

Study of measurement and improvement of productivity in the sector of cocoa processing companies, in the state of Tabasco, for the development of an improvement proposal

Estudio de medición y mejoramiento de la productividad en el sector de las empresas procesadoras de cacao, en el estado de Tabasco, para el desarrollo de una propuesta de mejora

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Abstract

Objective: To carry out a study of the measurement and improvement of productivity in the sector of companies dedicated to the processing of cocoa. Methodology: As a first point for the study and collection of data, it is important to know the structure of the companies, that is, if they are divided by departments and / or processes, to proceed to make the selection of the sample. Following this, the instrument called the Comprehensive Productivity Assessment Technique (TIEP) will be applied. With the results obtained, we will proceed to the elaboration of the composite and simple average graphs, which will give us an overview of the current situation of the organizations and thus be able to identify the areas of opportunities. Contribution: With the results obtained, a model for measuring and improving productivity will be developed, so that organizations in this sector increase their productivity, which in turn will allow them to be more competitive in the market that they are positioned

Measurement, Productivity, Cocoa

Resumen

Objetivo: Realizar un estudio de la medición y mejoramiento de la productividad en el sector de las empresas dedicadas al procesamiento del cacao. Metodología: Como primer punto para el estudio y levantamiento de datos, es importante el conocimiento de la estructura de las empresas es decir si están divididas por departamentos y/o procesos, para proceder a realizar la selección de la muestra. Seguido de ello se procederá a la aplicación del instrumento llamado Técnica Integral de Evaluación de la Productividad (TIEP). Con los resultados obtenidos se procederá a la elaboración de los gráficos de promedio compuesto y simple, lo cuales nos darán un panorama de la situación actual de las organizaciones y así poder identificar las áreas de oportunidades. Contribución: Con los resultados obtenidos se elaborará un modelo de medición y mejoramiento de la productividad, para que las organizaciones de este sector aumenten su productividad lo que a su vez permitirá que sean más competitivas en el mercado que estén posicionados.

Medición, Productividad, Cacao

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Introduction

The measurement and improvement of productivity is a process of utmost importance, because there is always something to improve or correct so that the processes continue to continue in a better way. Measurement and improvement will allow us to improve weaknesses and strengthen those strengths that we already have, but in what benefits this, because it will help organizations to be competitive and above all productive in the market in which they are, obtaining results in a visible way like, costs, expenses, time, these are items of utmost importance.

The measurement and improvement of productivity will allow organizations to visualize a broader horizon, since it allows the participation of all areas of a production chain, which will help train leaders, in the same way it will help to obtain what every organization wants. possessing that is productivity, but how this was carried out in the union of effectiveness and efficiency, but for this, a comprehensive systemic approach must be taken, that is, to see the organization as a whole, analyzing internal and external factors, not leaving any element out, since all have a degree of importance and a reason for being.

Problematic

Nowadays the variables of the context have an unstable behavior, that is, changes are presented in an accelerated and unexpected way, therefore it is of the utmost importance that organizations are prepared for these modifications, and thus be able to find solutions that will allow facing the changes presented by the contexts, a clear example of today is the Covid 19 pandemic. This event led to the context variables presenting unexpected changes which many organizations were not prepared for, but over time they have found strategies to adapt to new contexts and be able to continue in the market in a feasible way, fulfilling the new requirements that its clients demand.

Companies limit themselves when considering their goals, they do not visualize that they can go further than where they are today, with the simple fact of having good profits, many there stay and settle, they do not seek what else they can improve or implement to continue growing in the If they do not take these aspects into account, it is very possible that others will arrive that if they do so and they gain more ground in the markets and gradually displace them, they should always think about growth, the improvement of productivity would be a key factor for this process by This has a high degree of importance, therefore organizations must have a productivity measurement culture so that they can visualize what elements are influencing and see the solutions and areas of opportunity that can be presented.

Investigation methodology

For the collection of data and the analysis of the productivity of the organization, knowledge of all those elements that will be studied in an intangible or tangible way is essential since each one has a high degree of importance for the study to be carried out, that is, be seen in a comprehensive way not leaving out any element to obtain good results.

For the data collection and the application of the instrument, it is important to know the structure of the company, that is, if it is divided by departments or processes, in this case the organization is divided by departments from which five of them were selected, choosing those as more interaction or decision-making is carried out, it is worth noting that all the departments of the organization are important, but for this study only 5 departments were selected, which are:

- Management.
- Production.
- Sales.
- Finance.
- Shopping.

The variables that were studied in the departments were the six context variables which are: Environmental, Political, Economic, Social, Technological, Cultural

Instrument

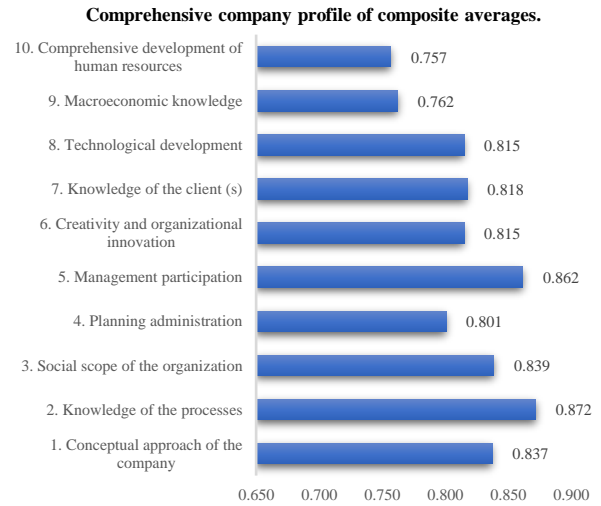
In the instrument, Comprehensive Productivity Assessment Technique (TIEP), 10 elements will be displayed, each of which has a degree of importance within the organization, having these a relationship with the variables of the context that is where the impact will be analyzed. have the elements in the organization and in what way the variables have an impact within each one. To carry out the relationships, the instrument provides two criteria which are indicated by a P that means the weighting, this will help to establish how important the elements are in the organization, the sum of the weightings is carried out vertically and its result must be 1 The second criterion is established by an E which means Evaluation, this determines the qualification that the evaluated department will obtain in relation to the 10 elements and the context variables, the qualifications range from 1 to 10.

Results

The values that can be observed below in the graphs were obtained from the weightings and evaluations of the results that gave the application of the instrument, Integral Technique of Productivity Evaluation (TIEP).

With the help of the excel package, the calculations of the integral profile of the simple average company were carried out, which is obtained from the calculation of all the averages of the weights thrown in the instrument, and the integral profile of the composite average company is obtained by multiplying all the weights for the evaluations and in the end divide them by the number of instruments applied, which in this case went to five departments.

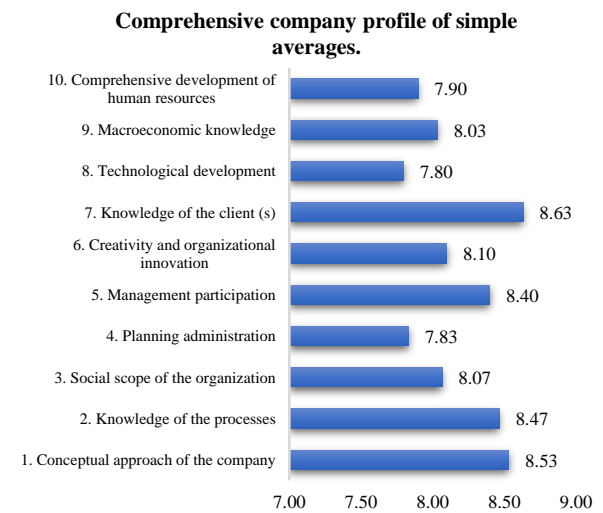
Taking into account the results obtained in the analysis of the graph of the integral profile of the company of composite averages, as shown in graph 1, it can be seen that there is low performance in the elements of integral development of human resources, macroeconomic knowledge, technological development, planning administration, creativity and organizational innovation. Composite averages give us a more complete picture of the impact that variables have of the context in the elements in all the departments analyzed that in this case a sample of 5 departments was used.



Graphic 1 Graph of the integral profile of the company of the results obtained from the composite averages of all the departments (Management, production, sales, finance and purchases)

Source: Author's Perception 2021

Analyzing the data obtained from the graph of the integral profile of the companies of the simple averages, as shown in graph 2, it is possible to observe that there is a low performance in the elements of technological development, planning administration, integral development of human resources , social scope of the organization and macroeconomic knowledge, it is of utmost importance to give due follow-up to the elements for their correction due to the impact that the variables are having on said elements, which is affecting their productivity, therefore it is of utmost importance to study that is being carried out regarding the issue of productivity in cocoa processing companies.



Graphic 2 Graph of the integral profile of the company of the results obtained from the simple averages of all the departments (Management, production, sales, finance and purchases).

Source: Author's Perception 2021

Proposal - Model

Proposal

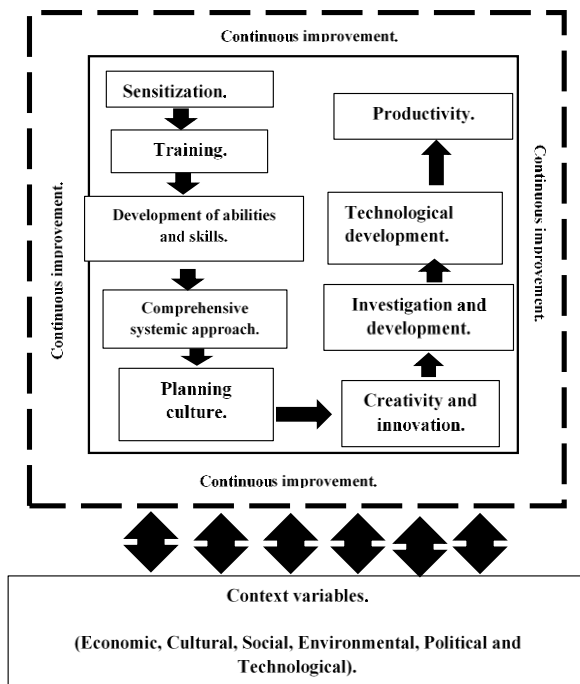


Figure 1 Proposed model for productivity improvement.
Source: Author's Perception 2021

Interpretation of the model

Based on the results obtained in the analysis previously carried out, the following model is proposed, which starts with the sensitization of all those involved, in order to broaden the vision that they have in their organization, that is, to go into the context so that These can be related in a better way with all the elements involved and have more interaction, this being the beginning of a preparation of everything that is to be done, it will also help to make those involved aware that the requirements and contexts are changing, therefore improvements or corrections are needed to be able to survive in the market; Because sometimes those involved have been carrying out their activities in a certain way for many years and making them understand that modifications are needed is complicated and they show attitudes of opposition to change, so it is of the utmost importance to make them understand the benefits and improvements that it will have making adjustments to their way of carrying out their activities. This can be done through talks, courses, or with the creation of an awareness plan.

Training is another element of great importance, because with its help it will be possible to improve and perform activities or processes more efficiently; In this way, good work teams can be formed, since this will give us the guideline to make those involved understand how the processes or activities are going to be carried out. Staff training is the stage in which the members of the organization reinforce or renew their knowledge and skills, therefore, the company must consider the cost that these entail, either in time or financial resources, therefore it should be viewed as investment in human resources, which will generate favorable changes to the extent that the training programs that senior management determines and sees fit are followed up, these must be strategically programmed according to the requirements.

The development of skills and abilities in the staff is important, because they will be able to adopt better aptitudes and attitudes, being two elements of utmost importance for the development of activities in a person, that is, it is the process by which people improve their skills and knowledge, to perform its functions to achieve optimal and desired results over time.

With the help of the aforementioned aspects, it will be possible to obtain a comprehensive systemic approach in which those involved will visualize the organization as a whole, that is, they will be related to all the areas that make it up and their activities, taking into account factors such as internal and external. For this, all those involved in the organization must be in constant communication, working as a team, that is, everyone must know and above all understand the operation of all the areas that make up their organization, not leaving out external factors. With a culture of planning, the organization will obtain a better strategic planning in which important points intervene such as objectives, metrics, the strategies that will be followed for the fulfillment of the previous ones, a key factor of this will be the intervention that senior managers have with the other areas so that together they plan their strategies, activities, processes for the fulfillment of their goals and objectives. For this it is of the utmost importance that a strategic plan is carried out.

Organizations must keep in mind the creativity and innovation that goes very hand in hand with research and development because the contexts and requirements of the clients change over time, it must be planned how to satisfy those requirements, in this case the company must be always innovating or improving their products to continue remaining in the market, since today the variety of products or services found in the markets is very wide, therefore, meetings should be held with senior managers to propose ideas that new products, processes that can be integrated into the organization, this is where the previous research that must be carried out intervenes to see the new requirements that the applicants have or what modifications the markets have had to proceed to look for strategies on how to supply them with the innovation of products or processes always being creative.

Implementing cutting-edge technology will be very useful for the organization because new technologies have been created to facilitate processes and activities at work, saving time and costs. Handling outdated technology can be a trigger to fall behind in the market, preventing adequate competition from other organizations in the same field. For this reason, investing in the creation of new technologies will be important, however, there are a large number of technological tools accessible to the company, but not all are adequate for its performance, so a prior analysis must be carried out.

With the union of all the aforementioned elements, they will lead to productivity, which is the main objective of this model, so it is very important to keep each one of them in mind and take into account, in order to achieve productivity, which will have an impact. of great relevance to the organization.

Continuous improvement must always be carried out since, as mentioned, the requirements change and must be covered, continuous improvement, as its name indicates, serves to improve to polish what is being done today and see how they can be done better. obtaining more benefits in all the elements involved.

Context variables should always be studied because they are the ones that will guide us in the modifications that the contexts in which we are living will have, without a doubt they are a key part of every process and especially if we want to improve productivity, they are they have an impact both internally and externally.

Conclusions

A measurement culture is of the utmost importance for every organization, therefore the improvement of its productivity must always be borne in mind, since with the passage of time the requirements of clients or applicants are presented modifications and if organizations want to survive in Markets must face these changes, looking for strategies to be able to face them in the most optimal way.

Having a comprehensive systemic approach will be of great help for organizations since they must always keep in mind all the elements that involve their company, speaking of internal and external elements, these will be a key factor to have improvements, the areas must bear in mind what the others do They should not only focus on theirs, so it is important to sensitize those involved to give way to training and then obtain something very important for them, which is intellectual capital, as we know the human factor plays a very important role in everything. this.

The areas of opportunities that organizations can find today are very broad, so it is important to bear in mind the measurement studies, but not only to stay in the study if not to give due follow-up to the factors we find and thus undertake the search for the Optimal strategies for improving these, which in the end will lead to something very important, which is increasing their productivity, which in turn will allow them to be competitive in their markets.

Recommendations

Preparation of the strategic plan: it is a document that identifies, describes and analyzes a business opportunity, examines its technical, economic and financial viability, and develops all the procedures and strategies necessary to carry out a specific business project, within it you will find aspects such as, objectives, goals, strategies, mission, vision of the organization.

Strategic Planning: it is a management element that allows establishing what to do and the path that organizations must travel to achieve the planned goals, taking into account the changes and demands imposed by their environment. In this sense, it is essential for decision-making within any organization.

Awareness plan: Here the strategies that are intended to be used to sensitize the staff will be proposed, through talks, coexistence, especially the interaction of all the areas that make up the organization.

Training calendar or plans: establish dates on which internal and / or external experts will be sought to give the corresponding talks to those involved and thus show them from the use of a new tool to a new process.

Innovation on your website, social networks: nowadays social networks, web pages are of great impact for customers, so this element must be followed up, in order to capture the attention of future customers, be innovative and above all Creative on these elements will go a long way, for example planning weekly content to upload to your platforms.

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