COMPUTERIZED COMPUTER COMMUNICATION SYSTEMS OF THE BALANCED SCORECARD IN EDUCATIONAL MANAGEMENT

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Abstract
The present work allows the establishment of contingency measures to deal with eventualities of the economic environment, generating liquidity and solvency in its financial operations through the rigorous fulfillment of the objectives set forth by the Balanced Scorecard, in such a way that both the financial indicators as well as the Proposed to measure the management of the company are the most favorable and demonstrate the growth of it.
This study generates analytical tools that allow rigorous fulfillment of the objectives of the Balanced Scorecard in the perspective of the clients, in order to give the service an added value through the activities proposed in the planning, allowing to reach an index Of customer satisfaction according to the quality of the service offered.
The updating of the official documents according to the planning established in the Integral Scorecard constitute a technical support tool within the company and at the same time allows to optimize the management and organizational performance in general and each One of its members.
It will also provide guidance and guidance to establish an annual training plan as well as the motivators that will enable the company's staff to obtain the professional incentives necessary to preserve the entity's human capital and thus to obtain quality human talent and to maintain The customer satisfied with the service offered.

Key Words: *Management Model, Full Scorecard, Business Efficiency, Management Control.*

1. INTRODUCTION

This research aims to generate strategies for the correct design of "PProcesses Management Model", based on the methodology of The Balanced Scorecard (BSC), which allow to provide a tool to improve the operational efficiency of the business sector from the four perspectives offered by the BSC.

Companiesgenerate values such as confidentiality, punctuality, precision, efficiency, organization and effectiveness; their raison d'être is the provision of services with multidisciplinary groups within a strongly consolidated organic structure that are with labor skills potentiated to the maximum, the main services offered will be the best result to generate technical tools when applying efficient and effective management models

For the development of the work, the situational analysis was carried out based on indicators provided by secondary sources and information raised within the research proposal as well as the analysis of past events that have repercussions within the four perspectives of the balanced scorecard.

The product of the development of the work is the balanced scorecard, which is a management tool of great importance, since in its content strategic objectives are formed based on the problems and opportunities prioritized in order to establish contingency measures in the short or long term.

2. DEVELOPMENT

Management Model

General

Cassini, (2008), referring to Management Models, explains:

The term model comes from the Italian concept of modello. Theword can be used in different areas and with different meanings. Applying to the field of social sciences, a model refers to the archetype that, due to its ideal characteristics, is susceptible to imitation or reproduction. Also to the theoretical scheme of a system or a complex reality.

The concept of management, on the other hand, comes from the Latin gestío and refers to the action and effect of managing or administering. It is, therefore, the concentration of diligences leading to the achievement of a business or any desire. The notion also implies actions to govern, direct, order, arrange to organize. (p. 45).

Pacheco, Castañeda, & Caicedo, (2004), mentions:

The management is based on a reticular model composed of multiple interacting elements. As a set of management practices, management establishes forms of regulation allowing the coexistence of different projects, mediating between the environment and the interior of the organization. As a system of representation, management refers to an organizational culture, based on shared and accepted principles and values. (p. 7).

(Kagono , 1994), refers to management in relation to the organization as:

"Its strategies, technology, structure, organizational processes, as well as the personal predispositions of its members, so that they are interrelated and interdependent." (p. 19)

Management Principles

- Transform the vision and mission together with the values and policies into results sought by shareholders and customers, with effective processes and motivated and prepared human resources.
- Communicate and link strategic objectives and indicators.
- Plan and establish strategic objectives aligned with strategic initiatives. These objectives and initiatives must generate value for the organization which creates value for the external customer and value for the internal customer.
- Promoting strategic training implies that with communication, rewards and creating strategic awareness, everyone in the organization works on the strategy.

Types of Management Model

a) The improvement cycle

Deming, (1950), proposes:

A model of four stages that make up a cycle which are described below.

- Plan (Plan): Activities susceptible to improvement are sought and the objectives to be achieved are established in order to seek possible improvements.

- Do: Changes are made to implement the proposed improvement, it is generally advisable to do a pilot test to test the operation before making the changes on a large scale.

- Control or Check: Once the improvement is implemented, a trial period is left to verify its correct operation. If the improvement does not meet the initial expectations, it will have to be modified to adjust it to the expected objectives.

- Act: Finally, once the trial period is over, the results must be studied and compared with the operation of the activities before the improvement has been implemented. If the results are satisfactory, the improvement will be implemented definitively, and if they are not, it will be necessary to decide whether to make changes to adjust the results or whether to discard it. (p. 45)

b) Traditional or Taylorist model of management

According to the source, he comments:(Pacheco, Castañeda, & Caicedo, 2004)

That was the management model that accompanied the period of greatest industrial growth which consists of the following principles:

- **Stability**
  The operational knowledge that allows us to be efficient is stable over time. Therefore, it is not essential to constantly ask the question: What is efficiency today?, on the basis of this principle of stability are based the forms of management in the rear-view mirror, always based on experiences of the past.

- **Perfect information**
  The subject of this model is a rational actor, who has access to information. This perfect information not only accounts for the environment, but also the technical knowledge necessary to move the company forward. He is a perfectly informed rational actor.

- **Productive efficiency**
  It is identified with the minimization of costs based on the following equation:
  $$U = V - C$$
  U= Utility
  V= Sales
  C= Costs

  The optimum of rationality is to supply a maximum by consuming a minimum, that is, the ability to maximize V-C.

- **The overall cost equals the cost of a dominant factor of production**
  The fourth principle of the Taylorist model is to control the cost of a strategic factor of production: usually labor, it can also be energy or raw material. With this principle the management is further reduced. (pp. 16-18)

c) The Baldrige model

Baldrige, M., (1996), states:

The model is elaborated around 11 values that represent its foundation, it is used for self-evaluation, it has seven great criteria that are mentioned below:

- **Leadership:** The concept of Leadership refers to the extent to which Senior Management establishes and communicates to staff strategies and business management and seeks opportunities. It includes communicating and reinforcing institutional values, expectations of results, and a focus on learning and innovation.

- **Strategic Planning: How the** organization raises the strategic direction of the business and how this determines key action projects, as well as the implementation of these plans and the control of their development and results.

- **Customer Focus:** As the organization knows the demands and expectations of its customers and its market. Also, in what proportion all, but absolutely all the processes of the company, are focused on providing customer satisfaction.

- **Information and Analysis:** Examines management, effective employment, data analysis, and information that supports key organizational processes and organizational performance.

- **Human Resource Focus: They examine how the organization** allows its workforce to develop its potential and how the human resource is aligned with the objectives of the organization.

- **Administrative Process:** Examines aspects such as key factors of production, delivery and support processes. How are these processes designed, managed, and improved?

- **Business Results:** Examines the performance of the organization and the improvement of its key business areas: customer satisfaction, financial performance and market performance, human resources, supplier and operational performance. The category also examines how the organization functions relative to its competitors. (p.126)

  Rampersad, (2004) explains the management of these two points of view which are mentioned below:

  Quality Management

  It is a form of disciplined action within the entire company in which continuous improvement is the main idea, where the identification of problems, the determination of their origin, the implementation of actions and the verification of the effectiveness of these actions and the verification of the effectiveness of these actions are achieved in a routine, systematic and consistent way, as well as the review of business processes. Quality Management puts all the emphasis on mobilizing the entire company to satisfy the customer continuously.

  Management by Competencies

  It encompasses the process of continuous development of human potential within the company. The goal of Competency Management is based on carrying out outstanding performances continuously within a developed and motivated environment. It emphasizes the maximum development of employees, as well as an optimal use of their potentials to achieve corporate goals, includes the development of work-related skills, that is, a set of information, capabilities, experiences, skills, attitudes and norms, as well as values, visions and principles that is based on the professional performance of the work. (p. 12)

  Management Control

  According to Pacheco, Castañeda, & Caicedo, (2004) management control is carried out under the following approaches.

- **Management control as a finance-centric information system**

  Specialized information system for senior management that shows, through numerical indicators, the performance of a company against critical variables, in order to highlight weaknesses and facilitate the adoption of corrective measures.

- **System for setting quantitative goals and evaluating executive performance**
  In some cases, numerical indicators are used to set performance goals, that is, the expected value for each indicator becomes a benchmark for evaluating the results achieved by executives.

- **Balance social**
  It is an information system based on numerical indicators on the social aspects of the company, especially on the attitudes of workers and management methods, in order to create a work environment characterized by knowledge, freedom and criticism and facilitate the adaptation of the company to the socio-political conditions of the environment.

- **Management control as a systemof continuous improvement**
  Approached in this way, management control is a change program that focuses efforts and resources on improving productivity and process quality through the use of numerical indicators and the creation of teams that involve the majority of workers.

- **Management control as a comprehensive evaluation system**
  Through a scorecard that takes into account the different dimensions of management expressed in numerical indicators, the overall performance of the company and each dimension in particular is periodically evaluated. The value achieved by each indicator is judged with reference to a standard, historical performance and other outstanding companies in the sector. (pp. 44-45)

Functions of management control

Pacheco, Castañeda, & Caicedo, (2004**),** proposes the following functions of management control:

- **Facilitate organizational learning.**
  It is a means to produce knowledge from systematic reflection on action, to adjust future action according to the results of experience.

- **Create institutional memory.**
  The records of the results of each period allow us to observe the evolution of each variable over a period that may be long enough to analyze trends.

- **Facilitate permanent diagnosis.**
  Annual management control reports enable a permanent assessment of critical success factors.

- **Improve planning and scheduling.**
  Management control provides the necessary feedback so that the planning assumptions are adjusted to the results obtained. In this way, future action will have incorporated the knowledge gained from experience.

- **Measure improvement.**
  Due to the historical nature of management control, which shows the evolution of the values of a variable, and because it isolates or separates the improvement goals, it gives rise to the ability of the organization to change in search of superior performance.

- **Enable decentralization.**
  When there is a lack of a systematic flow of information that objectively expresses the performance of the organization, control becomes independent of the supervision that managers exercise personally and directly over daily operations.

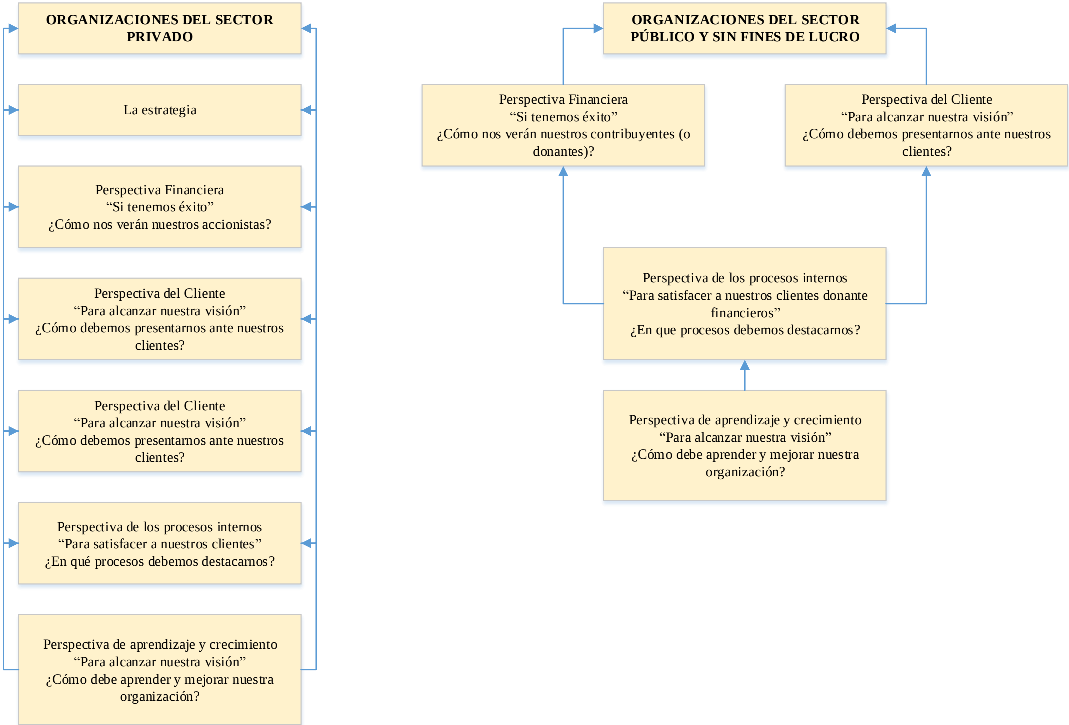
- **Evaluate executive performance.**
  The management control report provides an objective basis for measuring the performance of staff at all levels, comparing it with the benchmarks established above. The evaluation of each staff member can be incorporated as an additional merit rating factor or can replace this system completely, and with obvious advantages.

- **Improve flexibility.**
  Management control has been considered as an immediate alarm system because it informs those responsible for corrective action whenever an exceptional situation occurs. By drawing executives' attention to facts that are out of control, they contribute to improving the organization's speed of response.

- **Define levels of demand.**
  One of the functions of management is to determine at what pace work is expected, to formulate to all workers the degree of effort expected of them. This decision can be made with better elements of judgment based on the management control reports. Levels of demand have a significant impact on worker morale: there is nothing that hinders effective performance more than a poor view of what performance levels should be. (51-53)

Strategy Map

Graphic N° 1: Strategy maps: the simple model of value creation



Fuente: Kaplan & Norton, (2004)
Prepared by: The Authors

Concept

It is a graphic representation in which the managers of a company can visualize their strategic indicators not as performance indicators in four independent perspectives, but as a series of cause-effect relationships between objectives of the four perspectives of the Balanced Scorecard so we realize that the strategy map is a visual representation of the cause-effect relationships between the components of the strategy of an organization. Kaplan & Norton (2004)

Origin

The strategy map model evolved from the simple four-perspective Balanced Scorecard model. The strategy map adds a second layer of detail that illustrates the temporal dynamics of a strategy; It also adds a level of granularity that improves clarity and focus.
The strategy map model also provides a normative checklist of the components and interrelationships of a strategy. If a strategy is missing an element in the strategy map model, it will likely be a flawed strategy. For example, we often find that organizations have no connection between internal process indicators and customer value proposition, no innovation goals, and vague goals regarding employee skills and motivation, and the role of information technology. Kaplan & Norton, (2004)

Principles of the strategy map

- **Strategy balances contradictory forces**
  Investing in intangible assets with a view to long-term revenue growth typically conflicts with reducing costs for good short-term financial performance. The dominant objective in private sector organizations is to create sustainable growth of shareholder value. This implies a commitment to the long term. At the same time, the organization must show better short-term results, which can always be achieved by sacrificing long-term investments, often invisibly. Thus the starting point for describing the strategy is to balance and enunciate the short-term financial objective of reducing costs and improving productivity with the long-term objective of profitable revenue growth.

- **The strategy is based on a differentiated value proposition for the customer**
  Satisfying customers is the source of sustainable value creation. Strategy requires a clear enunciation of the target customer segments and the value proposition required to satisfy them.

- **Value is created through internal business processes**
  The financial and customer perspective in the strategy maps and Balanced Scorecards describe the results, that is, what the organization expects to achieve, increases in shareholder value through revenue growth and productivity improvements, increases in the share of customer spending in the company through acquisition, satisfaction, retention, loyalty and growth of those customers.

  The author classifies internal processes into four groups:

  Operations Management: Produce and deliver products and services to customers.

  Customer management: Establish and enhance relationships with customers.

  Innovation: Develop new products, services, processes and relationships.

  Regulatory and social processes: Comply with regulations and social expectations and build stronger communities.

- **The strategy consists of simultaneous and complementary themes**
  Each group of internal processes brings benefits at different points in time, improvements in operational processes, usually bring short-term results through cost savings and increased quality.

- **Strategic alignment determines the value of intangible assets**
  The fourth perspective of the Balanced Scorecard's strategy map, learning and growth, describes the organization's intangible assets and the role they play in strategy. Intangible assets can be classified into three categories:

  Human capital: skills, competencies and knowledge of employees.

Information capital: databases, information systems, networks and technological infrastructure.

Organizational capital: culture, leadership, employee alignment, teamwork and knowledge management.

The Balanced Scorecard

General

The Balanced Scorecard complements the financial indicators of past performance with measures of the drivers of future action. The objectives and indicators of the Scorecard derive from the vision and strategy of an organization; And they contemplate the performance of the organization from four perspectives: financial, that of the client, that of the internal process and that of training and growth. These four perspectives provide the necessary structure for the Balanced Scorecard.
The Balanced Scorecard expands the set of business unit objectives beyond financial indicators. A company's executives can now measure how their business units create value for their present and future customers, and how they must leverage internal capabilities and investments in people, systems and procedures that are necessary to improve their future performance. The Balanced Scorecard captures critical value creation activities created by expert and motivated employees of the organization. While continuing to retain an interest in short-term action through the financial perspective, the Balanced Scorecard clearly reveals the value drivers for long-term superior financial and competitive performance.

Concepts

According to , the balanced scorecard:(R. Kaplan D. Norton, , 2000)

"It is a management tool that goes from the most general to the most specific principles and is used to operationalize the strategic vision of a company in all areas of it."

According to "It is a revolutionary tool for mobilizing people toward the full fulfillment of the mission by channeling the energies, skills, and specific knowledge of the people in the organization toward achieving long-term goals and strategies."(R. Kaplan D. Norton, , 2000)

Importance

The importance of the balanced scorecard lies in the fact that it is based on several perspectives relating them simultaneously in the planning process in such a way that it allows to establish a cause and effect thread allowing in this way to take corrective actions applied at each level, in addition to the management indicators that allow to measure the results that are obtained in the execution process and in this way raise the respective adjustments of being necessary.
The balanced scorecard is a global tool of the entire organization that in general terms strengthens the administrative structure in general as well as the technological, information and cultural aspects leading to a direction demanded by the processes, and allowing them to be aligned with the expectations of the clients which at the macro level leads to the achievement of the objectives.

In conclusion, it can be said that the balanced scorecard is important because:

1. It is a method of measuring a company's activities in terms of its vision and strategy.

2. It provides managers with a global view of business performance, in terms of its strengths, weaknesses and the fulfillment of its strategic objectives.

3. It facilitates the taking of corrective actions that lead to a continuous improvement of the organization.

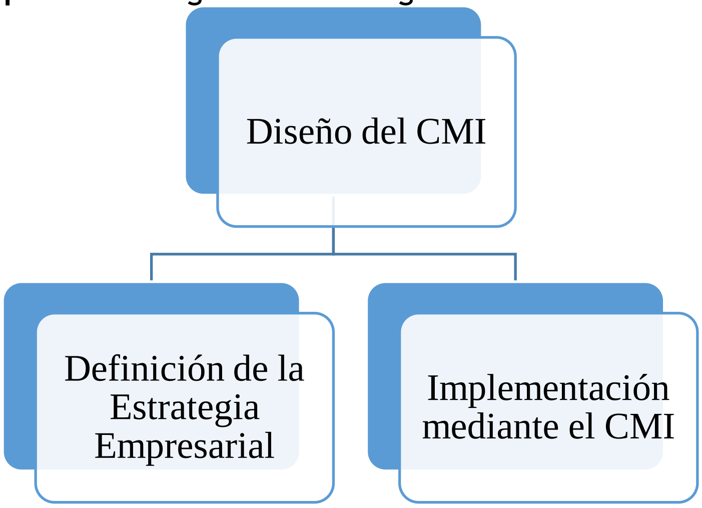
4. It allows to measure the results in time and resources since they are previously defined by the strategic plan.

5. Contributes to the formulation of initiatives, solutions, contingencies, etc., that finally allow to meet the strategic objectives.

Design of the Balanced Scorecard

For the design of the Balanced Scorecard, two stages are taken into consideration:

Graph N° 2: Stages of the Design of the Balanced Scorecard



Fuente: Kaplan & Norton, (2000)
Prepared by: The Authors

Definition of the Business Strategy

- Conception of the mission, vision and values.
- Internal and external analysis: specific global environment.
- Internal diagnosis of the organization.
- SWOT-DAFO-FODA Matrix
- Evaluation of strategic alternatives and selection

Implementation through the Balanced Scorecard

- Derivation of strategic objectives in the different strategic maps.
- Dependency relationships (cause-effect): design of the strategy map.
- Selection of identification of indicators of the scorecard.

- Identification of strategic actions and initiatives.
- Integration of the Balanced Scorecard in the planning, budgeting and reporting processes.
- Monitoring and control.

Mission

According to Kotler & Armstrong, (2004), the mission of a company is defined as the general purpose or raison d'être of the company or organization that states what customers it serves, what needs it satisfies, what types of products it offers and in general, what are the limits of its activities; therefore, it is what all those who make up the company or organization feel motivated to perform in the present and future to make reality The vision of the company.

Vision

The vision is constructed as a statement that makes visible the development prospects of the company in a given territory with a projection to the future. The vision incorporates great challenges and challenges to be achieved with an integrative character; It must therefore be ambitious and broad enough to frame a series of actions and not a detail of isolated activities. SENPLADES, (2015)

Values

According to the criterion of , values are the internal psychological concepts of a person. It expresses that organizations as such do not have values, but being made up of people their cultures are expressions of existing values and are shared by people in different ways in the organization.(Hultman, 2005)

The Balanced Scorecard as a Management System

Many companies already have performance measurement systems that incorporate both financial and non-financial indicators. What is new that requires a balanced set of indicators? Although virtually all organizations employ financial and non-financial indicators, many use their non-financial indicators for local, customer-facing and line-critical improvements in their operations. Senior managers use total financial indicators, as if these measures could adequately summarize the results of operations performed by their mid- and lower-level employees. These organizations are using their financial and non-financial performance indicators for feedback and tactical control of their short-term operations.

The Balanced Scorecard emphasizes that financial and non-financial indicators are part of the information system for employees at all levels of the organization. Frontline employees need to understand the financial implications of their decisions and actions; Senior executives must understand the drivers of long-term financial success. (Kaplan & Norton, 2000, pp. 20-23)

The Balanced Scorecard as a strategic management system

The Balanced Scorecard is more than a tactical or operational measurement system. Innovative companies are using it as a strategic management system, to manage their long-term strategy under the measurement approach:

- Classify and Translate the Vision and Strategy.
- Communicate and link strategic objectives and indicators.

- Plan, set goals and align strategic initiatives.

Clarifying and Translating the Strategic Vision

The Balanced Scorecard process begins when the senior management team gets to work translating their business unit's strategy into specific strategic objectives. To set financial goals, the team must think about whether they are going to put an emphasis on market growth and revenue or on generating cash flow.

Once customer and financial objectives have been established, the organization identifies objectives and indicators for its internal process. This identification represents one of the main innovations and benefits of the Balanced Scorecard approach. Traditional performance measurement systems, even those that use many non-financial indicators, focus on improving the cost, quality and time cycles of existing processes.

Communicate and link strategic objectives and indicators.

The strategic objectives and indicators of the Balanced Scorecard are communicated throughout an organization, through a company's internal newsletters, bulletin boards, videos and even electronically, communication serves to indicate to all employees the critical objectives that must be achieved if the organization's strategy is to succeed.

At the end of the communication and engagement process, everyone in the organization should understand the long-term goals of the business unit, as well as the strategy for achieving these goals. Individuals have formulated local actions that will contribute to the achievement of the objectives of the business unit. And all the efforts and initiatives of the organization will be aligned with the necessary change processes.

Plan, set goals and align strategic initiatives.

The Balanced Scorecard makes its biggest impact when deployed to drive organizational change. Senior executives must set targets for Scorecard indicators, 3 to 5 years ahead, which, if achieved, will transform the company. The objectives must represent a discontinuity in the performance of the business unit. If the business unit were a publicly traded company, achieving the target should result in the share price rising twice or more.

Increase feedback and strategic training

The final management process inserts the Balanced Scorecard into a strategic training structure. We consider this process to be the most innovative and most important aspect of the entire Scorecard management process. This process provides the capacity and aptitude for organizational training at the executive level. Today, managers do not have a procedure in organizations to receive feedback on their strategy and to check the hypotheses on which the strategy is based. The balanced scorecard allows them to monitor or adjust the implementation of their strategies and, if necessary, make fundamental changes to the strategy itself.

The Personal Balanced Scorecard

It covers personal vision and mission, key roles, critical success factors, objectives, performance measures, goals and improvement actions. It includes the continuous improvement of one's skills and behavior, based on personal well-being and social success. At this point personal vision and mission and key roles are called personal ambition. Self-management, self-development and self-coaching are the most important part of CMIP, and are geared towards both managers and employees across the company.

The Corporate Balanced Scorecard

It covers the corporate vision and mission, core values, critical success factors, objectives, performance measures, goals and improvement actions. At this point the corporate mission and vision and core values are called corporate ambition. This concept includes the continuous improvement and control of business processes and the development of strategies based on obtaining competitive advantages for the company. (Rampersad, 2004, p. 10)

Table N° 1: Differences and similarities between the balanced and corporate scorecard

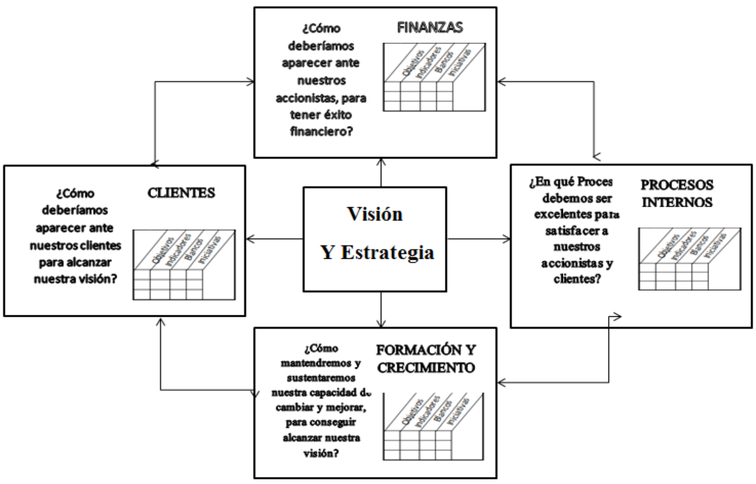
PERSONAL BALANCED SCORECARD	*CORPORATE BALANCED SCORECARD*
Differences	
Personal vision and mission *Individual continuous improvement* *Personal ambition*	Corporate Vision and Mission Continuous business improvement Corporate ambition
Similarities	
Critical Success Factors *Objectives* *Action measures* *Goals and improvement actions*	

Prepared by: The Authors

Balanced Scorecard Perspectives

Kaplan & Norton, (2000), propose four perspectives:

Figure 3: Balanced Scorecard Outlook



Source: Robert S. Kaplan and David P. Norton. The balanced scorecard. 2000

a) **Financial Perspective**

The Balanced Scorecard retains the financial perspective, as financial indicators are valuable for summarizing the easily measurable economic consequences of actions that have already been taken. Financial performance measures indicate whether a company's strategy, implementation and execution are contributing to the improvement of the minimum acceptable. Financial targets tend to relate to profitability, measured, for example, by operating income, returns on capital employed, or more recently by economic value added.

How to link financial objectives with business unit strategy

Kaplan & Norton, (2000); propose:

Financial goals can differ significantly at each stage of the business lifecycle. Business strategy theory suggests several different strategies, which business units can follow, ranging from aggressive market share growth to consolidation, exit and liquidation, for which three phases have been identified:

- Growth
- Support
- Harvest (p. 70)

For each of the strategies proposed, there are also three financial themes that drive the business strategy, which are: Revenue growth and diversification, cost reduction and improvement of productivity and asset utilization as an investment strategy; For a better understanding of this topic they propose the following indicators, based on the relationships of the components mentioned:(Kaplan & Norton , 2000)

Table N° 2: Indicators of strategic financial themes

		TEMAS ESTRATEGICOS		
		CRECIMIENTO Y DIVERSIFICACION DE LOS INGRESOS	**REDUCCIÓN DE LOS COSTES/MEJORA DE LA PRODUCTIVIDAD**	**UTILIZACIÓN DE LOS ACTIVOS**
ESTRATEGIA DE LA UNIDAD DE NEGOCIO	**CRECIMIENTO**	Tasa de crecimiento de las ventas por segmento	Ingresos empleados	Inversiones (porcentaje de ventas) I+D (porcentaje de ventas)
		Porcentaje de los ingresos procedentes de nuevos productos, servicios y clientes		
	SOSTENIMIENTO	Cuota de cuentas y clientes seleccionados	Coste frente a competidores	Ratios de capital circulante (ciclo de maduración)
		Venta cruzada	Tasas de reducción de costes	ROCE por categorías de activos clave
		Porcentaje de ingresos de nuevas aplicaciones	Gastos indirectos (porcentaje de ventas)	Tasas de utilización de los activos
		Rentabilidad de la línea de producto y clientes		
	RECOLECCIÓN	Rentabilidad de la línea de producto y clientes	Costes por unidad (por unidad de output, por transacción)	Periodo de recuperación (Pay-back) Throughput
		Porcentaje de clientes no rentables		

Fountain: (Kaplan & Norton , 2000)

Prepared by: The Authors

Revenue growth and diversification

For a correct evaluation of the growth and diversification of incomes, the following elements must be taken into consideration:

Chart 44: Income growth and diversification

Nuevos productos	• Énfasis en la expansión de las lineas de productos existentes • Porcentaje de ingresos procedentes de nuevos productos y servicios.
Nuevas aplicaciones	• Porcentaje de las ventas en base a las nuevas aplicaciones. • Hacer llegar los productos a nuevos mercados
Nuevas relaciones	• Cooperación entre las unidades de negocio para el desarrollo de nuevos productos o la venta a clientes de los mismos.
Nueva variedad de productos y servicios	• Aumentar sus ingresos cambiando su variedad de productos, dejando a un lado la oferta a un coste más bajo que el de la competecia.
Nueva estrategia de precios	• Tiene que ver fundamentalmente con incrementar la rentabilidad del negocio en base a un incremento en los precios especialmente en los clientes de alto grado de exigencia.

Fountain:(Kaplan & Norton , 2000)
Prepared by: The Authors

b) Customer Perspective

Identify the customer and market segments where you are going to compete. Measure value propositions by identifying key attributes. Evaluates customer needs, such as satisfaction, loyalty, acquisition and profitability in order to generate a business relationship that seeks to align products and services with their preferences. Translates the strategy and vision into objectives that define the processes of marketing, operations, logistics, products and services, emphasizing the image that will be presented by the entity to the market. The customer perspective allows companies to match their key customer indicators: satisfaction, loyalty, retention, acquisition and profitability with selected customer and market segments.

- **Market segmentation**

Kaplan & Norton, (2000) refer to market segmentation as:

"A strategy formulation process that uses in-depth market research should reveal the different market or customer segments and their preferences in terms of aspects such as price, quality, functionality, image, prestige, relationships and service." (p. 90)

Through market segmentation, the company can define the needs of each of its customers, both fixed and potential, in order to convert these needs into objectives that will subsequently represent benefits for the company.

- **Customer Core Indicator Group**

Table N° 3: Central indicators of the customer perspective.

MARKET SHARE	It reflects the proportion of sales, in a given market (in terms of number of customers, money spent or volume of units sold), made by a business unit.
CUSTOMER GROWTH	It measures, in absolute or relative terms, the rate at which the business unit attracts or gains new customers or business.
CUSTOMER RETENTION	It tracks, in relative or absolute terms, the rate at which the business unit retains or maintains existing relationships with its customers.
CUSTOMER SATISFACTION	Evaluates the level of customer satisfaction according to specific performance criteria within the added value proposition.
CUSTOMER PROFITABILITY	It measures the net profit of a customer or segment, after discounting the only expenses necessary to keep that customer.

Fountain: (Kaplan & Norton , 2000)

- **The indicator of value propositions to customers**

Attributes of products and services
They have to do with the functionality of the product, its price and its quality that will allow to satisfy the identified needs of the clients.

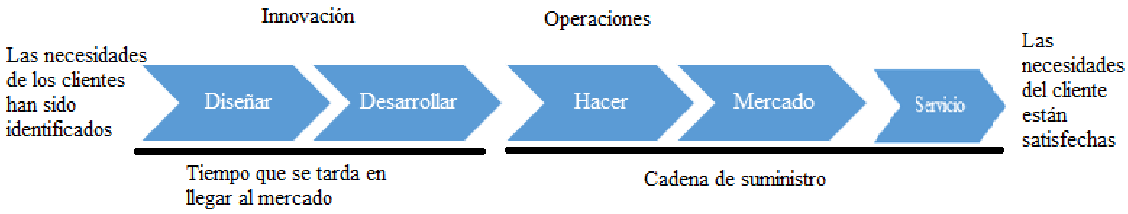
The relationship with customers
It has to do with the feeling that the client has regarding the acquisition he is making in the business.

c) Internal process perspective
In the perspective of internal process, executives identify the critical internal processes in which the organization must be excellent. These processes enable the business unit to:

- Deliver the value propositions that will attract and retain customers from selected market segments.
- Meet the expectations of excellent financial returns of shareholders.

The primary difference between the Balanced Scorecard model and traditional models is that the Balanced Scorecard approach tends to identify entirely new processes, in which the organization must be excellent at meeting financial and customer objectives, while traditional models focus on improving only existing processes.

Graph No. 5: Internal Process Value Chain Perspective



Fuente: Kaplan & Norton , (2000)
Prepared by: The Authors

The objectives of the Internal Process Balanced Scorecard will highlight some processes, several of which may not currently be taking place, and which are more critical for an organization's strategy to succeed.

d) The perspective of training and growth

It identifies the infrastructure that the company must build to create long-term improvement and growth.

The formation and growth of an organization comes from three main sources: the people, systems, and procedures of the organization. The financial, customer and internal process objectives of the Balanced Scorecard will reveal large gaps between the existing capabilities of people, systems and procedures; At the same time, they will show what it will take to achieve a breakthrough performance.

In short, the Balanced Scorecard translates vision and strategy into objectives and indicators, through a balanced set of perspectives. The Balanced Scorecard includes indicators of desired outcomes as well as processes that will drive desired outcomes for the future. (pp. 46-50)

Characteristics of the Balanced Scorecard

The main features of the Balanced Scorecard can be mentioned below:

- It includes indicators on external variables of the organization.
- Balance between performance indicators and inducers that drive future action.
- It emphasizes the achievement of non-financial objectives and maintains traditional financial indicators.
- Objectives and indicators are derived from the organization's vision and strategy.
- It includes indicators for critical processes of the company (Innovation, Training and Growth).
- Both financial and non-financial indicators are part of the information system.

3. DISCUSSION

According to the above, the characteristics of each organization adopt a very different strategic model, because they are responsible for designing their own model according to the perspectives and variables that are presented, as well as the

direction and dynamics of the environment in which they work. Gonzalez, (2001). Faced with this statement by González, we allow ourselves to add values and sequence of analysis that will become the axis of development in business management.
Through field research, primary information was collected, carried out within the facilities of several companies, in order to make a diagnosis through the application of research techniques with direct observation and interview, was applied specifically in the diagnostic phase as explained above.
Through documentary research it is intended to carry out the analysis of file s that rest in the s entityis to determine shortcomings and critical nodes in which to intervene, it was also used in the bibliographic consultation described in the theoretical framework that bases this research, both in books and publications which has allowed to establish a thorough analysis to reach a conclusion, the main book that has served for the theoretical foundation is Kaplan Robert S. and Norton David P., who were the main authors of the Balanced Scorecard.
The survey was applied as a diagnosis to show the problems in the s s companywhose results will serve to generate processes in the design of a management model.
In addition, theinterview was applied in the preliminary visit to the company, which was carried out mainly to establish a relationship with the directors of the company and to inform them of the nature and scope of the investigation in order to provide the facilities required for that purpose.
For the purposes of the application of the aforementioned research techniques, the survey and interview guide as well as the observation guide will have to be taken into account as instruments to be used.
The starting point for the application of CMI lies in observing the strategic points resulting from the SWOT, for its subsequent analysis framed in the four perspectives

Table N° 4: Strategic points detected in the SWOT

PROBLEMS	ANSWER
Declining revenues	Reduce costs and operational expenses without affecting the quality of service delivery
Tariff increase	Expand the variety in the offer of services according to the needs of the market.
Over-indebtedness due to lack of working capital	Control the liabilities of the company so that it does not affect its liquidity.
Uncertainty in the economic environment	Identify potential risks that affect the nature of the business
Lack of credit policies	Establish credit policies through the study of the credit capacity of the s s companies to allow easy access to the service of customers
Lack of advertising strategies that promote the services offered.	Create advertising strategies through the budget allocation that is required for the effect in order to publicize the services of thes companies and expand their client portfolio.

Lack of consumer incentives.	Offer incentives that motivate the acquisition of the service.
Lack of contact between managers and customers.	Maintain contact with the client in order to meet the needs that arise and measure their satisfaction.
Lack of continuous renewal of business strategies that promote the acquisition of the service.	Maintain an impeccable image before the consumer in order to capture their preference in relation to the provision of the service.
Failure to measure the level of customer satisfaction.	Create systems for measuring customer satisfaction.
Lack of a risk identification system.	Create a risk identification system.
Lack of socialization of internal documents.	Periodically update and socialize internal management documents.
Lack of evaluations of the staffof the s	Perform periodic evaluationsof the internal personnel of the company.
Lack of infrastructure in other market sectors	Establish branches in local or national strategic sectors.
Lack of training for the personnel of the s company.	Create an annual training plan.

Prepared by: The Authors

Synthesis of the Macro Environment

Table N° 5: Synthesis of the Macro Environment

CODE	INDICATOR	REFERENCE	BEHAVIOUR	IMPACT	ANSWER
			ECONOMIC FACTOR		
FE-001	Activity Level Index		Decrease	Revenue decline in the services sector	Increase the offer of services
FE-002	Gross Domestic Product		Increment	Increased demand	Increase in the company's supply capacity
FE-003	Inflation		Decrease	Low costs compared to previous periods	Lower the price of the service
FE-004	Inflation Services Sector		Decrease	Increased competition	Added Value in the service
FE-005	Family Basket		Increment	Decrease in sales	Offer of services accessible to the type of client

FE-006	Country Risk		Constant	Uncertainty in the economic environment	Contingency response plan
		LEGAL POLITICAL FACTOR			
FP-001	Political andLegal Instability		Increment	Changing legal framework	Risk contingency plan
		FACTOR SOCIO CULTURAL			
FS-001	Unemployment		Increment	Greater purchasing power of companies	Promotion and advertising
FS-002	Unified Basic Salary		Increment	Greater purchasing power of the population	Promotion and advertising
		TECHNOLOGICAL FACTOR			
FT-001	Technological Availability and Furniture		Increment	Greater capacity to provide the service	Promotion and advertising
		ENVIRONMENTAL FACTOR			
FA-001	Natural Disasters		On alert	Tax impositions	Tax Planning

Prepared by: The authors

Customer Analytics

Table N° 6: Customer analysis

CODE	INDICATOR	REFERENCE	BEHAVIOUR	IMPACT	ANSWER
		CLIENTS			
CL-001	Leads		Increment	Increased sales	Competitive prices.
CL-002	Captive Customers		Increment	Increased revenue.	Strategies to retain customers.
		SUPPLIERS			
PR-001	Suppliers		Permanent	Low costs	Availability of resources
PR-002	New services		Increment	Market growth.	Determine customer needs.
PR-003	Barriers to entry		Existing	Changing legal policies.	Continuous training.
		COMPETENCE			

CM-001	Prices		High	Greater reception of users.	Set competitive prices.
CM-002	Advertising		Nonexistent	Greater opportunity over the competition.	Increased advertising and propaganda.
CM-003	Customer Satisfaction		Present	Greater coverage of services	Innovate the service
CM-004	Customer recognition		Nonexistent	Competitive advantage	Formulate and publicize a company slogan.
CM-005	Innovation		Present	Competitive advantage over the competition.	Adopt new technologies
CM-006	Location		Present	It covers market in the province of Chimborazo and Tungurahua.	Publicize the services.

Prepared by: The authors

Elaboration of the Balanced Scorecard

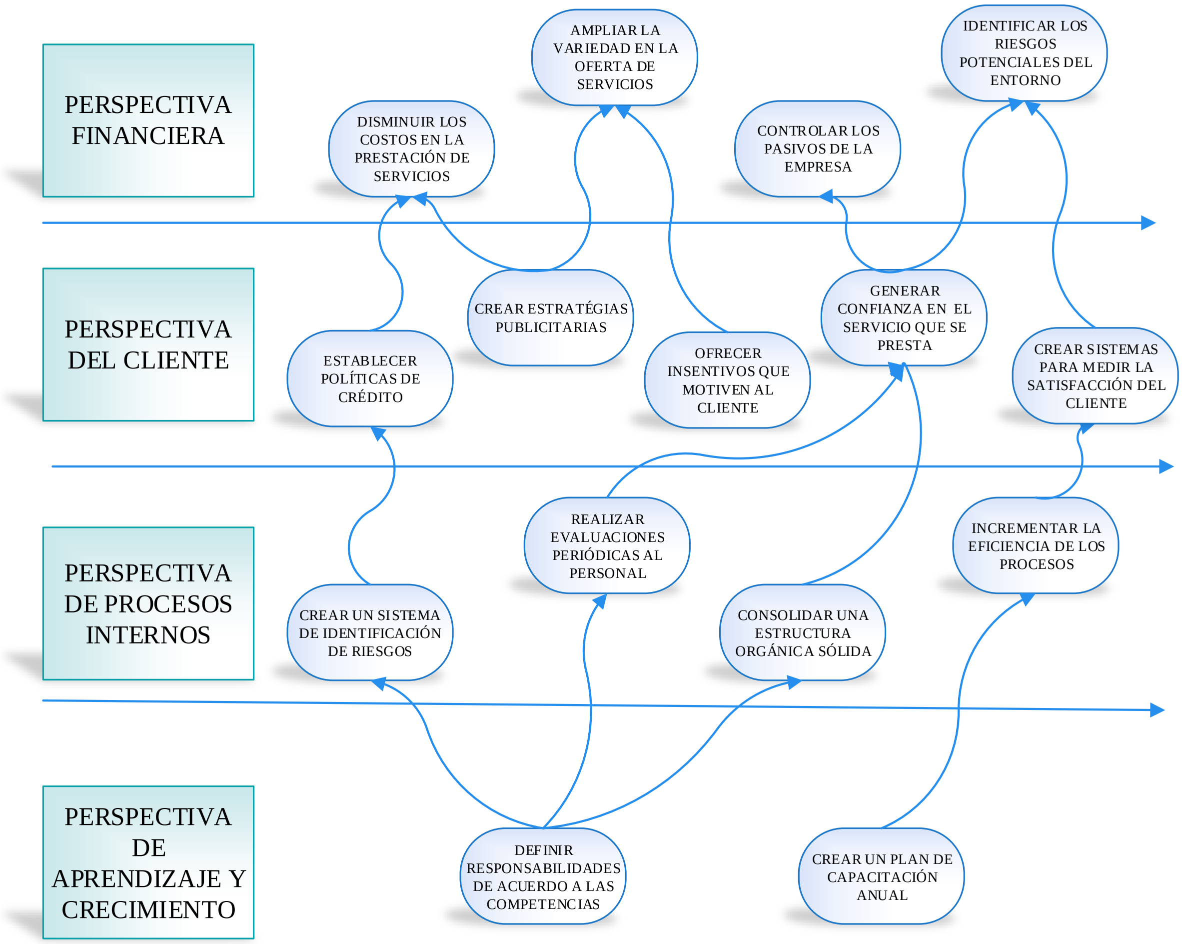
For the preparation of the Balanced Scorecard, we have tried to raise the elements that constitute the Strategic Plan in a structured and orderly manner in such a way that the members of the company are able to analyze this information and through it create added value in the services offered.

Strategic Direction

Strategy map

The purpose of the Strategic Map is to establish a comparative framework that allows to determine the possible conflicts that may arise between the strategic objectives outlined as follows:

Chart N° 6: Strategic Map



Prepared by: The Authors

- **Analysis of the mission, vision and business strategy**

The elements referred to in this point constitute the strategic basis of the organization, so their proper formulation is of paramount importance to achieve the institutional objectives.

Analysis of the Mission

The mission is the raison d'être of the company and constitutes the letter of introduction for the users of the service, a well-formulated mission impacts the market and provides confidence to the consumer since it emphasizes several relevant aspects.

Table N°7: Analysis of the mission

Components	Definition	Mission
Main economic activity	Services offered	The mission should provide that the organization seeks to be a leading company in the services offered
Raison d'être	Provide solutions	
Customer	According to the categorization of customers	

Products & Services	High quality service	with high quality producing solutions framed in processes of efficiency, effectiveness and social responsibility.
Values or philosophy	Social responsibility, honesty, kindness, etc.	
Principles	Quality, innovation, delivery.	

Prepared by: The Authors

Vision analysis

Table N° 8: Vision Analysis

Components	Definition	Vision
Nature of Business	Services offered	In 2022 we are a leading company in the provision of multidisciplinary services of high quality and added value, providing support to our clients for the correct decision making, positioned nationally in a responsible and competitive manner promoting constant innovation and teamwork.
What do we want to create?	High added value to meet customers' needs with high quality services.	
Where are we going?	Leading company in the services offered	
Time horizon	The time you want to position and assess the results	
Market positioning	Offer a quality service with high added value	
Scope of action	National	

Prepared by: The Authors

Formulation of Objectives and Initiatives

The Balanced Scorecard as a planning tool requires the formulation of long-term strategic objectives, which must be comprehensive and focus on the fulfillment of the institutional vision.

Financial Perspective

The strategic objectives are formulated by prioritizing strategic issues identified in the diagnostic phase, in the financial perspective it is sought in the first instance to increase the profits of the company and maintain adequate liquidity and solvency ratios.

Table 99: Prioritisation of strategic themes and formulation of objectives of the financial perspective

PRIORITIZATION OF STRATEGIC ISSUES	STRATEGIC OBJECTIVE	INITIATIVE	RESPONSIBLE
Declining revenues	Reduce costs and operational expenses without affecting the quality of service delivery	Reduce unnecessary costs and expenses.	**Financial Management**
Tariff increase	Expand the variety in the offer of services according to the needs of the market.	Increase the services offered by the company.	**Directorate-General**
Over-indebtedness due to lack of working capital.	Control the liabilities of the company so that it does not affect its liquidity.	Maintain high liquidity ratios.	**Financial Management**
Uncertainty in the economic environment	Identify potential risks that affect the nature of the business	Create a Response Plan for eventualities.	**Operations and project management**

Prepared by: The Authors

Customer Perspective

In the part of the diagnosis was raised relevant information about the customers of the company and those who could be part of the list of the same, in technical terms constitutes the target market of the same, with these data we proceed to determine the critical nodes and prioritize the strategic issues through which we proceed to formulate the strategic objectives from the perspective of the clients.

Table N° 10: Prioritization of strategic issues and formulation of objectives from the client's perspective

PRIORITIZATION OF STRATEGIC ISSUES	STRATEGIC OBJECTIVE	INITIATIVE	RESPONSIBLE
Lack of credit policies	Establish credit policies through the study of the credit capacity of the company to allow easy access to the service of customers	Create credit policies to venture into new market sectors.	**Financial Management**
Lack of advertising strategies that	Create advertising strategies through the budget	Periodically advertise to capture the	**Operations and Logistics Management**

promote the use of the service.	allocation that is required for this purpose in order to publicize the company's service and expand its client portfolio.	attention of the market and promote the service.	
Lack of consumer incentives.	Offer incentives that motivate the acquisition of the service.	Create a customer incentive plan.	**Financial Management**
Lack of contact between managers and customers.	Maintain contact with the client in order to meet the needs that arise and measure their satisfaction.	Create a customer visit plan.	**Operations and Logistics Management**
There is no continuous renewal of the company that promotes theacquisition of the service offered	Maintain an impeccable image before the consumer in order to capture their preference in relation to the provision of the service.	Renew the institutional image.	**Directorate-General**
Failure to measure the level of customer satisfaction.	Create systems for measuring customer satisfaction.	Determine the quality in the provision of the service by measuring customer satisfaction.	**Operations and Logistics Management**

Prepared by: The Authors

Internal process perspective

Internal processes are an important element in the management of the company since an adequate management of the internal processes of an institution is reflected in a quality service to the consumer, that is why it is necessary to direct the strategic objectives to increase efficiency and effectiveness in compliance with them.

Table N° 11: Prioritization of strategic themes and formulation of objectives from the perspective of internal processes

PRIORITIZATION OF STRATEGIC ISSUES	STRATEGIC OBJECTIVE	INITIATIVE	RESPONSIBLE
Lack of a risk identification system.	Create a risk identification system.	Create a risk identification system so that	**Operations and Projects Management**

		the company can respond to any eventuality immediately.	
Lack of socialization of internal documents.	Periodically update and socialize internal management documents.	Comply with regulations and statutes of the company through the collaboration of all company personnel.	**Directorate-General**
Lack of evaluations of company personnel	Perform periodic evaluations of the company's internal staff.	Evaluate the performance of the company's personnel to measure the effectiveness of the service.	**Directorate-General**

Prepared by: The Authors

Learning and growth perspective

Table N° 12: Prioritization of strategic themes and formulation of objectives of the learning and growth perspective

PRIORITIZATION OF STRATEGIC ISSUES	STRATEGIC OBJECTIVE	INITIATIVE	RESPONSIBLE
Lack of infrastructure in other market sectors	Establish branches in strategic sectors of the country	Expand the coverage of the service.	**Directorate-General**
Lack of training for company personnel.	Create an annual training plan.	Continuously update the knowledge of internal staff in order to increase the quality of service.	**Directorate-General**

Prepared by: The Authors

4. CONCLUSIONS

- The economic environment of the country is directly influences the management of the companies of the same, forcing them to reduce costs, in this context the companies areaffected by these changes that from the financial perspective it is possible to solve starting from an organizational SWOT using an exhaustive investigation that allows formula r relevant objectives to address the problems identified.

- From the perspectiveof the client, the company excludes some important aspects such as providing a service with an added value that leads to the conservation of customers and to expand the market to which the services are offered, another important point is the promotion of the service through the different means to publicize the company and position itself in a better way in the market.

- Most companies haveoutdated and non-socialized documents and processes, which causes these documents to become obsolete and do not fulfill the purpose for which they were created and issued, in addition to the fact that the company does not carry out an analysis of the possible risks that arise in the environment in such a way that it is prepared to respond adequately to any eventuality that arises. present.

- The company does not provide the facilities so that the personnel working within it are constantly trained, in such a way that the knowledge applied in the provision of the service offered is the most current, thus increasing the competitiveness of the company and customer satisfaction.

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