evaluation criteria, here the general average of each criterion will be calculated covering the five departments, for example, to calculate the average of the criterion of (1) Customer satisfaction, the results of this same criterion will be covered in all instruments, this average will be ranked like the other.

Results

The Managements studied were the following:

- General management.

- Bank management.

- Clothing and furniture management.

- Administration management.

- Cash management.

- Collection management.

And the results for each of them are represented below:

	Profile by criteria General management	General average %
1	Customer satisfaction	97.5
2	Leadership	95.5
3	Staff development and intellectual capital management	100
4	Information and technology management	87
5	Strategic Planning	98
6	Process management and improvement	100
7	Impact on society	100
8	Results	98
	GENERAL AVERAGE %	**97**

Table 1 Results obtained in the General Management applying the Measurement Instrument
Source: Author's Perception

	Profile by criteria Bank management	General average %
1	Customer satisfaction	96
2	Leadership	98
3	Staff development and intellectual capital management	98
4	Information and technology management	97
5	Strategic Planning	97.7
6	Process management and improvement	100
7	Impact on society	85
8	Results	96.6
	GENERAL AVERAGE %	**96**

Table 2 Results obtained in the Bank Management applying the Measurement Instrument
Source: Author's Perception

	Profile by criteria **Clothing and furniture management**	General average %
1	Customer satisfaction	81
2	Leadership	84
3	Staff development and intellectual capital management	76
4	Information and technology management	82
5	Strategic Planning	91
6	Process management and improvement	90
7	Impact on society	95
8	Results	86
	GENERAL AVERAGE %	**85**

Table 3 Results obtained in the Clothing and Furniture Department applying the Measurement Instrument
Source: Author's Perception

	Profile by criteria **Administration management**	General average %
1	Customer satisfaction	81
2	Leadership	83
3	Staff development and intellectual capital management	92
4	Information and technology management	98
5	Strategic Planning	98
6	Process management and improvement	100
7	Impact on society	95
8	Results	98
	GENERAL AVERAGE %	**93**

Table 4 Results obtained in the Administration Department applying the Measurement Instrument
Source: Author's Perception

	Profile by criteria **Cash management**	General average %
1	Customer satisfaction	100
2	Leadership	73
3	Staff development and intellectual capital management	88
4	Information and technology management	84
5	Strategic Planning	85
6	Process management and improvement	86
7	Impact on society	100
8	Results	71
	GENERAL AVERAGE %	**85**

Table 5 Results obtained in Cash Management applying the Measurement Instrument
Source: Author's Perception

	Profile by criteria **Collection management**	General average %
1	Customer satisfaction	56
2	Leadership	58
3	Staff development and intellectual capital management	68
4	Information and technology management	70
5	Strategic Planning	66
6	Process management and improvement	86
7	Impact on society	87
8	Results	46
	GENERAL AVERAGE %	**67**

Table 6 Results obtained in the Collection Management applying the Measurement Instrument
Source: Author's Perception

The general results by work center and by evaluation criteria are shown below:

	Profile by work center	General average %
1	General Management	97
2	Bank Management	96
3	Clothing and Furniture Management	85
4	Administration Manager	93
5	Cash Management	85
6	Collection Management	67
	GENERAL AVERAGE %	**87**

Table 7 General results obtained by work center
Source: Author's Perception

	Profile by evaluation criteria	General average %
1	Customer satisfaction	85
2	Leadership	81
3	Staff development and intellectual capital management	87
4	Information and technology management	88
5	Strategic Planning	90
6	Process management and improvement	93
7	Impact on society	93
8	Results	82
	GENERAL AVERAGE %	**87**

Table 8 General results obtained by evaluation criteria
Source: Author's Perception

Interpretation of results

The departmental company that was studied obtained a general average of 87%, which is why it classifies as a world-class, however, any fluctuation could decrease said score, placing it as a competent company.

General Management is the department with the highest score, this was planned because, in terms of hierarchy, this department is the one in charge of the vast majority of internal processes. It had a high score in almost all its areas, it seems that in the technological issue another department serves as the database and this slows down some processes a little, but it does not seem to affect it too much.

In the bank department, he was also expected to get a high score. It maintained a high score in most of the criteria, it had a drop in the impact on society criterion because the methodology they use to promote the culture of quality is not updated regularly, this goes against the approach of continuous improvement.

The administration department scored moderately high, generally did well, and was low on the Customer Satisfaction and Leadership criteria. It does not have tools to update employers and be able to meet the requirements and needs of the client, from this problem derives the inefficiency of training employees to the new needs of clients. And in terms of Leadership, it failed in the same way, it does not have adequate tools for senior management to participate in its activities.

The clothing and furniture department, as well as the cashier department, obtained the same score, one of the reasons why it is believed that both departments obtained lower scores is because they are the departments most directly involved with the client, however, the same are those that, within the reference system, depend more on the rest of the departments.

The clothing and furniture department, in terms of customer satisfaction: does not have tools to update employers and be able to know the requirements and needs of the customer based on trends, as well as the lack of a plan to train staff who comes into contact with customers. Regarding Leadership: there are several declines since there are no innovation and quality models until there is no organizational culture to identify and address gaps. In the criterion of personnel development and management of intellectual capital, programs are needed to promote teamwork and a plan for quality improvement, as well as strategies, plans, and programs for personnel development, as well as a procedure for properly managing intellectual capital.

For the cashier's department, its lowest point was Leadership, mainly due to the lack of pertinent documented information and the complexity of the organizational environment, since in it the employee-employer hierarchies vary more.

Finally, there is the collection department, which was the lowest of all. There are several observations of the criteria, to begin with, with Customer Satisfaction, there is no reference framework with the competition and, therefore, no tool to measure itself with the competition.

Regarding Leadership, there is a notable lack of training, in addition to the fact that several employees have difficulties outside the company, so the quality culture is not a priority, in addition to the fact that this same situation hinders several quality-related processes. With the foregoing said, criterion three, Personnel Development, and Intellectual Capital Management suffer from quite a few complications, even so, it is observed that teamwork meets the minimum, but in terms of training and the plan for improving the quality of life at work, these are scarce. In conclusion, this department has two notable shortcomings through the eight criteria, one is the lack of trained personnel, and the other is the lack of methodologies and their respective documented information.

Proposal to improve Productivity and Competitiveness

As part of the results obtained and the analyzes carried out, the following proposals are drawn up for the department store studied:

- Periodic increase in audits, since it is vital for the company to constantly look for opportunities for improvement, as well as to take into account any threat that may arise in its operations. It is noted that the audits that are carried out in the company are annual, it is proposed that these are carried out on a semi-annual basis. Furthermore, this will strengthen your management systems by highlighting the importance of documented information, leadership, and quality culture.

- Regularly, organize interdepartmental meetings where specific topics are discussed, such as organizational culture, teamwork, quality culture, awareness, etc. This to create a work environment that promotes personal development.

- Carry out a rewards campaign for taking surveys. The vast majority of departments have adequate tools for measuring customer satisfaction, however, under the continuous improvement approach, the number of customers who stop to leave their opinion about the company's services should be greatly increased. business. The proposed strategy consists of granting a small reward for answering a more detailed survey, the reward may consist of discount vouchers or other types of goods.
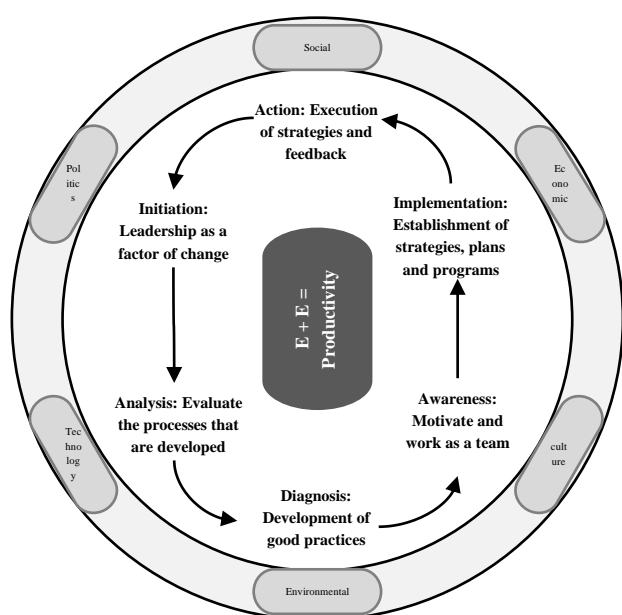
Figure 3 Model proposed for the improvement of Productivity
Source: Author's perception

In this model, the context variables can be observed as a first stage, each variable influencing the improvement model, whether due to political, cultural, social, environmental, economic, or technological aspects.

Due to the data obtained in the position profile and criteria graphs, the model is then based on permanence as a world-class company, as well as continuous improvement in aspects within the evaluation criteria such as leadership, we proceed to the initiation where there is leadership as a factor of change and permanence and continuous improvement as a world-class company, then analysis and evaluation of the leadership activities and practices that are currently being used in the company have to be done, once this first stage is finished, the diagnostic stage will be carried out where they will obtain and know what is necessary to do and thus develop the practices that must be implemented, once it has been diagnosed, the stage of awareness comes, since, for some people leadership, permanence and continuous improvement do not mean much, (we influence the cultural variable where customs, traditions, and values they have as a person).

Since the personnel and senior management have been sensitized, it is possible to establish strategies, programs, as well as action plans that the company creates the appropriate so that they can continue to maintain themselves as a trusted company by their clients and continue to be preferred by Finally, the public has the action, this being the execution of the strategies that have been established, along with feedback, which leads to change and continuous improvement.

Conclusions

Today's world is highly competitive, where production companies seek to go faster and faster since continuous improvement will give the company a stable present and a solid future.

Getting involved in all the processes of the system is convenient since it means taking the first step to implement, develop tools that are easy to use and carry out, which are of the utmost importance for adequate training within a company.

Measuring the departments gives guidelines to obtain real and current results of the organization studied in this project.

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