

Original article

Procedure for organizational design with a process approach in food industry enterprises



Procedimiento para el diseño organizacional con enfoque a procesos en empresas de la industria alimentaria

Procedimento de desenho organizacional baseado em processos para empresas do setor de alimentos

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ABSTRACT

Organizational design is becoming more and more relevant, since it is necessary to achieve greater effectiveness and efficiency in organizations, optimizing not only material and financial resources, but also human resources. The present work was carried out in the Provincial Food Industry Enterprise of Pinar del Río, with the purpose of proposing a procedure for organizational design with a process approach that contributes to a better organizational management. The historical-logical theoretical method was used, with the support of the documentary analysis technique, mainly in the study of different technologies for organizational design that served as theoretical-methodological references, which allowed determining their main contributions and limitations as a basis for the proposal made. For the empirical diagnosis, a methodology was applied to characterize the organizational design process in the enterprise, using secondary and primary sources of information that made it possible to know the necessary elements related to the dimensions of organizational

design. Scientific methods, procedures and research techniques were used to collect, process and analyze the information. As a result of the work, a procedure was designed that establishes the stages and steps for organizational design with a process approach in the entity under study, which will contribute to optimize resources based on the processes developed by the entity and to improve the decision-making process, in order to ensure greater efficiency, efficacy and effectiveness.

Keywords: organizational design; procedure; processes.

RESUMEN

El diseño organizacional cada vez adquiere mayor relevancia, pues se hace necesario lograr mayor eficacia y eficiencia en las organizaciones, optimizando los recursos, no solo materiales y financieros, sino también humanos. El presente trabajo fue realizado en la Empresa Provincial de la Industria Alimentaria de Pinar del Río, con el propósito de proponer un procedimiento para el diseño organizacional con enfoque a procesos que contribuya a una mejor gestión organizacional. Se utilizó el método de nivel teórico histórico lógico, con el apoyo de la técnica del análisis documental, fundamentalmente en el estudio de diversas tecnologías para el diseño organizacional que sirvieron como referentes teórico-metodológicos, lo que permitió determinar sus principales aportes y limitaciones como base para la propuesta realizada. Para la realización del diagnóstico empírico, se aplicó una metodología que permitió caracterizar el proceso de diseño organizacional en la empresa, para lo cual se utilizaron fuentes secundarias y primarias de información que posibilitaron conocer elementos necesarios relacionados con las dimensiones del diseño organizacional. Se utilizaron métodos científicos, procedimientos y técnicas de investigación que permitieron recolectar, procesar y analizar la información. Como resultado del trabajo, se diseñó un procedimiento que establece las etapas y pasos para el diseño organizacional con enfoque a procesos en la entidad objeto de estudio, el cual contribuirá a optimizar los recursos sobre la base de los procesos que desarrolla la entidad y a mejorar el proceso de toma de decisiones, en aras de garantizar una mayor eficiencia, eficacia y efectividad.

Palabras clave: diseño organizacional; procedimiento; procesos.

RESUMO

O desenho organizacional está se tornando cada vez mais relevante, pois é necessário alcançar maior eficácia e eficiência nas organizações, otimizando não apenas os recursos materiais e financeiros, mas também os recursos humanos. Este estudo foi realizado na Empresa Provincial de Lá Industria Alimentaria de Pinar del Río, com o objetivo de propor um procedimento para o desenho organizacional com uma abordagem de processo que contribua para uma melhor gestão organizacional. Utilizou-se o método teórico histórico-lógico, com o apoio da técnica de análise documental, fundamentalmente no estudo de diversas tecnologias de desenho organizacional que serviram de referência teórico-metodológica, o que permitiu determinar suas principais contribuições e limitações como base para a proposta apresentada. Para realizar o diagnóstico empírico, foi aplicada uma metodologia para caracterizar o processo de desenho organizacional na empresa, para a qual foram utilizadas fontes de informação secundárias e primárias que possibilitaram a descoberta dos elementos necessários relacionados às dimensões do desenho organizacional. Métodos científicos, procedimentos e técnicas de pesquisa foram usados para coletar, processar e analisar as informações. Como resultado do trabalho, foi elaborado um procedimento que estabelece as etapas e os passos para o desenho organizacional com enfoque em processos na entidade estudada, o que contribuirá para otimizar os recursos com base nos processos desenvolvidos pela entidade e para melhorar o processo de tomada de decisões, a fim de garantir maior eficiência, eficácia e efetividade.

Palavras-chave: desenho organizacional; procedimento; processos.

INTRODUCTION

At the present time, every enterprise is immersed in a specific environment (technological, sociocultural, political, economic, ecological, demographic) that evolves and is subject to continuous and permanent change, which in turn brings about conditions both in its relations with suppliers, competitors, customers, personnel, among others, and in its results (sales, expenses, profits, etc.). Business success requires a continuous adaptation of the enterprise to its environment, trying to achieve maximum efficiency in its internal operation, clearly separating the factors that affect it.

The demands of customers in the modern business world and the intensification of competition for market supremacy have unleashed changes in the environment that demand the establishment of continuous improvement processes to achieve improvement in process management.

In the case of Cuban enterprises, efforts are being made to improve their administration and operations management systems. This imperative has gained strength as a result of the process of business improvement, in the sense that profound transformations are being carried out in terms of process management.

Organizations' managers show a growing interest in knowing the effects of organizational structure and processes on their personnel, since they fundamentally affect the behavior of individuals.

Cuba is no stranger to these trends and the Guidelines of the Economic and Social Policy of the Party and the Revolution, approved at the VIII Congress of the Communist Party of Cuba (PCC, 2021), expressed the need to improve the management model in food production, based on the use of endogenous resources, achieving the potential of local activity and consolidating productive chains. In this framework, the socialist state enterprise is corroborated as the main form in the national economy and, in correspondence with this, the need to deepen the organizational designs to ensure the business purposes of efficiency and competitiveness is insisted on. Therefore, any scientific attempt to contribute to promote business organizational designs oriented to the consolidation of the desired attributes in Cuban organizations constitutes a challenge of singular importance in the current context.

Assuming a process approach implies an orientation towards the client; laying the foundations to guarantee optimization and rationalization in the use of resources with criteria of efficiency and effectiveness, in addition to enabling greater visualization of the organization's internal relationships, also reducing costs and identifying with greater accuracy those associated with poor quality, which contributes to effective decision-making, as has been advocated by authors such as: González González et al. (2019), Medina León et al. (2021), Marín González and Pérez González (2021), Cantero Cora et al. (2021), Viteri Quishpi et al. (2022).

Specifically, organizational design should, according to Torres Torres et al. (2019):

- Facilitate the flow of information and speed of decision making to meet the demands of customers, suppliers and regulators

- Clearly define authority and responsibility for positions, teams, departments and divisions
- Create the desired balance of integration (coordination) between positions, teams, departments and divisions with inherent procedures to produce a rapid response to changes in the environment

The current food complexity requires quick and daring solutions, in search of real decentralization, empowerment of the territorial management levels of government (municipality) and achieving the separation of government management from business management, made up of the various forms of production existing in the territory and all those who have the capacity and possibility of producing food.

The most immediate destination of local food production is the municipality, bearing in mind the requirements of demand, local food habits and nutritional requirements of the population.

In recent years, a group of measures has been approved in Cuba to strengthen the entrepreneurial system. The transformations in state enterprises are numerous and profound. Increasingly, enterprises have greater autonomy and entrepreneurs have more powers in their work management.

The work presented is based on the elaboration of a procedure for the organizational design with process approach in the Provincial Food Industry Enterprise of Pinar del Río, an organization created by agreement No. 21, adopted by the Provincial Council of the Administration of Pinar del Río and approved by Resolution No. 4/93 dated July 15, 1993, issued by the president of this Organism, of local subordination, belonging to the Provincial People's Power.

The Provincial Food Industry Enterprise of Pinar del Río (Epia in Spanish) has satisfactorily achieved the fulfillment of its mission, reaching acceptable levels of efficiency, maintaining stability in its human capital and consolidating a minimal and practical management structure, although not free of problems in its development.

Its commercial activity is the elaboration of a variety of food products and the fulfillment of the family basket in the assortment of bread and noodles. The sector to which it belongs is currently highly exploited, as it gives it the benefit and opportunity for growth in the country. However, since its inception until today, the enterprise has an organizational, departmental and administrative structure, defined in its entirety, but has shortcomings, which is causing internal problems due to

inadequate management of both administrative and internal control information and customer dissatisfaction.

In order to survive and increase their market share and not fall into stagnation, enterprises must be aware of the importance of having an appropriate organizational design.

Epia has 2,433 employees to produce food and provide services to all the inhabitants of the province. It is currently experiencing problems with respect to organizational structure, designation of functions or tasks, and some processes are not being properly managed, since some knowledge about managing the enterprise and resources used are empirical and this is a problem that can have a direct impact on the development of the organization, affecting market positioning and decreasing revenues.

The preliminary diagnosis in the entity identified the following findings: lack of communication between employees in different areas, lack of appropriate organizational structure, the distribution of departments is not correct, poor teamwork, the management of some processes of the enterprise is done empirically, the performance of the functions of employees is not adequate, insufficient training and preparation of cadres and workers in various subjects, caused by the low level of schooling in general in the enterprise, dissatisfaction of the clients, presence of a double subordination (administrative and methodological), insufficiencies in the follow-up and control of processes, technological obsolescence and conflict to accede to new technologies, accessories and pieces, because the imports are from the methodological organism.

These findings lead to the need to elaborate the organizational design with a process approach for the Provincial Food Industry Enterprise of Pinar del Río, which allows structuring, ordering and identifying the specific areas, their functioning and interrelationships, providing the optimal rational conditions to operate daily, in order to achieve the desired objectives, maintaining a follow-up and control of the functioning of the different processes, based on their continuous improvement.

Based on the above, this work poses as a scientific problem that the predominant organizational design in the Provincial Food Industry Enterprise of Pinar del Río is by functions and is carried out on an empirical basis, which affects the decision-making process in the short, medium and long term and the organizational performance with efficiency and effectiveness.

In this sense, the objective of this work is to elaborate a procedure for the organizational design of the Provincial Food Industry Enterprise of Pinar del Río with a process-based approach, which contributes to the effective fulfillment of its organizational objectives.

MATERIALS AND METHODS

In order to fulfill the objective, methods, techniques and procedures were used that facilitated the collection and processing of information to solve the research problem. Theoretical and empirical methods were used.

The dialectical-materialistic method was used to carry out a systemic study of the process of organizational design with a process approach, with the objective of understanding the elements that make up the object of research, as well as the contradictions existing in it. The induction-deduction method was used in the elaboration of the process-oriented organizational design procedure.

The analysis and synthesis procedures were used to reach the multilateral knowledge of the organizational design process, from the study and analysis of the bibliographic material, which allowed to delimit the essential elements, as well as to establish the links between them.

As a research technique, documentary analysis was used, through the study of different documents and other bibliographic materials related to the subject, which allowed the evaluation of the state of the organizational design process in the Provincial Food Industry Enterprise. The documentary analysis also allowed the study of different technologies of organizational design that served as theoretical-methodological references, which allowed determining their main contributions and limitations as a basis for the proposal made.

In addition, other techniques such as group work, survey, interview and cause-effect diagram were used to determine the potentials and limitations of the organizational design process in the enterprise under study.

For the empirical diagnosis, a methodology was used to characterize the organizational design process at Epia, using secondary and primary sources of information that made it possible to know the size of the organization, organizational structure, existing organizational models, number of levels in the hierarchy, level of coordination between areas, number of jobs, processes developed by the enterprise, among other elements.

A structured interview was applied to managers of the central office and heads of basic units. No sampling technique was used, since it was decided to interview 100% of the entity's managers, who total 25. In addition, a survey was applied to 113 workers belonging to each area of the Basic Units, determined through simple random sampling. The purpose of applying these instruments was to identify the elements that are affecting the organizational design process in the entity.

After consulting the primary and secondary sources of information and processing the results, the information was triangulated. The triangulation of methods was used, which offers the opportunity to improve the organizational diagnosis, synthesizing the results derived from the use of multiple scientific methods in a valid and coherent interpretation. As a tool to apply the triangulation of methods, the Ishikawa diagram or cause-effect diagram was used, which made it possible to determine the main causes affecting the deficiencies in Epia's organizational design process.

RESULTS AND DISCUSSION

Results of the empirical diagnosis in the Provincial Food Industry Enterprise

The main findings derived from the consultation of secondary information sources are listed below:

- The enterprise's structure does not have a Management or Development Group responsible for R&D&I activities
- Institutional communication failures
- Lack of clarity of the tasks that correspond to each one
- Poorly planned work schemes
- Hierarchical-functional organizational structure
- Outdating of the internal regulatory base
- There is no competency-based job profile designed for each position
- Lack of clarity in determining the functions of the organizational units and the powers of management
- Insufficient organizational measures in logistics, production and service processes

The main results derived from the primary sources of information are listed below:

- The information necessary for decision making is not managed
- The enterprise's production technology is obsolete

- There are certain activities in which the use of procedures is not properly applied
- There are functions that are not performed due to lack of knowledge and other causes influenced by the existing structure
- The structure of the enterprise must be changed according to timely criteria of some work areas that must be ordered

After consulting the primary and secondary sources of information and processing the results, the information was triangulated to determine the main causes that hinder the organizational design process at Epia.

For this purpose, the cause-effect diagram technique was used, which made it possible to determine the main causes affecting the deficiencies in the organizational design process of the entity. The problem located at the tip of the arrow signifies the effect (inadequacies in the organizational design of the Provincial Food Industry Enterprise) and the "thorns" to be enunciated signify its probable causes, which in turn may have other secondary causes or thorns. To achieve this diagram, it was worked with five cadres and nine main specialists from the Basic Units.

Each participant was given a summary of the main results obtained in the diagnosis. Then, individually, the participants selected the possible causes of the effect defined above, highlighting the following as fundamental causes:

- There are no tools and techniques that guarantee greater precision in decision making
- Workers' skills and competencies are not sufficient for successful performance
- There are certain activities in which the use of procedures is not properly applied, such as: gastronomy, marketing, load and capacity studies, among others
- Predominance of hierarchical-functional design in the entity
- Timely and reliable information for decision making is not always available

For the definition of the "causes", brainstorming was applied among the participants. Once the evaluations were issued, they were condensed in a table or matrix of judgments, where R_j means the sum of the values given by each of the 14 specialists (E); deducting from the lowest R_j the most important cause and from the highest R_j the least important cause. The scale of values ranged from 1 to 5, with 1 being the most important and 5 the least important in the effect analyzed.

This was complemented with the calculation of the concordance (Cc), which reached a $Cc > 60\%$ for each Rj in all cases, so it was considered that there was a good level of consensus among the participants.

Based on the weighting carried out, the most important cause was: "Predominance of the hierarchical-functional design in the entity", followed by "There are no tools and techniques that guarantee greater precision in decision making" and as the least important cause, "Timely and reliable information is not always available for decision making".

Procedure for organizational design with process approach

Theoretical-methodological basis of the procedure

Today more than ever, in the midst of a globalized world, where enterprises and organizations must develop their products and services in a highly competitive context, organizational design is gaining in importance (Bú Alba, 2022).

In this globalized world, the design of the organizational structure of enterprises must respond to the social functions it performs, taking into account both structural dimensions (formalization, specialization, standardization, hierarchy of authority, complexity, centralization, professionalism and people reasons) and contextual ones (size, technology, external environment, strategy and objectives and organizational culture) (Zambrano Campoverde et al., 2017).

Such is the importance given to organizational design that multiple researches have been conducted, including those of Mintzberg (1992) and Garcias Solano et al. (2019), who from different perspectives and fields agree that an enterprise to be competitive, efficient and successful requires adequate administrative management, where organizational design is a strategic tool that allows not only to organize and rationalize resources, but also to foresee the necessary changes and adjustments in order to increase efficiency and generate competitive advantages.

The organizational design of enterprises allows the formalization of procedures, serves as a guide, promotes the integration of personnel, rationalizes information and technology to achieve greater efficiency, effectiveness and competitiveness (Serrano Polo et al., 2021). In the design of the organizational structure of an enterprise, multiple factors intervene, such as the behavior of the

personnel inside and outside the organization, the environment, the size of the enterprise, the objectives and functions of the different areas, as well as the final goal of the enterprise.

For organizational design, several technologies have been used, designed by different authors (González Sánchez, 2014; Torres Torres et al., 2019). The study of these technologies made it possible to assess the evolution of research in the field of organizational design with a process approach. Coincidence is reflected in some phases or stages of this process, namely: diagnosis of the current structure, selection of processes as the basis for the design, design of structures, implementation, which have become classic elements of organizational design, rather static in nature and which constitute the main methodological contributions of the technologies studied. Another common element is that they are all focused on processes, a basic issue in the design of organizational structures adapted to the demands of these times.

The main limitations analyzed in the technologies and which serve as the basis for the proposed procedure to be carried out in this work are as follows:

- They do not include the preparation and sensitization of personnel with respect to process-based organizational design
- No premises are established for the implementation of the technology
- The evaluation of the organizational design process is not reflected at any stage or phase
- They do not consider external factors that influence the process of organizational design with a process approach

According to Asanza Molina et al. (2016), a procedure is a method of execution or steps to be followed, in a sequential and systematic way, in the achievement of an end.

In this case, a procedure for organizational design with a process approach is elaborated, whose simplicity, concreteness and feasibility of use allow analyzing this process within the framework of the operation of the Provincial Food Industry Enterprise of Pinar del Río.

The proposed procedure aims to carry out the organizational design of Epia, with a focus on processes, which will contribute to achieving greater efficiency and quality in the production and service process carried out in the entity.

This proposal is based on a set of principles that support its conception from a scientific and practical point of view, which are the following:

Systemic approach: It integrates and relates in its conception the key factors involved in the organizational design with a process approach, taking into account the requirements established in the entity's development strategy.

Coherence: It must guarantee coherence between the definition of the organizational design process, as well as the new changes that the management process establishes in order to support the entity's development.

Relevance: The procedure is characterized by its timeliness and applicability in the Provincial Food Industry Enterprise, as well as in other organizations of a similar nature.

Logical consistency: The procedure is developed taking into account a sequence of stages and steps that lead to the successful achievement of the expected results.

Action-oriented: Each one of the stages or steps implies the realization of concrete actions for the development of the organizational design process with a process approach in the entity.

Feasibility: The objectives and actions contained in each stage contribute to the precision and understanding by the actors involved in its implementation, so that it is oriented towards the possibility and ease of its practical application.

Flexibility: Given by the susceptibility to changes and the capacity of structuring in correspondence with feedback.

Organizational fit: the design and implementation must be consistent with the organization's strategy.

Coordination: individual positions and organizational units contribute to the general objectives of the enterprise and there is coordination between the different areas involved in the enterprise's processes.

Clarity: the structure should facilitate the definition of authority/responsibility levels.

Based on the definition of the principles that support the theoretical conception of the procedure, the following are determined as the main premises for its implementation:

- To have the willingness and disposition of the organization's top management to implement the proposed procedure
- Conscious collective participation: it is a process inherent to all participants, if the will is assumed that the workers themselves are the true protagonists of the process
- That the corporate strategy of the entity is designed

Description of the stages and steps of the procedure

The purpose of this procedure is to contribute to the process-oriented organizational design of a food production enterprise, taking the Provincial Food Industry Enterprise of Pinar del Río as the object of study. It is structured in four stages and ten steps; each stage has a clearly established objective and the expected result to be achieved. Each step has a description aimed at guiding the achievement of the stage, describing the elements to be considered in its procedure. The main tools that can be used to execute each step are also described.

The stages and steps of the procedure follow a logical sequence and are consistent with the theoretical assumptions on which they are based, as explained below.

Stage I: Establishment of initial conditions

Objective: To create the necessary conditions for the organizational design with a process approach in the entity.

Step 1: Formation of the work team

Description: The design work team may be composed of internal personnel of the organization, external or mixed, depending on the particularities of the entity and the level of emotional independence of the participants, among other possible factors to be considered in specific cases.

This step should consider the selection of a team leader by the entity that will lead the process and the preparation required by the members to be able to execute the design work. The entity's top management should be involved in the formation of the team, ensuring that it has a multidisciplinary composition, with experience and potential to execute this process. However, taking into account

that this design has more specific characteristics, other elements should be taken into account in the selection of the work team.

- No more than seven people
- The majority of its members who are members of the Board of Directors
- A team member who has experience in plotting process diagrams
- The team should be knowledgeable about the activities to be studied

Prior to the selection of the work team, it will be necessary to verify compliance with the premises established as part of the procedure, as these are essential requirements for its successful implementation.

Tools to be used: group dynamics, meetings, documentary analysis.

Responsible: deputy director

Time required: 5 days

Step 2: Sensitization of the work team

Description: In order to carry out the process of organizational design with a process approach, it is necessary to start with a preparation that consists of creating the conditions and, above all, establishing the commitments of the work team that will be directly involved in the design process.

The purpose of this step is to sensitize the people that make up the selected work team on the generalities of the process approach and the organizational design under this approach.

Tools to be used: group dynamics, workshops.

Responsible: deputy director of human resources

Time required: 15 days

Stage II: Evaluation of processes as a basis for organizational design

Objective: Evaluate the processes in terms of their design and performance through the collection and analysis of relevant information for the elaboration of the proposal for the improvement of the organizational design with a process approach.

Step 3: Process identification

Description: This step identifies all the processes that are necessary to produce the expected results in the organization. Processes are not created, they are present in the organization and, in this initial phase, the task is limited to detecting and listing them. There is also no "catalog" of processes, so it is up to the enterprise to determine its own processes according to its customers, the nature of its activities and its strategy.

To identify the processes, they must meet the following characteristics:

- It has some logic, a dominant method or rationale that is maintained during the activity and that allows the process to be identified
- It is worked with resources (materials, energy, information) that are transformed during the process
- Inputs and outputs can be described
- The process may cross one or more functional organizational boundaries being able to cross vertically and horizontally the organization
- It is necessary to talk about goals and ends instead of actions and means. A process answers the question "what", not "how"
- For the study of the process and its realization, all the processes and activities that are developed in the organization will be collected in a list. The success and simplification of the work to be carried out will depend on the quality of the process list, its completeness and the way in which they are separated or aggregated
- When listing the processes, it should be started by first listing the product or service realization processes, which are usually the most visible and known to all

All the processes that take place in the organization should be listed and then only the most important ones should be retained based on:

- Contribution to overall business volume
- Key success factor
- Level of risk of customer dissatisfaction
- Growth of non-quality
- A representative name should be assigned to each process that should illustrate what it conceptually represents or is intended to represent
- When choosing the processes, the interaction with the environment should not be taken into account, that is, only those activities that occur within the organization
- Processes that add value to the product should be identified. Processes should be focused on both internal and external customer satisfaction
- It is recommended that the number of processes should range from 10 to 25, depending on the type of enterprise. As a rule, it can be stated that if too few or too many processes are identified, the difficulty of their subsequent management increases

Tools to be used: process sheet, flow diagrams, group dynamics, relationship map.

Responsible: deputy director

Time required: 10 days

Step 4: Process classification

Description: In this step, processes are classified according to their mission in the organization. Due to the diverse nature of business processes, there is no single typology for their classification, since each particular process has its own content and scope and each one may be aimed at satisfying different needs, both external and internal customers of the organization.

The classification of processes is of utmost importance because it facilitates their identification and selection.

For the classification of the processes in the enterprise, they will be classified into strategic, key and support processes, according to the following characteristics:

- Strategic: These include the processes related to the management's own functions. Through their execution, policies, strategies, objectives, rules and regulations are defined, and the

operation of the organization is formalized and standardized. They establish the guidelines for the organization's management.

- **Key:** Processes that provide the main result intended by the organization. They represent the object of being of the enterprise and, therefore, respond to Requirement 7: Product realization, which establishes the ISO 9001:2015 NC. They establish the activities to be developed to achieve the good and service for which the organization exists.
- **Support:** They include all the processes that provide the necessary resources for the fulfillment of the organization's mission and objectives. They establish the processes that guarantee the fulfillment of the rest of the processes.

Tools to be used: group dynamics, flow charts, relationship maps.

Responsible: deputy director

Time required: 7 days

Step 5: Determination of the process sequence

Description: This step allows representing the relationships between the processes that take place in the Provincial Food Industry Enterprise of Pinar del Río. To do so, the processes necessary to achieve the expected results must be determined, as well as identifying all the input elements and the results of the processes together with the suppliers, customers and other stakeholders (which may be internal or external).

It is necessary to define and develop a description of the network of processes and their interactions, considering the following:

- the customer of each process
- the inputs and outputs of each process
- which processes are interacting
- interfaces and their characteristics
- time and sequence of the interacting processes
- effectiveness and efficiency of the sequence

Tools to be used: group dynamics, process analysis diagram, relationship map.

Responsible: deputy director

Time required: 15 days

Step 6: Elaboration of the process map

Description: As part of this step of the procedure, the identified processes and their interrelationships should be graphically represented.

To design the process map, emphasis should be placed on the interrelationship between the different sub-processes of the organization, which are represented by blocks, highlighting only some of the key processes in order to facilitate the understanding of the essential flow and the most important flows. The grouping of the processes within the map allows establishing analogies between processes, while facilitating the interrelation and interpretation of the map as a whole.

The process map is a vital model for developing a strategic plan because it will help to gain visual awareness of the mission, represented by the processes developed by the entity.

A desirable objective is to have documented, updated and consistent processes that capitalize on the organization's knowledge and respond to an updated logic, which is transformed into internal standards that are effectively used.

This method of visualizing the enterprise's activities at all levels, through the processes ordered by their hierarchies and relationships, together with the systematic display of objectives, responsibilities, characteristics, relationships, of each process, provides the enterprise's management, above all:

- An integrated vision of the activities that the enterprise needs to fulfill its obligations to the market
- An essential aid for planning new strategies or the deployment of new policies. This aspect becomes especially relevant when innovation (technological or reengineering) plays a prominent role in these new policies

Hence the widespread use of the process map in enterprises that employ a total quality strategy, with its strong component of innovation, change and adaptation to the environment.

Tools to be used: process map, group dynamics, flow charts.

Responsible: director

Time required: 15 days

Stage III: Design of the structure

Objective: To design the positions necessary to achieve the effectiveness of the processes, as well as the structure to be adopted by the organization.

This is a purely construction stage, where its immediate antecedent is the study and determination of the design of the work processes and the conclusions on the consistency or not of these results with the operation of the current structure. The closure must respond to a change if it is deemed necessary.

The steps to follow are as follows:

Step 7: Positions determination

Description: There must be an organizational structure that allows establishing a hierarchical order of the elements that make up the structure of the organization, as the various positions and their respective lines of command are established. The following aspects should be noted for each of them:

- Objective of the position: represents the reason for which the position is generated, it can also be interpreted as the reason for which the position was generated.
- Basic functions: represent a set of activities attributed to the position.
- Requirements for the position: set of aspects concerning the people who will assume the responsibilities inherent to the position, this can be more adequately detailed in a job profile.
- To whom he/she is subordinate and who he/she is subordinate to: establishes a hierarchical relationship between bosses and subordinates, which may already be quite obvious just by looking at the hierarchical structure in an organization chart, but the functional relationships cannot always be seen in this chart, therefore, these aspects should be detailed grouped in relation to the hierarchical dependence, which should only be listed, but in the functional, it should be detailed.

This step will lead to the analysis of the staffing of each Basic and Production Unit, as well as the design of the functions and powers at each organizational level.

Tools to be used: group dynamics, professiograms, load and capacity balance.

Responsible: deputy director of human resources

Time required: 30 days

Step 8: Design of the organizational structure

Description: The integration of the organizational structure to be designed in the entity with a focus on its work processes must have the ability to answer the following questions: is it essential to change the structure based on the redesign of the work processes?; what are the advantages of designing a new structure with a focus on its work processes?; what are the advantages and disadvantages of the current structure to take into account in the new design?; how to achieve the integration of the structure to be designed with its work processes?; on what basis should the processes and sub-processes be grouped in the organization; and what is the basis on which processes and sub-processes should be grouped in the organization?

In addition, two other questions must be answered: how should the units be grouped and how should the size of each unit be? Through the process of grouping into units, the formal authority system is established, that is, the hierarchy of the organization is built.

The individual items are grouped into a set of units, these are, in turn, congregated into larger groups or units; etc., until the entire organization is contained in the final group.

It will also be necessary to establish the levels of coordination and communication between the different departments or areas that make up the entity, so that information flows effectively in order to facilitate the decision-making process.

The organizational chart resulting from the process-oriented organizational design does not have to deny the functional structure, but it is proposed that the processes gradually become the structural basis of the organization so that there is no divorce between the work style and the management style, avoiding violent changes in the organization that could lead to the non-fulfillment of its objectives and affect the work environment.

Tools to be used: group work sessions, brainstorming, documentary analysis.

Responsible: director

Time required: 10 days

Stage IV: Evaluation of the structure

Objective: To evaluate the effectiveness of the structure in order to make the necessary adjustments.

Step 9: Evaluation of the effectiveness of the structure

Description: The structure designed must be evaluated annually, taking into account the entity's strategic planning, the environment, the enterprise's general policies, the identification of new processes, technology, etc.; based on the improvement of the production of goods and services to society.

The following indicators are proposed to evaluate the effectiveness of the structure:

- Sales revenue
- Production costs
- Net income
- Customer satisfaction level
- Level of employee competencies
- Number of new competitors
- Technological advances
- Decision-making capacity
- Level of institutional communication
- Level of cooperation between work areas
- Capacity to adjust strategy in response to changes in the business environment

Tools to be used: surveys, group dynamics.

Responsible: deputy director

Time required: 30 days

Step 10: Make adjustments to the design of the structure

Description: This step includes the execution of adjustments to the design of the structure, if necessary, taking as reference the results of the evaluation of its effectiveness, collected in the previous step.

Taking into account one of the principles established in the procedure, the organizational design and its implementation must be consistent with the entity's strategy. For this reason, to the extent that the enterprise's strategic planning changes, it will be necessary to analyze whether the current structure is consistent with it; if not, adjustments will have to be made to match what is to be achieved with the structure and resources needed to achieve it.

Tools to be used: group dynamics, checklists, surveys.

Responsible: deputy director

Time required: 21 days

From the bibliographic consultation carried out, it was possible to conclude that it is convenient to integrate the process approach to organizational design, since it points to the necessary orientation of enterprises towards the satisfaction of customer needs, while process management has a significant influence on the final quality of the product or service.

The analysis of technologies for organizational design made it possible to determine the existence of a set of stages, steps, contributions and limitations that served as a basis for outlining a procedure adapted to Provincial Food Industry Enterprise of Pinar del Río.

With the procedure for the organizational design based on processes for the Provincial Food Industry Enterprise, it facilitates the adaptation of the entity to the changes of the environment, it contributes to increase the competitiveness of the products, as well as the innovation in new products, since it favors the incorporation of new technologies. At the same time, it allows greater flexibility and adaptability of managers and workers and increases their commitment to the activity they perform.

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Conflict of interest

Authors declare that they have no conflicts of interest.

Authors' contribution

Oviamna Martínez Barreras y Tania Vargas Fernández designed the study, analyzed the data and prepared the draft.

Oviamna Martínez Barreras was involved in data collection, analysis and interpretation.

All the authors reviewed the writing of the manuscript and approve the version finally submitted.



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