

Strategic planning oriented to the growth of microenterprises

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ISBN: 978-607-8948-56-7

ECORFAN Publishing Label: 607-8948

Control Number B: 2025-01

Classification B [2025]: 300625-0101

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Strategic planning oriented to the growth of microenterprises

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Strategic planning oriented to the growth of microenterprises

Books

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Universidad Politécnica de Tulancingo

June 2025

DOI: <https://doi.org/10.35429/B.2025.1.1.117>



Preface

Microenterprises represent more than 97% of the business fabric in many countries, constituting a productive and economic base that provides social cohesion. However, they are vulnerable to environmental forces: informality, low adaptability, poor planning, and, above all, a lack of strategic tools appropriate to their reality.

This book, *Strategic Planning for Microenterprise Growth*, is a natural response to the urgent need for an accessible, contextualized, and functional strategic planning model for microentrepreneurs, who constitute the most important segment of the administrative ecosystem. Its objective is not to mechanically adhere to the approaches applied by large companies, but rather to adapt key principles to the operational, cultural, and structural logic of microenterprises, promoting a transition from reactive to interactive planning.

The book proposes that actors view the future not as an uncertain possibility, but as a scenario in which they can infer, build, and conquer. Through clear language, applicable examples, and a solid theoretical foundation, entrepreneurs, students, academics, and decision-makers are invited to reflect and act strategically, from the local to the global level.

In this sense, the motivation behind these pages comes from the deep conviction that if microenterprises, in a coordinated manner, adopt a strategic vision oriented toward growth, they will not only survive, but also compete and transform markets that are currently dominated by large corporations. This book aims to contribute to the broader management theory for this change.

I invite the reader to explore these pages with an open mind, a critical spirit, and a willingness to act. Because strategic planning, in the context of microenterprises, is no longer an option: it is a necessity for sustainable growth and economic equity.

Ortega-De la Cruz, Edwin Chofo. PhD
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June, 2025









Content

Strategic planning oriented to the growth of microenterprises	1
Planeación estratégica orientada al crecimiento de microempresas	1
Abstract	2
Resumen	2
Introduction	3
Chapter I Background	5
1.1 Formal pre-studies of strategic planning	5
1.2 Relationship between administrative theories and strategic planning	6
1.3 Administrative theories of organizational development	7
1.4 Structuralist administrative theories	8
1.5 Contingency management theories [imperative environmental analysis].	8
1.6 Management hierarchy and its relationship with strategic planning	9
1.7 The management of organizations through the strategic planning method	11
1.8 The role of control in strategic planning	11
1.9 The four approaches to planning.	12
1.10 Strategic planning and its relationship with a proactive approach	12
1.2 Statement of the problem.	13
1.3 Research objective	17
Chapter II Theoretical foundation	18
2.1 Company	18
2.1.1 Stratification of companies in Mexico	18
2.1.1.1 Industrial sector	19
2.1.1.2 Trade sector	19
2.1.1.3 Service Sector	20
2.2 Planning	21
2.2.1 Planning levels	21
2.2.1.1.1.3 David Fred's strategic planning model	26
Chapter III Methodology	62
3.1 Approach	62
3.2 Scope of the investigation	62
3.3 Research design	63
3.4 Study hypothesis	64
3.4.1 Conceptualization and operationalization of variables.	64
3.5 Determination of sample size	64
3.5.1 Population	64
3.5.2 Sample	65
3.5.3 Sampling	66
3.5.4 Probability sample	66
3.6 Data collection	66
3.7 Reliability and Validity	67
3.7.1 Validity	67
3.7.2 Reliability	67
3.8 Data processing and analysis	68
Chapter IV Results	70
4.1 Descriptive statistics	70
4.1.1 Strategic planning variable.	70
4.1.2 Strategic control variable	71
4.2 Inferential statistics	72
4.2.1 Principal component analysis.	72
4.2.2 Multiple correlation analysis	78
4.3 Methodological proposal	81
Chapter V Conclusions	98
Attachments	102
References	106

Strategic planning oriented to the growth of microenterprises

Planeación estratégica orientada al crecimiento de microempresas

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Classification

Area: Social Sciences
Field: Administration and business
Discipline: Administration and management
Subdiscipline: Business Administration

Area: Promotion of frontier research and basic science in all fields of knowledge

Key Books

The main contributions of this research focus on the design and validation of a research technique based on an exhaustive review of the literature, consisting of theses, indexed scientific articles and specialized works on strategic planning. From this process, the most recurrent dimensions and factors in the literature were evaluated, identifying the way in which they had been conceptualized and measured. The reliability of the technique was determined by Cronbach's alpha coefficient, obtaining a value of .912, which indicates a high degree of internal consistency. This technique made it possible to identify key variables that support the proposal of a strategic model applicable to microenterprises in the professional, scientific and technical services sector. The administrative instrument is strengthened through an empirical diagnosis based on parametric statistical techniques, principal component analysis and multiple correlation analysis, which facilitated the construction of an interdependent structure between the strategic, tactical and operational hierarchical levels. This integration favors a systemic understanding of the strategic planning process in similar organizational contexts, allowing organizational control and evaluation from a scientific perspective. The relevant conclusions of the research are based on three points: 1. The current strategic model used by microentrepreneurs is known and used; however, its internal structure does not fully correspond to that proposed in the literature. 2. The analysis shows weak or non-significant relationships between key factors of the applied strategic planning, indicating a lack of practical interdependence. 3. A new hierarchical model is proposed, based on decision levels [strategic, tactical and operational], to strengthen the articulation of variables and improve the business performance of microenterprises.

Citación: Ortega-De la Cruz, Edwin Chofo & Gordillo Benavente, Liliana de Jesús. 2025. Strategic planning oriented to the growth of microenterprises. 1-117. ECORFAN.

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Book shelf URL: <https://www.ecorfan.org/books.php>






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Abstract




The objective of this research is to design a strategic model that favors the growth of micro-enterprises in the professional, scientific and technical services sector. For this purpose, a quantitative methodology was applied with a non-experimental, transversal, descriptive and correlational design, by means of a probabilistic sample of 174 surveys directed to managers. The results indicate that the strategic planning model applied is known and used; however, it presents an internal configuration different from that proposed in the literature. The parametric analysis of principal components reveals differences in the structure of its dimensions and the correlation analysis shows weak or moderate relationships, without statistical significance in some key factors. It is concluded; in practice the model is not applied interdependently as theoretically suggested. Therefore, a new strategic model is proposed to strengthen the interrelationship between key administrative variables, based on hierarchical levels and strategic, tactical and operational control.

Strategic planning oriented to the growth of microenterprises		
Objectives	Methodology	Contribution
<p>To design a strategic planning model that contributes to the growth of professional, scientific and technical services microenterprises in Tulancingo de Bravo Hidalgo.</p> 	<p>Quantitative with a non-experimental, cross-sectional, descriptive and correlational design, using a probability sample of 174 surveys addressed to managers.</p> 	<p>A new strategic model is proposed that strengthens the interrelationship between key administrative variables, supported by hierarchical levels and strategic, tactical, and operational control.</p> 

Strategic planning, Microenterprises, Growth

Resumen

Esta investigación tiene como objetivo diseñar un modelo estratégico que favorezca el crecimiento de microempresas del sector de servicios profesionales, científicos y técnicos. Para ello, se aplicó una metodología cuantitativa con un diseño no experimental, transversal, descriptivo y correlacional, mediante una muestra probabilística de 174 encuestas dirigidas a directivos. Los resultados indican, el modelo de planeación estratégica aplicado es conocido y empleado; sin embargo, presenta una configuración interna distinta a la planteada en la literatura. El análisis paramétrico de componentes principales revela diferencias en la estructura de sus dimensiones y el análisis de correlación muestra relaciones débiles o moderadas, sin significancia estadística en algunos factores clave. Se concluye, en la práctica el modelo no es aplicado de forma interdependiente como se sugiere teóricamente. Por ello, se propone un nuevo modelo estratégico que fortalezca la interrelación entre variables administrativas clave, sustentado en niveles jerárquicos y control estratégico, táctico y operacional.

Planeación Estratégica Orientada al Crecimiento de Microempresas		
Objetivos	Metodología	Contribución
<p>Diseñar un modelo de planeación estratégica que coadyuve al crecimiento de las microempresas de servicios profesionales, científicos y técnicos en Tulancingo de Bravo Hidalgo.</p> 	<p>Cuantitativa con un diseño no experimental, transversal, descriptivo y correlacional, mediante una muestra probabilística de 174 encuestas dirigidas a directivos</p> 	<p>Se propone un nuevo modelo estratégico que fortalezca la interrelación entre variables administrativas clave, sustentado en niveles jerárquicos y control estratégico, táctico y operacional.</p> 

Planeación estratégica, Microempresas, Crecimiento

Introduction

Strategic planning is a management model, it adheres within it a large number of concepts of military origin that date back to the treatise *Art of War*, written by Sun Tzu [Lajara, 2022].

It is a key management tool for establishing the guidelines that companies must follow in order to achieve their proposed objectives, considering the changes and demands imposed by their environment; this management tool is not an instrument for forecasting or predicting future trends [Flayyih, et al., 2022].

However, it opens up a large gap of possibilities where microenterprises can anticipate future market trends, opinions and preferences for growth.

The advantage offered by strategic planning is to provide greater certainty in decision making, the benefit of this research is implicit in proposing a strategic model that takes up an association between ad hoc dimensions and a degree of orderly, logical and accepted relationship between variables by theory and literature that allows Mexican micro-enterprises of professional, scientific and technical services in Hidalgo to anticipate future market changes and thus contribute to their growth.

Likewise, strategic planning is a long-term project that considers in its structure social, economic, technological and environmental aspects as interconnected dimensions that offer certainty and greater adaptability to future changes [Suárez, 2017].

It is a continuous process on the organization and its environment [internal and external] in which a vision is shared in an integral way in all the functional areas of an entity, the objective is to improve the present modeling a long-term future in affinity to the objectives set.

In analogy to what was stated by Ackoff [2012] & Chiavenato [2017], regarding the systems approach, the strategic planning variable is a disaggregated and interdependent whole in seven dimensions: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, so that, a solid foundation of the situation diagnosis, directly affects the fulfillment of the organization's objectives and inversely in a continuous process, in this way, the strategic planning applied is the fruit of the interactions of some dimensions with others.

In this guideline, planning is inherently found throughout the organization in an explicit or implicit manner, requiring the hierarchy of the different plans through a deductive method in order to achieve the objectives [Flayyih et al., 2022].

The purpose of this research is to provide results from the parametric analysis of principal components and multiple correlation and thus make a comprehensive diagnosis of the variables that make up the strategic planning model [independent variable], contrasting the dimensions that make them up between the relationships exposed by the literature in the microenterprises of scientific and technical professional services [dependent variable].

This resulted in a study of variables that allow making conscious and coherent decisions in the daily events, through the design of a model oriented exclusively to these economic units, covering factors that affect in greater depth and contribute to their growth.

Since, as the Oficina Económica y Comercial de la Embajada de España en Ciudad de México [ICEX, 2019] exposes, scientific and technical professional services organizations are of great relevance due to the specialized knowledge they offer to other economic units for their development where through innovation in conventional entities gives rise to a knowledge-based economy, which is the main engine of growth of Countries, States and Municipalities, it is not strange that their permanence, performance and efficiency is of private and public interest.

From this context, the following research hypothesis is proposed: Strategic planning positively influences the growth of micro organizations in the professional, scientific and technical services sector located in the District of Tulancingo de Bravo, Hidalgo.

This hypothesis will be evaluated through a parametric analysis of principal components and multiple correlation, in order to perform an integral diagnosis of the variables that integrate the strategic planning model [independent variable], contrasting their dimensions and behavior [dependent variable].

Chapter I presents the background and problem statement. This section reviews the literature related to the past perspective of strategic planning. Likewise, the research problem, the objective of the study and the working hypothesis are presented.

Chapter II presents the theoretical foundation, where concepts and postulates of various authors specialized in strategic models are recovered. This chapter starts with the definition of a company and its stratification, breaking down the first stage of the administrative process into three fundamental hierarchical levels: strategic, tactical and operational.

Chapter III details the methodology employed. It explains the inclusion and exclusion criteria for the formation of a probabilistic sample, conceptualizes the variables under study and describes the data collection process and the analysis of the information.

Chapter IV systematically presents the results obtained from the application of the measurement instrument. By means of parametric statistical analyses, such as principal component analysis and multiple correlation, the relationships between variables are empirically validated. Based on these results, on the literature reviewed and on the theoretical foundation, a strategic planning model oriented to the strengthening and growth of micro-enterprises in the professional, scientific and technical services sector is proposed.

Finally, Chapter V is dedicated to the conclusions of the study. This section evaluates the research hypothesis in relation to the empirical findings, highlighting the theoretical and practical contributions of the proposal, as well as its implications for strategic management in microenterprises.

Chapter I Background

1.1 Formal pre-studies of strategic planning

Henry Fayol, considered the father of modern management, postulated in 1916 the fundamental principles that govern the administrative process: plan, organize, direct, coordinate and control, among his main contributions was the conceptualization of planning as an essential function of management. These principles are still valid and applicable to all types of organizations, including microenterprises, where it is common for the owner to assume multiple functions within the organizational structure [Calderón et al, 2025].

One of the most important representatives of the neoclassical school is Peter Drucker, who contributed several specialized and empirical elements taken up in strategic management as a key field for the projection and management of organizations in the long term, like Ernest Dale, Drucker rejected speculative positions and unsubstantiated intuition, stating that management should be approached as a rigorous discipline, both theoretical and practical. In this sense, he argued, decision making should be based on the meticulous analysis of organizational reality [Huerta, 2025].

In relation to the above, he developed an approach called Management by Objectives, which emerged as a response to the need to establish clear, measurable and achievable goals, facilitating the alignment of individual and corporate objectives and the formulation of rational processes [Martínez, 2022].

In this sense, Ansoff's studies are recognized for their pioneering analysis of strategic management techniques; he segments the environment into two categories, historical and discontinuous. In historical environments, prospective resolutions are based on past and current events that serve as an analogy to the future. Within the discontinuous environment, the vision of the future is fragmented and abstract, therefore, foresight has viability by using the weak signals provided by the environment [Emery & Trist, 1965].

In this order of ideas, Kenneth Andrews and Alfred Chandler observed the need to formulate strategies based on unifying external elements of the competitive environment [market and competitors] in a dynamic and structured way in the guideline of the subunits [functional areas], where the strategy depends on the purpose of the company [Castellanos & Cruz, 2014].

Among the fundamental antecedents in the study of organizational strategy is the contribution of Henry Mintzberg, who proposes a multifaceted vision of the concept. In his research, he identifies five complementary interpretations that allow understanding strategy from different perspectives: as a deliberate plan that guides decisions; as a pattern of action adaptable to different contexts; as a pattern of behavior sustained over time; as a position taken in the competitive environment; and as an organizational perspective that reflects the way in which an institution conceives and interprets its environment [Montoya, 2005].

A significant event was the publication of the book, Competitive Advantage by Porter [1980], which laid the foundations for modern competitive analysis. Porter introduced concepts such as generic strategies, the five forces of the competitive environment, and the value chain, which enabled organizations to better understand their market positioning. His theories gave rise to multiple consulting tools and approaches, such as the Boston Consulting Group [BCG] matrix, which facilitated the evaluation of product portfolios and strategic business units [Henderson, 1970].

Another key element of planning emerged in the 1960s with the work of Humphrey [2005], who developed the SWOT [Strengths, Weaknesses, Opportunities, and Threats] matrix, a fundamental tool for the strategic diagnosis of organizations. This matrix was later refined by Weihrich [1982], who incorporated a structured model for evaluating internal and external factors, allowing organizations to link their capabilities to environmental conditions in a more precise and operational manner. At the same time, in the early 1970s, Ackoff [2012], provided a relevant conceptual framework for addressing different approaches to strategic planning, classifying them as reactive, inactive, proactive, and predictive. This typology made it possible to understand how different organizations respond to changes in their environment, whether by anticipating them, ignoring them, adapting to them, or trying to shape them.

In the area of planning systematization [Steiner \[1979\]](#), proposed a comprehensive model that divides the process into three hierarchical levels: strategic planning [long term], tactical planning [medium term], and operational planning [short term]. He raised the need to incorporate a control system called the "plan review and evaluation process" to ensure the consistency and effectiveness of the organizational strategy over time.

[Kaplan & Norton \[1992\]](#), broadened the perspective of strategic control with the creation of the Balanced Scorecard. This tool made it possible to move beyond an approach focused exclusively on financial indicators, integrating key dimensions such as internal processes, organizational learning, and customer satisfaction. Their proposal represented a paradigm shift in strategic performance measurement, guiding organizations toward a more balanced, dynamic vision aligned with their long-term objectives. In summary, strategic planning gained prominence and expanded its influence in the late 1960s in administrative sciences, as the scenarios in which organizations competed changed due to the natural growth of the economy, the business expansion processes of large organizations, and the macroeconomic oil crisis of 1974 [[Sriyono et al., 2022](#)].

1.2 Relationship between administrative theories and strategic planning

General Management Theory is a field of knowledge that deals with the study of management in an absolute sense, regardless of its profit orientation, public nature, size, or sector. It has a systemic approach to the interaction and interdependence of six variables [tasks, structure, people, technology, environment, and competitiveness]. It posits that these variables are present in every organization and that each variable influences another within the administration of organizations [[Chiavenato, 2019](#)].

The unification of these variables is one of the main administrative challenges, as shown in Table 1, where different management theories emphasize one or more of these variables.

Box 1			
Table 1			
Integrative approach to the General Theory of Management			
General theory of administration	Emphasis	Administrative Theories	Main approaches
Six variables present in every company where past and present management theories have a greater emphasis on one or more variables.	Tasks	Scientific management	Rationalization of work at the operational level
	Structure	Classic management Neoclassical management Bureaucratic theory Structuralist theory	Formal organization General principles of administration Administrator's functions Formal bureaucratic organization Multiple approach. Formal and informal organization Intra-organizational and inter-organizational analysis
	Persons	Theory of human relations Theory of organizational behavior	Informal organization Motivation, leadership, communications, and group dynamics. Management styles Decision theory Integration of individual and organizational objectives
	Environment	Organizational development theory Structuralist theory Contingency theory	Planned organizational change Open system approach Intra-organizational and inter-organizational analysis Open system approach Environmental analysis [environmental imperative] Open system approach
	Technology	Contingency theory	Technology management [technological imperative]
	In competitiveness	New approaches to management	Chaos and complexity Organizational learning Organizational capital

Note. Based on Introducción a la administración [p.8], by A. Lozada et al., 2019, Universidad de San Martín de Porres

Likewise, one of the main approaches within strategic planning refers to the open system. In decades prior to the 1960s, studies and approaches focused efforts more intensely on the interior of the organization, largely ignoring phenomena outside its boundaries. From this perspective, the closed system does not interact with or receive stimuli from the environment, contrary to its counterpart [Nava, 2013].

1.3 Administrative theories of organizational development

Within the variable environment emphasis, there is a set of theories on organizational development, defined as the set of ideas of a human relational nature, considered within the scientific management tradition as the theoretical projection of organizational behavior, used in conditions where the company's operations are affected by the environment, requiring it to adapt to change while maintaining its position [Ferrerias et al., 2004].

Beckhard [1973] points out that it is a logical response to external transformation, a strategy whose purpose generates a change in organizational thinking [values, beliefs, attitudes, and structure] aimed at the new prevailing market trend and change itself.

This transformation is based on the application of knowledge from behavioral sciences, implemented through planned interventions and actions managed with the support of senior management and directed at the entire organization, with the aim of simultaneously increasing organizational effectiveness and the well-being of its members [Huse, 1975].

One of the representative theories was proposed in 1990 by Peter Senge, who suggests creating environments where organizations generate the capacity to learn and adapt continuously to the environment, interrelating five disciplines: personal mastery, the drive for individual growth and the promotion of a proactive attitude; mental models, an invitation to question and reformulate limiting beliefs and assumptions; shared vision, a determining factor in cohesion and commitment to a common purpose; team learning, aimed at fostering collaboration and strengthening collective knowledge; and systemic thinking, which allows for understanding organizational dynamics as a whole and addressing problems from their structural causes [Senge, 1995].

In this vein, Kurt Lewin's Action-Research organizational development model, born out of research in the 1940s, provides a practical and systematic way to implement sustainable changes in relation to the environment; it uses an approach of reflection, learning, and adaptation. It proposes an effective approach to social problems through a three-step spiral process: planning, action, and fact-finding. It underscores the need for realistic analysis and evaluation for continuous learning and adaptation, emphasizes rational social management, and therefore points out that intergroup relations improve cyclically [Lewin, 1946].

For its part, the congruence model is a diagnostic tool that allows us to interpret how economic units can strategically adjust to changing forces in the environment. It is based on the premise that companies must have the ability to determine and manage the external and internal variables that drive change. Each factor of the organization [tasks, structure, people, and culture] is affected by the variables of change [technological, economic, political, and sociocultural] must in turn be balanced with internal factors such as staff capabilities, operational processes, and leadership style, which have a direct impact on the organization's operations. The key to the model is to achieve alignment [congruence] between all dimensions, resulting in explicit transformations that allow the organization to visualize and adjust to new market demands [Nadler & Tushman, 2011].

In this sense, the Socio-Technical Systems development model is a replica of a unidirectional vision of analysis oriented solely towards production within organizations. It observes the system in two guidelines with the same weight of management and inference in corporate objectives. The premise is that the company is made up of a technical system [technology, work processes, infrastructure, and structure] and a social system [organizational culture, employee motivation, interpersonal relationships, and the way teams collaborate] belonging to a closely linked whole. In other words, changing technical elements without considering social factors and vice versa directly affects the organization's performance in a negative way [Lepratte, 2014].

1.4 Structuralist administrative theories

The structuralist method is based on the assumption that there is a system made up of relationships underlying sociocultural events that enables partial or total discernment [Rodríguez, 2019]. Within administrative thinking, it complements the adjacent principles of human relations theory by integrating vision and the bureaucratic theoretical structure [Martínez et al., 2016].

This current represents an evolution of bureaucratic theory and, at the same time, a critical approach to human relations theory. The approach emerges as a need to integrate the strengths and correct the omissions of both previous schools of thought, classical theory and humanistic theory. In this framework, organizations are understood as complex social systems where various formal and informal structures and multiple social groups interact [Lozano, 2018].

In other words, the multiple approach encompasses formal and informal organizations, considering the effect of internal customer behavior in relation to material and social rewards and sanctions [Agüero, 2007].

In parallel, structuralist theory recognizes a natural antagonism that should not be hidden between the pursuit of efficiency and personal aspirations: employees want autonomy, freedom, and happiness, while the organization wants order, rules, and discipline. Likewise, the organization is conceived as a complex social unit in which diverse groups with common and divergent interests interact; conflict is inevitable and functional, reflecting the differences between productivity [management] and fulfillment-autonomy [workers]. This approach criticizes manipulation through simulated democratic participation and points to the importance of a balance between material and social rewards, warning that both elements fulfill different functions [Etzioni, 1965].

For his part, Mayntz [1985], analyzes organizations based on the classic principles of the bureaucratic model, such as hierarchy of authority, vertical communication, work specialization, rules, and procedures. However, he indicates that organizational reality is more complex than a formal structure. In practice, hierarchy or any other principle can be altered by internal or external elements. He emphasizes how personal relationships, group dynamics, and other informal aspects influence the daily functioning of organizations, facilitating or generating resistance to new change. Thus, organizations tend to modify their traditional structures to adapt to the demands of the environment, incorporating flexible elements that allow them to respond effectively to contemporary challenges.

In this context, Dahrendorf [1962], enriches structuralist theory by offering a sociological perspective on conflict as an inherent element of organizations. He argues that structural tensions are not dysfunctional, but rather drivers of social and organizational change. He distinguishes between sectors and classes, highlighting that groups with opposing interests within hierarchical structures can bring about change. He proposes regulating conflict through institutional mechanisms and rejects simplistic views of class struggle, favoring a dynamic understanding of power, authority, and stability within organizations.

1.5 Contingency management theories [imperative environmental analysis].

The dominant theory in the 1950s, 1960s, and 1970s, it is still valid today and focuses its influence on marketing. It posits that companies act rationally and seek to adapt to their environment through an ad hoc structure given the variables that dominate the context; there is no meta structure, only the adjustment of variables to respond to the environment. Each economic unit independently has the competence to formulate an optimal action plan depending on internal and external situations based on the risks, uncertainties, and constraints present [Agüero, 2007].

In this context, an initial contribution to contingency management theory comes from Burns and Stalker [1961], who identified two work structures: one mechanistic, suitable for stable and predictable environments, which employs a rigid hierarchical process, high formalization, and centralized control; and another organic, effective in ambiguous and variable environments, which requires mostly horizontal communication, less formalization, and flexibility in decision-making.

Research by Woodward [1965] showed that, the technology used by an organization determines how goods are produced and how a company should be structured to achieve efficiency. He identified three main types of production: unit, mass, and continuous. His study concluded that there is no single or ideal organizational structure, but rather that it is subject to contingent factors, the most relevant of which are technology, the size of the organization, and the external environment in which it operates.

In a complementary manner, Lawrence & Lorsch [1967], broadened the perspective by studying how successful organizations achieve a balance between differentiation and integration. They analyzed companies from different industrial sectors and observed the behavior of functional areas [production, sales, or research and development] that face different environments, requiring different levels of specialization and specific structures. However, they warned that differentiation is only effective when accompanied by mechanisms that ensure organizational integration, that is, interdependence between the various units.

In relation to the above, Mintzberg confirms the multiple contingency factors [age and size, technical system, environment, and power] that operate independently, conditioning the organizational structure, resulting in two main hypotheses and a third conclusion. The first hypothesis concerns consistency: each organization requires an organizational design in line with its own characteristics and context [age, size, technology, operating environment, and internal power relations]. The second hypothesis concerns configuration: the parameters of organizational design [division of labor, hierarchy, formalization] must be consistent with each other, without contradictions that affect efficiency. The third hypothesis, which integrates the previous two and is broader in scope, states that the organizational structure must be consistent with the organization's mission and objectives. division of labor, hierarchy, and formalization must be logical with each other, without contradictions that affect efficiency. The third hypothesis integrates the previous two, of expanded configuration, stating that an effective structure will be one in which external consistency adapts to the environment and, in parallel, maintains a harmonious and consistent internal design [Antoni, 2018].

However, Donaldson, within the theory of structural contingency, considers that a radical redesign approach in a structure with a specific or relatively stable line does not usually occur suddenly. Instead, change is usually incremental or gradual, without an exponential leap towards a new structure. Transformation is consistent with the environment in an evolutionary rather than revolutionary manner [Washington, 2013].

There has been a transformation in the traditional understanding of the contingent model, which conceived of a direct and linear relationship where external change was the cause and structural modification was the effect. Donaldson [1987] argues that, structural adjustment does not automatically respond to external conditions, but arises from a positive correlation between organizational misalignment, declining performance, and pressure to reconfigure the structure. In other words, the greater the demands of the environment, the greater the likelihood of internal pressures driving structural change.

These perspectives are in line with theoretical proposals for strategic planning, emphasizing the importance of anticipating potential changes in the environment before they cause significant disruptions, seeking to prevent negative impacts through proactive adaptation and offering an internal organizational perspective that complements external approaches by integrating and coordinating efforts toward strategic objectives [Ortega et al., 2024].

1.6 Management hierarchy and its relationship with strategic planning

From a general perspective, hierarchy is the support for certain configurations, which represent the multiplicity of dimensions that are grouped into variables that are fully identified and differentiated from one another with an ordered and objective range for the fulfillment of specific functions [Bernal, 2018]. In this sense, in management, organizational hierarchical levels are classified as strategic, tactical, and operational [Luna, 2015]. Operational responsibility is directly associated with the performance of specific tasks in areas of the organization's various departments. As it allows for internal exercise, it tends to be the most numerous. From an administrative point of view, proper functioning allows for compliance with specific indicators that will be used to evaluate the plans implemented in the various functional areas in which the company operates [Moreno, 2017].

The tactical level transforms the guidelines issued by senior management into specialized plans and directs them to various departments to achieve strategic objectives. Measurement is issued through policies that establish the success or failure of the actions implemented in these plans. In other words, it is the application of the administrative process in the communication channel at the operational level [Rivera, 2016]. Likewise, the strategic level diagnoses, directs, and controls using different administrative techniques that aim to provide harmony and internal certainty in relation to the company's external competitive environment. The exercise of its functions allows for the establishment of a philosophy, guidelines, and general objectives that will guide the entire organizational system. It is basically the application of the administrative process in the tactical level structure through an empirical foundation [Kaplan & Norton, 2016]

Management levels are related to the time frame for which they are established. In other words, planning can be oriented comprehensively toward the entire organization, a department or area, or a specific position [Ávalos, et al., 2017].

Chiavenato [2017] states, the planning is carried out through plans that cover long or short periods of time and may include the company as a whole, a department, or even a function. Planning is found throughout the organization but has different characteristics at each level of management to which it is applied.

The hierarchical order of plans is classified as follows: philosophy, long-, medium-, and short-term objectives, policies, strategies, rules, procedures, programs, and budgets [Gómez, 1994].in this sense, the link between the hierarchical structure and the planning levels can be seen in Figure 1, which shows the types of plans in order from general to specific, in line with the organizational hierarchical levels.

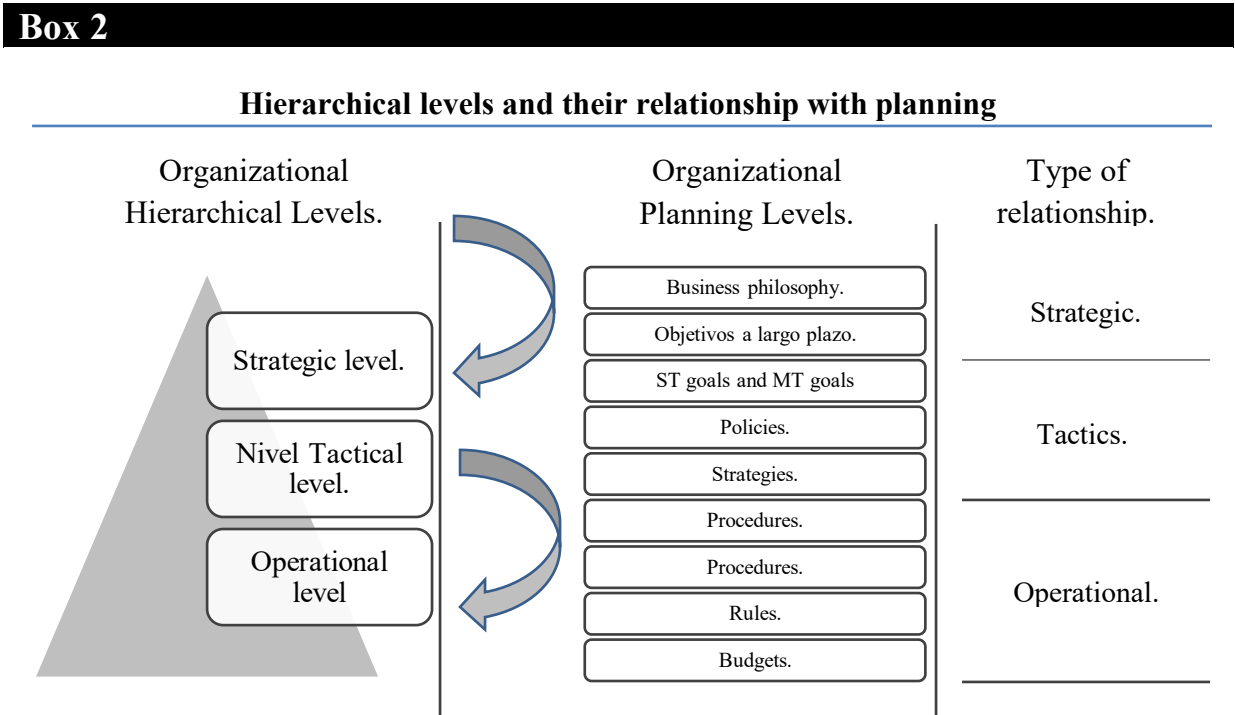


Figure 1
Relationship between the organizational hierarchical level and the planning level
Source: own elaboration based on Strategic planning fundamentals and applications [p.260], by I. Chiavenato, 2017.

Based on this premise, strategic planning is constantly active and guides the entire organization. At the institutional level, the information necessary to formulate a strategy is gathered; at the intermediate level, it serves as a means of communication by designing a tactical plan with these guidelines; and at the operational level, it is formalized in detail in operational plans, each of them according to their hierarchical authority and in line with the objectives of the strategic plan. This planning will impose guidelines and consistency in tasks, as well as coordinate and integrate the company's units and provide harmony and synergy for the achievement of the ideas translated into objectives by the administrators [Chiavenato, 2017].

1.7 The management of organizations through the strategic planning method

The administrator is responsible for formalizing the ideas structured by senior management in a conducive environment, establishing a cause-and-effect relationship between what is planned and the results obtained.

This is achieved through logical and sequenced administrative processes at different hierarchical levels of the organization. These processes convey the links, ideas, and tasks to be developed at each organizational level with the aim of achieving top-down management where there are reports, suggestions, complaints, requests, and inquiries based on an understanding of the instructions, orders, and policies issued by senior management [Staton, et al., 2007].

In this regard, Gallardo [2016] states that, in order to achieve the goals set by management, it is essential to prioritize the different objectives and plans to be achieved, conceiving them in general terms and breaking them down into specific ones for each branch of the organization, department, area, or function.

In analogy to the above, planning, aimed at any organization, regardless of size or line of business, starts from deductive reasoning, hierarchizing administrative principles in a general way and adapting them to specific phenomena or facts. This hierarchy of administrative principles begins in strategic planning with the study of a series of external and internal dimensions inherent to this process, which has the permanent objective of adapting an organization to its environment in the most appropriate way [Arias, 2011].

By virtue of this, strategic planning is a means that contains a consistent and agreed methodology for directing temporary, financial, and human resources toward a specific objective, taking as a starting point the business philosophy and the diagnosis of internal and external variables. It is deductive in its analysis but inductive in its application

1.8 The role of control in strategic planning

Strategic planning inherently addresses the establishment of institutional objectives to achieve them, supported by monitoring, evaluation and feedback mechanisms, that is, the administrative tool of control [Lima, 2021].

Control within the three hierarchical levels has the same elements and is structured as a six-phase process: it establishes control norms and performance standards, measures actual performance, compares the standard with actual performance, identifies deviations, analyzes causes, and takes corrective action. However, the elements of the process at each of the three organizational levels establish norms, measure performance, compare standards, identify deviations, analyze, and provide feedback on different results. Therefore, control is classified into levels [strategic, management, and operational] that are directly interrelated with strategic planning [Schmid, et al., 2018]

The above relationship is shown in Figure 2, which establishes the link between organizational levels, planning and control activities, and the types of indicators studied in Robert Anthony's book *Management Control Systems*. In this sense, strategic control gives the concept of strategic planning a dynamic character by providing feedback to the information system that establishes the organization's guidelines [Kotler & Armstrong, 2017].

Management control within the strategic model aligns the results of policies and strategies policies, and indicators by responsibility center managed by the middle level. Operational control, on the other hand, establishes the relationship of supervision, evaluation, and feedback on tasks, activities, rules, procedures, and programs carried out by the first level and links them to the specialized plans of the tactical level based on the guidelines issued [philosophy and strategic objectives] by senior management [Schmid, et al., 2018].

Box 3

Interrelation between strategic planning and control levels

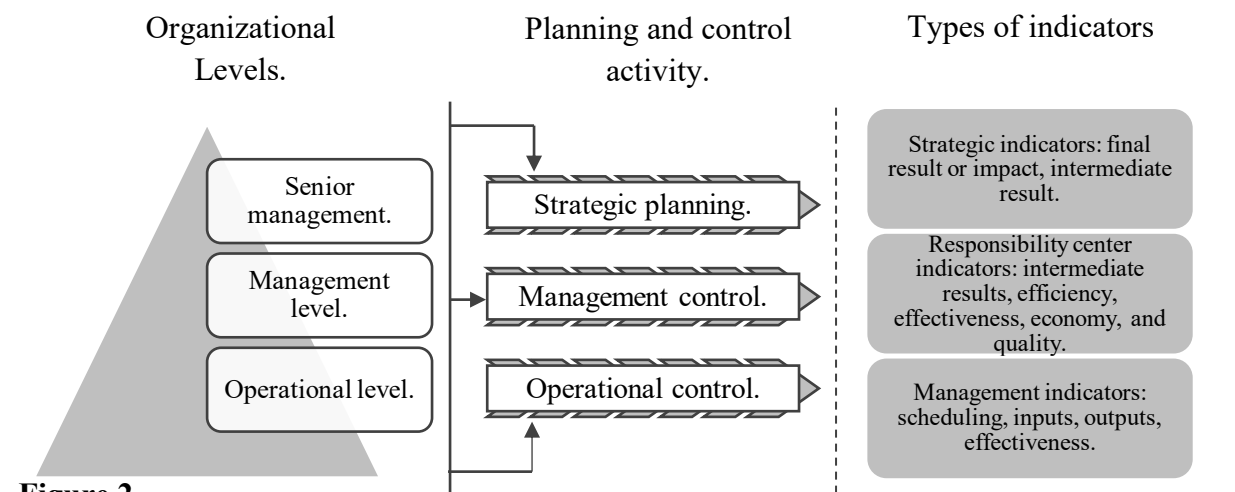


Figure 2
Relationship between organizational levels, strategic activity and the different levels of control
Source: own elaboration based on Sistemas de Control de Gestión [p.749], by R. Anthony, 2008, MCGRAW HILL.

1.9 The four approaches to planning.

The systemic approach asserts, organizations must be managed as a disaggregated and interdependent whole, with the capacity to alter their properties and behavior [Ackoff, 2012]. The company is a system broken down into functional areas: general management, human resources, finance, production, marketing, finance [Chiavenato, 2017]

Each functional area is inherently interconnected with its peers, which means that one depends on another and that none is independent of the system as long as it is subject to it. Thus, what is established by general management affects what is managed by human resources and vice versa. Therefore, the company is not the result of the sum of the behavior of the functional areas that comprise it, but rather the result of the interactions between them [Estanislao, 2023].

In this sense, the role of planning in organizations is a continuous variable that manifests itself explicitly or implicitly and depends, in turn, on the philosophy of the person who manages or directs it. Therefore, the process responds to the observer's vision regarding a preference marked by a state of affairs that has been defined a priori: past, present, or future [Ackoff, 2012]

The above visions are translated into four planning approaches: reactive, inactive, proactive, and interactive. The first is based on the past, recommended in stable environments, which focuses its activity on preventing change or seeking to delay it as long as possible. The second is approached from a present-day perspective, which involves high risk as it only yields results in favorable circumstances. The third is focused on the future, accepts the natural process of change and prepares the necessary steps to minimize threats and exploit opportunities, integrating plans from a strategic hierarchical level to a tactical level. Finally, the fourth approach brings together the three previous time frames and seeks to develop a methodology based on systems theory [Montes, 2020].

1.10 Strategic planning and its relationship with a proactive approach

The hierarchical order of plans is classified as follows: philosophy, long-, medium-, and short-term objectives, policies, strategies, rules, procedures, programs, and budgets [Gómez, 1994]. Based on this premise, the administrator is responsible for formalizing the ideas structured by senior management in a conducive environment, establishing a cause-and-effect relationship between what was planned and the results obtained. This is achieved through logical and sequenced administrative processes at different hierarchical levels of the organization. These processes convey the links, ideas, and tasks to be developed at each organizational level with the aim of achieving top-down management, where there are reports, suggestions, complaints, requests, and inquiries based on an understanding of the instructions, orders, and policies issued by senior management [Staton, et al., 2007].

In this regard, in order to achieve the goals, set by management, it is essential to prioritize the different objectives and plans to be achieved, conceiving them in general terms and breaking them down into specific ones for each branch of the organization, department, area, or function [Gallardo, 2016].

This is in line with the third planning approach outlined by Ackoff, which is exclusively future-oriented in relation to strategic planning, as it considers that the future will be different from the present and the past. It is therefore based on the collection of relevant data for study and uses strategic control to give this information the necessary dynamism.

1.2 Statement of the problem.

Companies are the result of a fusion of production factors [land, labor, and capital]. They are social and economic units founded with the aim of producing goods, services, or both. Their importance lies primarily in satisfying the needs and desires of individuals or social groups in exchange for a profit [Hernández, 2018]. To this end, they make use of self-employment and the work of individuals who form part of the external context, which is their second most important function, since they contribute to the balance of society.

In light of the above, given their responsibility for generating more than 52% of the country's gross domestic product [National Commission for the Protection and Defense of Financial Services Users [CONDUSEF], 2015]. There are more than 5 million active economic units in the country [National Statistical Directory of Economic Units [DENUE], 2020]. [The latter only applies to formally established organizations, with the number increasing significantly when informal economic units are taken into account].

Due to the existence of a large number of needs and desires on the part of society, different types of companies have developed with varying sizes, time in the market, technology, complexity of processes, type of structure, percentage of profits, and economic focus, established to achieve specific objectives set by their leaders, which indirectly benefit society. This led to the establishment of mechanisms for their classification under the responsibility of the Federal Government, which have changed over time, in order to identify and explain their characteristics and problems in an appropriate manner, given their great social and economic importance for the State.

Within the current stratification model, which was initially established in 1978, the methodology used by the National Institute of Statistics and Geography [INEGI] began to take into account the different sizes of organizations and the number of annual sales, given that it is precisely their size and sales range that are the mandatory reference for determining their distinctive features and the problems that affect their competitiveness. The latter is used as a complementary criterion because, in certain cases, there are companies with high capital investments that have technology that allows them to carry out activities with reduced labor. In this reality, it would be inappropriate for only one variable to define their classification [Sánchez, 2009].

Within this form of stratification, microenterprises stand out as one of the economic foundations of Mexico. These organizations have between 0 and 10 employees, representing 97.6% of the workforce, with a concentration of 75.4% of the total employed workforce [National Survey on Productivity and Competitiveness of Micro, Small, & Medium-Sized Enterprises [ENAPROCE], 2016]

Similarly, in the state of Hidalgo, there are 139,255 economic units, of which 132,953 are microenterprises representing 95.47% of the total. In the district of Tulancingo de Bravo Hidalgo, there are a total of 13,150 organizations, of which 12,912 are micro units with a percentage of 96. However, in this state, there are 2,492 entities dedicated to professional, scientific, and technical services, of which 2,382 are classified as microenterprises. Finally, in Tulancingo de Bravo, there are 307 entities of this type, 301 of which are classified as microenterprises, the latter being the subject of the current research [DENUE, 2020]. With regard to the above organizations, approximately 2.0% of the national economy is concentrated in this sector [Mexico: How Are We Doing? [MCV, 2020]. As shown in Figure 3, professional, scientific, and technical services are part of the tertiary economic activities that together contribute 62.6% of the state's GDP to the State of Hidalgo [National Institute of Statistics and Geography [INEGI], 2016].

These types of organizations, especially micro-enterprises, represent more than 95% of their sector in Tulancingo de Bravo Hidalgo. They are extremely important, not so much for their contribution to GDP, which is not insignificant, but rather for the specialized and up-to-date knowledge they provide, which is the main driver of economic growth, high-quality job creation, industrial progress, and wealth for municipalities, states, and countries. innovation in conventional companies leads to the development of products, services, and technologies that generate increased productivity and, therefore, growth in organizations, which in turn gives rise to a knowledge-based economy [[Economic and Commercial Office of the Spanish Embassy in Mexico City \[ICEX\], 2019](#)].

Box 4

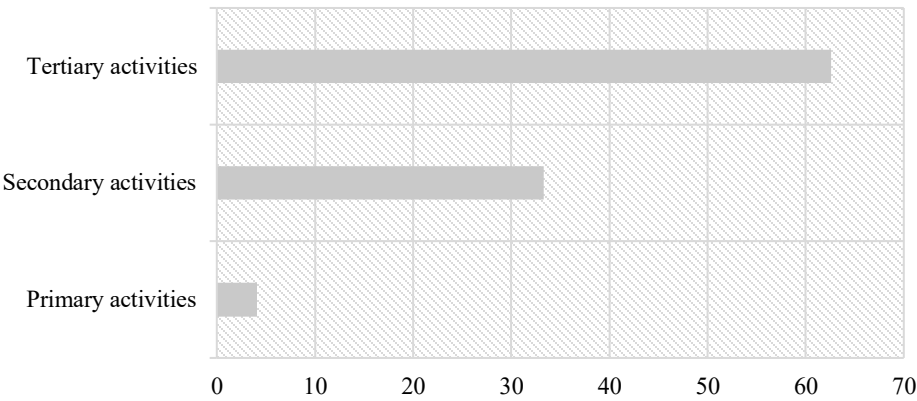


Figure 3
GDP distribution in the state of Hidalgo
Note. Prepared from Economic activities, by INEGI, 2016.

In line with the above, as can be seen within the national territory, there is more in-depth development in companies in the northern states of the country, where there is greater investment and innovation in technology.

In this same vein, and from a historical perspective that extends to the present day, the country, the state of Hidalgo, and Tulancingo de Bravo, from a productive standpoint, are home to micro-sized economic units, not only in the professional, scientific, and technical services sectors, but also in all economic activities such as commerce, industry, transportation, agriculture, and livestock [[Méndez, 1995](#)].

That is why the creation of organizations in this sector at different levels is encouraged, supporting their viability, productivity, competitiveness, and sustainability, as well as increasing their participation in markets, based on the Law for the Development of Competitiveness of Micro, Small, and Medium-Sized Enterprises [[Official Gazette of the Federation \[DOF\], 2019](#)]. In other words, when analyzing the above, stratification was created as a multidimensional variable to identify the degree of growth and adequately explain the characteristics and problems faced by companies.

Likewise, these entities emerge during a formulation and execution stage, the second logical step after creation, which encompasses the prolongation or continuation of their existence. Following this guideline, it is natural to think that once this first phase is completed, a search for information and a synergy of human and financial resources will begin, which, when carried out properly, will culminate in their growth or leap in stratification, thereby fulfilling the vision, whether written or not, with which the business project was founded at its inception.

Therefore, the success of this vision comes from the implicit or explicit implementation of various administrative processes that enable sound short-term decision-making. This strategic thinking can be evaluated over time, that is, in a given period, through medium- and long-term strategies and objectives. However, this has not been sufficient for micro-enterprises in the professional, scientific, and technical services sector, due to the wide range of variables that must be taken into consideration and that have a direct impact on their growth. These variables refer to their internal and external context, primarily age, size, human capital, structure, internal technology, and line of business, and secondarily to political, economic, social, social, technological, legal, and environmental factors, as explained in the diverse literature found in books and scientific research.

In general, these companies survive in a demanding market, with insufficient access to upgrade their technology, complex administrative procedures, and limited access to credit, among other factors. This could lead one to believe that it is solely the government's responsibility to promote them, but it is actually a joint effort between the business community and the government. To put it another way, a comprehensive productive apparatus must be promoted in which, among other factors, long-term sustainable business models are preserved, with the creation or maintenance of jobs, increasing the savings of own capital that favors their growth. [Cruz et al., 2016, p.330]

Being specific, in a study applied to the district of Tulancingo Hidalgo, five variables were found that influence the growth of microenterprises in various strata encompassing the professional, scientific, and technical services sector. These include financial, market, human capital, and administrative factors, as well as external and technological elements, with the market factor being significant at 19%. Another key variable is external factors [Domínguez et al., 2017].

Interrelated elements developed in depth in strategic planning models are necessary in today's competitive market, marked by obsolescence and sudden innovation, configured more aggressively as a result of a global pandemic that has profoundly affected micro-enterprises since February 27, 2020, when the first case of COVID-19 was detected in Mexico [Ministry of Health [SSA], 2020]. This forced the Federal Government to issue a voluntary lockdown in the first quarter of 2020, dividing economic units into two groups, essential and non-essential, closing the second group for an indefinite period with the possibility of reopening through an epidemiological traffic light system and regulating the operation of the first group only through strict safety and hygiene measures [Ministry of Economy [SE], 2020

This new normal caused more than 1 million organizations to close their doors in Mexico. The percentage of companies that implemented temporary closures or technical stoppages stood at an average of 41.35%. The most disadvantaged sectors are micro and small businesses, with 85.1% reporting a decrease in income and 51% affected by low demand. 1%, and 77% said they were unable to meet their tax obligations. Ultimately, 23.07% of micro, small, and medium-sized enterprises closed their doors within a 17-month period, equivalent to 41,482 economic units shut down due to SARS-CoV-2 [INEGI, 2020]

As shown in Figure 4, focusing on Tulancingo de Bravo Hidalgo, the total population of companies engaged in scientific and technical professional services has decreased by 5.24% compared to 2020. In that year, there were 324 organizations, while in 2021 only 307 entities remain [Ministry of Economy, 2020].

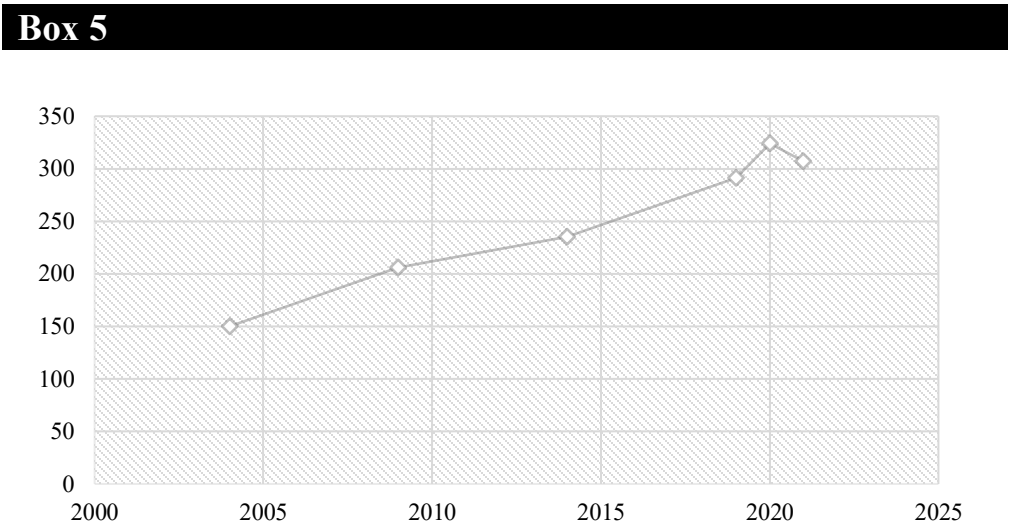


Figure 4
Ratio by years between the populations of companies dedicated to offering professional, scientific and technical services.
Note. Based on *Data Mexico Beta*, by INEGI, 2021.

Looking at Figure 5, the micro-stratum population shows a decrease of 1.61%. In 2020, there were a total of 310 economic units, and currently 305 companies remain open for investigation [SE, 2020].

Box 6

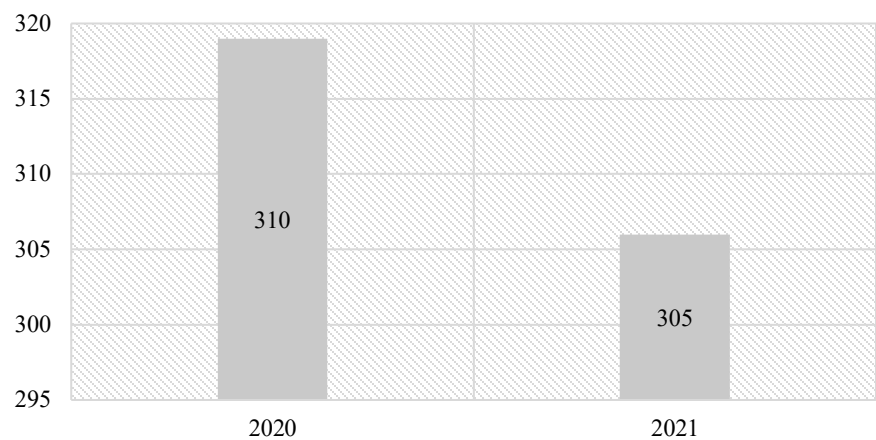


Figure 5
Ratio by years between the populations of companies dedicated to offering professional, scientific and technical services
Note. Based on *Data Mexico Beta*, by INEGI, 2021.

In this regard, a minority of organizations have excelled, mostly transnational companies that saw the SARS-CoV2 pandemic as an opportunity for growth, anticipating years ago a technological change that was occurring at a moderate pace but accelerated disproportionately due to the lockdown resulting from COVID-19. Examples include Amazon, Microsoft, PayPal, Netflix, and Alphabet, which increased their profits and capital by billions of dollars in a short period of time [Financial Times, 2020].

This increase in profitability and growth cannot be explained without the guidance of strategic plans with a technical and methodical structure, developed from a need to face or exploit external circumstances for their own benefit in line with a common vision. This allowed them to adapt to present and future changes over long periods of time and even to shape preordained scenarios set out by senior management through their actions. As a result, their services have become indispensable during and after the lockdown.

This allows us to infer an empirical strategic positioning on the part of the micro-enterprises subject to this research. In other words, factors of notable relevance have been omitted in order to cope with the situation, with the capacity to apply to the micro-level or, failing that, have not been adequately controlled.

The country's economy is currently in transition to a complex period in which various external and internal factors are interrelated. On the domestic front, the change of government has introduced new public policies that directly or indirectly impact the environment and business investment projections. At the same time, the international context is returning to nationalism, protectionism of local trade, and self-sufficiency in strategic industries, with signs of recession in large economies. This is symptomatic of the development of a military conflict between Russia and Ukraine, in which the United States, together with the European Union, is playing a major role [Rodríguez et al., 2023].

Growth depends largely on the analysis of all these factors, which accurately indicate the external and internal environment of an organization. This diagnosis will allow realistic goals and objectives to be set, as well as the determination and implementation of efficient strategies to achieve the objective. Therefore, a planning model is required to facilitate this diagnosis, its implementation, and feedback, i.e., the identification of key success variables, the execution of strategies, as well as measuring and controlling objectives in these economic units that offer professional scientific and technical services. In this guideline, it is essential for micro-enterprises providing professional scientific and technical services to evaluate which factors assigned to the strategic model are best suited to the structure and application of their administrative process, in order to generate a long-term position in an aggressive market where cracks are beginning to appear in large supply chains, a marked change in distribution channels and consumer needs, as a result of the current contingency caused by SARS-CoV2 and an international environment that is moving towards a multipolar order.

This is because there are a significant number of mental representations of the strategic planning process, which allow its conceptualization to be analyzed in various ways, each with elements that are similar or specific to that representation. However, these are geared toward medium and large organizations [Choque, 2015].

This sets the stage for the problem to be addressed in the current research: What are the elements contained in strategic planning that integrate a model that contributes to the growth of micro-enterprises providing professional, scientific, and technical services in Tulancingo de Bravo, Hidalgo?

This research consists of conducting a comprehensive diagnosis of the variables that make up the strategic planning model [independent variable], contrasting the dimensions that comprise them with the relationships described in the literature on microenterprises providing professional, scientific, and technical services [dependent variable].

This will result in a study of variables that will enable informed and coherent decisions to be made on a daily basis, through the design of a model geared exclusively to these economic units, covering factors that have a greater impact and contribute to their growth.

I.3 Research objective

Design a strategic planning model that contributes to the growth of micro-enterprises providing professional, scientific, and technical services in Tulancingo de Bravo, Hidalgo.

Chapter II Theoretical foundation

2.1 Company

Company, the concept from which this chapter begins, is a term that has changed over time and is difficult to define due to its different nuances, with its main dimension being economic, as it contributes to the satisfaction of needs and generates jobs for the balance of societies.

A company is defined as a profit-making economic and social unit in which natural resources, capital, technological resources, labor, management, and individuals are systematically coordinated to carry out socially useful production in accordance with the demands of the common good. [Mora et al., 2016, p.514]

Sanchez [2015] conceptualizes, it as "an organizational unit dedicated to industrial, commercial, or service activities for profit or not for profit" [p.130].

In the same vein, Rojas [2017] states, "a company is a set of elements organized and coordinated by management, aimed at achieving a series of objectives, always acting under conditions of risk" [p. 4].

For Bueno et al., [2018], an organization is "a productive or service unit that, constituted according to practical or legal aspects, is made up of resources and uses management to achieve its objectives" [p.17].

Finally, Chiavenato [2019] states that, an organization comprises either in writing or in empirical application, an organizational structure, guidelines, rules, regulations, routines, and procedures; aspects that enable relationships between areas, positions, and their occupants to achieve objectives and maintain a balance that allows the company to function properly.

In other words, the company coordinates human, financial, and time resources to generate satisfaction for a group of individuals, using technical or empirical management for their benefit or to achieve their objectives. Due to the breadth of variables and heterogeneous dimensions involved, this requires classification and stratification. It is therefore necessary to investigate the subject in depth.

2.1.1 Stratification of companies in Mexico

According to the Official Gazette of the Federation [DOF, 2019] dated February 28, which covers stratification agreements based on the number of employees, annual sales, and annual sales range, this classification is shown in Table 2.

Box 7			
Table 2			
Stratification of companies in Mexico.			
Stratification			
Sector	Range of number of employees	Range of sales amount [million pesos]	Maximum ceiling combined*.
All	Up to 10	Up to \$4	\$4.6
Trade	From 11 to 30	From \$4.01 to \$93	\$100
Industry and services	From 11 to 50	From \$4.01 to \$95	\$100
Trade	From 31 to 100	From \$100.01 to	
Services	From 51 to 100	\$250	\$235
Industry	From 51 to 250	From \$100.1 to \$250	

Note. Prepared on the basis of REGLAS de Operación del Fondo Nacional Emprendedor para el ejercicio fiscal 2019, by the Secretaría de Economía, 2019, DOF.

According to the Official Gazette of the Federation:

- Micro-enterprises in all sectors must not have more than 10 internal customers, their maximum sales amount is 4 million pesos with a combined maximum cap of 4.6 million.
- Small companies in the commerce sector must have a maximum of 30 employees, with maximum profits of up to 100 million pesos and a combined cap of 93 million pesos. In the service and industrial sectors, the number of employees must be between 11 and 50, with annual income of 100 million pesos and a maximum cap of 95 million pesos.
- Medium-sized companies in the industrial sector, their turnover must be between 100 and 250 million pesos, with a maximum combined limit of 250 million pesos and a workforce of between 51 and 250 employees. In the commercial sector, the number of employees must be between 31 and 100, while in the service sector, it must be between 51 and 100, with income for both categories ranging from 100 to 2 50 million pesos per year and a combined cap of 235 million pesos.

2.1.1.1 Industrial sector

Bueno et al., [2018] report that industrial companies are those dedicated to offering satisfiers through the extraction or transformation of inputs and raw materials, which in turn are classified as manufacturing, extractive, or transformative.

This industrial sector comprises economic units primarily engaged in the mechanical, physical, or chemical transformation of materials or substances to obtain new products; the assembly of manufactured parts and components in series; the reconstruction of industrial, commercial, office, and other machinery and equipment in series; and the finishing of manufactured products by dyeing, heat treatment, plating, and similar processes. [...] This also includes the mixing of products to obtain different ones, such as oils, lubricants, plastic resins, and fertilizers. The transformation work can be carried out in places such as plants, factories, workshops, maquiladoras, or homes. These economic units generally use energy-powered machines and manual equipment. It also includes economic units contracted to carry out manufacturing activities for products that are not their own. [INEGI, 2018, p.143].

Caballero [2024] points out that, most of the industry's activities are in the secondary sector, whose main activity is to transform raw materials into goods for final or intermediate consumption. The result is a manufactured product that can be consumed by the end customer or used as an input for another industrial transformation process before it can be consumed as a consumer good.

2.1.1.2 Trade sector

Bueno et al., [2018] state that, organizations dedicated to trade have as their main activity the purchase of products for resale, and their function is to serve as an intermediary between two parties [producer and consumer]. They are subdivided into retailers and wholesalers.

The trade sector comprises economic units primarily engaged in the purchase and sale [without transformation] of capital goods, raw materials, and supplies used in production, and of other goods for resale to other traders, distributors, manufacturers, and producers of goods and services; economic units engaged solely in purchasing or selling, for example, units that purchase goods but do not sell them directly, instead distributing them for resale to other economic units with which they share the same business name, as well as to those who receive these goods and sell them without having purchased them. [INEGI, 2018, p.249]

In the same vein, the World Bank [WB, 2022] explains, that trade is a social process that allows for the anticipation, expansion, and satisfaction of the demand structure for economic goods and services through their conception, promotion, exchange, and physical distribution. It is a business activity that directs the flow of goods and services from producers to consumers with the aim of satisfying customers and meeting the objectives of the company. execution of the area of activity related to the management and stimulation of the flow of goods from the producer to the consumer or user. Since all operations involving the sale of goods, rights, or services for consideration take place within the trade sector, the types of trade covered by this study are detailed below

2.1.1.3 Service Sector

Bueno et al., [2018] state that, the purpose of economic service units is to provide an intangible service to the population or businesses, operating in the public or private sector.

INEGI [2018] states that, the service sector does not transform inputs or raw materials into material goods, but rather groups together a series of activities that provide comfort or well-being to individuals, actions that satisfy needs and desires. These services can be offered to individuals or organizations. The branches that comprise services refer to real estate and rental services, business support and waste management, education, health and social assistance, cultural, sports and recreation, temporary accommodation, and finally, the area that interests us, scientific and technical professional services.

Sánchez [2019] explains that, in the economic sphere, a service is a set of activities or a single action to satisfy a specific demand, providing an intangible and personalized good with heterogeneous characteristics that responds to different factors that rarely coincide with each other and that are designed and carried out to individually serve the consumer, with no mass production chains due to their intangible nature.

2.1.1.3.1 Professional scientific and technical services

The search for information focuses on the service sector, specifically on one of its classifications [professional, scientific, and technical], in order to investigate its main characteristics, given that this is the sector in which the study to be addressed is being carried out.

This branch includes services provided to the end consumer and organizations synonymous with professional services that provide technical functions performed by independent workers or organizations specializing in certain activities such as consulting, legal or engineering services, and auditing [[Banco Bilbao Vizcaya Argentaria \[BBVA\], 2021](#)].

Professional scientific and technical services comprise economic units whose activity requires specialized knowledge and skills, which is why the main component of the production function of the economic units that make up this sector is precisely human capital [...] the economic units included in this sector are mainly engaged in providing legal, accounting and auditing services, architecture and engineering, specialized design, computer systems design, administrative, scientific and technical consulting, scientific research and development, advertising, market research and public opinion polling, photography and videotaping, translation and interpretation, veterinary services, and other professional, scientific and technical services. [INEGI, 2018, p.116]

This activity excludes economic units that provide educational services; health and social assistance services [Health and social assistance services], and day-to-day administrative services [Business support services and waste management and remediation services]. [INEGI, 2018, p.117]

MCV [2020] states, "this sector generates services that require specialized knowledge and skills, which is why the main component of the production function of the economic units that make up this sector is, precisely, human capital" [p.3].

In summary, the category of scientific and technical professional services involves activities that require a high degree of skilled human capital, as individuals are responsible for performing specialized tasks using skills and knowledge acquired through prior training [[National Institute of Statistics and Census of Costa Rica \[INEC\], 2017](#)].

As described above, within the service sector there is a specialized branch dedicated to offering services provided by professionals from various fields such as law, administration, accounting, finance, technical fields such as architecture and photography, and scientific fields such as medicine. These services stand out for adding value to other organizations or end customers, becoming an important support for the development of activities in other sectors, given the high cost of maintaining qualified human resources for such activities.

2.2 Planning

Planning involves determining and organizing the actions necessary to achieve better business performance. This requires a comprehensive analysis of how the organization operates, including its accounting records, marketing strategy and capacity, and operating capital International Labor Organization [ILO, 2016].

Planning is the first part of any administrative methodology. When conceptualizing it, the following dimensions emerge: the organization's environment, the setting of objectives, strategies, policies, and the actions to be implemented in the short, medium, and long term. It consists of establishing principles that set a precise course of action, as well as the sequence and resources necessary to bring them to fruition [Ávalos et al., 2017].

In the same vein, Cano [2017] explains, it is an intentional act of exerting formal and positive influence on the course, direction, and future of an organization; it can also be considered as the process by which those responsible for managing the company chart the course and design the "navigation load in accordance with the mission and vision of the organization, It must be based on a very clear and rigorous understanding of the internal and external environment of the organization. [p.30]

For his part, Moreno [2017] states, planning is based on structuring a set of rational processes in an orderly manner that result in coordinated actions, with the aim of influencing the course of certain events in order to conceive desirable scenarios, maximizing the organization's available resources. This guideline, in Figure 6, outlines the basic elements of planning.

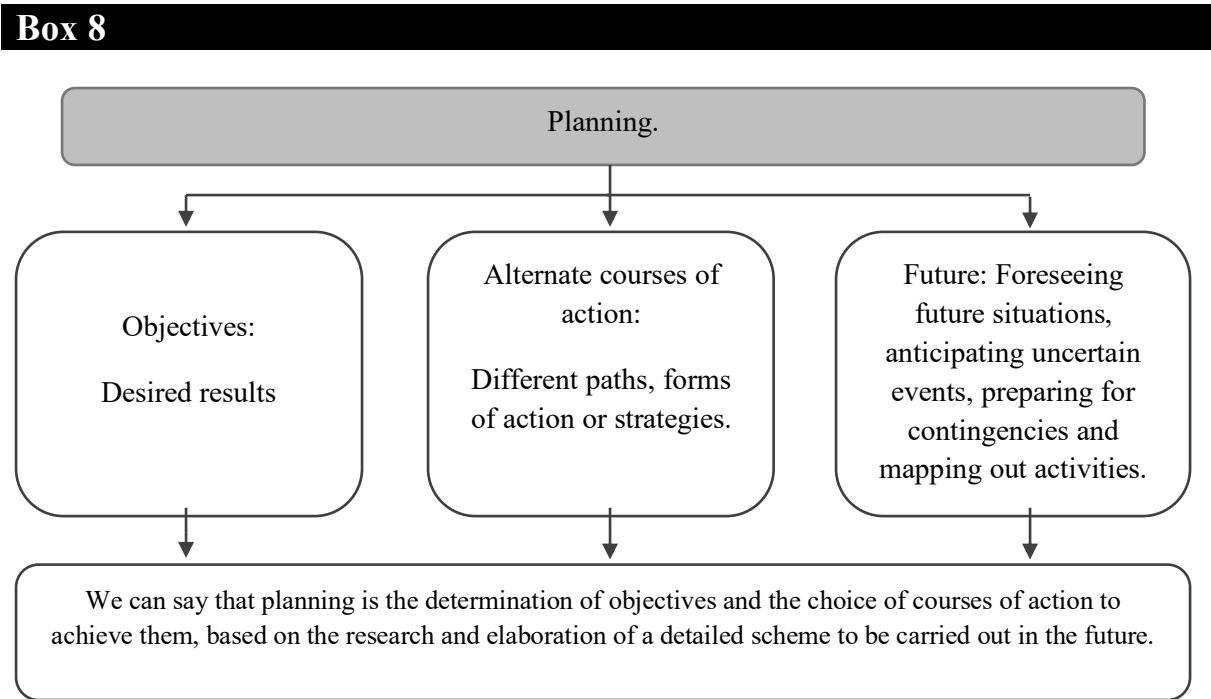


Figure 6
Fundamental elements of planning
Note. Taken from Strategic Planning: A management approach [p.14], by J. O. Moreno, 2017, Fondo editorial Areandino.

Finally, planning is the first step in the administrative process through which a problem is defined, past experiences are analyzed, and plans and programs are outlined. [...] it is the selection and relationship of facts, as well as the formulation of assumptions about the future in the vision and formulation of the proposed activities that are deemed necessary to achieve the results [Flores, 2015, p.23].

2.2.1 Planning levels

The administrator is responsible for formalizing the ideas structured by senior management in a conducive environment, establishing a cause-effect relationship between what is planned and the results obtained. This is achieved through successful communication processes, motivation, and leadership at different hierarchical levels.

This communication between sender and receiver transmits the links, ideas, and tasks to be developed at each organizational level with the aim of achieving top-down management where there are reports, suggestions, complaints, requests, and demands, and where the instructions, orders, and policies issued by senior management are understood [Moreno, 2017; Tucno & Yucra, 2025].

In this regard, Gallardo [2016] exposes in order to achieve the goals set by management, it is essential to prioritize the different objectives and plans to be achieved, conceiving them in general terms and breaking them down into specific ones for each branch of the organization, department, area, or function. Planning should not be seen as the sole task of management, but rather of all executives, as what is planned will logically be subject to their responsibility, area of influence, and hierarchical authority in line with the plans set out by senior management. Management levels are related to the time frame for which they are established. In other words, planning can be oriented comprehensively toward the entire organization, a department or area, or a specific position [Ávalos et al., 2017].

In this sense, planning or management levels are classified as strategic, tactical, and operational [Luna, 2015]. As shown in Figure 7

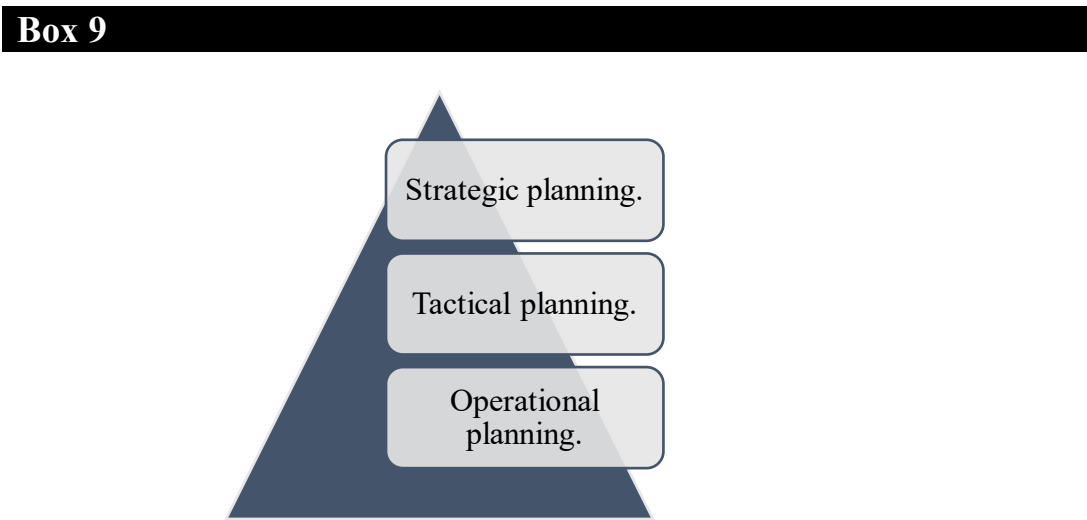


Figure 7
Levels of planning
Note. Taken from Proceso administrativo [p.60], by A. C. Luna, 2015, Patria. Luna, 2015, Patria.

Finally, Chiavenato, [2017] refers, the planning is carried out through plans that cover long or short periods of time and may include the organization as a whole, a department, or even a function. Planning is found throughout the organization but has different characteristics at each level of management to which it is applied. Planning is constantly active throughout the organization. At the institutional level, a strategy is designed; at the intermediate level, a tactical plan is formulated; and at the operational level, detailed operational plans are formalized, each according to its hierarchical authority and in line with the objectives of the strategic plan. Planning will impose guidelines and consistency on tasks, coordinate and integrate the company's units, and provide harmony and synergy for the achievement of the ideas translated into objectives by managers [Chiavenato, 2017].

2.2.1.1 Strategic planning

In the face of an uncertain future, methodologies have been developed to mitigate scenarios that are contrary to those envisaged by administrators. However, it is not possible to eliminate these unknowns entirely, so administrative models have been developed that are designed to adapt to a changing context through rigorous research. This is the case with strategic planning, which considers internal and external variables that together generate guidelines aimed at fulfilling the organizational vision.

Arias [2011] defines strategic planning as a decision-making process that pursues the ongoing goal of adapting a company to its environment in the most appropriate way [p. 2].Walter & Pando [2014] point out that strategic planning is an administrative tool that contributes to better decision-making in organizations by providing guidelines to follow in order to adapt to market demands and changes.

In the same vein, González & Rodríguez [2019] affirm that, this process allows for the formulation of long-term objectives that are in line with reality, whose primary characteristic is to establish courses of action to achieve these objectives. From this perspective, strategic planning is a key tool for decision-making in economic units. Therefore, it is stated that strategic planning is a means that contains a consistent and agreed-upon methodology for directing temporal, financial, and human resources toward a specific objective. In light of this, Espinoza [2017] states that this administrative model unites the management team to translate the mission, vision, and strategy into tangible results, reduces conflicts, and fosters participation and commitment at all three levels of the organization with the efforts required to make the desired future a reality. Quintero & Fernández [2017] conceptualize strategic planning as an inherent component of senior management functions and, at the same time, as systemic, strategic, and flexible process that contributes to the growth of an institution, taking its starting point from the business philosophy. Finally, Table 3 shows the definitions of strategic planning analyzed by González & Rodríguez [2019].

Box 10

Table 3

Definitions of strategic planning analyzed by González & Rodríguez [2019].	
Concept of tactical planning.	Author.
Process for forecasting the future, analyzing internal and external factors, establishing strategies as means of action, framed in the vision and mission, in order to achieve long-term objectives.	Fuentes & Luna [2011].
Systematic process of top management that seeks the formulation of competitive advantages, to give a strategic direction to the company, making efficient use of available resources.	Suarez & Altahona [2009].
A process that enables an organization to be creative rather than reactive in formulating its future. Its purpose is to help the organization to operate effectively in a complex and dynamic environment that is constantly affected by constraints and threats.	Scott [2008].
The process by which a company develops the objectives and concrete actions to reach the desired state.	Gallardo [2012].
Process by which decision makers in an organization obtain, process and analyze relevant internal and external information in order to evaluate the present situation of the company, as well as its level of competitiveness, with the purpose of anticipating and deciding on the institution's direction for the future.	Serna [2008].
Selection and relating of facts, as well as the information and use of assumptions regarding the future in visualizing and formulating the proposed activities believed to be necessary to achieve the desired results", therefore, the manager who knows and secures the objectives to be set and the steps to achieve the results, is sure to obtain greater satisfaction than if he were to plan day after day.	Massie [2013].
Strategic planning is a concept that encompasses a series of techniques developed with the intention of supporting through the formalization and elaboration of the strategy from the beginning, starting with the top management and passing through a series of technicians, as a complement to the above.	Kotler & Armstrnogn [2001].
It is a process based on rationality, which must preside over each of the stages into which the process may be divided.	Mintzberg [2000].

Note. Based on Manual de planeación estratégica [p.6], by J. J. González and M. T. Rodríguez, 2019, Díaz de Santos

2.2.1.1.1.1 Strategic planning models

Models are theoretical abstractions of reality that seek to explain empirical phenomena. Strategic planning is represented through this methodology, and the various existing approaches allow its conceptualization to be analyzed from different angles, revealing common or disjunctive elements and their appropriate application in organizations.

2.2.1.1.1.1.1 Fernando D'alessio's sequential model of the strategic process.

Larios [2016] points out that, the sequential strategic process consists of a set of activities that are carried out in a specific order with the aim of projecting the future of an organization and achieving its established vision. Figure 8 establishes the three stages that make up this model: formulation, implementation, and evaluation. In addition, conclusions and recommendations are added

Box 11

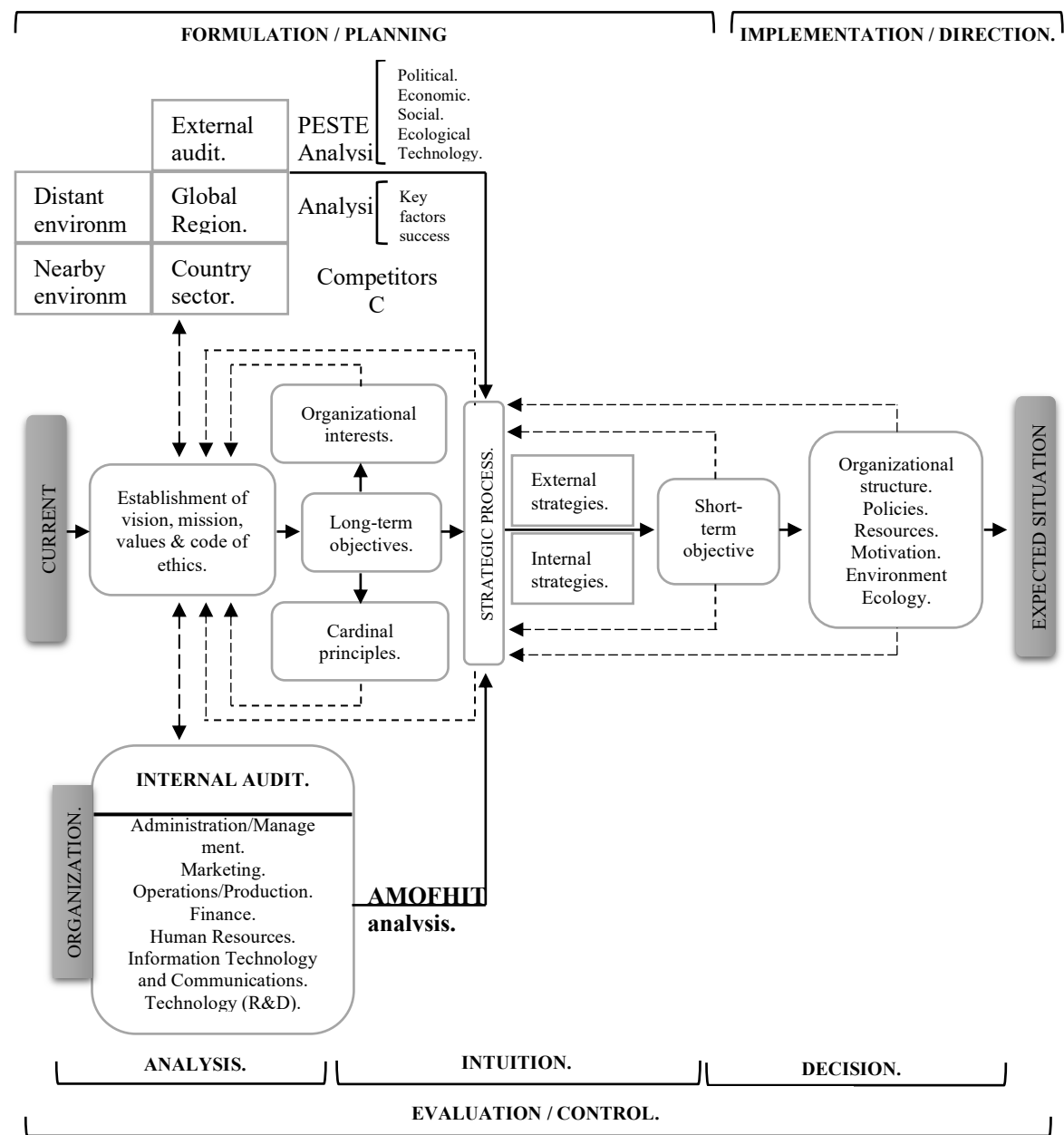


Figure 8
D'alessio's sequential model of the strategic process.
Note. Taken from The Strategic Process: A Management Approach [p.20], by F. A. D'alessio, 2015, Pearson Education.

Rivera [2016] argues that, the implicit axiom in formulating a sequential strategic model provides a rational and emotional perspective that generates logical causal relationships between the variables of the environment, current internal resources, present alternatives, and the objective to aim those dimensions toward the achievement of the goal. Zurita [2019] asserts that the sequential design of strategic planning consists of determining very precisely the available resources, skills, attitudes, real potential, and limitations of the organization in order to formulate, on that basis, a realistic and accurate philosophy, objectives, strategies, and coherent structures that will lead to the desired future

Valdiviezo et al., [2017] refer to the objective of this model as lying in the transition from a current situation to a future one through a strategic methodological process involving the leadership necessary for its application, monitoring, and, of course, the feedback that enables its viability.

For its part, Choque [2015] states that the sequential model starts from the current situation of the organization and is established through the development of two variables: the first is an external audit, consisting of a global, regional, country, and sector analysis; the second is an internal analysis of all departments, areas, or strategic functions of the organization. Once the analysis of the current situation has been carried out, the vision, mission, values, and code of ethics of the economic unit are formulated.

These will serve as a guide for establishing organizational interests, cardinal principles, and the definition of long-term objectives. In line with this guideline, internal and external strategies are established intuitively based on the input provided by internal and external audits, as well as the objectives and their definition.

Finally, the implementation process comprises a series of activities, policies, resources, culture, and organizational structure to bring this plan to fruition.

2.2.1.1.1.2 Steiner's systematic corporate planning model.

Díaz & Trujillo [2019] point out that Steiner's process consists of systematically identifying opportunities and threats, as well as establishing goals and defining strategies and policies for their achievement. This is done by answering three questions: When should it be implemented? How should it be done? And who should do it? The aim is to determine the most appropriate planning process to use.

Navarrete et al., [2023] how, as seen in Figure 9, that Steiner's conceptual model presents a general idea and focuses most of its efforts on operational representation, where it considers that complete and effective planning is carried out. All organizations have marked differences, but they follow standardized patterns concentrated in the conceptual model. Sáenz [2016] adds that the corporate model unites the three hierarchical levels of the organization through strategic plans, medium-term programs, short-term budgets, and operational plans.

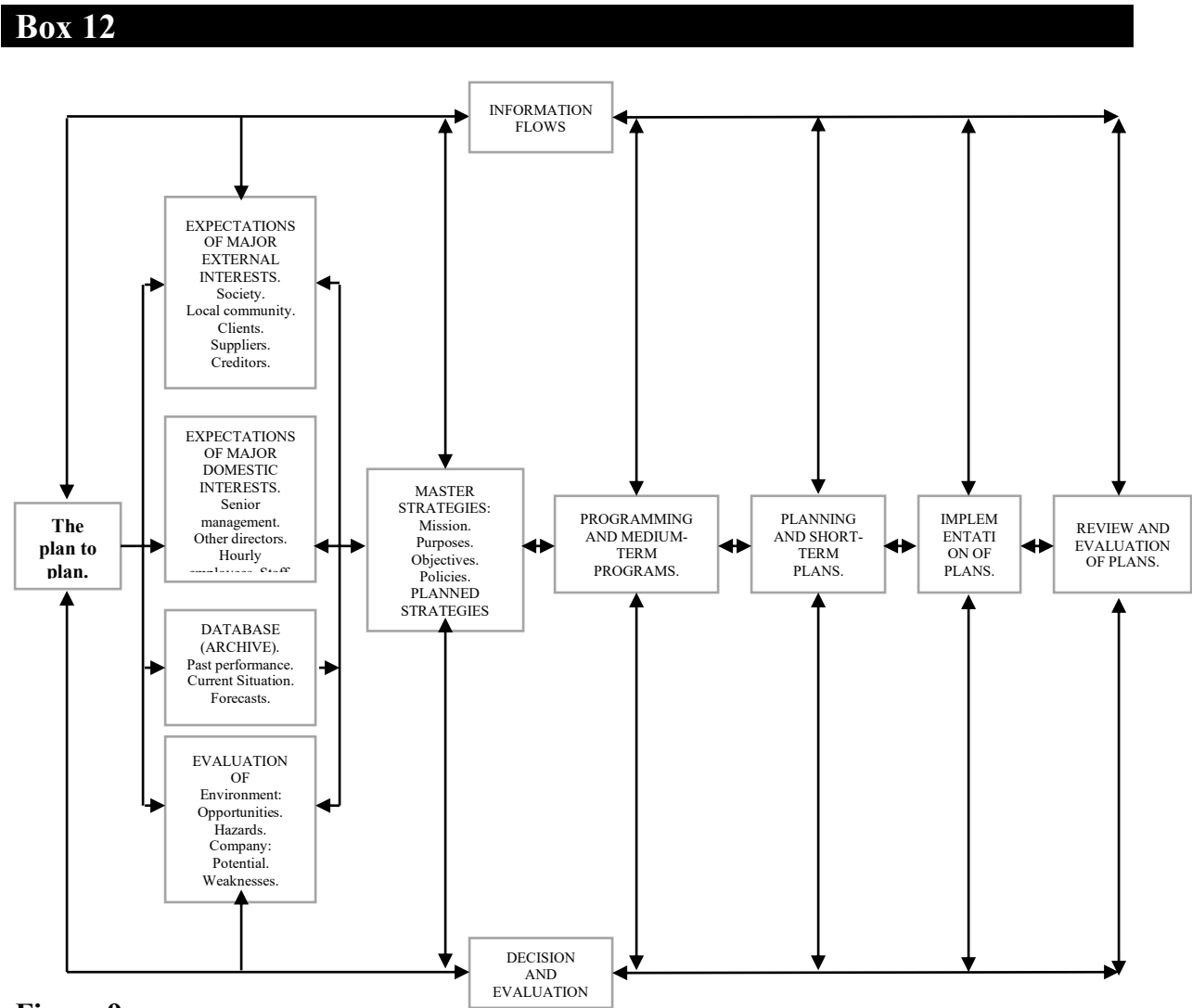


Figure 9
Steiner's conceptual model.

Note: Taken from Strategic Planning What Every Manager Should Know [p.31], by G. A. Steiner, 1986, Continental Publishing Company.

This translates into three stages: long term [strategic], medium term [tactical], and short term [operational], each process with its own particularities, applying feasibility tests to establish its correct alignment with the organization's objectives.

During the implementation process, the activities necessary to fulfill the short-, medium-, and long-term plans are carried out. To this end, the organization must have created regulations, trained its human capital, and acquired the necessary technology for such tasks. The plans are reviewed and evaluated annually [Choque, 2015].

The advantages of this model are its effectiveness in terms of intuitive anticipation, its organization, and its development based on a series of procedures that can be adapted to all types of organizations. On the other hand, the disadvantages refer to the need for exhaustive communication of the organization's current situation among internal customers [Bohórquez, 2018].

2.2.1.1.1.3 David Fred's strategic planning model

David Fred describes the strategic model as an objective and systematic approach in which qualitative and quantitative information is collected, described, and analyzed for sound decision-making in uncertain circumstances through three phases [Lima, 2021].

The process is based on dynamic strategic management and periodic review and updating of internal and external factors. The results and conclusions obtained are used to adjust the strategic plan to the new requirements of the situation, as a means of achieving long-term equilibrium in which the organization becomes less susceptible to market changes [Choque, 2015].

In the same vein, as shown in Figure 10, it details an interaction between the components of the organization through three phases: formulation, implementation, and evaluation. It specifies coordination between the various segments of the organization and highlights the importance of including lower departments in the decision-making process, setting the tone for a commitment from operational staff as a key variable in the face of necessary changes [Sánchez, 2017].

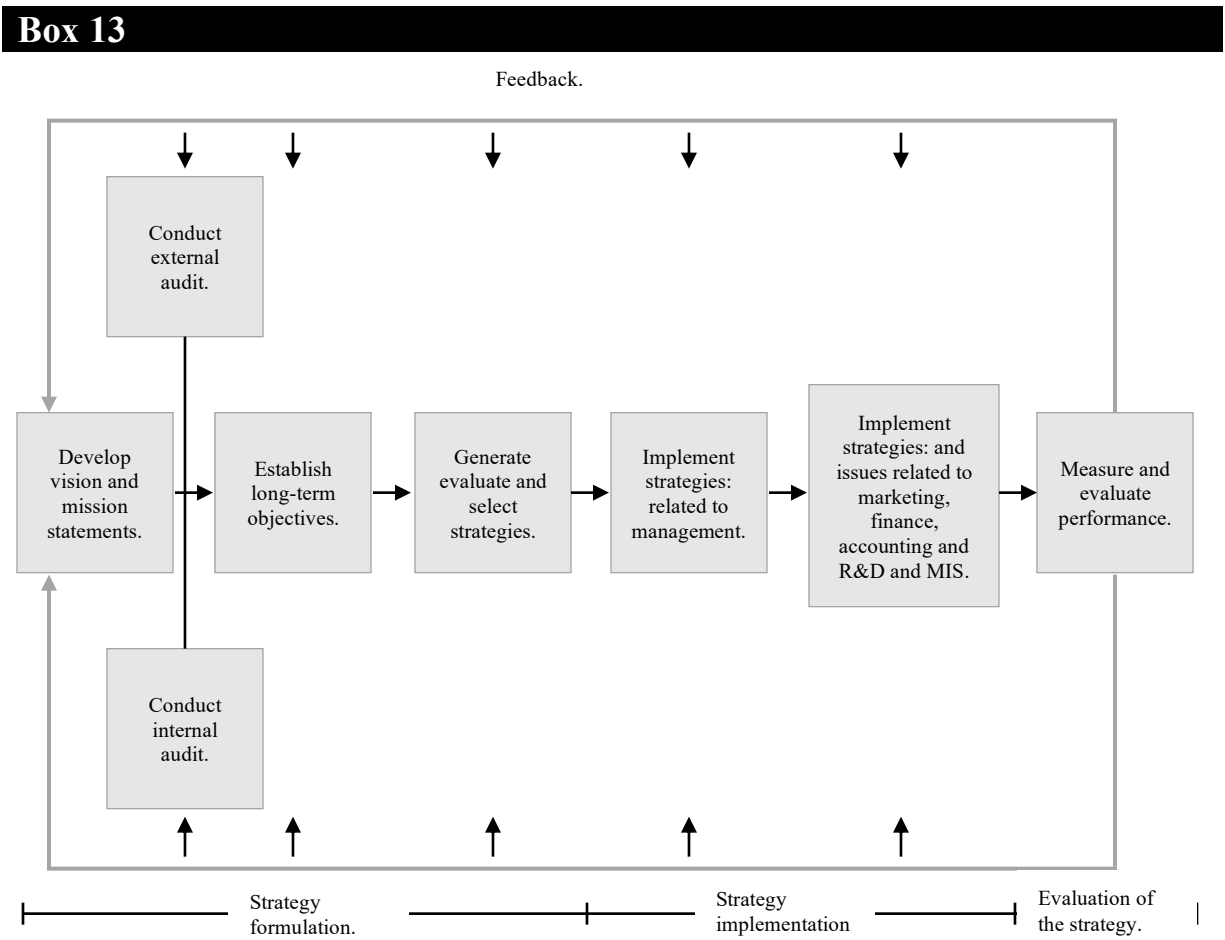


Figure 10
Model by David Fred
Note. Taken from Concepts of Strategic Planning [p.60], by D. R. Fred, 2017, Pearson Education.

The stages are developed at three hierarchical levels: management, division or strategic business unit, and functional. This form of management helps the company to operate as a competitive team where communication and interaction between managers and operational staff is encouraged [Bernal, 2018].

In the first phase, the current philosophy, objectives, and strategies are identified and then redefined through a thorough internal and external audit that provides an objective view of the organization's strengths, opportunities, weaknesses, and threats. Once these factors have been defined, the plan will have a basis for implementation. This first phase is called data entry [Diaz & Trujillo, 2019]. In the second stage, implementation of the strategy, the organization designs ad hoc policies that will motivate internal customers and allow for efficient distribution of resources. At the same time, a culture must be established that allows for the application of the strategies developed in the previous stage.

The last stage consists of evaluating the strategy, that is, how to measure and evaluate results, and making decisions regarding its application. This evaluation will provide information on how much progress has been made, which resources are essential, which aspects require feedback, and how the objectives are progressing, without forgetting that the evaluation can be qualitative and not only quantitative, oriented toward budget performance [Diaz & Trujillo, 2019].

2.2.1.1.1.4 Formal strategic planning model.

The model proposed by Hill and Jones is aimed at companies that compete in one or more industries. As shown in Figure 11, strategy is the result of a formal process of senior management responsibility, fed by a set of variables obtained sequentially [Alvarado, 2020].

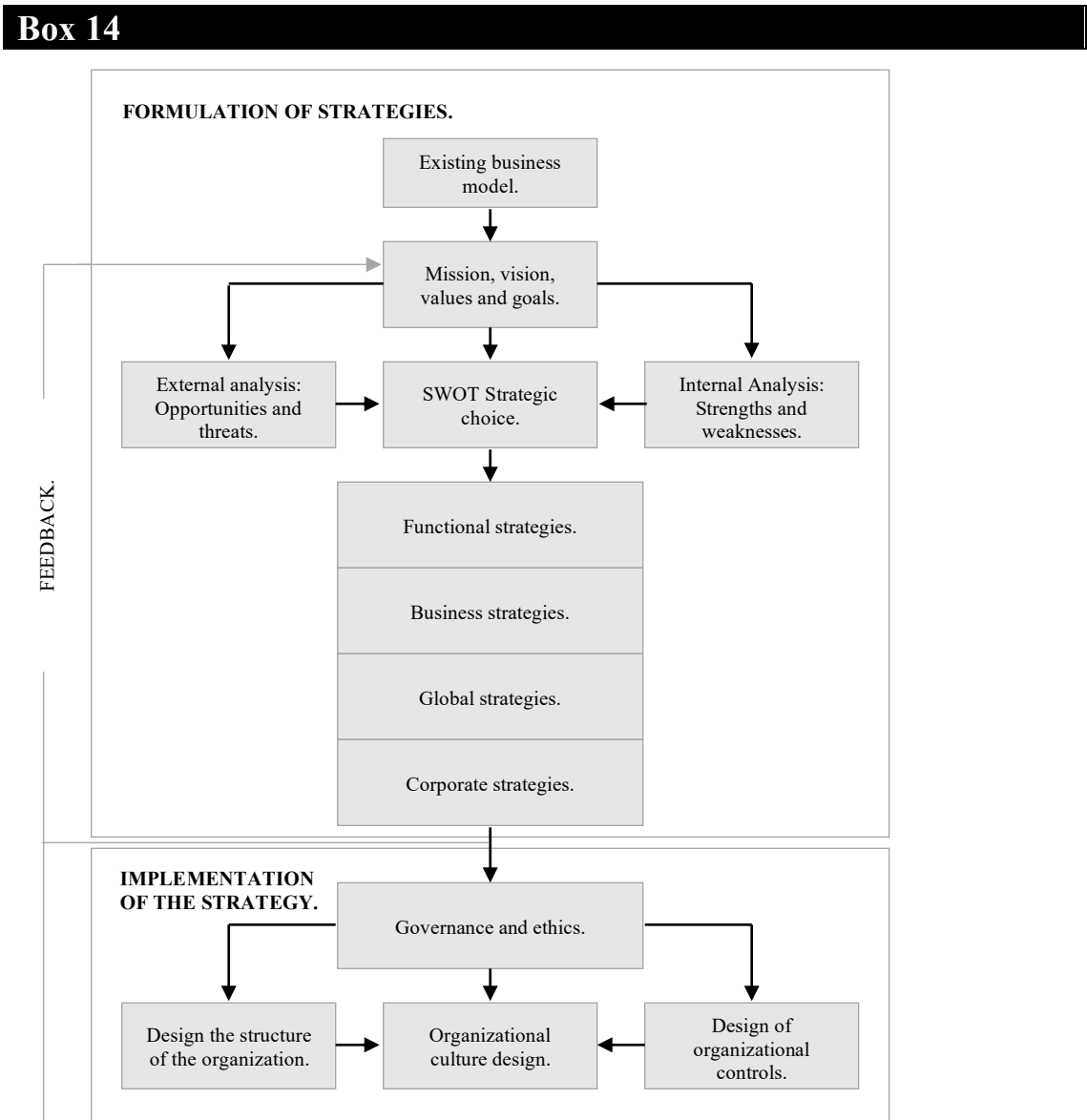


Figure 11
Model by W. L. Hill, Charles; R. Jones, Gareth.
Note. Taken from Strategic Management [p.13], by W. L. Hill & G. R. Jones, 2015, Cengage Learning.

Garcia & Katerina [2017] point out that the formal strategic planning model is the process through which managers formulate and implement strategies, which is equivalent to describing different phases for their preparation.

Strategies in the formal process start from the philosophy [mission, vision, and values] and main goals of the company to give consistency and viability to the business. The result will be a general plan covering a period of one to five years, which should be updated at least once a year [Sánchez, 2017].

The strategic model is a sequential step in the planning process. The first round begins with the statement of the mission and corporate goals, followed by strategic thinking: internal and external analysis and strategic choice. The process ends with the design of the organizational structure and culture. Hill & Jones [2015] state that the formal strategic planning process includes five main steps:

1. Choose the company's mission and its main goals.
2. Analyze the organization's external competitive environment to identify opportunities and threats.
3. Analyze the organization's internal operating environment to identify its strengths and weaknesses.
4. Choose strategies that build on the company's strengths and correct its weaknesses in order to take advantage of external opportunities and counter external threats.
5. Implement the strategies [p.12]

In relation to the above, periodic review of the internal and external analysis does not necessarily result in the choice of a new strategy. In many cases, it consists of feedback or restructuring based on existing resources and reports generated during the evaluation period to determine financial allocation within the organization [Hill & Jones, 2015].

2.2.1.1.1.5 Stanton, Etzel and Walter strategic planning model.

The strategic model proposed by the experts Stanton, Etzel and Walter, points out a logical sequence that merges strategic planning with the development of marketing planning, specifying in a clear and concise way the guideline to be followed by the marketing area [Chávez, 2017]. It recognizes that marketing does not operate in isolation, but is a function that must be aligned with the general objectives and strategies of the company, thus ensuring its effective contribution to the organizational mission and vision.

It uses administrative bases analyzed in the planning process at the organizational level and with it bases a new plan oriented exclusively to the activities of the marketing area based on the resources and opportunities that the company has to face the market with the objective of taking advantage of them as they may be temporary [Diaz, Trujillo [2019].

The model starts from the mission, situation analysis, general objectives and a selection of ad hoc strategies, for the subsequent formulation of a strategic marketing planning, in other words, the organization revolves around this area, the evaluation of the strategic plan will be made based on the performance of this department [Arango & Solarte, 2018].

As Labrador & Molero [2016] explain, after planning holistically, plans are formulated for the functional areas of the company or the functions on which it depends, focusing greater depth of importance to the marketing department

Thus, the organization's strategic planning revolves around the marketing area, given its direct impact on the company's positioning and growth in the market.

In summary, the model shown in Figure 12 contains four sequential elements: in the first part, the business mission is established, followed by a situational diagnosis [internal and external], considering the above, long-, medium- and short-term objectives are determined; in order to achieve them, strategies are formulated to support their attainment. Finally, the strategies are translated into detailed action plans, regardless of whether it is a micro, small or medium-sized organization [Juárez, 2020].

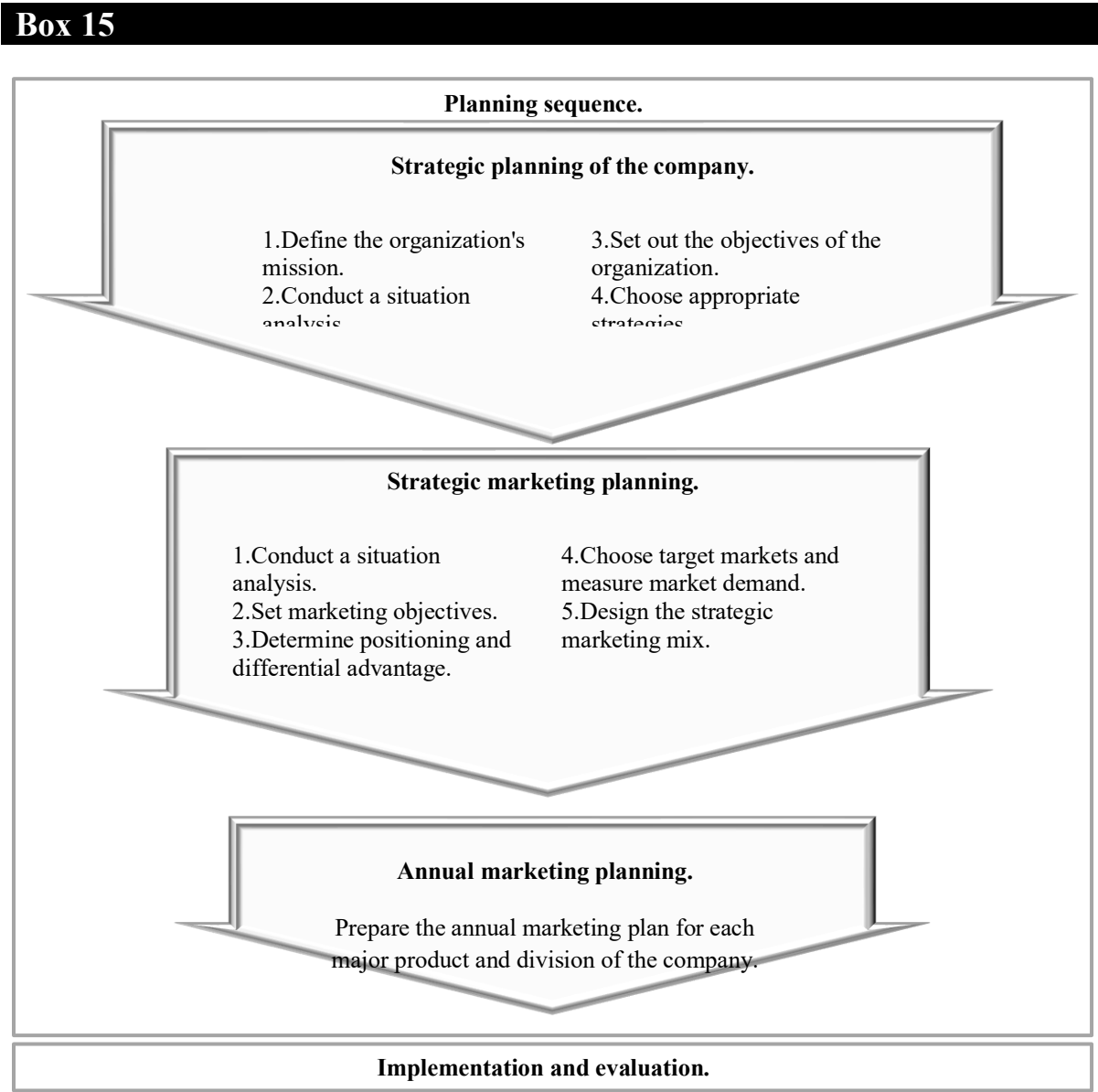


Figure 12
Stanton, Etzel and Walter's strategic planning model.
Note. Taken from Fundamentals of Marketing [p.601], by W. J. Staton et al., 2007, McGraw-Hill.

2.2.1.1.1.6 Strategic planning model using the balanced scorecard.

Linares [2020] refers, the balanced scorecard, is a business management tool that continuously shows when a company and its employees achieve the results defined by the strategic plan, this system allows to detect deviations from the strategic plan and express the objectives and initiatives necessary to redirect the situation, therefore, it is important to note that there are four operational axes that are responsible for monitoring [p.39].

In this same sense, the CMI builds a strategic management system, which feeds back the evaluations made by those responsible for the three hierarchical levels, these assessments are related to the development of actions for the successful achievement of goals and the attainment of objectives of a strategic nature [Vega, 2015].

In turn, Alcívar et al. [2024] states that the balanced scorecard transforms the strategy and qualitative variables of the organizational philosophy into an ordered set of indicators for its fulfillment, its objective is not to make internal customers follow a preset plan but to create a system of information, communication and training, which is based on four axes or perspectives shown in Figure 13 [internal processes, growth and learning, customers and finances]. Thus, the BSC is defined as a strategic management tool, used as a means to align initiatives at all levels of the organization, increase strategic formation and feedback, in other words, to define a suitable environment to transfer the strategy to the operational sector, integrating and interrelating it as a complement to the objectives pursued by the company [Ganga et al., 2015].

Box 16

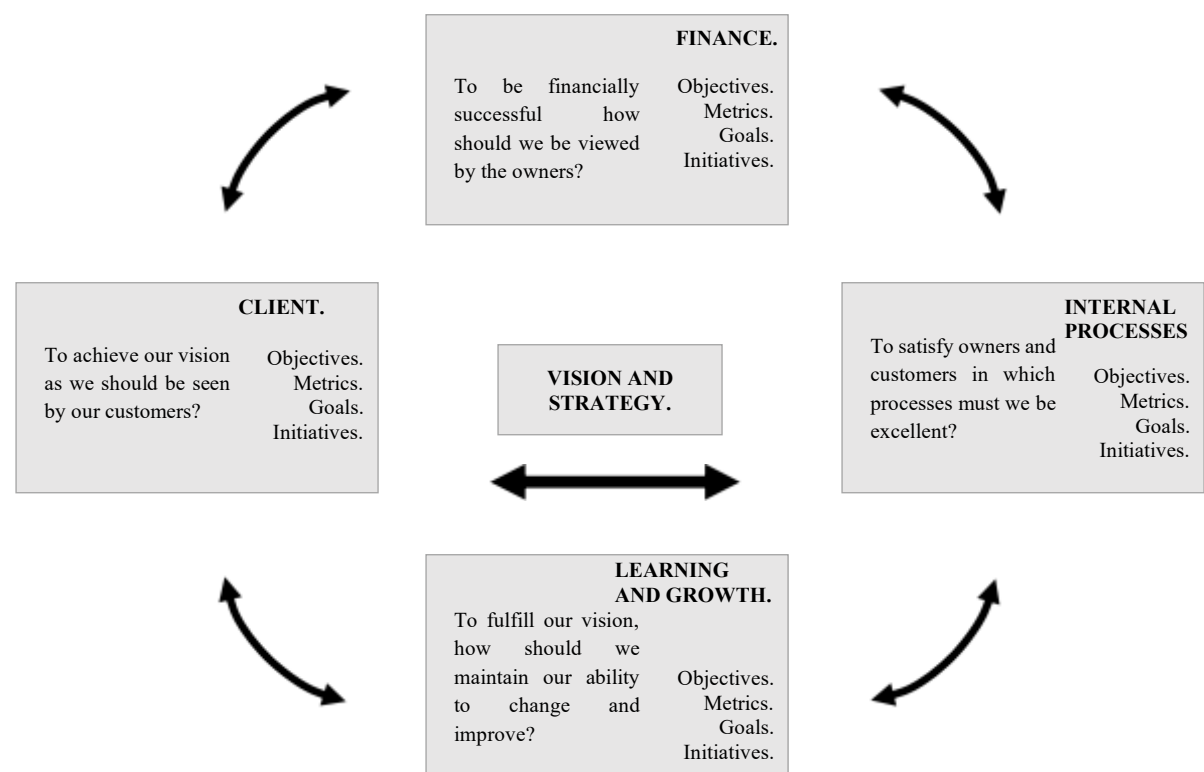


Figure 13
Norton and Kaplan model.
Note. Taken from The balanced scorecard [p.28], by R. S. Kaplan and D. P. Norton, 2016, Management 2000.

Finally, Quintero & Fernandez [2017] state, this strategic tool has four perspectives that answer a given question:

Development and Learning, Can we continue to improve and create value? measures employee productivity and the capacity of information systems, technology and organizational climate.

Internal Processes, What should we excel at? an analysis of the internal processes from a business perspective and a predetermination of the key processes that give value to the service are formulated.

In terms of customers, how they perceive us? we measure our relationships with them and their expectations of the business, using indicators such as customer satisfaction, deviations from service agreements, complaints resolved as a percentage of the total, and customer acquisition and retention

Finance, How do we look in the eyes of shareholders see us? this part of the BSC focuses on the need to create value for shareholders [profits, economic performance, development and profitability of the company]. Among the main indicators of this perspective are economic value added, return on capital employed, operating margin, revenue and asset turnover. [p.11]

2.2.1.1.2 Elements of strategic planning

Based on the above analysis, we conclude that strategic planning is a process that details how to optimally manage the financial, time and human resources of an organization, defining the strategy or course of action based on the current internal and external context; there are different models that guide this process formulated by different authors, however, they all share homogeneous elements:

- Business philosophy.
- Key internal factors.
- Key external factors.
- SWOT analysis.
- Diagnosis of the situation.
- Business philosophy.

In this same tenor, the business philosophy is an internal construction of the company, independent of the external context, composed of a future projection, organizational values and the objectives of a mission, it constitutes a system of general ideas that underpin the individual and collective behavior of the organization [Quiroga et al., 2018].

Authors such as, Franco [2012] states, philosophy is a system of values and beliefs of an organization composed of a series of principles, which are based on knowing who they are, what they believe in and the long-term projections; as well as, knowing the commitments and responsibilities. [p.48]

In parallel to what has been previously described, Dávila et al., [2017] point out that the business philosophy establishes a commitment to change and improvement that starts from the general management and integrates communication, participation, education and evaluation of all members of the company.

For his part, Mariño [2019] points out, organizational philosophy is a set of ideas put forward in order to design a mission, vision and values for optimal functioning of the organization, this set of beliefs and practices enable good performance and quality of response to the needs and desires of the end customer.

Finally, this section will indirectly define the starting point of strategic planning, where the philosophical convictions of the managers in charge of guiding the company will be stated; mission, its general concept, vision, its future projection and values, the rules by which it is governed, being intuitive and not analytical elements [Apolo et al., 2017].

2.2.2.1.1.2.2.1 Mission

The first part of this philosophy is the mission, which defines the work or activity in the market performed by an organization.

Kotler & Armstrong [2017] state, the mission is the company's purpose statement, it functions as an invisible guide that gives the guideline to internal customers for the achievement of an overall goal.

Chiavenato, [2017] exposes, is the variable that translates the purpose of the company, its limitation in the environment, represents the *raison d'être* and is considered the first definition of the strategic diagnosis.

The mission is the first guideline towards a desired future, it orients the company towards a desired change and answers the following question: What is our business? Who we are, What we do and Why we are here. D'alessio [2015] states, a mission has the following fundamental characteristics:

- Defines the organization.
- Define how you will serve your customers.
- Allows for creative growth.
- Differentiate yourself from your competitors.
- Gives the guideline to evaluate routine activities.
- He expresses himself clearly.
- It is credible to all those who read it.

The mission offers descriptive information, it identifies the services, the needs that are intended to satisfy and the market to which it is directed, the mission justifies its existence and indirectly points out the decisions to which it must be subject to please the client [González et al., 2019].

Choque [2015] points out, the mission is the general translation of organizational objectives, this proposition serves as a means to differentiate it from other similar companies, it is the starting point for designing strategies. The mission should be formulated collectively and established by consensus in the organization, this allows identifying stakeholders, making them compatible and directing them in a company-internal customer balance in a comprehensive manner towards the target population, the services offered, the characteristics of the environment, technology used, values and aspirations of the members that make up the company [Choque, 2015]

2.2.1.1.2.2.2 Vision

Chiavenato [2017] points out, the vision details the image of the company in terms of its purposes in the future, creates a state of positive tension between the current reality and the desired one in a future term; it serves as inspiration to stimulate the fulfillment of the mission, it constitutes the strategic intention of the company. Kotler & Armstrong [2017] state, the vision is the path to which the organization is heading in the long term, intrinsically shows an evolution of products, services, processes, technology and policies must be developed to reach that point.

The vision of the organization is the desired conceptualization of its future, it answers the question "How far do we want to go? Its approach is long-term, based on an accurate review of the market situation, as well as the current state of the organization. In this sense, D'alessio [2015] points out that the company will consolidate its vision only if the following four conditions are met:

- Existence of a correct understanding and communication.
- The role of vision in the strategic process is recognized.
- Adequate management is in place.
- The organizational culture facilitates teamwork and the link between areas and functions.

For his part, Manrique et al. [2019] states that the vision defines the goals to be achieved in the future, these must be realistic and achievable for the concept to be inspiring and attractive, it can be vague or very precise, it is recommended to answer the following questions for its formulation: what do I want to achieve, where do I want to be in the future, for whom will I do it, will I expand my area of action, will I expand my area of action, will I be able to achieve my goals in the future, will I be able to achieve my goals in the future, and will I be able to achieve them in the future?

Finally, when defining the vision, fundamental elements should be considered, the first of them, the future outlook, concerning the economic environment where the organization develops, and the second, the competitive framework, which encompasses the set of economic units that offer products and services that are competitive with each other. The vision is formulated from top management and has characteristics such as: inspiring, coherent, convincing, broad and shared by all levels of the organization [González et al., 2019].

2.2.1.1.2.2.3 Institutional Values

The values of an organization are considered the most important policies, their task is to regulate and direct the performance of internal customers towards a common goal, they are an important part of the philosophy, they represent the beliefs, attitudes, traditions and personality of an organization. Values are necessary to model objectives, design policies and define a strategic positioning [D'alessio, 2015].

Contreras et al., [2018] points out, the code of ethics is a frame of reference for the actions of an organization, the values over time will be transformed into its organizational culture, they direct the relationship with internal, external and intermediate customers. In other words, values have their foundations in moral criteria that transmit the philosophy of their creators and current leaders.

Kotler & Armstrong [2017] expound, adopting ethical values translates into building relationships and enhancing end-customer trust through the affirmation of core values such as: honesty, accountability, fairness, respect, transparency and citizenship.

Chiavenato [2017] states, institutional values are a set of beliefs and general terms that the company respects and holds above routine practices and with which it expects to obtain short-term gains, it is a timeless philosophy that serves as a guideline and inspiration to present and future internal customers of an organization. Values are qualities and virtues that external customers like, such as transparency, respect for diversity, a culture of innovation or respect for the environment.

Finally, Bores [2020] concludes that values are positive qualities that govern the behavior of an organization, such as excellence, community development and human capital development of employees.

2.2.1.1.2.4 Internal key factors

Internal analysis is the study and evaluation of different aspects within a company [financial, human, material, technological, etc.], the key factors are analyzed in order to glimpse the response capacity of an organization and thereby detect strengths and weaknesses [Bores, 2020; González & Saltos, 2025]

Chiavenato [2017] points out, the organizational analysis or internal audit is an evaluation of the main functional areas of the organization, the strengths they possess and weaknesses that must be corrected or improved. It is an intuitive investigation of introspective approach that has the scope to reinvent a company, responsibility of the tactical and operational area with guidance from top management. This sense, D'alessio [2015] in Figure 14, presents the interrelationships of the main variables and key factors in the operating cycle of any organization, the above for the analysis and monitoring of the internal audit process.

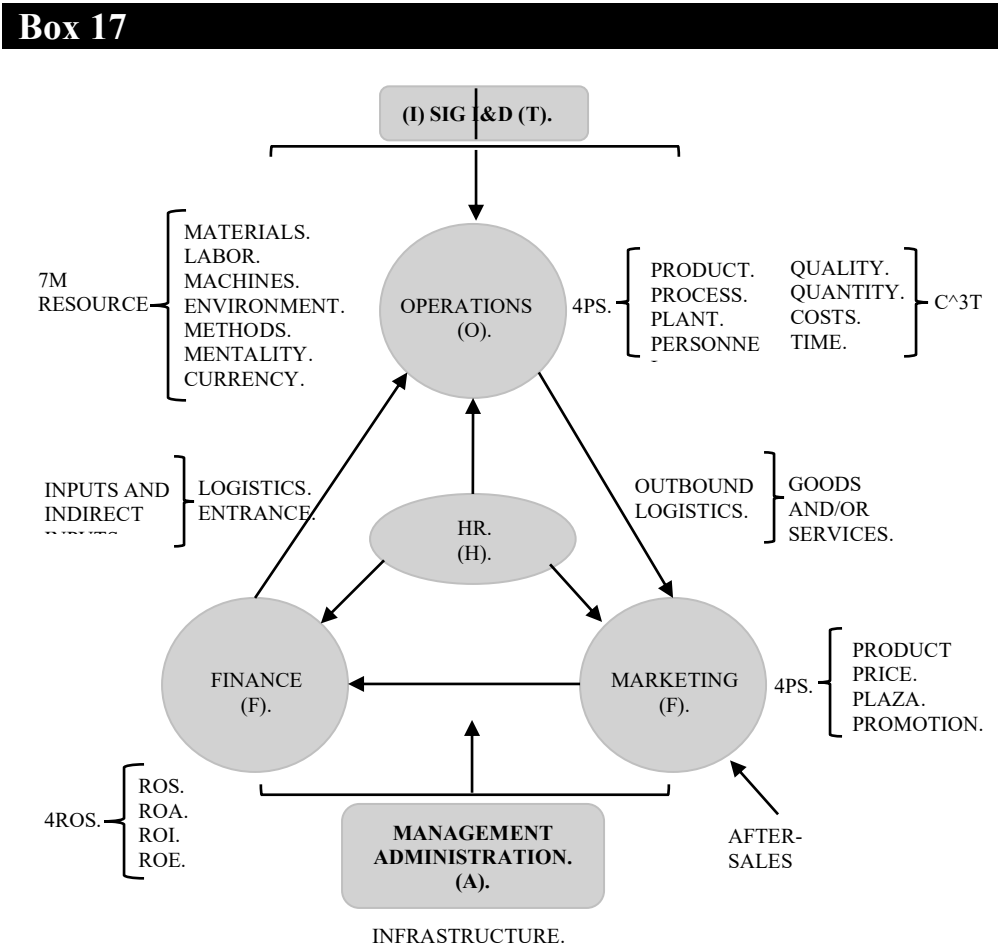


Figure 14
Operational cycle of organizations.

Note. Taken from The Strategic Process: A Management Approach [p.167], by F. A. D'alessio, 2015, Pearson Education.

In this tenor, Contreras et al., [2018] state, the internal analysis gives the opportunity to clearly identify the strengths and weaknesses of the daily operation and human capital of the collaborators, some internal elements of the organizations that are subject to evaluation are the following:

- Resources: capital, human resources, information systems, fixed assets, non-tangible assets.
- Management: management resources, strategic resources and creativity.
- Risks: in relation to the organization's resources and activities.
- Project portfolio: consolidated contribution from the different activities of the organization.
- Structural: adequate working definition: mission, vision, values, policies, objectives, strategies.

Likewise, [D'alessio, 2015] refers, internal evaluation is aimed at a search for strategies that capitalize on strengths and minimize the impact of weaknesses, consequently, what is relevant in an organization is to locate its distinctive qualities [strengths] that are not replicable in the short term and thus design strategies that reduce the entity's weaknesses and transform them into strengths.

The main areas that should be audited and analyzed in any organization are: administration, marketing, logistics and operations, finance and accounting, human resources, information systems, technology, research and development, that is, an AMOFHIT analysis. Finally, the Institute of Internal Auditors of Argentina [IAI, 2017] concludes, the analysis or internal audit is an objective assurance activity designed to add value and find improvements in the operational level of the organization, its purpose is to evaluate and improve the effectiveness of day-to-day processes.

2.2.1.1.2.4.1 Functional areas of the organization

Valencia & Molina [2018] expose, the functional areas or areas of responsibility, are directly related to the basic functions executed, they are a set, activities and responsibilities performed in a specific department simultaneously, as seen in Figure 15.

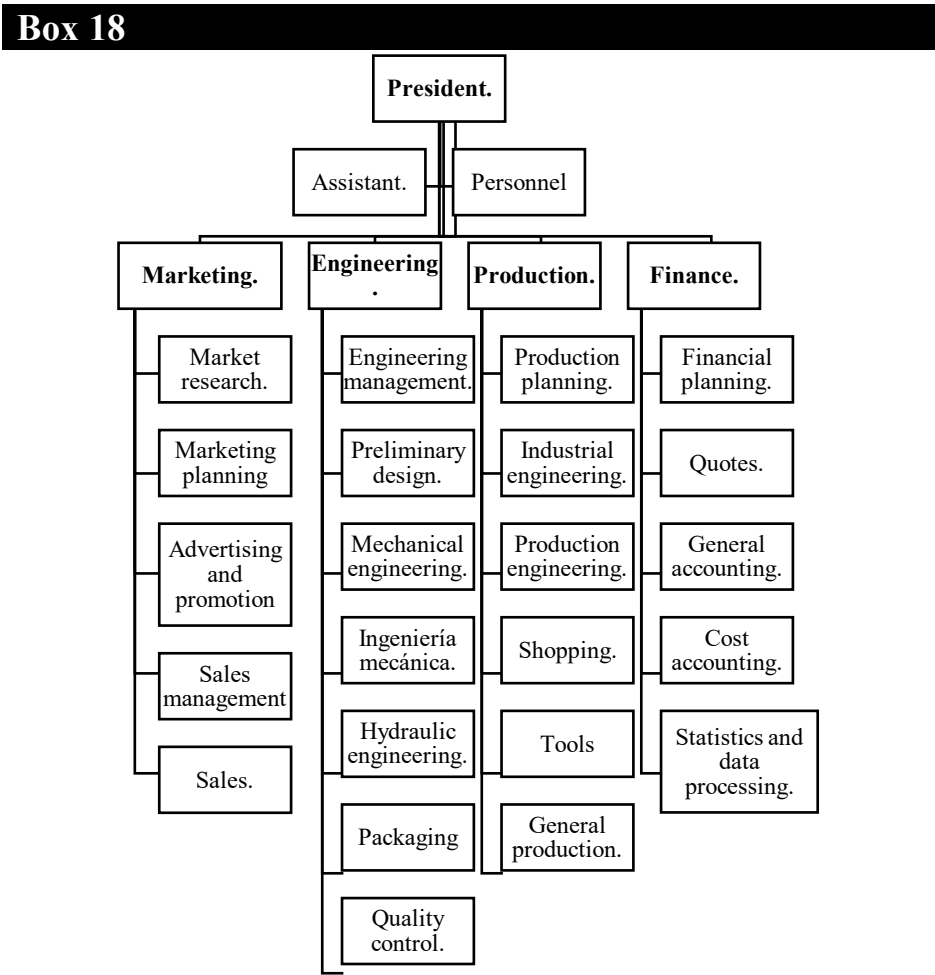


Figure 15

Functional areas.

Note. Taken from Functional areas of the organization [p.4], by D. Pinto, 2018, INACP.

Molinari et al., [2018] explains, the existence of a company indicates an organizational structure oriented to the achievement of objectives, the main theoretical contributions regarding the tasks, functions or operations developed within companies were contributed by Henry Fayol in which an integral numbering of operations performed by economic units regardless of their size or complexity was obtained, classifying them into six groups:

- Technical activities: production, transformation, manufacturing.
- Commercial activities: purchases, sales, exchanges.
- Financial activities: raising and administration of capital.
- Security activities: protection of property and people.
- Accounting activities: inventories, balance sheets, costs, statistics, etc.
- Administrative activities: [or management] foresight, organization, command, coordination, control.

However, none of the first five activities has the function of formulating a comprehensive plan of action [strategic planning] or building a structure that efficiently coordinates efforts and harmonizes acts, planning, organization, planning and direction is part of the administration and institutional hierarchical level, so a sixth activity with administrative functions is added [Molinari et al., 2018].

Pinto [2018] refers, they represent the primary tasks of a company, its objective is to consummate its vision. These functions are created from a need and adapt to changes in the environment, there is no formula to define what or which functions should be present in each area. In this direction, Chao [2019] points out, the functional areas are those necessary for an efficient operation of the company, together they allow to achieve the strategic objectives established by the top management, the most common are: finance, marketing, logistics, TICS, and general administration.

Linares [2020] states that they are those that provide strategic, tactical or operational value for any organization, generally there are between 5 and 7 basic functional areas:

- General management: establishes the objectives of the organization and directs them to their fulfillment, in addition to controlling the other functional areas of the organization, normally the person responsible is the administrator or manager.
- Human resources management: efficiently manages the knowledge, skills and abilities required in the division of labor.
- Production: Creation of the service or transformation of the raw material into a satisfier.
- Finance and accounting: efficient distribution of financial resources in the various departments in affinity with the guidelines established by management, in addition to performing financial analysis to accurately determine the economic situation of the organization.
- Advertising and marketing: performing demand analysis, market research, reengineering, product or service life cycle feasibility and viability and advertising
- Information technology: Implementation of technological elements in the different areas of the organization.
- Operations: creation of competitive advantages, efficient measurement of processes and adequate supply of inputs for the operation of the organization.

2.2.1.1.2.4.2 Marketing mix

The marketing mix is made up of the controllable variables that are mixed and interact with each other with the objective of positively influencing the demand for a certain product or service in target market [Díaz, 2019].

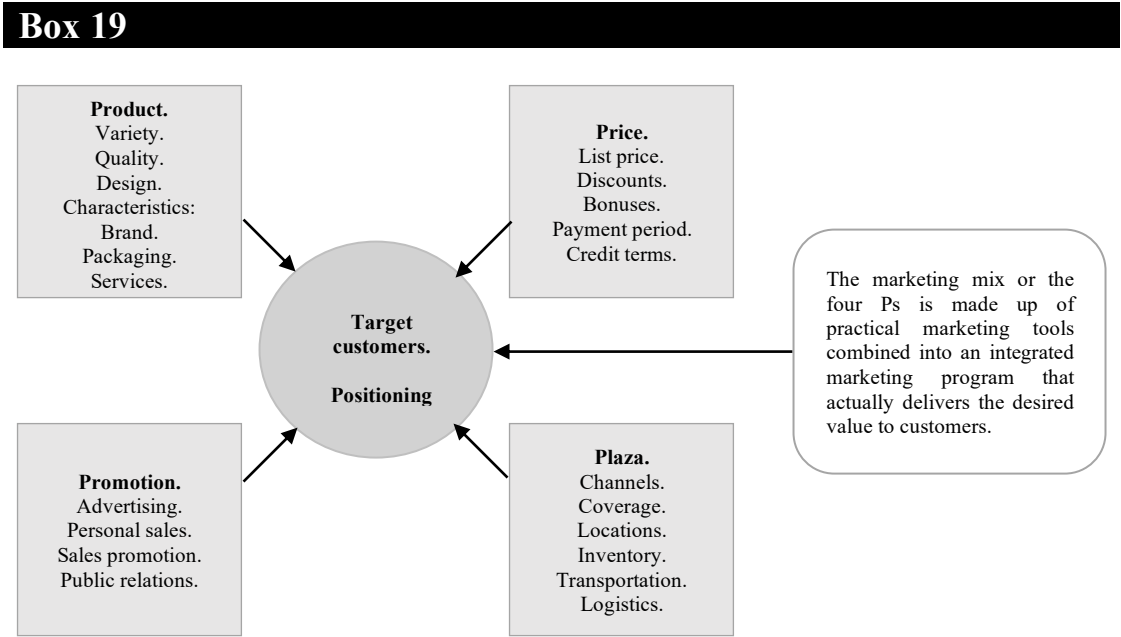


Figure 16
The four Ps of the marketing mix
Note. Taken from Fundamentals of Marketing [p.53], by P. Kotler and G. Armstrong, 2017, Pearson.

Kotler & Armstrong [2017] state, the marketing mix is a defined set of tools that interact with each other to generate the desired response by the target market. Figure 16, expresses the tools that merge, with this objective:

Product: the combination of goods and services that the organization offers to its target segment.

Price: refers to the amount of money that external customers must pay to enjoy a satisfier; this price is aligned to qualitative factors of the demander and the competitive and economic situations of the market.

Place: the total activities that an economic unit carries out to make the product or service available to the final consumer.

Promotion: refers to the total of activities that notify the virtues of the good and induce the target customer to purchase it.

However, with the evolution of the economy, marketing channels, an aggressive competitive environment and social responsibility towards the internal, external and final customer, 3 new 3Ps were added in the 1990s and later evolved to a total of 9Ps, or even more, but which for many authors are intrinsically present within the traditional ones [Cano et al., 2015].

Collarte [2017] exposes, in the beginning the marketing mix was composed of four tools, today it has evolved and five more variables have been added, as shown in Figure 17:

Personalization: Designing advertising and goods oriented towards the needs and desires of a defined segment of the total market.

Process: related to the P of Plaza, it refers to the total of activities necessary to guarantee the production of the product or service in an efficient way, as well as the steps to deliver it to the final consumer with the quality that was produced within the organization.

Participation: integration of the internal client in the development of the strategies and plans developed by the organization and the marketing department.

Proof: tangible visual cues that infer and impact a quality consumer experience of the company.

Prediction: divided into two parts, the first, using various digital monitoring tools to measure the impact of the strategy and the company's interrelationship with consumers, the second using the quantitative values collected to attract new customers.



Figure 17
The Ps of the marketing mix.
Note. Taken from Fundamentals of Marketing [p.53], by P. Kotler and G. Armstrong, 2017, Pearson.

Robles & Sandoval [2015] conclude that the marketing mix is usually made up of four controllable variables that have the capacity to influence the demand for a service or product.

2.2.1.1.2.2.5 External Analysis

The external environment is characterized by profound, rapid and discontinuous changes, which have an influence on people, organizations and societies in general, these changes are stimulated by the exercise of varied agents that simultaneously form a field of dynamic and chaotic forces, whose derived effect is unknown and unforeseen [Chiavenato, 2017]. To perform an external strategic analysis, top management must select a large set of variables and dimensions that could contain valuable information about significant changes in the environment and personal motivations of individuals or organizations.

External analysis is understood as a situation in which every company is permanently located, it works as an open system where it performs transactions and exchanges, therefore, whatever happens to this interaction environment has the ability to affect it. In this sense, the external analysis is a set of elements outside the organization, directly or indirectly affect the achievement of its objectives, these variables have significant changes constantly, influencing positively or negatively, its impact is not controllable, but it is taken as an area of opportunity for development, growth and achievement of goals from its analysis [Valencia & Molina, 2018].

Palacios [2016] points out, the external environment is an environment that encompasses countries, their societies, organizations, companies and communities, it works as a system that has an effect on all the components that integrate it, in this scenario phenomena occur that influence the development of organizations. By virtue of the extensive volume of data from the external environment, it is necessary to create systems to gather available information and through this try to reach a conclusion, the strategic diagnosis must take into account the environment of the organization that deeply impact the current world, composed of the macro-environment, the consumer dimensions and the analysis of the competition as seen in Figure 18 [Chiavenato, 2017].

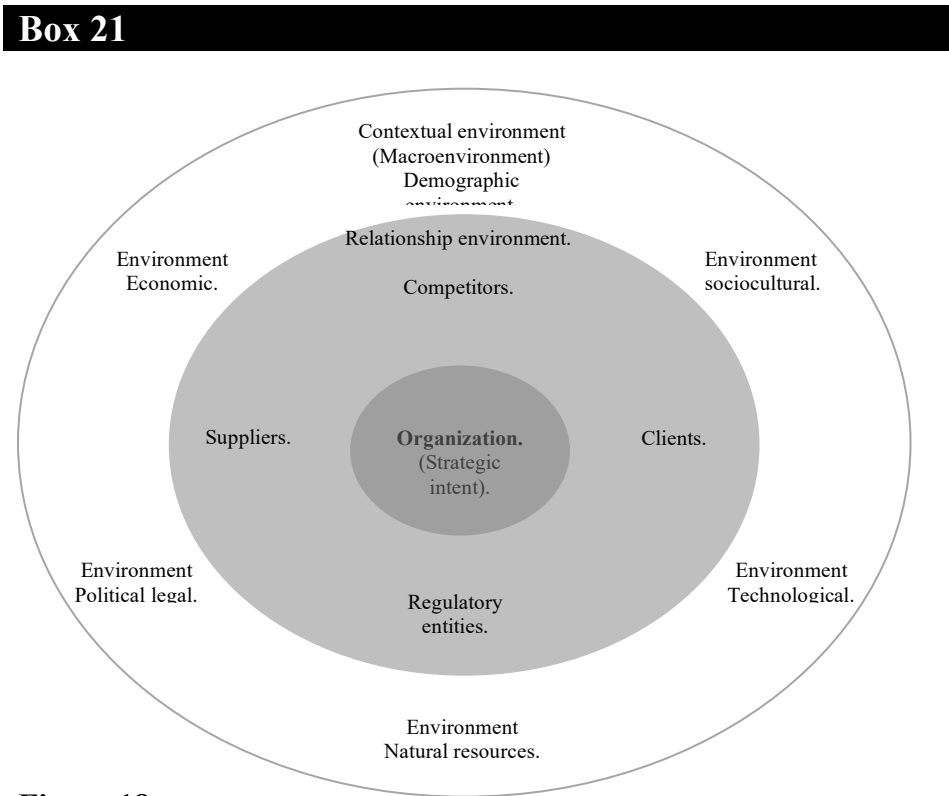


Figure 18
Company environment.
Note. Taken from Strategic planning fundamentals and applications [p.65], by I. Chiavenato, 2017, MCGRAW HILL.

Contreras et al., [2018] states, external audit identifies political, economic, social and technological factors that have influence on an organization, program or project, this study allows identifying threats and areas of opportunity present externally. Finally, the external evaluation or strategic management audit focuses on the exploration of the environment and an analysis of the market, through which it seeks to distinguish and evaluate trends and phenomena that are beyond the project's control. D'alessio [2015] refers, to formulate an external audit it is recommended:

Involve top management and key officials.

- Research political, economic, social, technological and ecological information.
- Gather important data about the main competitors.
- Properly track relevant information in different sources: journals, articles, yearbooks, reports, etc.
- Use the experience of internal customers.
- Use suppliers, distributors and customers as a source of information.
- Analyze and evaluate information to collectively identify the most important opportunities and threats of competitors.
- List in chronological order the priority of critical factors affecting the company.

2.2.1.1.1.2.5.1 Macroenvironment

Organizations generate products and services for a certain segment, for this they must define threats and opportunities, present in the macro environment, made up of important factors or forces that affect customers, individuals, companies, countries, etc., [Taípe & Pazmiño 2015].

Macro-environment factors are generic variables that exist at the international level and their management is independent of the organizations in a market; they are the external environment that surrounds the company in which they develop their exchange of goods and services [González & Larios 2015] Organizations operate within a macro-environment that largely shapes their threats and opportunities [Kotler & Armstrong, 2017].

D'alessio [2015] exposes, the key factors are analyzed with a systemic and integral approach through the political, economic, social, technological, ecological and competitive forces also called PESTEC analysis. By virtue of this, Figure 19 shows the different variables that make up the macro-environment contained in the strategic planning [Palacios, 2016].

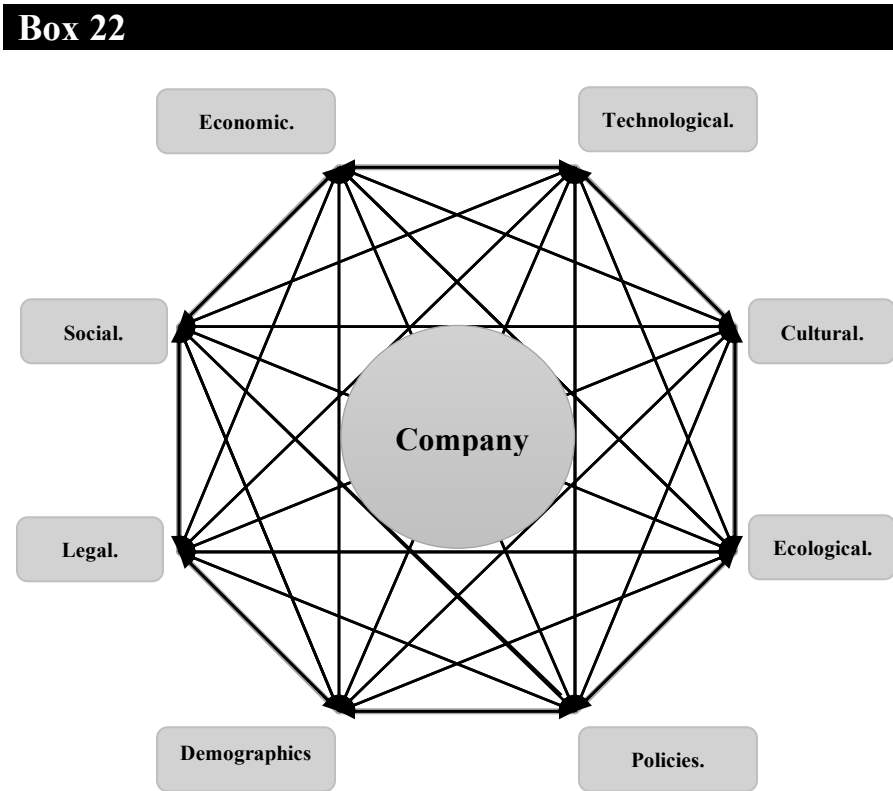


Figure 19
Variables of the external environment.
Note. Taken from Dirección estratégica [p.31], by L. C. Palacios, 2016, ECOE Ediciones.

The objective of analyzing the macro-environment is to identify the vital variables and indicators that influence the levels of supply, demand and operating costs of organizations, since, according to the configuration of these dimensions and their trends, new consumer preferences are generated, which translate into a set of opportunities and threats to the sector, and their analysis allows adjusting changes to anticipate future events and phenomena that are beginning to take shape in the present [Puebla, 2015].

Chiavenato [2017] points out, the external environment is analyzed through its different nuances, that is, the demographic, economic, legal political, sociocultural, technological and natural resources environment, for this purpose indicators or sensitive dimensions of each variable must be selected with the ability to detect trends and changes that are beginning to be glimpsed, every company should select and discriminate indicators depending on their needs, priorities or experience. Contreras et al., [2018] refers, it is necessary to draw up a list of the dimensions of the macroenvironment with the ability to influence the operability of the organization, answering the following questions: What are the greatest threats that the organization faces in the environment? What are the best opportunities that the organization has?

In this sense, the choice of such a list represents a competitive advantage due to the large amount of information available, dispersed in different sources of information which makes its collection impossible in economic and technological terms, therefore, it is necessary to highlight some indicators that generically affect all entities to a lesser or greater extent [Chiavenato, 2017; Jayo et al., 2025]

Each of the factors that make up the external environment are mentioned below.

2.2.1.1.2.5.5.1.1 Demographic environment.

Tapie & Pazmiño [2015] state that the demographic factor encompasses a comprehensive study of a human population in terms of size, density, location, age, sex, race, occupation and other statistical data of importance to the organization. When performing the situational diagnosis, the demographic profile of the sector to be satisfied must be considered, since it is not constant and changes slowly or rapidly. Chiavenato [2017] explains, the demographic environment is a statistical investigation of the population, its distribution and demographic conditions, its study is of relevance because individuals constitute markets and these in turn set trends, which directly influences the fulfillment of goals and objectives. Demographic analysis analyzes and describes the most relevant elements in a given population, identifying relevant needs and based on statistical information design control strategies [Mina, 2018].

Table 4 explains the main particularities of the demographic environment.

Box 23

Table 4

Definitions of the demographic environment analyzed by Kotler & Armstrong, [2017].	
Subvariables.	Demographic environment.
Explosive growth of the world population	It is one of the main concerns of governments based on two factors: the first is the possible depletion of natural resources; social marketing is recommended, and the second is that population growth is higher in countries and communities that are less prepared to cope with it.
The age mix of the population determines the needs.	A population can be divided into six groups: preschool, school-age children, adolescents, young adults ages 25 to 40; middle-aged adults ages 40 to 65; and older adults, ages 65 and older. Each group has a known range of product and service needs, retailer preferences and media that help marketers to more accurately define their market offerings.
Ethnic markets.	Countries vary in terms of their ethnic and racial makeup. Each population group has its own desires and buying habits.
Educational groups.	The population is usually divided into five educational groups: illiterate or illiterate, high school dropouts, high school graduates, college interns, and degreed professionals.
Household formation.	In contrast to the traditional household composition [father, mother, children and grandparents], households now include single people living alone, adults of one or both sexes living together, families with a missing parent, married couples who do not have children, and people who do not build households. These new compositions are the result of people choosing not to marry, marrying at an older age, or marrying without the intention of having children; people are separating or divorcing more frequently.
Geographic changes in population.	The 1990s was a period of significant migratory movements between and within countries. Where people are located makes a difference in their preference for goods and services.
Change from a mass market to a micro-market.	As a result of all these changes, there is differentiation among them in terms of age, gender, ethnic background, education, geography, lifestyle, and. Companies are increasingly designing their marketing programs and products for specific micro-markets.

Note. Developed from Fundamentals of Marketing [p.70], by P. Kotler and G. Armstrong, 2017, Pearson.

Palacios [2016] proposes, indicators for the demographic environment: size, density and geographical distribution of the population, population mobility rate and migratory process, population growth and aging rate, marriage, birth and death rates, age structure, family and housing, level of schooling and ethnic and religious composition.

2.2.1.1.2.5.1.1.2 Economic environment

A large part of the markets is globalized, no economic unit, whether large or small, is safe from international competition, due to the great technological advances, currently there is a movement towards global markets, where it is possible to achieve economies of scale in production, the result is a significant decrease in cost which reduces the profits of organizations that do not operate on a global scale, therefore the analysis of trends in economic dimensions affect the supply and demand of services [Chiavenato, 2017].

D'alessio [2015] states, the economic variable determines macroeconomic trends, financing conditions and investment decisions, these variables have a direct effect on the purchasing power of the organizations' target audience.

In this guideline, there are fundamental economic forces that determine the success of companies, for example, wages or salaries, general prices of payments to suppliers, competitors' prices and government policies are variables that influence production costs or when granting services [Tapie & Pazmiño, 2015].

In the last decade, this force has been one of the most relevant variables for the management of a company, due to the fluctuations that its dimensions have experienced internationally, these indicators are evaluated to reveal the generation of opportunities or threats [D'alessio, 2015].

By virtue of this Kotler & Armstrong, [2017] point out, it is a study of dimensions and sub-variables that affect the purchasing power of end customers, as well as spending patterns, from a global, national, regional and local level, its main indicators are two:

- Income distribution: which distinguishes five distinct patterns of income distribution [very low income, Mostly low income, Very low or high income, Low, middle and high income and Mostly middle income].
- Savings, debt and credit availability: any substantial change in income, cost of living, interest rates, savings and financing patterns because their impact can be considerable, especially in companies whose products are highly sensitive to income and prices.

Palacios [2016] proposes, the following indicators that influence macro-environment variables: economic environment: economic development, population, Gross Domestic Product [GDP], per capita income Social infrastructure, natural resources, inflation, interest levels, wage levels, monetary and fiscal policy.

2.2.1.1.2.5.1.1.3 Natural environment

Natural factors are raw material transformed into input that affect business activities, these dimensions are linked to characteristics of the environment, nature, natural resources, natural phenomena, natural forces or climate, organizations consider the impacts of natural factors in the development of their services or products [Tapie & Pazmiño, 2015].

Trejo et al. [2023] affirms that the ecological environment translates into forces with the capacity to determine the rules by which organizations are and will be governed, and constitute the most relevant variables in the external evaluation. These forces are associated with power processes, agreements related to strategic objectives, as well as conflicts of interest of the agents involved, such as governments and other larger organizations, which determine a set of variables that must be evaluated to glimpse opportunities or threats.

In this guideline, the natural environment or ecological factor contemplates renewable and non-renewable natural resources that are used by organizations or affected by marketing-related activities [Kotler & Armstrong, 2017]

Table 5 analyzes the main characteristics of the variables that influence the natural environment.

Box 24

Table 5

Definitions of the natural environment analyzed by Kotler & Armstrong, [2017].

Natural environment.	Subvariables.
Materials are INFINITE [such as air], FINITE RENEWABLE [such as forests and food] and FINITE NON RENEWABLE [such as oil, coal, platinum, zinc, silver, etc.]. Companies involved in research and development have an excellent opportunity to develop new substitute materials.	Shortage of raw materials.
Companies need to be aware of fluctuations in oil and other energy prices.	Increase in energy costs.
Some industrial activities will inevitably damage the quality of the natural environment. Public concern about this creates a marketing opportunity to alert companies and create a large market for pollution control solutions such as scrubbers, recycling centers and landfill systems.	Increased levels of contamination.
The most important hope lies in all companies around the world accepting greater social responsibility and also in finding more economical devices to control and reduce pollution.	Changes in the role of government in ecological protection.

Note. Prepared from Fundamentals of Marketing [p.77], by P. Kotler and G. Armstrong, 2017, Pearson.

Palacios [2016], concludes with the following indicators for the ecological environment: state of nature, physical environment, natural environment, natural resources and renewal.

Chiavenato [2017] adds the following indicators that he considers the most used in the information process of the natural environment: scarcity of raw materials, cost of energy, global warming, environmental pollution, threats of new diseases, natural disasters and sustainability.

2.2.1.1.2.5.1.4 Political-legal environment

Politics is a space of power struggle, where an individual or groups of them have the ability to make decisions that impact on the life and conduct of a large number of people, the product of these decisions is a set of specific laws where organizations are immersed. A public institution will have the option of adapting a flexible or strict position with respect to a company within its state, it will apply laws or encourage business growth through them, these variables are called political-legal forces, so called because of the management of the political process and climate present in a state [Tapie & Pazmiño, 2015].

González & Larios [2015] & Tacuri [2025] points out that political factors are an important factor for economic units, they are responsible for guiding their behavior with defined laws that prevent abuses to internal, external and final customers. Therefore, it is necessary to carry out an investigation that covers laws and government regulations where the organization provides its services, detecting opportunities and threats, since, the relations between the business and government sectors are combative.

In other words, they are elements that drastically influence companies, since the regulations of municipal, state and federal agencies impose a series of laws and rules that place a margin to organizations of what is allowed and not allowed, currently these laws are oriented to environmental protection, tax evasion, as well as fair wages and rights that benefit collaborators who provide added value to these economic units [Valencia & Molina, 2018].

In this sense, they are forces that determine formal and informal rules to which organizations are subject, they constitute variables that can be evaluated according to the degree of influence on the line of business and activities of the business, suppliers and customers [D'alessio, 2015].

Chiavenato [2017] exposes, organizations do not control the legal political environment they only explore scenarios by searching and evaluating a set of variables that establish limits for their performance, among which are: monetary, tax, fiscal and social welfare policy, tax, commercial, labor and criminal legislation, international relations policy, legislation for environmental protection, regulatory, deregulation and privatization policies, federal, state and municipal legislation and power structure.

2.2.1.1.2.5.1.5 Technological environment.

Technology is a variable that determines the development or decline of an organization, due to the gradual changes that replace previous techniques that in parallel generate new opportunities and marketing markets. These new scenarios force organizations, with prior planning or unexpectedly, to manage changes in the structure of their processes, products or services, the manager must consider the technological factor as an opportunity, since its acquisition represents an optimization of resources that could hardly be considered as a threat except in certain circumstances where its depreciation is rapid or its cost is excessively high [Tapie & Pazmiño, 2015].

In this guideline, it is an analysis of trends concerning human knowledge, which have the ability to influence the use of raw materials, inputs or the application of operational and administrative processes [Chiavenato, 2017]

D'alessio [2015] states, the technological environment is characterized by rapid change, wide dissemination of knowledge and permanent scientific innovation, the impact of these three forces modifies the rules of competition, makes traditional management practices obsolete, reduces entry barriers, generates opportunities and even breaks the status quo of consolidated organizations.

Valencia & Molina [2018] explain, comprises scientific and technological advances [plants, services, equipment and the technological knowledge base], these changes are visualized in two main points:

- Technological changes in products or services: these are those modifications that a product or service undergoes in order to obtain new characteristics and capabilities.
- Technological changes in the process: changes in the way a product or service is produced or in the way an economic unit is managed.

Palacios [2016] proposes, the following indicators that exert influence on the technological environment: procedures, equipment, research and development, scientific advances and state-of-the-art technology.

2.2.1.1.2.5.1.6 Socio-cultural environment.

Part of the macro-environment where aspects that describe norms, customs and values of a population are included, studied by organizations when hiring personnel and installing new matrices, each state has a cultural and social system that comprises certain beliefs that must be analyzed for proper decision making [Valencia & Molina, 2018].

Tapie & Pazmiño [2015] state that the sociocultural environment influences the daily actions of the organization due to the set of values, perceptions, desires and general behaviors that an individual learns from his family and the community where he lives, in other words, it can serve as an opportunity or threat if it manages to influence or not the purchasing behavior of consumers and thus cause an increase in demand or decrease in supply.

In other words, it is an analysis of trends in basic beliefs, values, norms and customs prevailing in a society that are associated with changes in the economic environment [Chiavenato, 2017].

In parallel, D'alessio [2015] explains, sociocultural analysis involves beliefs, values, attitudes, opinions, and lifestyles developed by cultural, ethnic and religious social conditions that exist in the external environment of the organization. These variables define the consumer profile, determine market sizes, direct purchasing habits, and create thought structures that influence consumer purchasing decisions.

By virtue of this, Kotler & Armstrong [2017] state, consumers experience variations from one geographical point to another in terms of age, income, educational level and preferences; the way in which these consumers demand this enormous variety of products and services affects the supply of organizations and therefore the strategies to satisfy the wants and needs of the markets, these characteristics affect purchasing behavior and must be considered for sound decision making. Table 6 analyzes the main characteristics of the sociocultural environment variables that influence consumer behavior in consumer markets.

Box 25

Table 6
Socio-cultural environment variables analyzed by Kotler & Armstrong, [2017].

Variable.	Sub variable.			
Cultural	Culture. Set of values, perceptions, desires, and basic behaviors that a member of society learns from his or her family and other important institutions.	Subculture. A group of people who share value systems based on common experiences and situations in their lives.	Social classes. Relatively permanent and orderly divisions of a society whose members share similar values, interests, and behaviors.	
	Reference groups. Two or more people interacting to achieve individual or collective goals.	Family. It is of interest to know the roles played by the husband, wife, and children, and the influence each has on the purchase of different products and services.	Roles and status. A person belongs to many groups: family, clubs, organizations. The person's position in each group can be defined in terms of both the role he or she plays and his or her status.	
Social.				
Personal.	Age and stage of life cycle. The goods and services that people buy change throughout their lives; tastes in food, clothing, furniture, and recreation are often related to age, family cycle, or alternate non-traditional stages.	Occupation. The occupation of a person influences the goods and services he/she buys, the aim is to identify those occupational groups that have an outstanding interest in their products and services.	Economic situation. A person's economic situation influences his or her product selection; marketers who sell income-sensitive items monitor trends in personal income, savings, and interest rates.	Personality. Personality refers to the unique psychological characteristics that give rise to relatively consistent and enduring responses in the individual environment.
Psychological.	Motivation. People have many needs at any given time, some are biological, arising from states of stress such as hunger, thirst or discomfort. Others are psychological, arising from the need for recognition, esteem or belonging.	Perception. The process by which people select, organize and interpret information to form an intelligible picture of the world.	Learning. Learning describes the changes observed in an individual's behavior as a result of experience.	Beliefs and attitudes. The marketer is interested in the beliefs that people formulate about specific products and services because such beliefs constitute the image of products and brands, which affects purchasing behavior.

Note. Prepared from Fundamentals of Marketing [p.80], by P. Kotler and G. Armstrong, 2017, Pearson.

2.2.1.1.2.5.2 Microenvironment

Contreras et al., [2018] state, within the list of external factors it is necessary to include elements other than the PESTEL analysis that, in affinity to it, establish a clear causality principle, in other words, an effect on the activities in the economic unit.

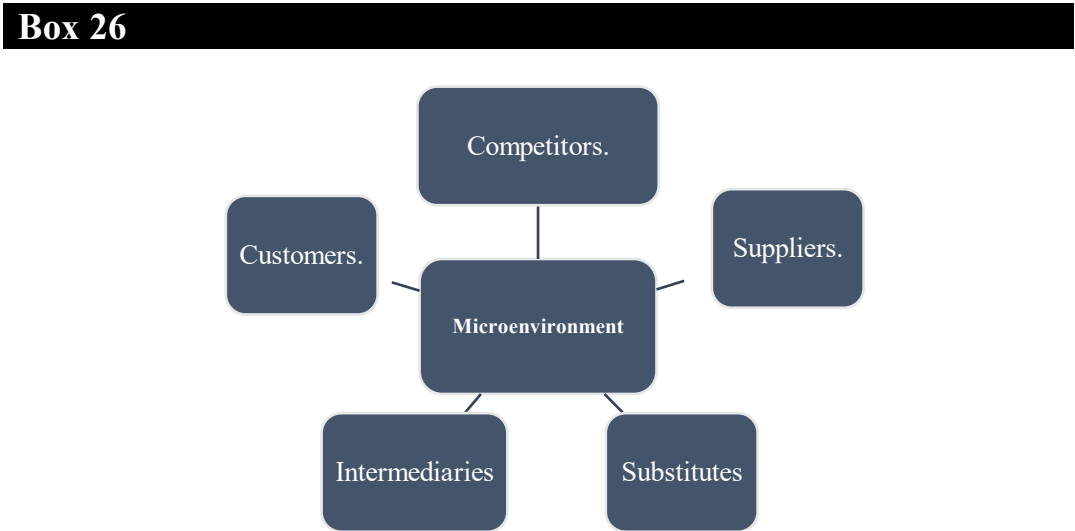


Figure 20
Microenvironment variables.
Note. Taken from Consideration of the external and internal factors or forces to be taken into account for the situational analysis of a company [p.174], by J. F. Tapie and J. F. Pazmiño 2015, Revista Publicado.

Valencia & Molina [2018] point out, the microenvironment has the ability to offer a complementary analysis on the opportunities and threats of a company, unlike the macroenvironment, this tends to possess a direct influence on the company and some degree of control for the general management.

In turn, Tapie & Pazmiño [2015] refer, it is composed of factors closely related to the operation and growth of the company, as shown in Figure 20, it is made up of: competitors, suppliers, substitute products, intermediaries and target public. In this sense, the study of the microenvironment becomes necessary, by virtue of being a key element in the strategic planning process, establishing in its objective to adapt, anticipate or influence its environment and thus guide the organization to an environment of certainty for proper decision making [Navarrete et al., 2023].

Vizcarra et al., [2018] conclude, the microenvironment refers to the forces that directly affect the object of analysis, such as: competitors, suppliers, intermediaries, customers and public, by generating a cause-effect principle in the strategy of the economic unit and inferring in the customer's perspective on the products or services offered. Therefore, it is necessary to know information about the dimensions of the microenvironment that directly affect the organization.

2.2.1.1.2.5.2.1 Model of the structure of the industrial sector.

The analysis of elements such as suppliers, competitors, customers, intermediaries and substitutes, is subject to be carried out through the study of Porter's five forces, by virtue of, integrally encompassing the dimensions inherent to the microenvironment, which as noted act directly on the organization. Gutiérrez & Restrepo [2017] state, the model of the structure of the industrial sector was developed to analyze the various industries in terms of profitability, serving as a strategic guide that considers five forces inherent to any market that allow to pose a future scenario of the organization that performs activities within that sector.

According to Porter, the ability to generate profits in a company is not a matter of simple chance, it all depends on a series of abstract configurations of the forces available to the competition in the segment, given through the premise of a higher return on invested capital [Chiavenato, 2017].

Therefore, the competition of a sector is not a direct effect of a search to satisfy the needs of new customers, but for an expected economic return, which brings different forces to compete with each other, for the predominance and hegemony of that segment

Box 27

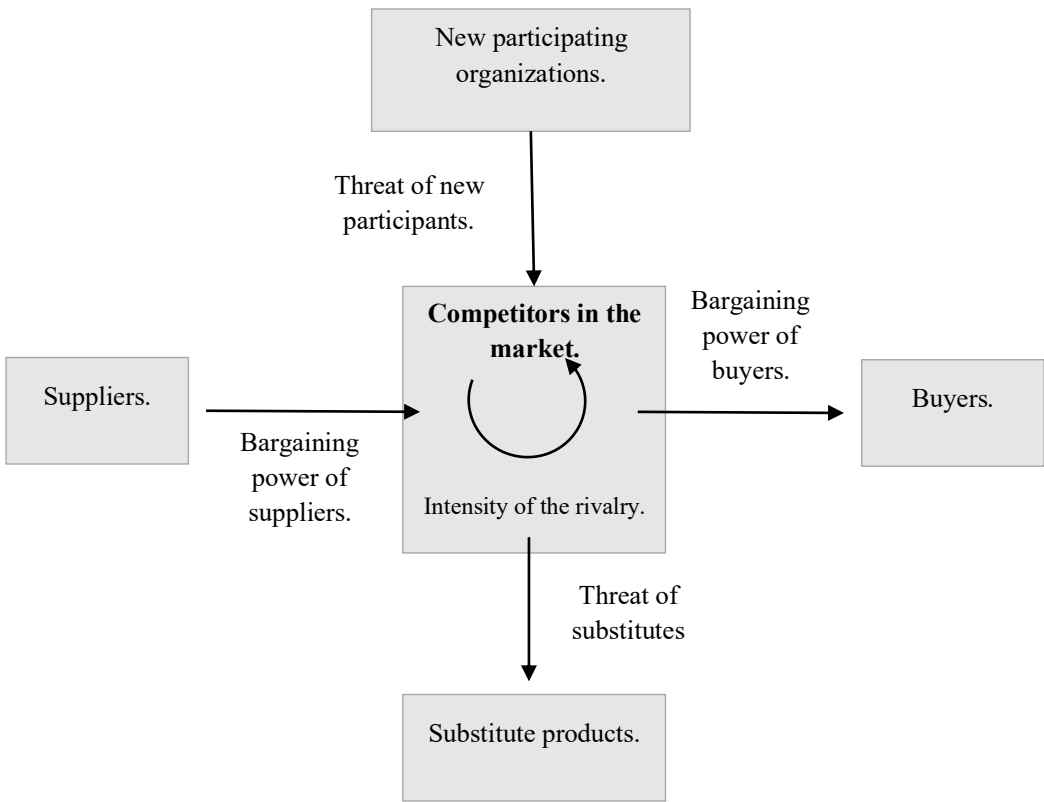


Figure 21

Porter's five forces that drive competition in industry.
Note. Taken from Strategic planning fundamentals and applications [p.78], by I. Chiavenato 2017, McGraw-Hill Education.

As shown in Figure 21, Porter has proposed a five forces of competition model, which takes into account the rivalry between competitors and the threat of entry by potential entrants, the probability of the existence of new substitute products or services, and the bargaining power of suppliers and customers.

In affinity with the above, Porter's model generates a clear picture that makes it possible to determine the configuration and growth possibilities of the sector in which the company operates, the general strategies employed by competitors and the current strategic positioning of the organization in the market. Figure 22 shows the most important aspects in the study of Porter's five forces.

The detailed analysis of each aspect is relevant because it answers the question "How attractive is the sector where the economic unit is located? And it allows the visualization of threats and opportunities, as well as the bargaining power of suppliers and customers or buyers [D'alessio, 2015].

Box 28

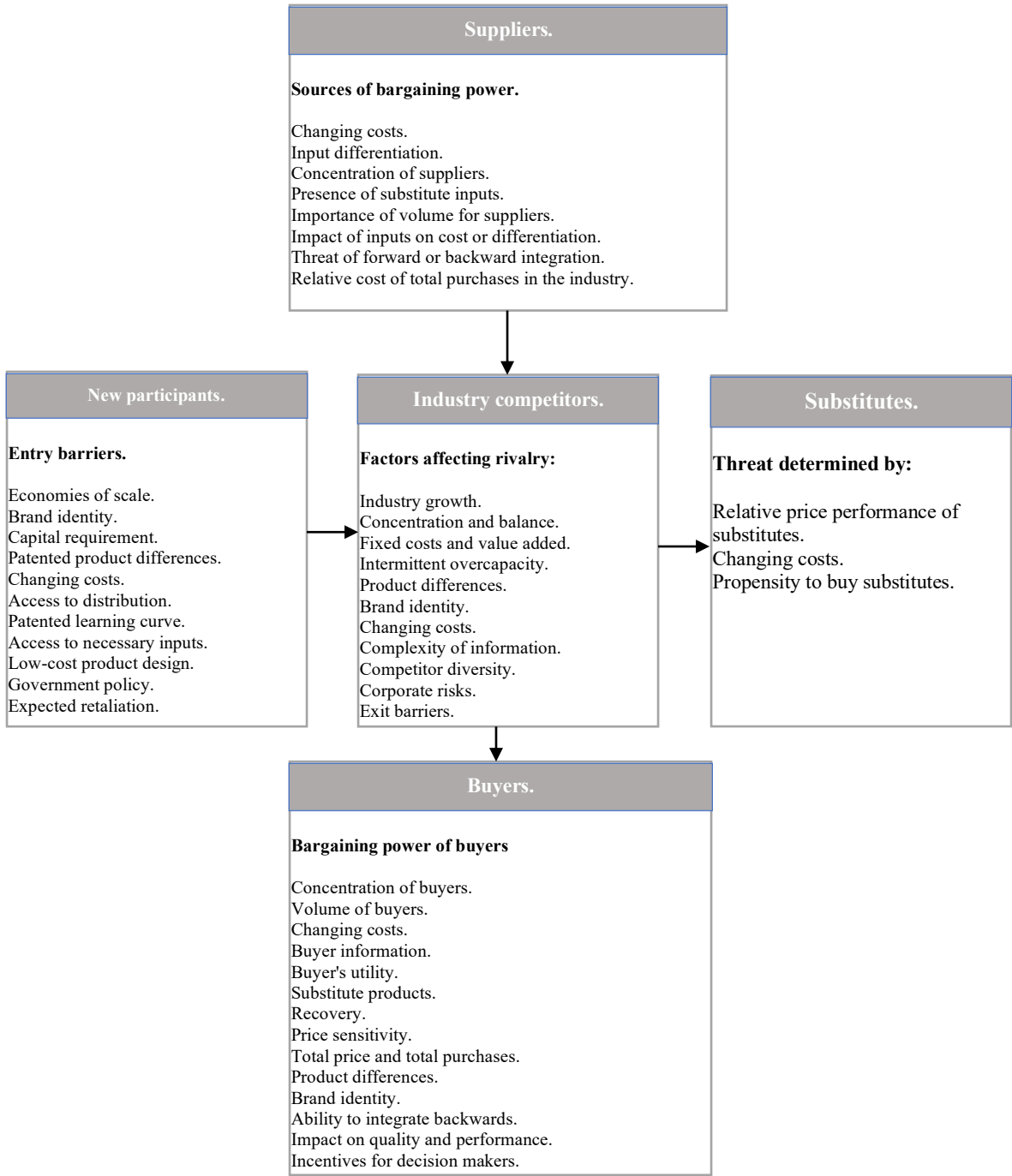


Figure 22

Elements of industry structure according to Porter.

Note. Taken from *The Strategic Process: A Management Approach* [p.140], by F. A. D'alessio, 2015, Pearson Education

Devoto [2018] concludes, the analysis of competitive forces in the industrial sector focuses on two fundamental aspects:

- What are the main factors affecting long-term success or performance in the industrial sector?
- How do these five forces positively or negatively impact the long-term performance of the industry?

2.2.1.1.2.5.2.2.2 Market analysis

Barradas et al. [2021] affirms that market analysis is the study of different dimensions of a specific sector that together have the capacity to generate a commercial horizon that provides greater clarity to increase certainty in the establishment and application of strategies.

In this sense, market analysis refers to a set of investigations carried out by the managerial or strategic hierarchical level of an organization in order to gather as much reliable information as possible about the current and future situation of a segment or part of the market [Da Silva, 2021].

Labrunie [2018] points out, market analysis is considered one of the main objectives for any business project, all organizations intrinsically seek to know the factors that influence the supply and demand of their product or service and thereby evaluate with objective rigor the medium and long term future of the organization.

In this sense, the word market contains two connotations, the first in a general or strategic term, which refers to the part of the environment where the entity develops its activities, the second in a sales and marketing term, which is oriented to a specific aspect, i.e., the particularities that help to understand the purchasing behavior of the set of customers targeted by the company [Labrunie, 2018].

In other words, market analysis is carried out with the objective of knowing more precisely the change in demand response in parallel to the supply of an organization and thus to propose more solidly the best commercial strategy that the company can develop to anticipate that change that has not yet arrived, but is about to arrive [Nuño, 2017].

Finally, economic units of different strata market a large number of products that in some cases become similar to each other, but why some satisfiers have a greater acceptance than others and why some organizations seem to be less affected by changes than others, to answer these unknowns it is essential to analyze the dimensions that make up the market [Peña, 2017].

2.2.1.1.2.5.2.2.2.1 Consumer Dimensions

The dimensions of the consumer can only be understood from a transversal perspective, by virtue of encompassing different disciplines such as: marketing, anthropology, psychology, economics and neuroscience; as they involve factors that influence the purchasing behavior of an individual, a group of individuals or even an organization, it is therefore necessary to study human behavior and the abstract components that give rise to decision-making [Da Silva, 2020].

In this guideline, the study of these dimensions is of general interest, since we all consume to a lesser or greater extent, therefore, from a business perspective, those responsible for the functional areas of the organization need to know how these factors affect the market and in parallel design business strategies in line with what is established by customers in the market [Raiteri, 2016].

Kotler & Armstrong [2017] point out, consumer dimensions, are equivalent to performing a comprehensive analysis on how, individuals, groups and companies choose, obtain, employ and dispose not only goods and services but their ideas and experiences to satisfy their needs and wants.

Sanchez [2015] describes it as a process that encompasses a large number of actions that involve the consumer in terms of background, accompaniment and subsequent purchase of a good or satisfactory.

In this sense, Da Silva [2020] points out that consumer dimensions are understood as the different factors that intervene at the moment of acquiring a product or service, in other words, the how or why a consumer, a group or an organization decides to make use of its financial, human and time resources to satisfy its desires and needs.

In this sense, this involves the consumer's behavior with respect to the acquisition of a product or service, from the origin of the need, to the moment of purchasing the satisfactor and to the perception of its use [Gómez et al., 2020].

In affinity to the above, the process of investigating internal and external dynamic behavior to locate, evaluate and purchase goods or services with the objective of satisfying needs and desires, is referred to as consumer dimensions [Raiteri, 2016].

Gómez et al. [2020] point out the following dimensions to be investigated about behavior before, during and after the purchase:

- What is purchased? Distribution of the products offered, products with increasing and decreasing demand, hierarchy among the desired products.
- Who buys? Delineation of the roles of initiator, influencer, decision maker, buyer, consumer and payer.
- Why is it purchased? Reasons, benefits sought, functions performed by the product.
- How do you buy? Rationally or emotionally, with interest or routinely, with a lot of information or not.
- When is it purchased? Occasions or moments, frequency, time, day.
- Where to buy? Points of sale, service received there, image.
- How much to buy? Appropriate sizes, quantity, weight.

Finally, it can be concluded that a rigorous investigation of consumer dimensions leads to an adequate market segmentation.

2.2.1.1.2.5.2.2.2 Market dimensions

Velasco [2015] points out that the conceptualization of market analysis includes the suppliers and demanders of a service or product; however, in order to know more precisely which of them should be included, an analysis of its dimensions is required, in other words, the limits it has from a geographic perspective, as well as the variety of products it covers.

In this sense, the dimensions of the market are anchored to the logic of demand on what is offered by the economic unit, i.e., a detailed description of current general aspects and future trends that represent a strategic risk on the market for the goods or services that the company markets [Kotler & Armstrong, 2017].

Likewise, Nuño [2017] refers, the analysis of the market dimensions in conjunction with the consumer dimensions provides the guideline to establish the relationship between the supply and demand of a product or service and based on this knowledge, make an informed decision on the strategy to be followed in the organization.

This answers the question: How does the market adapt to what the organization offers? The objective of answering this question is to evaluate the current and future market in which a product or service is marketed. Gómez et al. [2020] state that the investigation of market dimensions requires a detailed description that provides an overview of a specific market.

Finally, Sanchez [2015] refers, it is an analysis that covers a time span of a market, addresses its main particularities and determines its structure at a specific time, it is built from four aspects:

- Market description.
- Size and development.
- Customer sector research.
- Potential analysis of the target market.

2.2.1.1.2.6 SWOT Matrix

A detailed analysis of internal factors [stratification, functional areas, organizational culture and marketing mix] and external factors [microenvironment and macroenvironment] will provide the necessary elements for the construction of a SWOT matrix. The external factors will provide the opportunities and threats, while the internal variables will provide the weaknesses and strengths that will have a positive or negative impact on the organization. Valencia & Molina [2018] point out, the SWOT matrix or SWOT is born from the first letters of the words strengths, opportunities, weaknesses and threats, it is used by economic units as an effective method to detect the critical strategic dimensions in the organization, shoring up the strengths, minimizing the weaknesses and benefiting from the opportunities that exist in the external environment.

Navarrete et al. [2023] explains that the matrix of strengths, opportunities, weaknesses and threats is an instrument that opens up a clearer picture of the company's current scenario, its objective is to obtain a diagnosis that has the capacity to generate better certainty when making decisions and that the previous ones are aligned with the objectives and policies imposed by the general management.

D'alessio [2015] states, as seen in Figure 23, SWOT analysis represents a qualitative type of situational matrix, it requires rigorous research in each quadrant and not brainstorming to establish strategies.

Box 29

Vision - Mission - Values.		
<div>Internal analysis</div> <div>External analysis.</div>	<div>Strengths-F</div> <div>List the strengths</div> <div>1.</div> <div>2.</div> <div>3.</div> <div>4.</div>	<div>Weaknesses - D</div> <div>List weaknesses</div> <div>1.</div> <div>2.</div> <div>3.</div>
	<div>Opportunities-O</div> <div>List opportunities.</div> <div>1.</div> <div>2.</div> <div>3.</div> <div>4.</div>	<div>FO Strategies</div> <div>Use strengths to take advantage of opportunities.</div> <div>Exploit</div> <div>Maxi-Maxi</div> <div>OD Strategies</div> <div>Improve weaknesses to take advantage of opportunities.</div> <div>Search</div> <div>Min-Maxi</div>
	<div>Threats-A</div> <div>List threats</div> <div>1.</div> <div>2.</div> <div>3.</div>	<div>FA Strategies</div> <div>Use strengths to neutralize threats.</div> <div>Confronte</div> <div>Maxi-Min</div> <div>DA Strategies</div> <div>Improve weaknesses and avoid threats</div> <div>Avoid</div> <div>Mini-Mini</div>

Figure 23
SWOT matrix
Note. Taken from *El proceso estratégico: Un enfoque de gerencia* [p.268], by F. A. D'alessio, 2015, Pearson Educación.

Kotler & Armstrong [2017] point out, as shown in Figure 24, opportunities are situations external to the company that can be exploited for its benefit, in this sense, threats are unfavorable trends that put the company's equilibrium at risk, for their part, weaknesses represent internal restrictions that influence the entity's exercise and strengths represent the resources and dimensions with which, the economic unit provides value to its customers.

Box 30

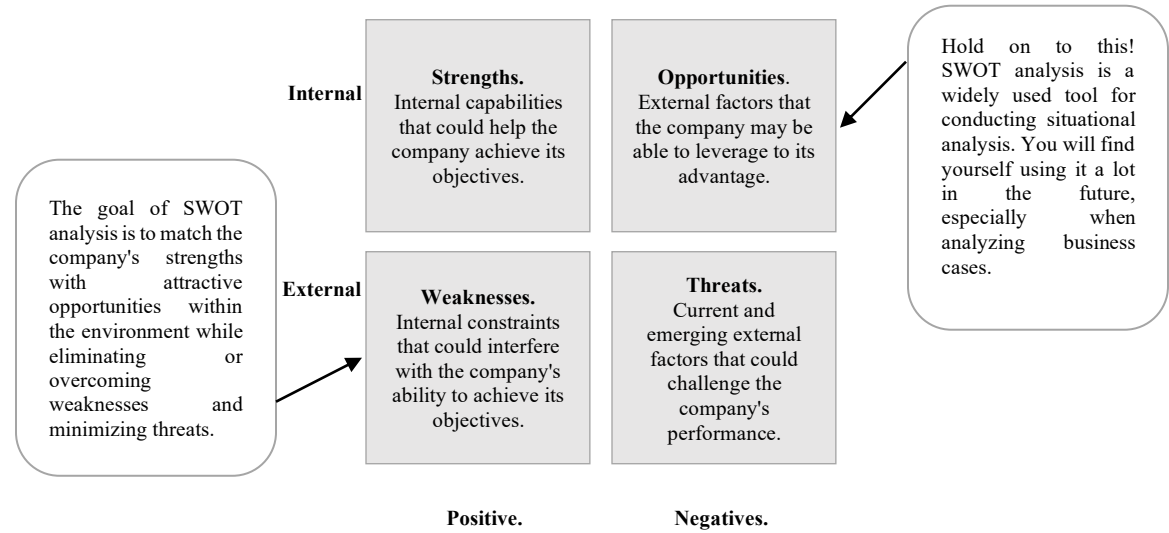


Figure 24
SWOT analysis: strengths [F], opportunities [O], weaknesses [D] and threats [A].
Note. Taken from *Fundamentals of Marketing* [p.55], by P. Kotler and G. Armstrong, 2017, Pearson.

In affinity to the above, Contreras et al., [2018] expose, properly formulating a SWOT analysis allows, creating effective strategies, knowing more accurately the strengths and weaknesses faced by the organization, preventing future obstacles through the timely detection of emerging problems and planning more structured strategies to improve the services or products offered. [p.32]

2.2.1.1.2.2.7 Situation Diagnosis

By performing a structured analysis of the SWOT matrix, the necessary elements are available to carry out an adequate combination of the resources available to an organization, where the internal and external evaluation matrix is concatenated to give rise to the strategies that in theory should be applied by the organizations [Portugal, 2017; Méndez, 2025].

Chiavenato [2017] points out, the situational diagnosis is born from a strategic study that marks the best ways to manage current and future situations of external and internal context commonly expressed in strengths, opportunities, weaknesses and threats. In this sense, the diagnosis of the situation is conceptualized as an abstraction of the most relevant points of the key external and internal factors that offer the guideline to define more precisely the differential advantage of a company, its a posteriori segmentation and strategic objectives [Sanchez, 2015].

Huilcapi & Gallegos [2020] state that the situational diagnosis establishes the correct exchange of resources with the objective of minimizing risk scenarios and maximizing those of certainty, i.e., this diagnosis dictates the guideline of the changes that must be made to achieve the strategic positioning to which the economic unit aspires.

As described above, the situational or comprehensive diagnosis is tool used for decision making, strategy implementation and business development [Navarrete et al., 2023].

2.2.2.1.1.2.7.1 Competitive Advantage

Competitive advantage is a concept that has been present since the supply of companies exceeded the demand of consumers; this allowed the creation of a differentiation between the goods and services marketed by suppliers for their subsistence and a comparison of their position in relation to that of their competitors [Peña et al., 2019].

D'alessio [2015] states that the competitive advantage is related to the company's status in the market; therefore, the strategy that arises from the SWOT matrix and the diagnosis of the situation is set in relation to the knowledge, resources and distinctive capacity of the economic unit.

Vizcarra et al., [2018] state, the differential advantage of an organization is some attribute, resource, knowledge, innovation, which its competition lacks or possesses to a lesser extent.

Chiavenato [2017] refers, a competitive advantage is a set of skills and technologies inherent to the organization that offers commercial value to its external customers.

Apodaca et al., [2016] conclude, differential advantage refers to implementing strategies with the ability to originate value to customers before, during and after consumption, through various skills, resources or activities that competitors do not have the ability to replicate immediately.

2.2.1.1.2.7.2 Market segmentation

Market segmentation is a key point to be considered when carrying out strategic planning, since by defining the target market or segment that the company will serve, the objectives and goals are set in order to reach the market accurately and thus offer a product that will undoubtedly have total success. [Feijoo et al., 2017, p. 41]

Malhotra [2016] states, determining market segmentation translates into knowledge to efficiently establish its potential, as well as profiling about a group of consumers.

Moreno [2018] points out, a specific product and/or service does not satisfy the needs and desires of all consumers; even satisfiers that present general characteristics possess market segmentation.

Kotler & Armstrong [2017] state, the process of fragmenting a market into different strata of smaller size by classifying them by homogeneous needs, characteristics and behaviors to target certain specific products and services, is called market segmentation and the most optimal selections from that set are called target market.

The segmentation of a market consists of dividing it into smaller groups of demanders that require differentiated marketing strategies from other segments [Moreno, 2018].

In this sense, through the process of market segmentation, target market choice, differentiation and market positioning, the organization divides target consumers into small segments to serve them and offer them in better proportion value [Kotler & Armstrong, 2017].

Choque [2019] concludes, through market segmentation, a set of characteristics that the target audience has can be more clearly glimpsed.

2.2.1.1.2.7.3 Strategic Positioning

Strategic planning seeks, according to the school of positioning, to define the strategic position vis-à-vis external factors, from which a clear picture must be opened to give way to an analytical process, called strategy [Chiavenato, 2017].

This sense, after defining the segment to which the organization is going to focus its efforts, the new logical step focuses on establishing how to differentiate the product or service and the strategic position it wishes to obtain in the target segment [Kotler & Armstrong, 2017].

Urrutia [2021] states that positioning is the management of the organization to place the offered good in the consumer's mind in order to increase the brand's profitability.

Kotler & Armstrong [2017] state, "strategic positioning is the arrangement of a market offering to occupy a clear, distinctive, and desirable place relative to competing products in the minds of target consumers" [p.50].

Hernandez et al., [2018] refers, the process of placing in the consumer's mind a satisfactor as the main and differentiated option against the competition is called strategic positioning.

In relation to the above, strategic positioning is to create important differences among its competitors and generate greater value to its consumers [Valencia, 2017].

2.2.1.1.1.2.8 Formulation of objectives

González et al. [2019] state that the objectives are statements that detail the nature, style and ideals of an organization for the short, medium and long term, they form an operative term of the vision, whose contrast will allow us to know its progress, the key questions to formulate them are the following: What do we want to achieve, when should it be achieved, how will we know if it has been achieved?

Choque [2015] refers, the objectives are desired results, they express a concrete and measurable change to be achieved in a specific time, space and population, they give directionality to the plan, allow the design of its structure and determine the activities necessary to achieve them, they also intervene in the evaluation, since they provide the criteria to determine the success or failure of the implemented plan, they also encourage cooperative teamwork, since they encompass several areas of the organization. [p.60]

Galaz & Ruiz [2017] point out, objectives should meet the following six characteristics:

- Clear, concrete and achievable.
- Accepted by the three hierarchical levels of the company.
- Ability to measure and provide feedback.
- Ability to motivate the operational level of the organization.
- It should be challenging but not frustrating.
- Consider the company's human capital.

Cano [2017] explains, it is an a priori proposal of the expected results in a defined period of time, and must be consistent with the internal management of the organization, harmonious with its business philosophy and measurable in quantitative and qualitative terms.

As shown in Figure 25, the objectives must be specific [to know how, when, where, and how the organization's situation changes], measurable [quantifiable in terms of goals and benefits], achievable [feasible in terms of resources, means and attributions of the company], realistic [interrelated with the strengths and weaknesses existing within the organization], limited in time [must specify a time interval to complete it] [Linares, 2020].

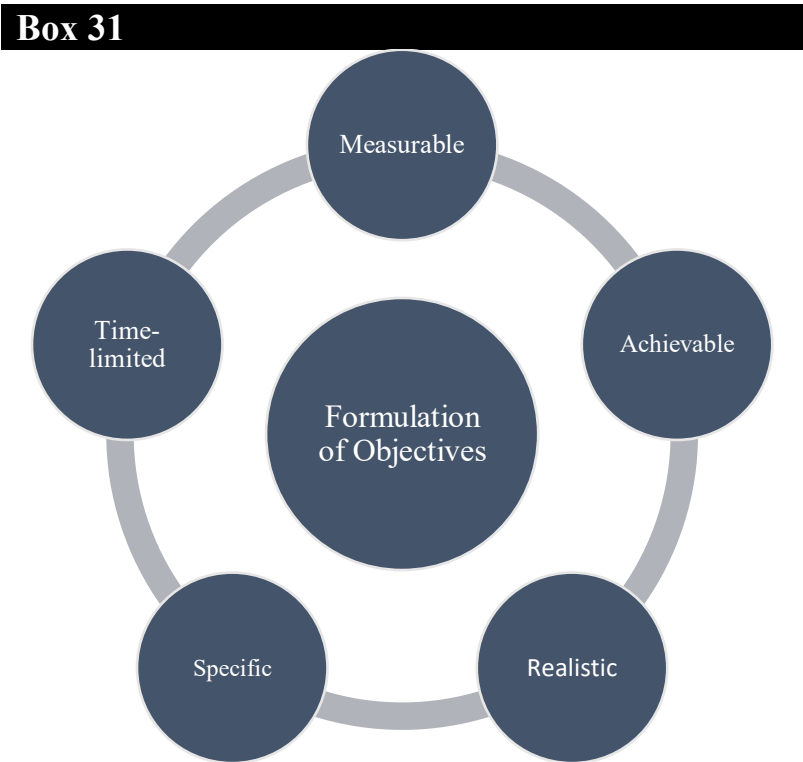


Figure 25
Criteria for defining objectives
Note. Based on Proceso del Suministro de Bienes, Inicio de los procesos logísticos [p.44], by A. Linares, 2021, Editorial Mapa.

2.2.1.1.2.8.1 General strategic objectives

Ramirez [2017] refers, strategic objectives state the purpose of undertaking a certain strategy, dimension the real possibilities of carrying them out, and whether it will contribute, provide a solution, or solve some problem presented in the organization.

Choque [2015] states that strategic objectives have a dual sequential function: first, they serve as a guide that directs the resources and efforts of an organization towards its organizational vision; their second objective is to support the design of a set of strategies that will serve to achieve this future projection.

López [2020] explains that strategic objectives have a long-term projection, they describe in general terms what the organization wishes to achieve, they are the sum of specific objectives of smaller dimensions that together make it feasible to achieve the proposed goal.

Valencia [2016] reports, they are by definition medium and long-term objectives, aimed at achieving the corporate mission, they are the most relevant results and level to which the institution aspires to achieve.

Gonzalez [2018] exposes, the general objectives are a midpoint between the vision and mission of the company, defined in an understandable, precise and clear way, they express the path that directs logically to the philosophy.

Linares [2020] states that general objectives are qualitative and integral statements that are based on the company's philosophy and serve as a parameter for specific objectives.

Strategic objectives are general guidelines that the organization outlines as a means to achieve the vision formulated in the organizational philosophy [Choque, 2015].

Ramírez [2017] points out, the general objective is a transversal reference that serves as a point of comparison between what was planned at a specific point and what was obtained in the long term.

In this sense, the strategic objective has a high level of complexity, it refers to obtaining a defined result at the end of a time interval [Bastidas, 2020].

In affinity to the above, it is concluded that strategic objectives are one of the fundamental components of strategic planning; their function is to realistically define what is desired in a period of time in parallel to the vision of the economic unit [Arias et al., 2020].

2.2.1.1.1.2.9 Strategic control

Strategic planning is an administrative model that aims to standardize a dynamic system to make it controllable by introducing different variables and bringing it to a given time.

Strategic control goes in the direction of dynamic environments where through the principle of feedback it seeks to achieve a previously planned result, i.e., it acts as a tool that monitors, evaluates and feeds back the variables that feed the strategic model [Chiavenato, 2017].

Likewise, strategic control reviews the congruence of general strategies based on opportunities, by virtue of existing in a dynamic environment of rapid obsolescence where strategies, plans and programs may be overtaken, making new evaluations of the market necessary [Kotler & Armstrong, 2017].

D'alessio [2015] states, when performing a strategic control, it is necessary to study three aspects:

- Analyze the continuity of the information collected on the variables that feed the strategic planning model.
- Contrast the current results with the proposed objectives.
- Provide feedback to the strategic model with corrective actions in plans, programs and protocols to fill gaps in performance.

A quality of strategic control is to have the ability to provide feedback to the system by changing aspects that prevent its proper functioning in an accelerated, timely and effective manner, having two approaches for its evaluation in the short and long term [D'alessio, 2015].

In this guideline, it is a process through which the timely or not functioning of the strategy, its deviations and new contingency plans to counteract aspects that had not yet been clearly envisioned are established [López & Nevado, 2016].

Is the system by means of which it is corroborated whether the implementation of the strategy yields a positive result; this control makes it possible to identify strategic deviations and to formulate and implement other means to achieve the objectives. This process is closely related to strategic planning. Table 7 analyzes some of the concepts proposed by Naranjo et al. [2005].

Box 32

Table 7

Definitions of strategic control analyzed by Naranjo et al., [2005].

Concept of tactical planning	Author
Strategic control focuses on the dual question of whether the strategy is being implemented as planned and whether the results generated by the strategy are as desired.	Schendel & Hofer [1979].
It is a system that ensures the effective implementation of the strategy and the achievement of the objectives and results that form the basis of its conception.	Roush & Ball [1950].
Strategic control establishes the criteria that define a good strategic performance, in order to motivate managers to achieve the results in accordance with them, allows a quick identification of strategies that deviate from the planned trajectory and, when necessary, triggers the process of formulating a new strategy or determining better means for implementation.	Goold [1991].
It is the one that allows assessing and acting on the achievement of the strategy outlined by the organization, by means of certain guiding criteria that serve as a guide to evaluate its progress, setting standards and measuring the performance of dynamic variables to managers in order to determine whether the strategic direction is being carried out and initiate the relevant actions.	Bourzac [1997].
Strategic control comprises the systematic verification at strategic control points, as well as the modification of the organization's strategy based on this evaluation.	Koontz & Weihrich [1994].

Note. Based on Estrategia y control estratégico. Unity or dichotomy [p.59], by R. Naranjo, M. A. Mesa and J. Solera, 2005, Tecnología en Marcha.

Finally, strategic control should be defined at a time parallel to the design of the strategy where the most important aspects to be monitored, evaluated and fed back into the organization are clearly distinguished [Figueroa, 2019].

2.2.1.2 Tactical planning

Organizations are planning at different hierarchical levels consciously or unconsciously, at the first level they create operational plans, at the intermediate level they develop tactical plans.

Candelas et al., [2016] states, tactical planning focuses on the different areas, departments or specific divisions, covers a period of one year [medium term], is developed at the intermediate level and emphasizes the current activities of the various functional areas of the organization for a successful outcome.

In this guideline, Table 8 shows the definitions of tactical planning examined by Rivera et al. [2020].

Box 33

Table 8

Budget definitions analyzed by Rivera et al., [2020].

Concept of tactical planning	Author
This refers to the more specific plans, which are elaborated in each of the departments or areas of the company and which are subordinate to the strategic plans. It is the responsibility of the heads or area managers and are focused on a specific area of the organization, can be medium and / or short term. Tactical plans are detailed plans of each management to achieve the strategic plan.	Münch [2008].
It is determined in the middle management of the company, which, depending on its size, may be management or departments, based on strategic planning. It is generally established in the short and medium term.	Moon [2015].
Tactical planning is a process through which the company sets the objectives it needs to achieve in a short period of time.	Martinez [2017].
Tactical planning covers a department or division, so the person in charge of tactical planning is concerned with the interpretation of strategic planning, bringing it closer to the market reality through specific plans for each department or division called: tactical plans.	Ambrosio [2000].
To achieve strategic planning it is necessary to make several specific plans in each of the company's departments. These plans are given in the medium term [more than one year and less than 3 years] and are known as tactical planning.	Córdova [2012].

Note. Based on La planeación como fase del proceso administrativo [p.53], by A. A. Rivera, C. V. Moraga and R. D. Ureña, 2020.

Tactical planning is used to outline plans based on the objectives set by the institutional hierarchical level, these plans are aimed at the main functions or areas of the organization [marketing, human resources, production, accounting and finance], and have a period of application that can be short or medium term.

2.2.1.2.1 Strategy

Maldonado et al., [2017] point out, it is the effect of an analytical process, which conceives in its structure a plan of action with demand of skills and financial resources for its good port. D'alessio [2015] states, they are potential actions that result from management decisions and require the timely allocation of the organization's resources for their fulfillment, they constitute the paths that lead the organization to the expected vision, they are also defined as courses of action to turn the organization into what it wants to be; that is, paths that allow it to achieve the long-term objectives. [p.4]

Chiavenato [2017] refers, the strategy is related to the institutional behavior followed by the organization, synonymous of organized change to face present or future phenomena, events or circumstances. Contreras et al., [2018] exposes, a strategy addresses the methodology with which a strategic objective will be achieved, it is proposed to establish three strategies with a maximum of six per objective raised, its excess represents a loss of focus and control, its foundation responds to the question How will the objective be achieved?

Acevedo [2015] explains, from the SWOT analysis four types of strategies are obtained:

- Offensive strategies are those that generate the greatest impact. They are established based on the analysis of the strengths and opportunities that have been identified in the internal and external environment.
- Defensive strategies are designed to face the impact of threats by making use of strengths, the question to ask is: What can we do to minimize the negative impact of the Threats identified in the environment, by making the most of our Strengths?
- Adaptive strategies are formulated to reduce the limitations of the organization by means of existing opportunities. The question to be asked when designing them is: What can we do to minimize the negative impact that our weaknesses may have on the maximum use of the Opportunities?
- Survival strategies are designed to reduce the impact that threats have on the company's weaknesses. The key question to ask is: What should we do to reduce the negative effects that our weaknesses may have on the threats that we have identified in the environment?

These are formulated on the basis of the information provided in the SWOT matrix, as shown in Figure 26.

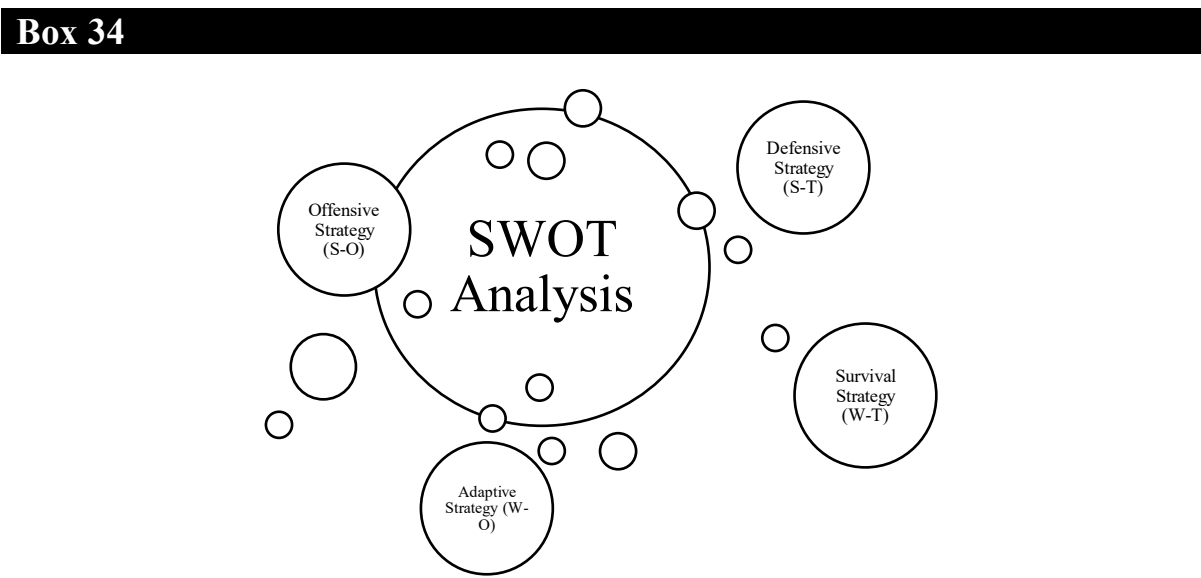


Figure 26
SWOT analysis and its relationship with strategy
Note. Based on Ocho pasos para planear estratégicamente en microempresas gerenciadas por "no gerentes" [p.67], by A. Acevedo, 2015.

2.2.1.2.2 Policies

Casanovas [2016] reports, policies are the principles to which an organization is subject, they strengthen the content of legal norms allowing an adequate interpretation and execution of daily activities, often raising the ethical development of the established rules. Moreno [2017] states, policies are a description where the guidelines and responsibilities of how to operate a procedure are established, prescribes limits within which assigned activities are to be performed.

González et al., [2019] state that in a company, policies represent a process that makes operational the strategies outlined by the management, policies affect the functional areas of the organization, they are a support of the strategic objectives, they are carried out by middle management. Mariño [2018] refers, a policy is a transparent disposition dictated by the middle hierarchy of the organization and approved by the institutional commands where a homogeneous set of activities are oriented with the objective of facilitating frequent actions.

Valdivieso [2018] points out, the objective of policies in a company is to make administrative paperwork efficient by eliminating unnecessary paperwork by simplifying it, A policy has a *raison d'être* when when when implemented it contributes directly to the fulfillment of activities and processes within the organization. [p.13]

In other words, policies are a general guideline that supports strategies, eliminates wasteful use of time in day-to-day activities.

2.2.1.2.3 Specific strategic objectives

Ramírez [2017] refers, the specific strategic objectives describe the goals to be achieved as a whole to achieve a general strategic objective, they are a coherent sequence of the general objective from which they are derived.

López [2020] points out that the specific objectives are a succession of steps that contribute to the achievement of the strategic objective, in other words, they contribute in a specific part to the general purpose.

Choque [2015] states, these are the definitions that detail the different aspects to achieve or fulfill each of the general strategic objectives, that is, they are the paths by which the organization seeks to achieve the latter, they are also the tangible products that are achieved from the development of a set of project that corresponds to it, to formulate the specific strategic objectives you have to ask: What does obtaining good results in each of the identified critical success factors depend on? The specific strategic objectives are derived from each of the general strategic objectives [p.61].

Aspeé [2015] explains, specific objectives, frame, guide and give meaning to the daily activities that the organization develops, their absence causes a lack of direction at the operational hierarchical level, in other words, a meaninglessness in routine tasks.

Murulanda & Gonzalez [2017] conclude, operational objectives are of immediate compliance, they focus on situations close in time and specific, they are broken down by department, area or even by functions of the internal customer, from these objectives depend the strategic ones.

2.2.1.2.4 Tactical control

Schmidt et al., [2018] states, tactical control has the function of measuring the efficiency of the middle hierarchical level, it establishes how much each area contributes to the organization's income or to the achievement of its objectives, that is, it separates the economic unit by functions, areas or departments, each one separately evaluating its individual performance.

The control exercised at the intermediate level is tactical, also called departmental control, it is oriented to a medium term and addresses non-generic and detailed aspects, but limited to a specific area unlike strategic control [Reategui, 2016].

Hernandez et al., [2018] exposes, the tactical control argues internally the mission and vision of the organization, extracts from the philosophy, the dimension of "marketing" in time, form, place and with the specifications that satisfy the desires and needs of the current customer, without considering the possible future changes of the final consumer.

Medium control evaluates and feeds back into tactical plans that link the reality of the current environment with the execution of activities for each functional area, this allows institutional managers to disaggregate strategic and tactical planning into operational functions [González et al., 2019].

Salas [2016] refers, tactical control obtains information by monitoring the execution of action plans or previously established programs, its objective is to have reports to contrast what was planned with what was carried out in order to achieve the formulated objectives, it provides the possibility of correcting errors in situations where there are variations or deviations from the established goals. In other words, the function of tactical control is to provide information that articulates the strategic level and the operational level, the former subject to the uncertainty of sudden changes in a changing external environment and the latter oriented to the certainty of the current external situation with well-defined and well-defined programs and tasks.

2.2.1.3 Operational Planning

Mero [2018] points out, the operational plan "is oriented to the lowest level of the organization, that is, the level of supervision or first-line management; those at this level are given different designations: foremen, chiefs, supervisors, managers, etc." [p.4].

Operational management consists of primary activities, directly related to the production process of the service or product, its distribution and after-sales service, etc., the main premise of planning states: it should be planned, organized and controlled from the strategic to the operational and executed from the operational to the strategic, in other words, the planning process has its initial design in the strategic part with plans and objectives directed towards lower level commands, starting its execution in lower commands, the measurement of operational plans is evaluated through indicators and the achievement of these plans is considered a means not an end [Moreno, 2017].

For his part, Avalos et al., [2017] explains, operational planning is the organization of resources and personnel of a company for the resolution of problems, a fundamental part of any entity, since it traces the route to follow for linking the different areas for the development of the different tasks in time interval previously planned by the department in charge.

It is designed according to the role that each internal client has in the first line level of the company, its objective is to fulfill the tasks and guidelines established in the departments where he/she works, the operational planning has the function of bringing to reality the objectives formulated in the strategic plan because its primary function is not to lose the guide of the medium and long term, setting in each task the achievement of the objectives of the medium and high levels of the economic unit [Herman, 2019]. The daily activities should be planned in a process of continuous improvement planned and evaluated every certain period of time [monthly, bimonthly, semi-annually or annually], taking into consideration the necessary feedback to advance and know where the company is.

Chiavenato [2017] refers, operational planning is short term and is oriented to individual functions, it is concerned with what to do and how to perform it in the most optimal way to maximize results in contrast to tactical planning that is based on the search for results in the direction of what is planned.

The operational planning is constituted, by a large number of operational plans that focus on all areas and functions of the organization, these in turn may or may not have sub-plans with varying degrees of detail, these plans deal with the daily administration in the company and with this support to the objectives for compliance [Chiavenato, 2017].

Finally, Chiavenato [2017] exposes, operational plans focus on efficiency [serves as a means] as effectiveness [the end] is the responsibility of the intermediate and institutional levels, not leaving aside the heterogeneity of these and classifying them into 4 types:

- 1. Procedures: operational plans related to methods.
- 2. Budgets: operational plans related to money.
- 3. Programs [or scheduling]: time-related operational plans.
- 4. Regulations: operational plans related to people's behaviors.

2.2.1.3.1 Procedures

Cano [2017] points out, a procedure consists of establishing in a sequential and chronological order the actions or activities that must be carried out to perform a process, not to be confused with a schedule of activities.

Herman [2019] states, the procedure is conceptualized as a detailed description of a coherent sequence of activities that occur daily in an organization, its purpose is to reduce to a minimum expression the probabilities of error when executing a process, it has the disadvantage of limiting the autonomy and creativity of the collaborators involved in such series of steps, since the latter precisely defines the guideline to be performed.

Cáceres & Romero [2016] refer, procedures are components of the internal control system of an economic unit, they have detailed, orderly, systematic and comprehensive information containing instructions and the responsibility of different positions in charge of carrying out some process establishing security and control measures for compliance.

Luna [2015] explains, procedures are interrelated actions that express the order of tasks for a specific achievement, in the organization they are present in its internal structure; they are plans of utmost importance to carry out the administrative process; they represent a basis for planning due to the fact that:

- They define the correct order that all company activities must follow.
- Specify and detail the activities to be performed.
- They are useful in activities that are performed suddenly.
- It is responsible for when and by whom the activities should be performed.
- They are the basis for achieving effectiveness and specialization in the tasks.
- It mainly facilitates active and operational planning.
- Its implementation is adapted to feasible and real situations.

In this same tenor, it is established, they are plans through which a method is determined to direct future activities, synonymous with sequenced activities, they are guides for execution and not for thought, where it is described how and in what order to perform certain actions [Riquelme, 2017]. For the effectiveness of these there are as part flow charts, forms and procedure manuals as shown below in Figure 27.

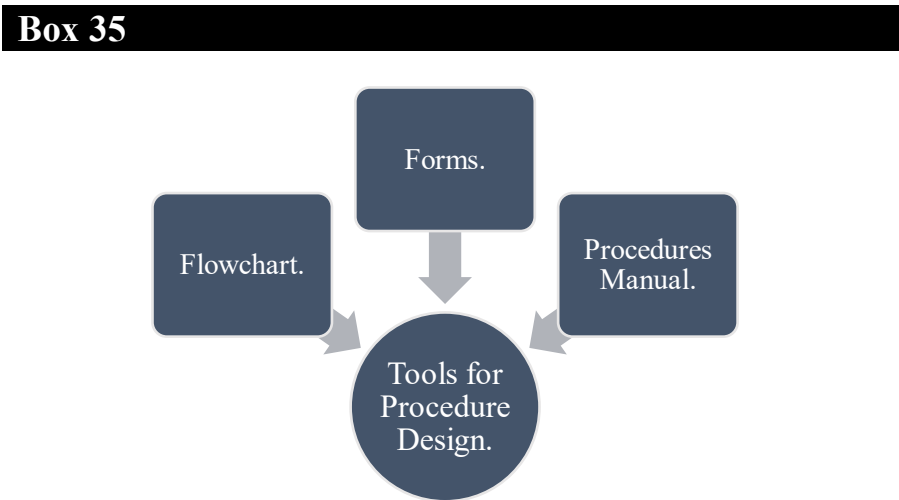


Figure 27
Tools to formulate procedures
Note. Based on Proceso administrativo [p.70], by A. C. Luna, 2015, Patria. Luna, 2015, Patria.

2.2.1.3.2 Budgets

The budget is one of the instruments of greater use and knowledge in organizations, it is used to control expenses and internal costs; when formulating it, the manager plans the use of financial resources to be applied a posteriori, Table 9 shows the definitions of budget analyzed by Santiago [2018].

Box 36

Table 9

Budget definitions analyzed by Santiago [2018].

Budget concept	Author
A tool that helps managers in their planning and control functions. Budgets help managers plan for the future. However, managers also use them to evaluate what has happened in the past.	Horngren et al., [2006].
A plan showing how resources are to be acquired and used over a specified interval. While operations are in process, the budget serves as a basis for comparison, and facilitates the control process.	Jiménez & Espinoza [2006].
A planning tool that, in a determined manner, integrates and coordinates the areas, activities, departments and people responsible for an organization, and that expresses in monetary terms, the income, expenses and resources generated in a determined period, in order to meet the objectives set in the strategy.	Muñiz [2009].
The budget is the quantitative expression of an action plan. It is a tool for the coordination, execution and control of an organization's various plans.	Alcoy et al., [2011].
The budget is a useful tool for management, since it establishes achievable goals that demonstrate the leadership of the directors and the commitment of all the members of the organization, all in pursuit of a common goal: to increase the value of the company".	Diaz et al., [2012].

Note. Based on Formulación de Presupuestos [p.11], by A. C. Santiago, 2018, Editorial UTA.

As stated above, the budget is the foundation of planning, serving as a pillar for designing the tools that will be used in the following elements used at the tactical and strategic operational level.

2.2.1.3.3 Programs

Cano [2017] states that programs are schemes where the sequence and time of different activities to be carried out by a social group are structured; they are synonymous with an end or purpose. For his part,

Salas [2015] synthesizes, programs are orderly sequences of interrelated plans, with which it is planned to achieve objectives, usually culminating in the short term.

Herman [2019] points out, they are a precise succession of activities developed with eventuality; the programs describe the time required and the resources for their execution, generally those responsible possess some degree of maneuver and independence to circumvent problems in their realization.

In this same sense, programs are a set of scheduled plans that can be adjusted, they detail a series of ordered functions to be performed as a means to achieve an end set by the middle hierarchical level of the organization; Luna [2015] states, the steps to develop a program should follow the following sequence:

- Identify and determine required activities.
- Chronologically order the performance of the activities.
- Identify the sequence [determine which activities must be carried out before others, which ones occur simultaneously and, finally, which ones must be carried out for their conclusion].
- Assign time and resources to each activity.

In this guideline, Figure 28 shows some of the most commonly used tools for designing a program.

Box 37

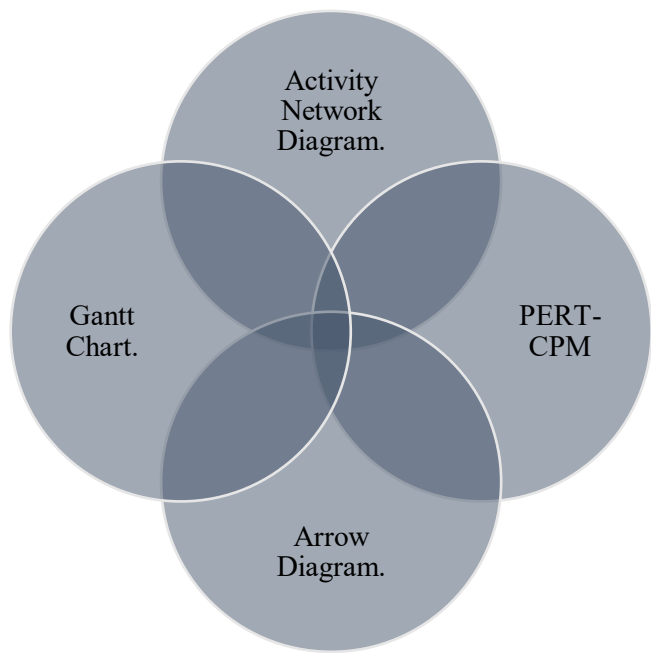


Figure 28
Tools for designing procedures.
Note. Based on Human Resource Management [p.207], by J. Collins, 2015, ALEC.

Contreras et al., [2018] concludes, programs are tools usually used to manage projects, these instruments project separately each of the parts of the set of activities, answering the questions What and When to do? When properly managed, they have the advantage of showing the completed plan and being updated when part of it is completed. This process gives the responsible the opportunity to make a comparison of what has been done with what was planned, allowing the optimization of human and financial resources and the efficient completion of the goals within the established time and cost.

2.2.1.3.4 Rules

Salas [2015] points out that rules are dominant norms on the behavior to which a group of individuals are subject without any margin of discretion; they dictate what actions can and cannot be performed in a physical or virtual space.

Regulations are instruments used by organizations, necessary regardless of their size. This document sets out the guidelines to be followed in order to achieve an adequate internal conduct that facilitates the ideal scenario for the achievement of the visualized objectives [Escuela Dollinco Nacimiento [EDN], 2021].

Herman [2019] refers, rules are exact precepts that establish the behavior and attitude that must be visualized in a general and specific environment, characterized by its great rigidity and executor of sanctions when obviated, it is a reflection of the objectives of strategic planning.

In this same sense, the regulation is a coherent compilation of premises created by an authority that regulates structure, operation and links between the elements that integrate an organization, which does not obviate the rights of internal clients since its basis is regulated in articles 422, 423, 424 and 425 of the Federal Labor Law [Justicia México [JM] , 2020].

Capacitación Empresarial [COFIDE, 2020] explains, the internal regulations generate a set of rules followed by employers and collaborators, in other words, it is an agreement between both parties that establishes statutes and obligations to which they are subject bilaterally within the company; the Federal Labor Law in its Chapter V [articles 422-425] states that this must be in accordance with the sector where the activities are developed.

2.2.1.3.5 Operational control

In parallel, it is necessary to examine theoretically the concept of operational control, applied to any organization, present at the lower hierarchical level or first line, which faces the external context from an internal analysis.

Olivares [2022] refers to internal control as the system that adjusts parameters to the management of an economic entity. It is used to designate the set of activities required to achieve the purpose of the organization. It includes, therefore, financing, promotion, distribution and consumption activities; its public and private relations, as well as the general supervision over its assets and those to whom it belongs.

Operational control is aimed at feeding back tasks, functions, activities and the use of financial and time resources at any level of the organization for its execution, regulations, budgets, programs and procedures are the main instruments of planning, but at the same time of operational control [Schmidt et al., 2018].

Amezcuca [2019] points out that operational control refers to methods, protocols and mechanisms that aim to efficiently manage the internal progress of the company, avoiding failures that have an effect on the continuity and development of the service or product, also allows opportunities for improvement, significant cost reduction and an increase in quality.

Process in charge of feeding back the operational execution of the organization, for this it is supported by records and controls of frequent operations of areas, functions or departments of the company, creating a structure of rules aimed at preserving the assets through a correct regulation of the activities necessary for the creation of a good or service, other words, it is responsible for monitoring compliance with the procedures and formally recording the results in a physical or virtual space [Martinez, 2015].

In the first line or operative control, tools are designed for an exhaustive review of the internal operations of the company, being a short-term control its fulfillment has to be immediate, its objective is to evaluate and feedback the performance of activities and habitual tasks of great relevance for the internal operation of the organization [Mendoza et al., 2018]. The application of internal control allows opening a clear picture about the real situation of the internal administration of the economic unit, i.e. of the functions that allow its operation, creating mechanisms for its control will allow measuring the efficiency provided by the tasks and activities that are oriented to the satisfaction of the final customer.

Regardless of the social, cultural or geographical context in which the activities of organizations are developed, they will require a strong control that fulfills the function of verifying and improving their management, i.e. obtaining efficiency, profitability and continuous improvement. Mendoza et al., [2018] states, the objectives of internal control are the following:

- a) To promote and optimize efficiency and economy in the entity's operations, as well as the quality of the services provided.
- b) To care for and protect the organization's resources and assets against any harmful situation that could affect them.
- c) Comply with the regulations applicable to the entity and its operations.
- d) Guarantee the reliability and timeliness of the information.
- e) Encourage and promote the practice of institutional values.

Chapter III Methodology

The set of techniques, methods and procedures proposed by Hernández et al., [2014], and assumed by the current research, is integrated by the following aspects in this specific order:

- Focus.
- Scope of the investigation.
- Research design.
- Hypothesis.
- Conceptualization and operationalization of variables.
- Sample selection.
- Data Collection Instrument.
- Validation of the instrument.
- Data Processing and Analysis.

3.1 Approach

As it has been established in several methodology books, there are different currents of thought [objective, subjective and intersubjective], which have been synthesized in three research approaches: qualitative, quantitative and mixed, whose main objective is to generate knowledge, so the following defines which of these three points of view will be used to guide this study, because each approach has unique characteristics; given the particularities and structure presented in this research, it is appropriate to the quantitative method, so it is necessary to have a clear concept of what it represents.

As stated by Hernandez et al., [2014] "The quantitative approach: uses data collection to test hypotheses based on numerical measurement and statistical analysis, in order to establish patterns of behavior and test theories" [p4].

In the current research the quantitative approach is used because it has a structured process that guides and fits the starting point of this study from generalities that were delimited and delimited in order to establish objectives and research questions using data collection techniques to generate information that allowed testing hypotheses through a research design, based on various concepts that have been considered true, have been intertwined and deepening among them, to be considered as a theoretical basis that founds and generates new information that leads to its subsequent description and presentation, for the creation of conclusions.

By virtue of this, we seek to make generalizations to a stratum of microenterprises dedicated to offering scientific and technical professional services based on the objective analysis of a representative sample.

3.2 Scope of the investigation

In this same sense, the scope of the research results from the perspective of the study, from the literature review and depends to a greater extent on the objectives set at the beginning. Hernández et al. [2014] state that it is not appropriate to consider the scopes as "types" of research, since they go beyond being a classification, they constitute a continuum of "causality" that may be implicit in a study, since the scope of the study depends on the research strategy. Thus, in theory, the design, procedures and other components implicit in the process will be different in research with an exploratory, descriptive, correlational or explanatory scope, but in practice, any research may include elements of more than one of these four scopes. By virtue of this, the scope of the research has been defined as descriptive and correlational.

Hernández et al., [2014] point out: the descriptive approach seeks to specify properties, characteristics and important features of any phenomenon that is analyzed, it describes trends of a group or population, [...]. That is, they only intend to measure or collect information independently or jointly on the concepts or variables to which they refer, i.e., their objective is not to indicate how these are related.[p.80]

Hernández et al., [2014] refer, the correlational approach aims to know the relationship or degree of association that exists between two or more concepts, categories or variables in a particular context, sometimes only the relationship between two variables is analyzed, but often relationships between three, four or more variables are located in the study, they measure each of them [presumably related] and then quantify and analyze the linkage. In affinity to the above, the scope of the study is descriptive and correlational; it is descriptive because it results in the collection of information by applying a research technique to micro-enterprises in the service, professional, scientific and technical sectors located in Tulancingo de Bravo Hidalgo, in order to generate an integral diagnosis of the variables that integrate the strategic planning model. Likewise, this research is correlational because it intends to contrast the relationships between the dimensions that make up the variables that integrate the strategic model and the degree of association between these variables among the links exposed in the literature.

3.3 Research design

Having defined the research approach and scope that guide the structure of this research work, a plan is developed for the collection of information, in this case there are two types of research designs: experimental and non-experimental, in the first case it refers to conducting experiments with the study variables, in the second case they are only observed [Hernández et al., 2014]. Therefore, the research is non-experimental because it does not seek to manipulate variables, but to perform a comprehensive diagnosis and identify the relationship of dimensions and degree of association between the variables that make up the strategic planning model used by microenterprises in the professional, scientific and technical services sector located in Tulancingo de Bravo Hidalgo, as it occurs in its natural context and, together with the literature and theoretical framework, propose a strategic planning model that contributes to the growth of microenterprises in the aforementioned sector.

Hernandez et al., [2014] indicates "correlational-causal cross-sectional designs describe relationships between two or more categories, concepts or variables at a given time. Sometimes, only in correlational terms, sometimes in terms of cause-effect [causal]" [p154]. In parallel to the above, the aim is to collect information at a single point in time, so the research design is cross-sectional, describing relationships between two variables at a given time only in non-causal correlational terms. The relationships presented are shown in Figure 29.

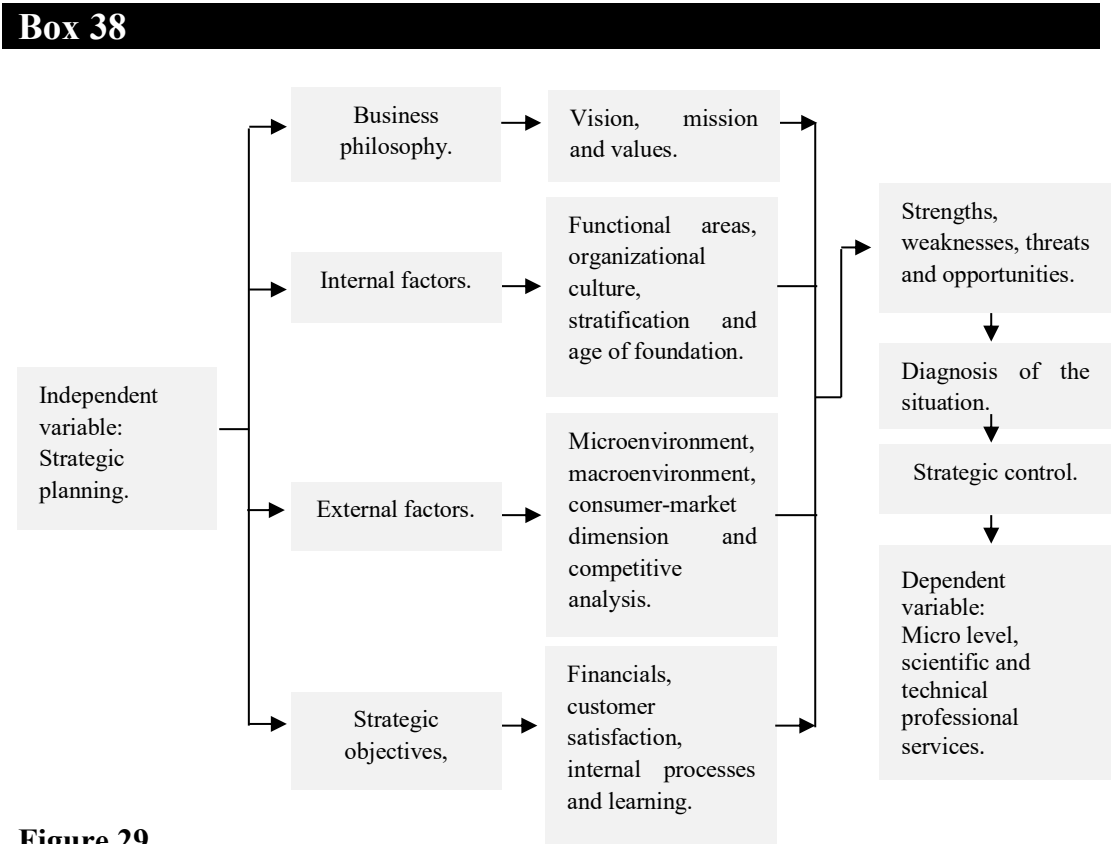


Figure 29
Diagram of a multivariate causal relationship with a dependent variable
Note. Based on Research Methodology, by R. Hernández, C. Fernández and M., P. Baptista. 2014, McGraw Hill Education.

In summary, the methodology of this research is quantitative with a non-experimental transactional descriptive and correlational design, where the aim is to establish the existence of a theoretical-practical relationship in the set of dimensions that make up the independent variable [strategic planning] in the stratum of microenterprises of the professional, scientific and technical services sector located in Tulancingo Hidalgo [dependent variable] and thus design a strategic planning model that contributes to their growth, therefore, the research is correlational.

3.4 Study hypothesis

Hi: Strategic planning positively influences the growth of micro organizations in the professional, scientific and technical services sector located in the District of Tulancingo de Bravo Hidalgo.

3.4.1 Conceptualization and operationalization of variables.

Variables should be defined in two ways: conceptual and operational. Conceptualization is the term defined by dictionaries or specialized books that describe characteristics of a variable, phenomenon or object that constitute the adequacy of the definition to the practical requirements of the research; for its part, operational definition constitutes a set of procedures that describe the activities that an observer must perform to measure a variable, an operational definition indicates what activities or operations must be performed to measure a variable, it also articulates the processes or actions of a concept that are necessary to identify examples of it [Hernández et al., 2014]. Table 10 presents the conceptualization and operationalization of variables in this research.

Box 39

Table 10

Conceptualization and operationalization of the independent and dependent variable.

Variable	Conceptual definition	Operational definition.
Independent: Strategic planning	Process allows formulating long-term objectives attached to reality, whose primary characteristic is to establish courses of action to achieve these objectives, from this perspective strategic planning is a key tool for decision making in economic units [González and Rodríguez, 2019].	It will be measured by means of a likert scale type research technique, composed of 122 items distributed in key dimensions of the strategic model, such as Philosophy, External analysis, Internal analysis, Situation diagnosis, Corporate objectives, Strategic control, Global strategies, Tactical control, Regulations, Communication, Procedures, Programs, Budget and Operational control.
Dependent: Behavior of the strategic planning variable in service microenterprises in Hidalgo.	Service microenterprises belong to the tertiary sector of the economy and are characterized by having a maximum of 10 workers and generating annual revenues of no more than 4 million Mexican pesos. Their main function is the provision of specialized, technical, administrative, professional or personal services, without the transformation or production of tangible goods [Secretaría de Economía [SE] 2012].	Physical visit to apply a measurement instrument to a finite probability sample of 174 microenterprises in the state of Hidalgo.

Note. Prepared from Metodología de la investigación [p.211], by R. Hernández, C. Fernández and P. Baptista, 2014, McGraw Hill.

3.5 Determination of sample size

3.5.1 Population

Condori [2020] points out that the population are global, finite and infinite elements [people, objects, programs, systems, events, databases,] [...]. Accessible or unit of analysis that belong to the special field where the study is developed. [P.4].

In the same vein, Malhotra [2016] defines: "As the sum of all elements that share some common set of characteristics and constitute the universe for the purposes of the research problem" [p.335].

In other words, it is a set of elements that have homogeneous characteristics, specifications that are the same or similar among themselves.

The population for this research is constituted by companies located in the Municipality of Tulancingo de Bravo Hidalgo, the inclusion and exclusion criteria considered for the population delimitation are the following:

1. Companies with contracted employees in a range of zero to ten.
2. Dedicated to providing professional scientific and technical services.

Considering these criteria, there is a total population of 314 microenterprises engaged in this economic activity [DENUE, 2020]

3.5.2 Sample

The sample must meet specific criteria. Quispe et al. [2020] report that an adequate sample size calculation allows two objectives: first, to determine the minimum number of participants necessary to test a hypothesis of interest and second, to establish its feasibility [p.78].

Now, we wish to determine the sample size for a finite population because the universe is less than one hundred thousand elements.

When determining the sample size to estimate a portion, three unknowns must be defined:

1. The desired level of confidence.
2. The allowable sampling error [e].
3. The true portion of successes [P].

Now that the desired confidence level has been determined, we can obtain the appropriate Z value of the normal distribution.

The sampling error [e] indicates the amount of error we are willing to accept or tolerate in estimating the portion of the population.

The third quantity, the true portion of successes P is actually the population parameter
In this case we have two alternatives:

1. In many situations, relevant information or experience may be available to enable us to provide a studied estimate of P.
2. If no relevant past data or experience is available, we try to provide a value of P that never underestimates the sample size we need. When no previous or past research is available from previous data we will take the value of 0.5 for P, it can be shown that when $P = 0.5$ then the product $p \cdot q$ achieves its maximum value.

The following information was used to calculate the sample:

$$P = .05 \quad p \cdot q = (0.5)(0.5) = .25$$

At 95% confidence level

$$Z = 1.96$$

$$P = 0.5$$

$$Q = 1 - P = 0.5$$

$$e = 0.03$$

$$N = 172$$

$$N = E^2 (N - 1) + Z^2 (p \cdot q) = .05^2 (314 - 1) + 1.96^2 (.5 \cdot .5) = 173.2$$

3.5.3 Sampling

As Malhotra [2016] points out sampling is one of the main components of a research design, it is a phase in the research process where previously the information needed to address the study problem has been identified and the nature of the research has been determined; the next step will consist of planning the appropriate sampling procedures.

Therefore, a probabilistic sample will be used as a mechanism to gather information to propose a strategic planning model that will contribute to the growth in the stratification of professional, scientific and technical services microenterprises in Tulancingo de Bravo Hidalgo.

3.5.4 Probability sample

As Malhotra [2016] states "is a sampling procedure where each element of the population has a fixed probability chance to be chosen in the sample, [...]. There are 32 different probability sampling techniques" [p341].

This technique is used due to time and budget constraints, since the census is costly and time-consuming to conduct, making it impractical for a universe of 314 microenterprises.

As mentioned above, there are 32 different probability sampling techniques; for the purposes of this research, simple random sampling is used.

As stated by Malhotra [2014] "probability sampling technique where each element of the population has an equal and known probability of selection, each element is selected independently of the other elements and the sample is drawn by a random procedure from the sampling frame" [p346]. In this research the probability sampling type is used, because it does not seek to exclude any element of the sample.

3.6 Data collection

Upon selecting the appropriate research design and the adequate sample, in affinity to the study problem and hypotheses, the subsequent stage consists of collecting the pertinent data on the attributes, concepts or variables of the units of analysis or cases [participants, groups, organizations, etc.], [...]. Collecting data implies elaborating a detailed plan of procedures that direct us to collect information with a specific purpose [Hernández et al., 2014, p.198].

The data collection stage in this research was through a Likert scale type measurement instrument composed of a total of 127 items, in the first part identification questions are used that refer to the company from which information is obtained. In the second part, questions with statements are used, using five scales:

- 1. Totally disagree.
- 2. Disagree.
- 3. Undecided.
- 4. Agreed.
- 5. Totally agree.

Where the elements that make up strategic planning are investigated as indicated in the literature: business philosophy, internal key factors, external key factors, SWOT, diagnosis of the situation, objectives, strategic control, organizational strategy, action plans, management control, regulations, procedures, programs, budgets and operational control.

The research technique was self-administered individually to one hundred and seventy-four microenterprises in the sector of scientific and technical professional services in Tulancingo de Bravo Hidalgo, to the participants, in a period of approximately one four-month period.

Table 11 details the relevant points of the measurement instrument.

Box 40

Table 11

Research instrument	
Technical data	
Methodological nature	Descriptive correlational approach.
Data Collection Method	Individual self-administered questionnaire.
Type of questionnaire	Likert scale with statements.
Geographic Scope	Tulancingo de Bravo, Hidalgo.
Companies	Micro of the scientific and technical professional services sector.
Addressed to	Administrators or Managers.
Sample	One hundred seventy-four.

Note. Prepared from Metodología de la investigación [p.211], by R. Hernández, C. Fernández and P. Baptista, 2014, McGraw Hill.

3.7 Reliability and Validity

In research, data collection instruments must contain two fundamental aspects, which are reliability and validity, where reliability allows determining that the instrument measures what it is intended to measure and that when applied several times it will indicate the same result. And validity allows a test to be conceived, elaborated, applied and that it measures what it was intended to measure.

3.7.1 Validity

It refers to the degree to which an instrument actually measures the variable it is intended to measure, i.e. validity answers the question "how closely does the universe or population correspond to the attribute to be measured?", in which there are different types of evidence related to content, criterion and construct [Hernández et al., 2014]. Corral [2009] explains that there are three types of validity:

- Content validity: Reflects the degree to which an instrument has specific domain of the variable to be measured.
- Construct validity: Asks the question: How well does the instrument actually measure a given trait and how efficiently does it do so? Explains how the measures of the concept are linked to measures of other theoretical concepts.
- Predictive validity: Associated with the vision of the future, which determines the extent to which it is possible to anticipate the performance of the subjects in a real context.

To establish the validity of the research instrument, the literature represented by 15 thesis studies and articles between 2016 and 2021 was reviewed, as well as research published in journals and various books on the subject, evaluating in them the main dimensions and factors that make up strategic planning and how these had been dimensioned. Seven concepts were identified that are strongly linked and intertwined: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, with which the measurement instrument was constructed. The same concepts are addressed in this study.

3.7.2 Reliability

Reliability is the relative absence of measurement errors in a measurement instrument, expressed more explicitly, an observed or measured score is the sum of a real or true score plus a measurement error score. Hernandez et al., [2014] indicates, there are several procedures to calculate the reliability of a measurement instrument, all use procedures and formulas that produce reliability coefficients, most range between zero and one, where a coefficient of zero means null reliability and one represents a maximum of reliability [total, perfect reliability], the closer the coefficient is to zero, the greater error there will be in the measurement, [...]. The most commonly used procedures to determine reliability by means of a coefficient are: 1] measure of stability [test-retest reliability], 2] method of alternative or parallel forms, 3] method of split halves [split-halves] and 4] measures of internal consistency. [p.208]

For the purposes of this research, the reliability of the instrument to be applied will be by means of Cronbach's Alpha coefficient. This tool allows analyzing the internal consistency of the test, the properties of the items that compose it, the response patterns of the subjects to the items, the effect of the elimination of items and the increase in the length of the test on its reliability [Hernández et al., 2014].

According to the above, the reliability of the scale should be obtained with the data provided by the managers or managers of the microenterprises in the scientific and technical professional services sector to ensure a reliable measurement of the measuring instrument.

By entering the data provided by the administrators, in the Statistical Package for the Social Sciences [SPSS] statistical program, two tables were obtained, the first shows the summary of processing in cases by number of observations included and excluded, in total and by training and reserved samples, the second refers to the reliability statistic, which will contain the total number of items analyzed and the reliability achieved by the measurement instrument through Cronbach's alpha coefficient. In this direction, the measurement instrument was applied to the random probability sample established at 174 surveys. The summary of total case processing is shown in Table 12; no item was excluded from the sample.

Box 41

Table 12

Summary of case processing total sample			
Processing		N	%
Cases	Valid	174	100.0
	Excluded	0	.0
	Total	174	100.0

Note. Taken from Statistical Package for Social Sciences, 2024.

In this sense, the result yielded by Cronbach's alpha corresponds to a value of .912 as shown in Table 13, which is synonymous with internal consistency.

Box 42

Table 13

Cronbach's alpha total sample.	
Reliability statistics	
Cronbach's alpha	N of Items
, 912	122

Note. Taken from Statistical Package for Social Sciences, 2024.

3.8 Data processing and analysis

There is a great variety of programs and applications for processing information, with similarities among them. For the current research, the Statistical Package for the Social Sciences [SPSS] statistical program will be used, since it contains the multivariate statistical analyses necessary for the processing, description and correlation of variables determined in this chapter.

The analysis section will be described through descriptive statistics, using frequency distributions and polygons, measures of variability such as range, standard deviation and variance, and finally measures of central position [mean, median and mode].

Likewise, a principal component analysis will be used to contrast the dimensions that integrate the variables of the strategic model put into practice with those presented in the literature.

Gallego & Araque [2019] state, the principal component analysis method consists of the representation of the numerical measures of several variables in a reduced space site where relationships that would otherwise remain invisible in higher dimensions can be perceived, aims to transform a set of original variables, in a new set and establish patterns of behavior. [p.258] With regard to the degree of theoretical-practical association between the set of dimensions that make up the strategic planning variable in the population under study, multiple correlation analysis will be used.

Hair et al. [1999] state that its use is appropriate when the problem under study includes a dependent metric variable that is supposed to be related to a set of two or more independent variables; its objective is to predict what changes occur in a criterion variable in response to two or more predictor variables in order to predict the magnitude of the movement of the dependent variable.

This sense, the present statistical technique is used, because of an inherent relationship of the dimensions: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, by theoretically together explaining the strategic planning variable [Hill and Jones 2015].

In this same sense, the hypothesis to be tested is the following:

Strategic planning positively influences the growth of micro organizations in the professional, scientific and technical services sector located in the District of Tulancingo de Bravo Hidalgo.

The categorical variables included in the current study: independent variable [strategic planning] and dependent variable its behavior in the microenterprises of the professional, scientific and technical services sector in Tulancingo Hidalgo.

Chapter IV Results

In order to analyze reliable information that allows the objectives formulated in the first chapter to be met and to propose an Ad hoc strategic planning model oriented to microenterprises in the service sector, the information obtained was emptied into the Statistical Package for the Social Sciences [SPSS] statistical program for its analysis and interpretation. The results are shown with respect to the order of the measurement instrument, starting with descriptive statistics and then inferential statistics, through principal component analysis and multiple correlation model.

4.1 Descriptive statistics

The information begins by presenting a general description of the research sub-variables [philosophy, functional areas of the organization, analysis of strengths and weaknesses, micro and macro environment factors, consumer dimensions, market and competition, analysis of opportunities and threats, situation diagnosis, strategic objectives, strategic control, organizational strategy, administrative tools, action plans, tactical control, regulations, procedures, programs, budgets and operational control] with which the strategic planning model is measured. The analysis and interpretation of the results are based on a probabilistic sample of 174 surveys applied to administrators or managers of the aforementioned microenterprises.

4.1.1 Strategic planning variable.

Based on the database obtained through the application of the research instrument to the total sample of microenterprises of scientific and technical professional services located in Tulancingo Hidalgo, the frequency histogram shown in Figure 30 has been formulated, establishing the attitude scale on the application of the administrative model of strategic planning, analyzing a total of 7720 data.

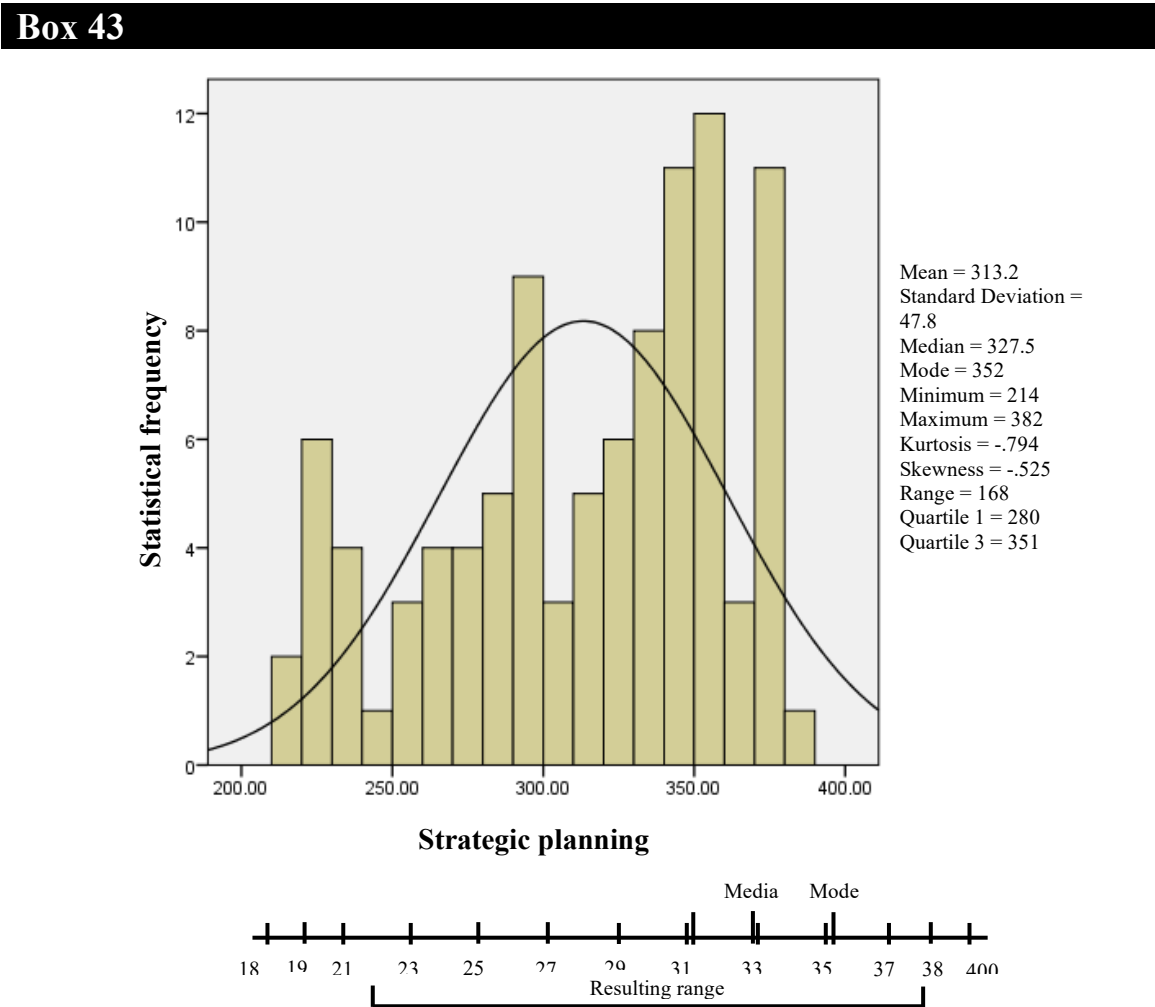


Figure 30

Histogram referring to strategic planning

Note. Taken from Statistical Package for Social Sciences, 2024.

The descriptive analysis derived from the sum of the total scores obtained through the data collection instrument is presented. The median reaches a value of 327 points, which indicates that 50% of the responses are below this figure and the remaining 50% above, which corresponds to the fourth scale ["agree"] of the research technique used. The mean is 313 points, a value close to the median, which suggests a general tendency of microentrepreneurs to agree with the application of the dimensions of the strategic planning model.

Likewise, the asymmetry coefficient obtained was negative, reflecting a distribution skewed to the left. This result implies that most of the microentrepreneurs surveyed provided scores above the overall average [313 points], which is interpreted as an affirmative tendency regarding the application of the factors of the strategic planning model in their businesses. As for kurtosis, a value of -0.794 was reported, which allows us to infer a distribution of a platykurtic type. This means that there is a lower concentration of responses around the mean, evidencing a moderate dispersion of the data around value 3 of the Likert scale.

Finally, when comparing the mean with the standard deviation, it is observed that the latter is lower than the average value, suggesting that the scores do not show great variability. This finding allows us to conclude, in preliminary terms, that the responses show homogeneity.

4.1.2 Strategic control variable

This section describes the strategic control variable for which a total of 396 data were analyzed. The frequency histogram shown in Figure 31 has a normal distribution trend, observing the order in the measures of central tendency: mean [16.10], median [16] and mode [16].

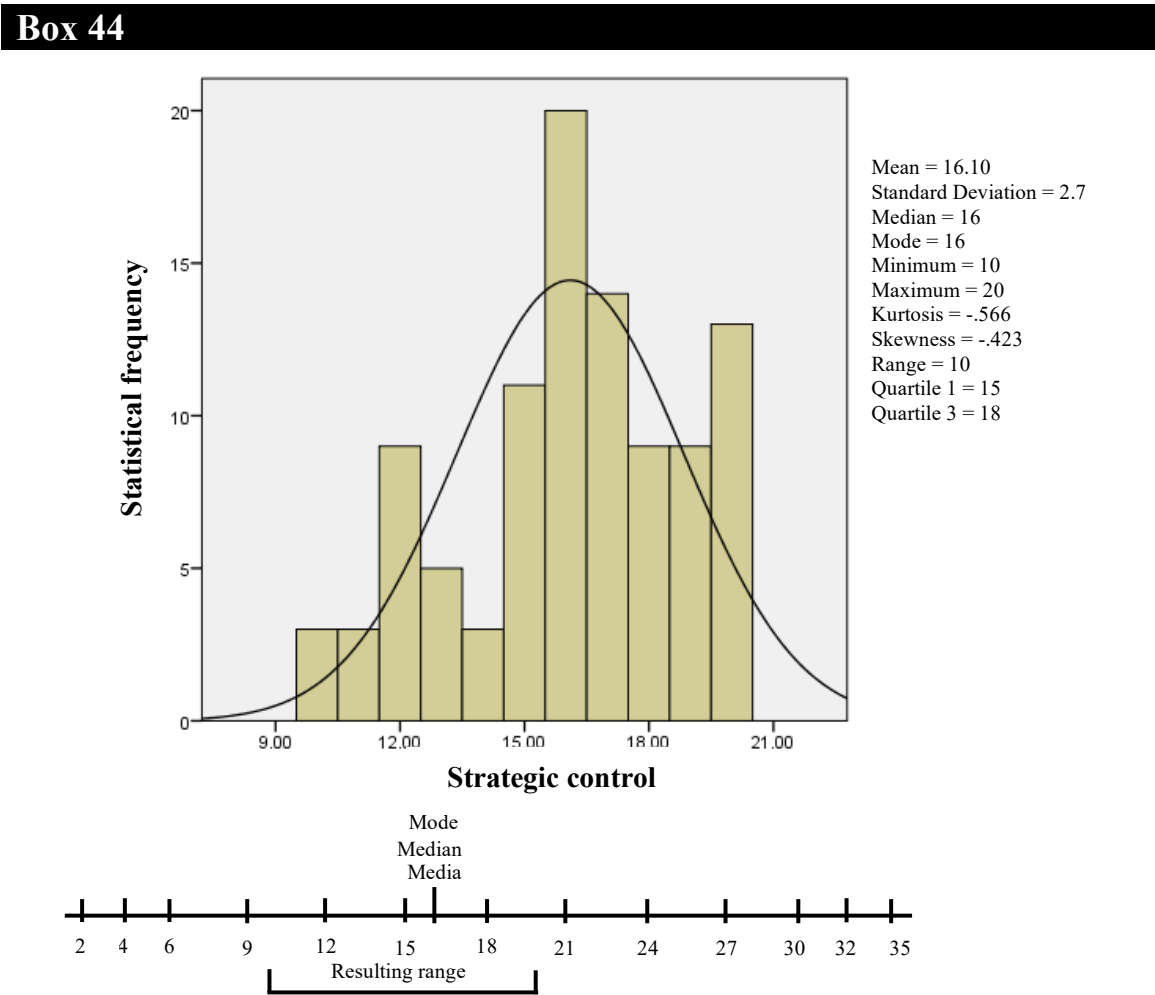


Figure 31
Histogram referring to strategic control
Note. Taken from Statistical Package for Social Sciences, 2024.

However, the skewness coefficient indicates that it has a negative skewness as it contains a negative value of [-.423], however, with an absolute value of less than 1.2, the non-existence of a significantly asymmetric distribution is affirmed.

In this guideline, when observing the value obtained in the kurtosis coefficient [-.566], it is leptokurtic, which shows a great concentration of information near the mean.

The mean has a score of 16.10 in affinity to an average response on a scale of attitude of agreement in using strategic control within the strategic planning model, with respect to the standard deviation, it has a lower score [2.7] with respect to the mean and thus gives the guideline to consider the non-existence of data dispersed between the lowest and highest, reaffirming the average as the central measure for calculations of greater complexity.

The percentage of total distribution of the data analyzed, the first quartile falls on the response score 15, in affinity to a fourth scale. That is, 75% of the data are distributed above the value 15 until reaching a limit of observation 20, the second quartile equivalent to the median, has a score of 16, positioning itself in the last range, regarding 75% of the information or third quartile, equivalent to the position of this fifth scale [totally agree].

Based on the above data, 75% of the responses are located in the scales of totally agree and agree to establish a strategic control in the strategic planning model applied, in terms of a periodic evaluation and review of the objectives set, generate reports that contrast the metrics and the goals set and apply a feedback of the diagnosis of the situation that feeds these objectives.

Finally, 18% of the managers and microentrepreneurs of the organizations under investigation are undecided about complying with the above precepts and 7% totally disagree and totally disagree.

4.2 Inferential statistics

Likewise, in order to contrast the dimensions that integrate the variables of the strategic model put into practice with what is presented in the literature, factor analysis will be used, mainly principal component analysis, whose objective in applying this type of statistics was, according to Abdi & Williams [2010] [2002] & Jolliffe, to extract relevant information from a set of multivariate data. Jolliffe [2002], to extract relevant information from a set of multivariate data, in this case the dimensions of strategic planning, when forming the model, a set of multivariate data was compressed keeping only the information that was considered important [reducing the dimensionality of the data], simplifying the description of a set of information, analyzing the structure of the observations and variables.

Regarding the degree of theoretical-practical association between the set of dimensions that make up the strategic planning variable in the population under study, multiple correlation analysis will be used, in affinity with Hair et al. [1999], to predict the changes that occur in a criterion variable in response to two more predictor variables in order to predict the magnitude of the movement of the dependent variable.

4.2.1 Principal component analysis.

The KMO test [Kaiser-Meyer-Olkin measure of sampling adequacy] and Bartlett's sphericity is necessary to analyze the viability of the statistical technique: principal components. Hair et al., [1999] point out that the KMO or sampling adequacy measure quantifies the degree of intercorrelation between the variables and the convenience of study, this index takes values from 0 to 1, reaching 1 when each variable is perfectly predicted without error by other variables, then the KMO measure above .5 is considered acceptable and values close to .9 are considered excellent. [p.88].

Likewise, to determine whether the original variables are correlated, Bartlett's test of sphericity is performed, the hypotheses handled by the statistical test are:

H0: the correlation matrix is an identity matrix, in other words, the variables are not significantly correlated.

H1: the correlation matrix is not an identity matrix, equivalent to pointing out that the variables are significantly correlated.

In this guideline, to accept or reject the hypothesis, the significance value obtained by SPSS is displayed, which states that when a value less than or equal to .05 is obtained, H0 is rejected and H1 is accepted; on the other hand, if the P value is greater than the criterion of .05, the null hypothesis is accepted and the alternative is rejected.

Table 14 shows the KMO and Bartlett's test in which a score of .703 is obtained, indicating an acceptable test of fit of the principal components analysis model, according to Hair and collaborators. With regard to Bartlett's test of sphericity, we have a statistical significance equivalent to .000, rejecting the null hypothesis of matrix similarity and accepting H1 where there is a significant correlation between the variables.

Box 45

Table 14

KMO test and Bartlett's sphericity.

KMO and Bartlett's test	
Kaiser-Meyer-Olkin measure of sampling adequacy	.703
Approx. chi-square	8121.181
Bartlett's test for sphericity gl	2701
Sig.	.000

Note. Based on Statistical Package for Social Sciences, 2022.

4.2.1.1 Criteria for calculating the number of factors

In affinity to what was described above, the sedimentation plot allows observing the number of principal components versus the total number of items analyzed in the research technique. The graph orders the values from the component that contributes most to the total variance to the smallest, where these values are similar to the variance of the principal components [Coutiño, 2014].

The sedimentation plot allows visualizing the number of optimal components to be used based on the size of the variance they can contribute. This is shown by a steep curve, followed by an elbow inflection and then a straight line, where those components located on the steep curve will be used before a straight line is drawn where a trend is created. Figure 32 shows the existence of 73 factors indicated in the research instrument, where nine components have their own extraction values greater than one and the remaining ones form a straight line in the sedimentation graph.085% of the variance, the second 6.755%, the third 5.749%, the fourth 4.539%, then a fifth, sixth and seventh component 3% respectively and finally the eighth and ninth 2% simultaneously, the cumulative sum explains together 66.771% of the total variation of the data.

Box 46

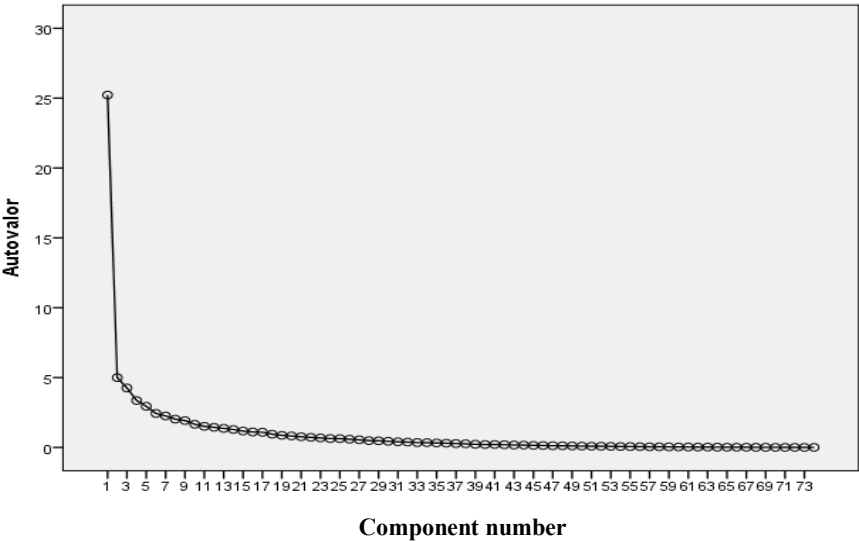


Figure 32

Sedimentation formulated from the principal component analysis of the strategic planning variable.

Note. Taken from Statistical Package for Social Sciences, 2024.

4.2.1.2 Explained variance of the factors

Likewise, Hair et al. [1999] state, "the communalities show the amount of variance of each variable that is explained by the principal components taken together [...] The communalities represent the proportions of variance with which each variable contributes to the final solution" [p. 101 and 112].

The researcher should observe the communality of each variable to evaluate if it reaches acceptable levels of explanation, for example, it is necessary that each factor specifies at least half of the variance of each variable [...] By taking into consideration 50% of the variance explained per item, one has elements to identify all variables with communalities lower than .5 as lacking sufficient explanation [Hair et al., 1999, p. 101].

Following this direction, the communality graph expresses the proportion of common variance within a variable with respect to another, in parallel to the percentage that manifests one item to another in the research technique. The principal components analysis works under the assumption that all variation is common, so before the extraction of the components the initial variation is equal to 1 and when the factor loadings are extracted, there is a more solid perspective to expose how much variance is common and it is expressed in the SPSS communalities table.

In an analogous example, Figure 44 shows the entrepreneurial vision factor, which shares a percentage of 52% of common variance with the rest of the items analyzed, likewise, the remaining explained variance [48%] that does not share a relationship with the factors indicated, is located in the components matrix, where the items are grouped by factor loadings and their summation with respect to the communalities table results in the total variance [100%]. However, it is in the rotated components table where the final component loadings will be established.

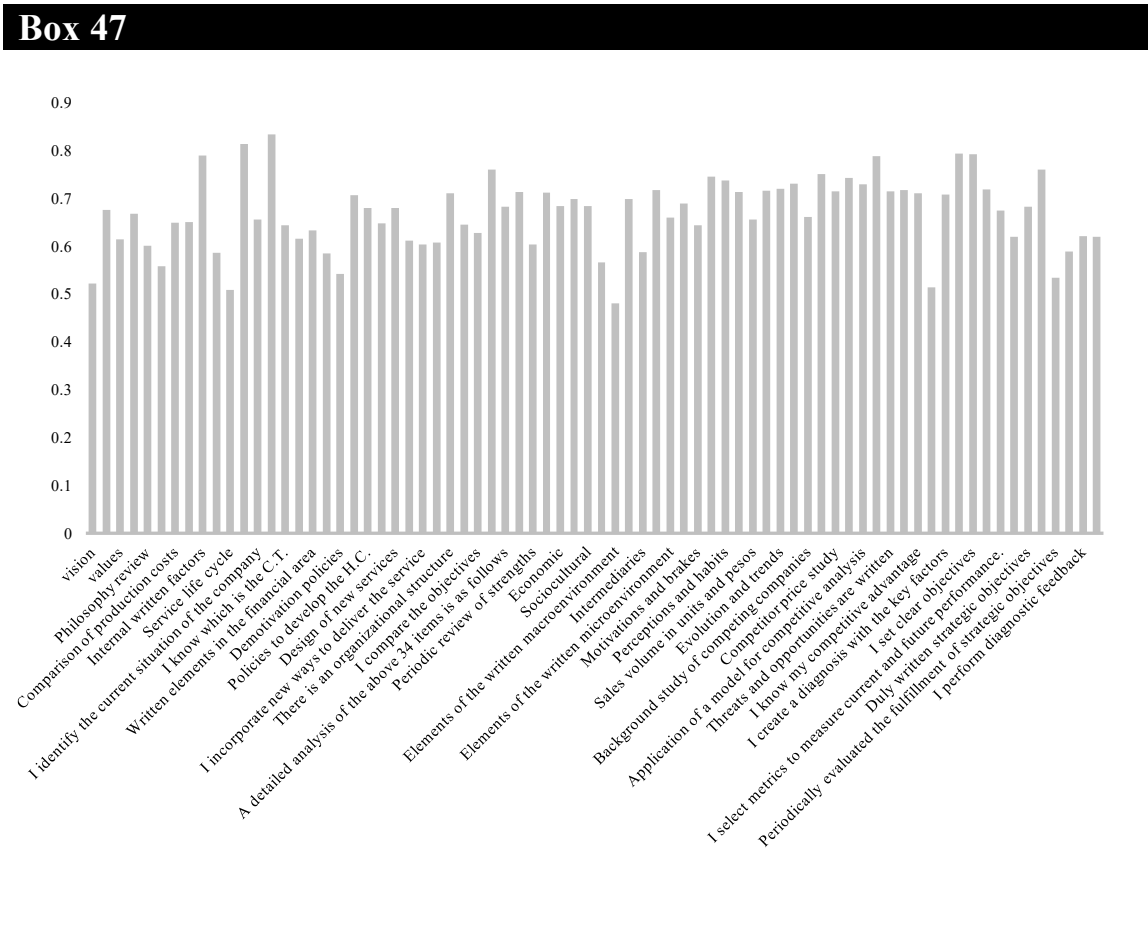


Figure 2
Graph of communalities of the strategic planning variable.
Note. Taken from Statistical Package for Social Sciences, 2024.

In this guideline, the communalities figure contains the proportion of common variance within a variable, where the item "I have a written summary of the analysis of the macroenvironment elements" is the only factor with an explained variance of less than 50%, indicating an insufficient illustration that provides the necessary elements to be excluded from the final component loadings, as stated by Hair and collaborators.

4.2.1.3 Interpretation of the factors

To interpret the factors and select the final factorial solution [...] The initial unrotated matrix is calculated in order to give a preliminary indication of the number of factors to extract [...] The factor matrix contains the factor loadings for each variable on each factor; in calculating the unrotated factor matrix, the researcher is simply interested in the best linear combination of variables, that is, in finding that particular combination of the original variables that has the highest percentage of variance in the data [Hair et al., 1999, p. 94].

In this sense, unrotated factorial solutions achieve the objective of data reduction, but the researcher must ask himself whether the unrotated factorial solution provides information that offers the most adequate interpretation of the variables examined [...] Most of the time this does not turn out to be the case [Hair et al., 1999, p. 95].

In other words, to interpret the factor loadings, the initial unrotated matrix is calculated as a preliminary indication of the number of total factors, since the initial matrix only locates an optimal combination according to the highest percentage of variance explained by the data. Likewise, what is sought to be interpreted are the correlations between each variable and factor to define it, which is not achieved in most cases with an unrotated matrix, therefore, some method of rotation is required to interpret the factors.

The rotation technique rotates the reference axes of the factors at the origin until a certain position is reached, unlike the unrotated solution that extracts the factors in order of importance, where the first factor is general and has a greater amount of variance explained as opposed to the subsequent factors that have a residual variance which explains a smaller percentage [Hair et al., 1999]. The rotated factor matrix seeks to redistribute the variance from the first factors to the last ones in order to achieve a simple and theoretically significant pattern of factors.

In this sense, there are two types of rotations, orthogonal and oblique, similar to each other, differing in that the latter allows the existence of correlated factors instead of maintaining independence between the rotated factors [Hair et al., 1999]. In this guideline, orthogonal rotation was used because it seeks to reduce the number of original variables in order to verify whether they are grouped according to what is described in the literature. There are three main approaches:

- QUARTIMAX which focuses on rotating the initial factors such that a variable loads high on one factor and as low as possible on the other factors.
- VARIMAX minimizes the number of variables that have high loadings on each factor. This method simplifies the interpretation of the factors.
- EQUIMAX is a combination of the VARIMAX method, which simplifies the factors, and the QUARTIMAX method, which simplifies the variables.

Based on the above, as shown in Table 15, the varimax approximation was used because it maximizes the variance of the factors [provides a clearer separation], trying to ensure that it is made up of as few variables as possible with the maximum factor load.

Box 48

Table 15

Matrix of rotated components of dimensions of the strategic planning model, rotation approximation: Varimax.

	Component								
	1	2	3	4	5	6	7	8	9
Importance and growth.	.767								
Purchasing behavior.	.764								
Establish strategic objectives.	.712								
Evolution and trends.	.690								
I review annually if the objectives need to be modified.	.684								
I know my competitive advantage.	.646								
Overall productivity.	.626								
Background studies of competing companies.	.607								
Market potential analysis	.571								
They conduct surveys.	.541								
I identify the current situation of the company	.541								
Written philosophy.	.530	.505							
I establish accountability for meeting objectives.	.527				.436				
I select metrics to measure current and future performance.	.486								
Written elements of the market dimensions.	.482							.482	
Consumers.	.453				.433				
Detailed analysis of the first 34.	.409						.405		
Written elements I.D.		.720							
Philosophy review.		.641							
Written administrative elements.		.632							
Duly written strategic objectives.		.603							
Periodic review of strengths.		.593							
Elements of H.R. written.		.568							
Vision		.568							
Written elements of the microenvironment.		.540		.463					
Strengths and weaknesses are written down.		.533							
I create a diagnosis with the key factors.		.484						.437	
I generate performance metrics reports.		.476							
Written elements of the macroenvironment.		.457							
I compare prices with competitors.			.757						
Application of a model for competitive analysis.			.751						
Study of competing advertising activities.			.737						
Written elements of competition.			.695						
Study the services of the competition.			.685						
Written marketing elements.		.524	.681						
Periodic review of threats and opportunities.			.681						
Competitor's price study.			.656						
Internal written factors.		.575	.642						
Comparison of production costs.	.443		.627						
Written elements in the financial area.		.511							
Intermediaries				.714					
Sociocultural				.668					
Technological				.635					
Perceptions and habits.				.621	.401				
Demographic.				.573		.480			
I determine break-even point.				.553					.472
Motivations and brakes.				.544					
Interrelated strategic objectives.					.686				
I set clear objectives.					.675				
Consumption preference.					.662				
Economic.				.606	.505				
Clear visualization of my organization.					.530				
Political.				.519	.518				
Implementation of improvements.					.435		.419		
Mission.						.768			
Target audience needs						.755			
Suppliers.				.641		.492			.473
Sales volume in units and weights.						.491		.436	
Characteristics and timing of the process.						.439			
Values.		.419		.417		.436			
Policies to develop the H.C.							.621		
I incorporate new ways to deliver the service.							.585		
Level of integration.							.566		
Motivation policies.		.430					.516		
Periodically evaluated compliance with strategic objectives.							.447		
Recruitment system accordingly.							.421		
I compare the objectives.							.408		
Organizational structure is in place.						.467		.490	
Threats and opportunities are written.								.468	
I perform diagnostic feedback.								.443	
Coordination mechanisms are in place.		.409						.410	
I know what the C.T. is.									.707
Design of new services.		.475							.513
Service life cycle.				.402					.425

Note. Taken from Statistical Package for Social Sciences, 2024.

In relation to the above, the first main component and of greater amplitude resulting from the statistical technique is composed of the market dimensions [importance and growth of the market, purchasing behavior, evolution and trends, potential market analysis, written elements of the market dimensions], in this sense, one of the factors of the microenvironment variable [consumers] is added, intrinsically related to the previous dimension.

The following two variables within the first component refer to a written business philosophy and the strategic objective [strategic objectives are established, I establish those responsible for enforcing them and review annually if they need to be modified], also, internal factors necessary for the fulfillment of these guidelines are added such as: I know the competitive advantage of the organization, the global productivity, I identify the current situation of the organization, I conduct surveys to have knowledge about customer satisfaction and I select metrics to measure the current and future performance of the organization.

Consequently, the first factor would be named, preliminary comparison of basic elements versus strategic objectives and written business philosophy.

The second component is related to the duly written reports resulting from the variables internal factors, research and development, administration, human resources, marketing, finance, microenvironment, macroenvironment and one of the elements of strategic control [report on the performance metrics achieved vs. those proposed].

The subsequent part of the second component goes in the following direction: first, to establish in writing the strengths and weaknesses of the organization in order to assume an empirical basis for its periodic review through a diagnosis of the situation that groups the main key factors found and thus study the fulfillment of the business philosophy.

This factorial loading will be referred to as a comparison of the results obtained in internal and external strategic areas versus compliance with the corporate philosophy [vision, vision and values].

The third component groups the factors related to the analysis of organizations that offer an equivalent or equal good: I compare prices and production costs, study the advertising activities and services offered, apply a model for the study of competitors and generate written reports of the information obtained from the competition. To the previous variable is added the periodic review of threats and opportunities.

In this sense, this component will be designated as: integral analysis of the competition.

The fourth factorial loading groups the items related to the micro and macro environment variables: intermediaries, suppliers, socio-cultural, technological, demographic and economic elements.

Therefore, the name for this factor will be: analysis of the micro and macroenvironment.

The fifth formation includes five items related to three dimensions of strategic planning, strategic objectives [I establish clear objectives and interrelated strategic objectives], situation diagnosis [clear visualization of my organization] and research and development [I implement improvements to services already provided].

The fifth grouping of factors will be called the future visualization of the organization based on an interrelation of objectives.

The sixth component is related to two elements of the philosophy, mission and values that are interrelated with the dimensions of the market: target public needs, sales volume in units and weights, in line with the analysis of the internal factor [characteristics and timing of the process] and an organizational structure, necessary elements for the adequate fulfillment of this mission. This component will be designated: Interrelation of the market dimensions and the organizational structure as support of the organizational mission.

The first refers to elements inherent to the human resources area [motivation policies, HR development policies, recruitment system and level of integration] and the second to strategic objectives and their periodic evaluation for their fulfillment. The previous component will be called: dimensions of the human resources area and its contribution to the fulfillment of the strategic objectives.

The eighth factorial load goes in the direction of the external factors with which the threats and opportunities in the organization are inferred and with it the feedback of the diagnosis of the situation. As well as the coordination between departments that allows the flow of indicators and reliable data for an efficient analysis and therefore a feedback to reduce errors. In this sense, the current component will be named, coordination between functional areas with the objective of providing feedback to the diagnosis of the situation.

The last component has an affinity with three sequential dimensions of the strategic planning model: marketing [I know the life cycle of the service], research and development [I design new services] and finance [I know the working capital], the premise is the knowledge of the current life cycle of the service offered in order to anticipate future changes and design a new offer that has the ability to meet the needs of the end customer considering the capital necessary for the operation of the organization.

Therefore, the last component will be called the interrelationship between the marketing, research and development and finance dimensions.

Finally, Table 16 shows the transformation matrix that indicates the correlation between components, where a weak positive association of variables is mostly visible and in some cases medium, however, between the factors that make up the components there is a mostly positive correlation.

Box 49

Table 16
Strategic planning model component transformation matrix, rotation approximation: Varimax.

Component transformation matrix									
Component	1	2	3	4	5	6	7	8	9
1	.475	.436	.330	.365	.353	.225	.292	.227	.173
2	-.660	.566	.275	.249	-.173	-.250	.041	-.094	.066
3	.245	-.164	.776	-.269	-.066	-.422	-.111	-.086	-.190
4	-.292	-.516	.360	.516	.132	.404	-.260	-.051	.041
5	-.003	.247	.170	-.242	-.372	.662	.042	-.062	-.518
6	-.242	-.088	.188	-.510	.266	.269	.390	-.329	.484
7	.352	.030	-.065	.304	-.400	-.009	.026	-.755	.218
8	.076	-.037	.121	-.099	-.604	.121	-.157	.467	.588
9	.078	.354	-.015	-.214	.299	.137	-.808	-.171	.179

Note. Based on Statistical Package for Social Sciences, 2024.

4.2.2 Multiple correlation analysis

To measure the degree of theoretical-practical association between the set of dimensions that make up the strategic planning variable in the population under study, multiple correlation analysis will be used. Hair et al. [1999] state that its use is appropriate when the problem under study includes a dependent metric variable that is supposed to be related to a set of two or more independent variables; its objective is to predict what changes occur in a criterion variable in response to two or more predictor variables in order to predict the magnitude of the movement of the dependent variable. This sense, the present statistical technique is used, because of an inherent relationship of the dimensions: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, by theoretically together explaining the strategic planning variable [Hill and Jones 2015].

The validation of the multiple regression model starts with respect to the level of independent variables related to a ratio of 15 to 20 observations per variable, where the sample exceeds this proportion by 24% [Hair et al., 1999]. Table 17 gives a preliminary indication of the principle of multicollinearity, the correlations in no observed case have a coefficient greater than .9, they are all significant, their value ranges between a weak and moderate association, the proportion of correlation between the independent variables is equivalent respectively to 43% and 47% [Rowntree, 1984].

Box 50

Table 17

Correlations between dependent and independent variables

		Correlations							
		Company [Y]	Philosophy [X1]	Internal factors [X2]	External factors [X3]	SWOT [X4]	Situation diagnosis[X5]	Objectives [X6]	Strategic control [X7]
Pearson correlation	Company	1.000	.481	.515	.617	.313	.442	.330	.281
	Philosophy	.481	1.000	.444	.465	.429	.399	.481	.381
	Fact. Int.	.515	.444	1.000	.380	.437	.525	.510	.291
	Invoice. Ext.	.617	.465	.380	1.000	.422	.537	.343	.372
	SWOT	.313	.429	.437	.422	1.000	.412	.434	.354
	Diag.	.442	.399	.525	.537	.412	1.000	.402	.369
	Objectives	.330	.481	.510	.343	.434	.402	1.000	.350
	Control	.281	.381	.291	.372	.354	.369	.350	1.000
Sig. unilateral [Y, X1, X2, X3, X4, X5, X6, X7].		.000	.000	.000	.000	.000	.000	.000	.000
N [Y, X1, X2, X3, X4, X5, X6, X7].		174	174	174	174	174	174	174	174

Note. Based on Statistical Package for Social Sciences, 2024.

As shown in Table 18, the measure that quantifies the simple correlation is invariable at .815. The coefficient of determination, indicates a fit to the regression line, with the ability to predict 66% of the estimation model, the remaining percentage is explained by the standard error, equivalent to the unquantified value in the final equation. Regarding the adjusted determination coefficient, its value is similar to .664, indicative of a proportional amount in the variation of the response of the micro service enterprises in Hidalgo [Y] with the predictions of the independent variable [X], in the current multiple regression model.

Box 51

Table 18

Summary of the multiple regression model.

Model summary ^b									
		Statistics of change							
Model	R	R square	Adjusted R- squared	Standard error of the estimate	Change in R- squared	Change in F	gl1	gl2	Sig. change in F
1	.815 ^a	.664	.650	35.33210	.664	47.214	7	167	.000

Note. Based on Statistical Package for Social Sciences, 2024.

Table 39 shows the unstandardized coefficients that specify the change of the predictor variable "strategic planning" on the response variable "service microenterprises". In this sense, the increase of one unit in the response to the affirmative of the formulation of a written business philosophy, within the organizations studied, is associated with an average increase of 2.966 units in the total sum of the responses indicated on the application of the dimensions in strategic planning by the microentrepreneurs, assuming that all other independent variables remain constant. In this guideline, the standardized coefficients in Table 19 show the individual significance of each of the dimensions that make up the strategic model on the response variable. When contrasting them with each other, an explanatory predominance of the external factors with 41% can be seen.

Box 52

Table 19

Summary of standardized coefficients, unstandardized coefficients and collinearity statistics of the multiple regression model

Coefficients ^a										
		Unstandardized coefficients		Standardized coefficients			95.0% confidence interval for B		Collinearity statistics	
Model		B	Standard error	Beta	t	Sig.	Lower limit	Upper limit	Tolerance	VIF
1	[Constant]	2.041	18.730		.109	.913	-34.937	39.020		
	Philosophy	2.966	.545	.294	5.443	.000	1.890	4.042	.688	1.453
	Fact. Int.	.712	.118	.342	6.028	.000	.479	.946	.623	1.605
	Invoice. Ext.	.807	.111	.414	7.279	.000	.588	1.026	.622	1.608
	SWOT	.628	.476	.073	1.321	.188	-.311	1.567	.665	1.503
	Diag.	.011	.814	.001	.014	.989	-1.595	1.618	.583	1.715
	Objectives	2.500	.504	.276	4.956	.000	1.504	3.496	.649	1.541
	Strategic control	.719	.643	.062	1.119	.265	-.550	1.988	.647	1.545

Note. Based on Statistical Package for Social Sciences, 2024.

According to the above, it is interpreted as: an increase, by one standard deviation in the positive response, on the analysis of the external factors within the organizations subject to research, being linked to an increase in the standard deviation by .414 when adding the total response per observation indicated in the application of the dimensions in the strategic planning by the microentrepreneur, considering a homogeneous value of the remaining independent variables.

Finally, the collinearity statistic indicates a problem of dependence between the predictor variables when the variance inflation factor tends to be greater than 10 [Ritchey, 2008]. In the present case the tolerance does not reach the threshold below .1, affirming the non-existence of multicollinearity. However, the one that has the greatest predisposition to be related to other dimensions is the diagnosis of the situation, which is not significant when observing a value of .989.

Figure 33 shows the scatter diagram with an imperfect positive correlation because the data do not fit the trend line. In this sense, when the positive response of microentrepreneurs increases in relation to the application of any of the seven dimensions of the strategic model [independent variable], the individual average per service organization in Hidalgo [dependent variable] is affected in an upwardly positive way. The regression equation is formed as follows:

$$Y = 2.041 + 2.996(X1) + .712(X2) + .807(X3) + .628(X4) + .011(X5) + 2.5(X6) + .719[X7]$$

Box 53

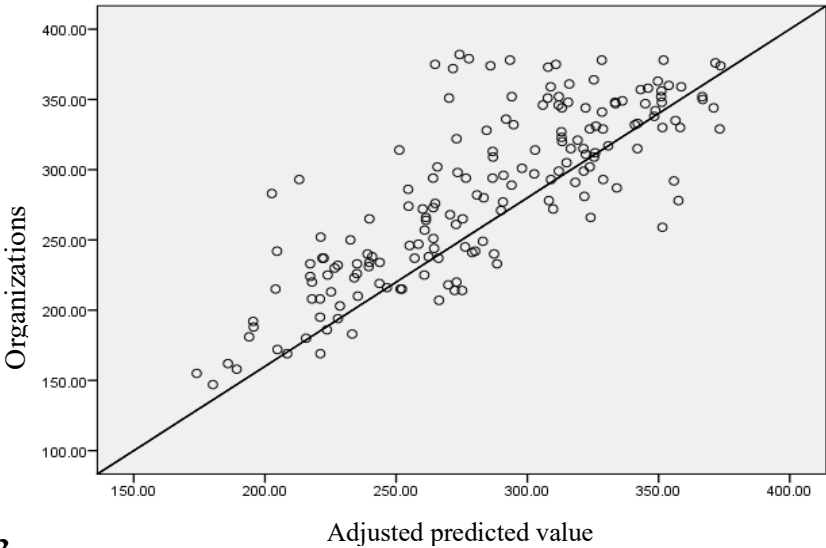


Figure 33
Scatter plot emanating from the predicted regression value
Note. Taken from Statistical Package for Social Sciences, 2024.

Finally, in order to have an accurate knowledge of the accuracy of the forecasting model obtained, it was contrasted with the data collected in the microenterprises under investigation. The procedure was by means of Student's t-test for related samples, which compares the means between the values of two variables in a single group [Ritchey, 2008].

Table 20 contrasts the mean value of the data collected with the predicted value. An estimate very similar to the average collected in the sample is observed, when taking into consideration the coefficient of determination associated with the prediction model, which has a moderate correlation, where in the prediction there is an error of .05 units in the average response of the micro-entrepreneurs.

Box 54

Table 20

Student's t-test to contrast related samples.

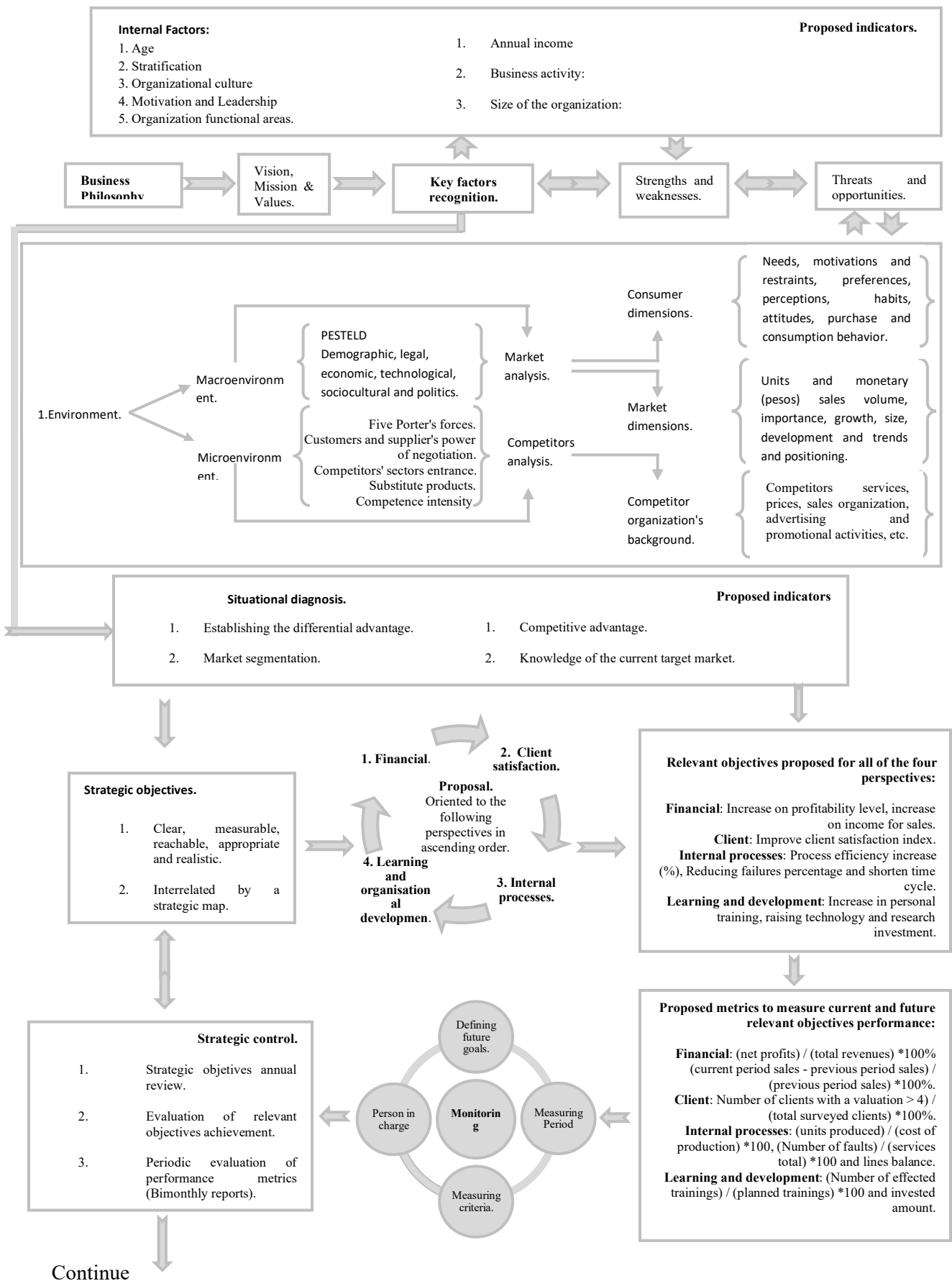
Paired sample statistics					
		Media	N	Standard deviation	Mean standard error
Par 1	Microenterprises [Y]	283.3657	175	59.74335	4.51617
	Prediction [Y]	283.8746	175	48.81496	3.69006

Note. Based on Statistical Package for Social Sciences, 2024.

4.3 Methodological proposal

Figure 34 shows the proposed model. The methodology of the strategic model fulfills the precept of solving the inadequate interrelation and the weak linkage between factors and indicators in the dimensions that integrate the current applied structure of strategic planning in Hidalgo's service microenterprises.

Box 55



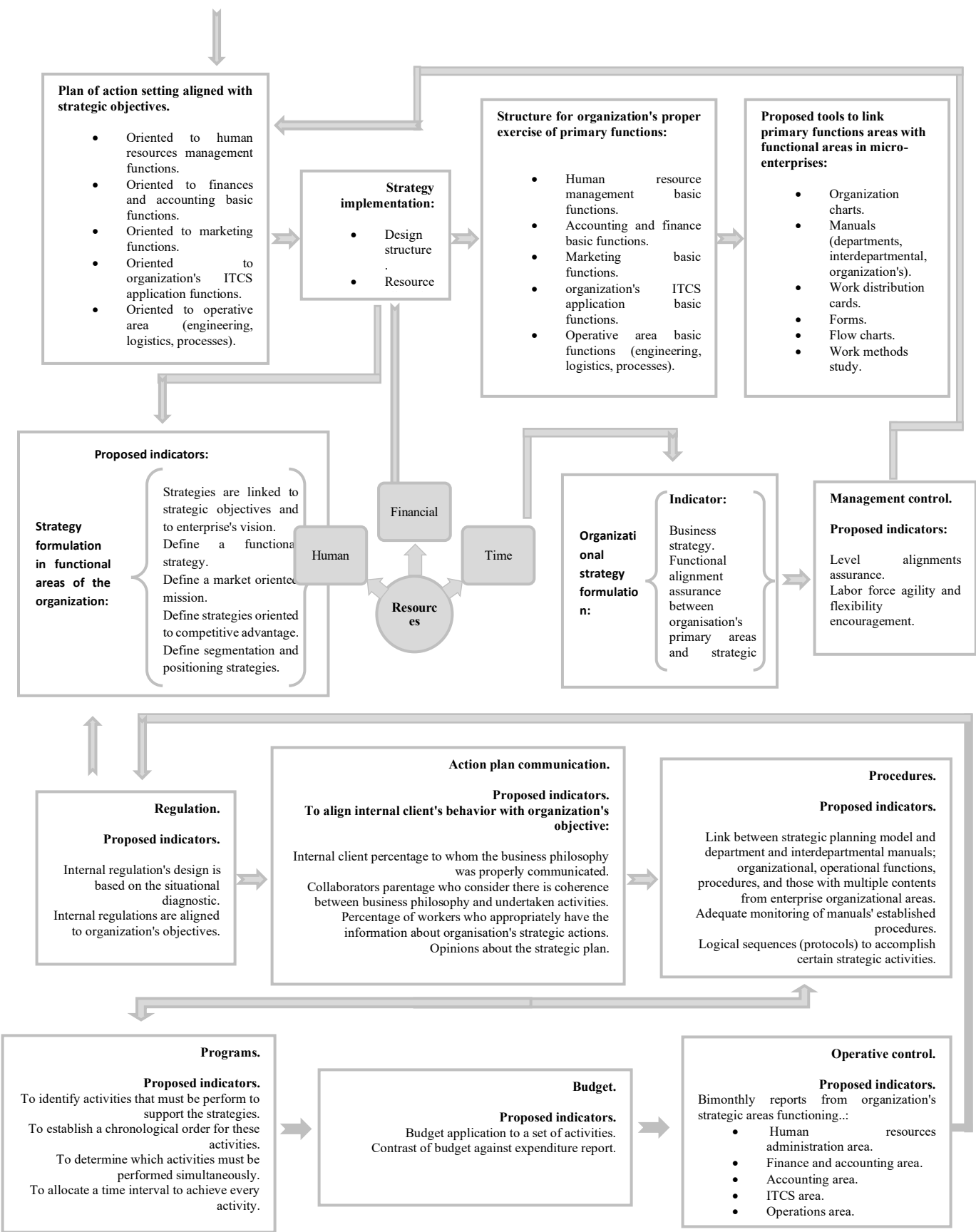


Figure 34
Proposed strategic model.

By virtue of the epistemological foundation with which the proposal was designed, which is based on the hierarchy of management and solves the findings found by means of the statistical technique of principal components and multiple correlation, by structuring in a logical order.

The proposal is based on the hierarchy of management and solves the findings found through the statistical technique of principal components and multiple correlation, by structuring in a logical order, various related elements in dimensions and correlating them strongly through a methodical order in affinity with the literature presented in the strategic planning models in the theoretical framework, where the strategic control acts as a means that gives dynamism to the static time interval in which the analysis of these dimensions takes place.

As shown in Figure No. 47, the design is based on the proposed model in three time intervals, planning starts in descending order [strategic, tactical and operational] and is reversed at the moment of application in ascending order through operational, tactical and strategic control.

In this sense, the first part of the process begins with the formulation of a market-oriented business philosophy [mission, vision and values] based on an analysis of key factors for its fulfillment, this study merges an internal investigation [age of foundation, stratification, organizational culture, internal audit, determination of the primary functions in the company and income level] and external [environment [microenvironment and macroenvironment], market analysis [consumer dimensions and market dimensions] and investigation of the competition]. In this sense, figure 35 shows the conceptualization of the basic principles in structuring a market-oriented philosophy

Box 56

Vision: this is the long-term guideline to be followed by a company's managers and internal customers. It answers the questions: What do we want for the future? How will we get there? How will we differentiate ourselves from the rest? How will we face change?
Mission: defined in terms of satisfying customer needs, it answers the questions: What is the business proposition? Who is the customer? What do consumers value?
Values: conceptualized under the principles that govern operations and labor resolutions and influence internally and externally the dynamics of work and customer service.

Figure 35
Basic principles of the conceptualization of a market-oriented philosophy
Note: Prepared by the authors

Likewise, the procedure proposed for the internal analysis of the organization was based on Chiavenato's book "The strategic process". As shown in table No. 21. The technique that consists of disaggregating the organization into different areas necessary for its subsistence and by means of these strata to study the variables that allow its internal consistency.

It is identified by the logic of its study and its low monetary cost, appropriate for companies of all sizes and incomes, including micro economic units that must adapt this analysis through a conceptualization of the functions of each area, since they do not have formal departments. The objective of this technique is to identify strengths [strong points] and weaknesses [weak points], the process to carry out this research consists of three stages:

1. Choose the areas of study: it is proposed to combine the functions of each area with the daily and eventual activities that allow the proper functioning of the company.
2. The logical choice of the variables to be studied: the manager must discriminate for each functional area, from which activities he/she wishes to extract information.
3. At the end of the structured analysis by strata of each selected variable, the strengths and weaknesses of the organization are identified.

Box 57

Table 21

Variables proposed for the internal analysis of the organization.

Variables	Indicators
Productive Area:	Qualities and attributes of the set of activities required to offer a service in the market: Is there an analysis of the actions inside and outside the organization and the necessary technology used to complete the service cycle?
	Determination of production costs: What amount of human, financial and time resources represent the set of daily and eventual activities required to offer the services to the market? How do the above costs compare with those of the competition? What is the present relationship between the sale of the service and the resources allocated to its production? Is there any stable growth trend among sales? What is the current situation of the production equipment? Are there any maintenance policies? Are they profitable with respect to what is offered in the market?
	Knowledge of the need to apply a quality service: Does the process through which the service is offered satisfy the needs and desires of the clients? Is feedback applied to the activities of the process through which the service is offered in order to maintain its validity in the market?
	Procurement of the inputs necessary to offer the company's service: Do they have reliable suppliers and do they offer affordable prices and payment terms?
	Location of the organization: Is the location of the organization adequate? Is it necessary to open other distribution centers? Is the size of the organization appropriate to offer a quality service?
Marketing Area:	Market: Do I know the evolution of the market share and the demand that the organization has the capacity to access? Do I know the group of individuals who might be interested in acquiring the service?
	Product: What is the slack of the services I offer? What are their homogeneous and specific attributes compared to those of the competition? Is there any technological component that influences their production? Do I provide complementary follow-up to the customers who have purchased the service?
	Price: How does the price I offer compare with the price offered by competitors? What has been the evolution of the price I offer to customers? Is the price at which I compete in the market justified?
Financial area:	Distribution: To which distribution channel do I offer the services? Do I have knowledge of the elements involved in the distribution channel?
	Promotion: Is there a plan that uses advertising as a means to influence the purchase of the organization's service?
	Are the advertising media and supports chosen? Are the advertising formats and supports that serve as a means of advertising and reaching the target customer chosen on an empirical basis?
	Administrative tools for the study of conclusive and relevant decisions about the organization.
Human Resources Area	What is the organization's break-even point? What is the current level of profit? What are the assets and rights that have the capacity to be converted into cash in a period of twelve months or less? Is there clarity on the investment capital required by the organization for proper operation? What is the company's current debt capacity? What are the external financing mechanisms to increase profits? To what extent can the services provided on credit to customers be amortized?
	Refers to the performance of activities directed to personnel working within the organization.
Innovation.	Is there a recruitment process to select personnel according to the needs of the organization? Are training activities developed to improve the human capital of the organization? Is the work of the collaborators evaluated by means of a performance method? Are there motivational techniques within the economic unit to encourage the achievement of the objectives set by the manager? Is there an occupational risk safety plan? Are administrative techniques used to stimulate collaborative work within the organization?
	Refers to the study of scientific techniques for the construction of knowledge in the development of new services, processes, etc.
Administration Area	Current status of administrative software licenses to carry out the activities related to the service? Does the organization have current patents? What is the analysis of investments in innovation and development? Does the organization have the capacity to create or develop new processes to make the services offered more efficient?
	Actions aimed at generating scenarios of coordination, synergy and optimization of resources to achieve the objectives of the other functional areas. What is the organizational structure that best suits the organization? What is the appropriate management style to lead the business unit? What is the communication and coordination system within the company? Is there feedback on the strategic plan?

Note: Prepared by the authors.

A detailed analysis of the internal factors [functional areas of the organization] will provide the necessary elements for the construction of a SWOT matrix, in reference to the factors in weaknesses and strengths that will have a positive or negative impact on the organization. Some questions to detect these factors more clearly are shown in Figure 36.

Box 58

Strengths	Weaknesses
What are we better at?	Where can we improve?
What are the advantages of the company?	What should we stop doing?
What are the factors that make us worthy of this opportunity?	What negative aspects have been mentioned by the market and customers?
What is our value proposition?	Why are we losing sales?
How is our financial muscle?	What do we lack more experience in?
What strengths does the market see in us?	What does the competition have that we don't have that is affecting us?

Figure 36
Basic principles for the construction of the strengths and weaknesses matrix
Note: Prepared by the authors.

Likewise, following the process of the proposed model opens the way to the study of external factors, divided into two sections: market analysis [consumer and market dimensions] and analysis of environment [microenvironment and macroenvironment]. For the analysis of the latter, the methodology of the structure of the industrial sector and PESTEL analysis will be used.

The industrial sector structure model was developed for the study of various industries, in terms of profitability, serving as a strategic guide that considers five forces inherent to any market, allowing to propose a future scenario for the organization.

According to Porter, the ability to generate profits in a company is not a matter of simple chance; it all depends on a series of abstract configurations of the strengths of the competition in the segment, given through the premise of a higher return on invested capital.

Porter has therefore proposed a model that takes into consideration rivalry among competitors and the threat of entry by potential entrants, the probability of the existence of new substitute products or services, and the bargaining power of suppliers and customers. The model is composed of the following variables:

1. The bargaining power of customers: this is the ability of end customers to pressure the sector or economic unit where they purchase products or services to lower prices. The following factors are inferred within this power:
 - Geographic concentration: the density of potential customers in a specific geographic area, which influences their ability to meet, organize and lobby; nowadays, with the explosion of social networks, they have moved to communicate through online media to share their experiences about organizations, services and products.
 - Information management: is the amount of data available to end customers regarding the service and competitors. Digital platforms give the guideline to a greater flow of information.
 - Standardized services: these are homogeneous characteristics that allow a service to be easily replicated; on the other hand, since they have attributes that are complex for competitors to replicate, it will be confusing for the target public to find substitutes.
 - Threat of backward integration: is the ability of an intermediary to substitute the services of an organization either by acquiring the company or by integrating the process offered internally.
2. Bargaining power of suppliers: refers to the pressure exerted by suppliers to substantially increase their prices. The dimensions analyzed answer the question: What gives a supplier power?
 - Number of suppliers: the proportion of suppliers influences the organization's capacity to establish standardized prices for certain products or services that suit them.
 - Lack of substitute product suppliers: this answers the following question: When selling a supplier at a high cost, are there others that offer a substitute in raw material or input? To the extent that there are a large number of supplies or inputs that can be substituted to transform my product or service, this detracts from the power of my suppliers and vice versa.

- Importance of the organization to suppliers: it is the membership of a main circle of customers, in other words, the probability of an imposition of sales conditions, distribution and costs at market price or higher increases if the supplier considers the organization to be unimportant in the long term.
- Differentiated products offered by a supplier: key inputs or services with qualities that are difficult to replicate by another equivalent. The more complex it is to find a substitute, the easier it will be to impose prices set by suppliers.
-
- 3. Potential entry of competitors into the sector: analysis of entry and exit barriers. For the first variable, the following question is answered: What are the factors that prevent new organizations from entering the sector where the economic unit intends to or performs its activities?
 - Capital necessary for the opening of the organization: by requiring a greater financial outlay to enter a specific sector, it is more complex for other companies to enter as competitors and visitors, a strong barrier to entry is desirable.
 - Level of differentiation: the degree of differentiation necessary to compete with established companies; a positioning of the service in relation to other economic units.
 - Economies of scale: the number of organizations that offer high production volumes with the possibility of selling below the market price. This makes it difficult to face competition.
 - Learning curve: refers to the difficulty in learning to replicate a service from another organization or a particular sector, the greater the complexity in the creation of a good, the higher the barrier to entry. It also refers to the simplicity with which an internal customer replicates the production process and thus opens a new organization, becoming a direct competitor.
 - Technologies used by competitors: infer costs, ease of acquisition, qualified personnel for handling, special permits granted or specific requirements within the organization for their operation.
 - Government subsidies: these are public policies aimed at favoring a certain group of companies, which makes it difficult to compete directly by having an advantage in terms of lower costs.
- 4. Number of substitutes: since there are a large number of substitutes, bargaining power will be low and, since there is a restriction on entry, bargaining power tends to become high.
 - Potential development of substitute services: this is the real probability of the entry of services that have the necessary characteristics and attributes to supplant a company's offer.
 - Cost benefit of a substitute product: there is a latent problem when a substitute service is better than the offered good, in other words, more practical, of much lower value or of greater convenience in acquisition.
- 5. Current competition intensity: is an analysis of the amount of competition in the geographic area where the organization is located that will affect its ability to succeed.
 - Market concentration: when market concentration is high, there is a group of leading organizations that assume a high profit margin in the market share. When there is a highly concentrated market, the percentage that these companies do not assume becomes small, which intensifies the rivalry between smaller organizations.
 - Market growth level: equivalent to the level of demand in a sector, as growth is slow there will be a greater probability of high rivalry between competitors.
 - Standardized products: customers who demand standardized services do not seek differentiation in their attributes, causing a rivalry in organizations as to who has the capacity to manage their economy of scale by lowering their cost without compromising their short and long term viability.

Likewise, the exemplification of entry and exit barriers is shown in Figure 37, where a combination of high entry barriers and low exit barriers is desirable.

Box 59

		Exit barriers	
		Low	High
Entrance barrier	Low	Low, stable yields.	Low yields, risky.
	High	High, stable yields.	High yields, risky.

Figure 37

Matrix for the evaluation of entry and exit barriers for market sector analysis.
Elaborated from Competitive Advantage [p.38], by M., E. Porter 1991, Grupo Editorial Patria.

The representation of the structure of the industrial sector developed by Porter can be analyzed through the following format, using the proposal shown in Figure 38, where each force studied is given a scale with an interval from 1 to 5 [very bad, bad, fair, good and very good], marking the factor with a symbol if it represents an opportunity or a threat, and finally using the averages, an overall assessment is obtained to detect how feasible the sector is to enter.

Box 60

Evaluation of factors.																			
1				2				3				4				5			
Very bad.				Bad.				Regular.				Good.				Very good.			
Bargaining power of customers	E	O	A	Bargaining power of suppliers	E	O	A	Potential entry of competitors into the sector	E	O	A	Quantity of substitute products	E	O	A	Current intensity of competition	E	O	A
	S	P	M		S	P	M		S	P	M		S	P	M		S	P	M
	C	R	E		C	R	E		C	R	E		C	R	E		C	R	E
	A	T	N		A	T	N		A	T	N		A	T	N		A	T	N
	L	U	I		L	U	I		L	U	I		L	U	I		L	U	I
	D	N	D		D	N	D		D	N	D		D	N	D		D	N	D
	A	A	A		A	A	A		A	A	A		A	A	A		A	A	A
	D	D	D		D	D	D		D	D	D		D	D	D		D	D	D
Geographic concentration.				Number of suppliers.				Capital required for the opening.				Number of substitute products.				Number of competitors.			
Information management				Lack of substitute suppliers.				Level of differentiation.				Potential development of substitute services.				Size of competitors.			
Standardized services				Importance for suppliers.				Economies of scale.				Cost benefit of a substitute product.				Growth of the sector.			
Threat of backward integration				Differentiated services.				Learning curve.				Average.				Service differentiation.			
Average.				Average.				Technologies used.								Market concentration.			
								Government subsidies.								Service elasticity.			
								Average.								Average.			
Overall evaluation or GPA:																			

Figure 38

Proposed format for applying the sectoral model analysis in market evaluation.
Note: Based on Competitive Advantage [p.19-49], by M., E. Porter 1991, Grupo Editorial Patria.

A complementary study to the industrial sector model is the analysis of competitors within a geographical area of influence; the objective is to examine the micro-environment in a holistic manner by contrasting micro and small competitors with whom the market share is directly disputed. However, it is suggested to annex large organizations if the location is relatively close. As shown in Figure 39, for the analysis of competitors, we propose to compare various factors that a target public perceives indirectly or directly when making a purchase.

Box 61

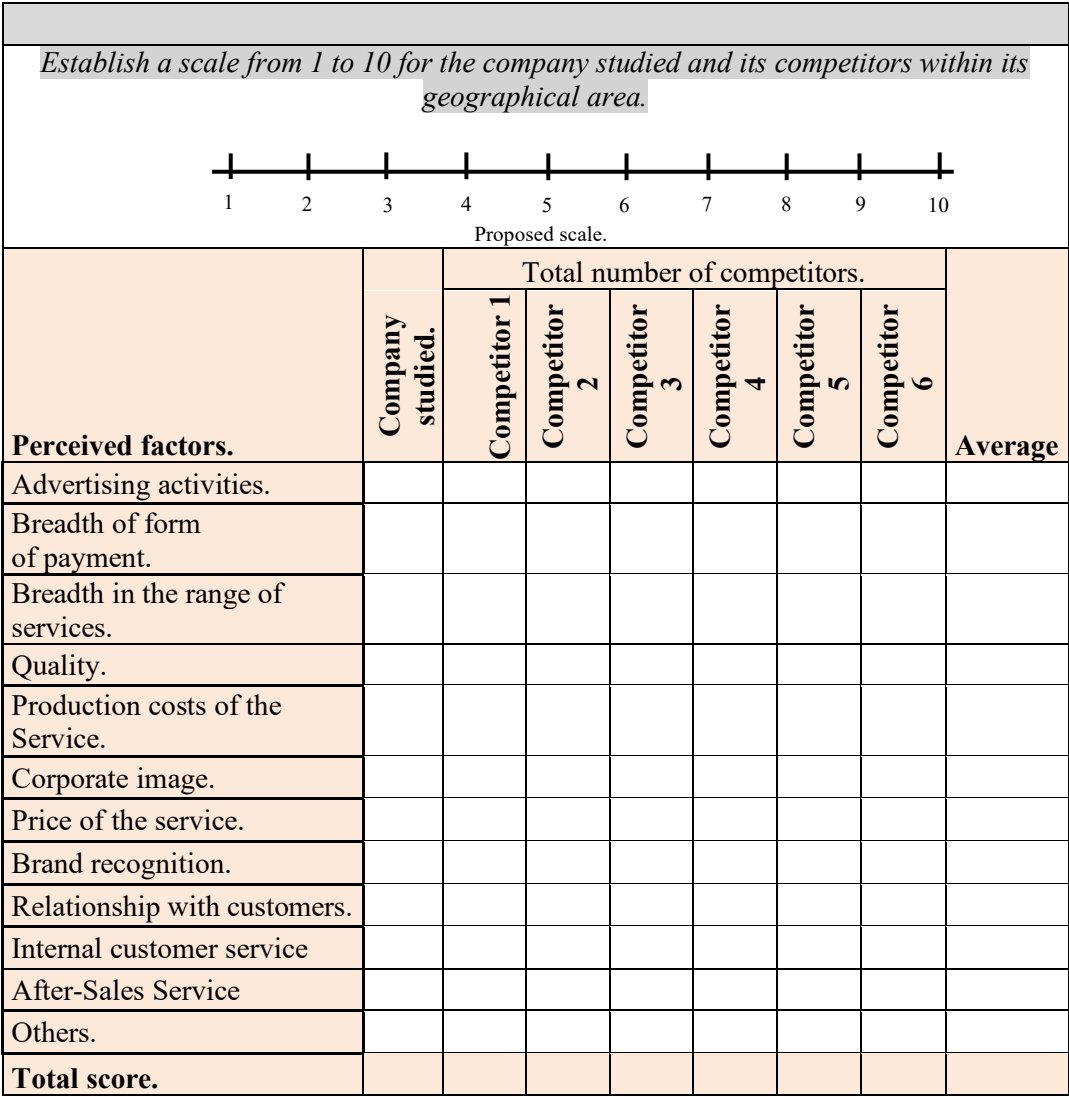


Figure 39
Proposed format for the analysis of factors perceived by the target customer
Note. Prepared from Analyze the company's sector. By Justexw, 2019.

In this guideline, the PESTELD analysis was used for the analysis of the macro-environment, generic variables that exist at an international level of independent management of organizations in a market; they are the external environment surrounding the company in which they develop their exchange of goods and services.

The political-legal, economic, sociocultural, technological, ecological and demographic variables are analyzed through the proposal shown in Figure 40, where each variable is given an impact factor [negative, indifferent and positive] that will determine whether it should be treated as a threat or an opportunity, with two relevant aspects: first, an expected time frame for the entry into force of the variable with the calculation of the corresponding proportion, and second, an average impact per factor. Finally, from the six averages, a weighting is obtained that evaluates the overall impact factor to determine the scale on which the study falls.

Box 62

Evaluation of dimensions.								
1			2			3		
Negative.			Indifferent.			Positive.		
Deadline.								
Short term: 1 year or less.			Medium term: 1 to 3 years.			Long term: more than 3 years.		
Variable	Dimension.	Detail.	Deadline.			Impact.	Threat	Opportunity.
			C.P	M.P	L.P			
Political-Legal.	Local, state and federal tax, consumer protection and trade laws							
	Ideology of the ruling political party.							
Ratio of events to C.P, M.P and L.P.							Average.	
Economic.	Interest rate.							
	Income distribution.							
	Savings, debt and income availability.							
	Inflation							
	Per capita income.							
Ratio of events to C.P, M.P and L.P.							Average.	
Sociocultural	Culture [subculture, social class].							
	Social [family, roles and status].							
	Personal [life cycle, occupation, economic situation, personality]							
	Psychological [motivation, perception, learning, belief, attitude].							
Ratio of events to C.P, M.P and L.P.							Average.	
Technological.	Technological change in the service.							
	Technological change in the service.							
Ratio of events to C.P, M.P and L.P.							Average.	
Ecological.	Shortage of inputs.							
	Increased energy costs.							
	Contamination level.							
	Government ecological protection.							
Ratio of events to C.P, M.P and L.P.							Average.	
Demographic.	Growth.							
	Age mix.							
	Ethnic market.							
	Educational group.							
	Household formation.							
	Demographic change.							
Ratio of events to C.P, M.P and L.P.							Average.	
General Ratio							General Average.	

Figure 40
Proposed format for the application of PESTELD analysis in the evaluation of macroenvironment factors

Note. Prepared from Fundamentals of Marketing [p.70], by P. Kotler and G. Armstrong, 2017, Pearson.

Likewise, the dimensions from which each factor is derived and the conceptualization are shown in Figure 41.

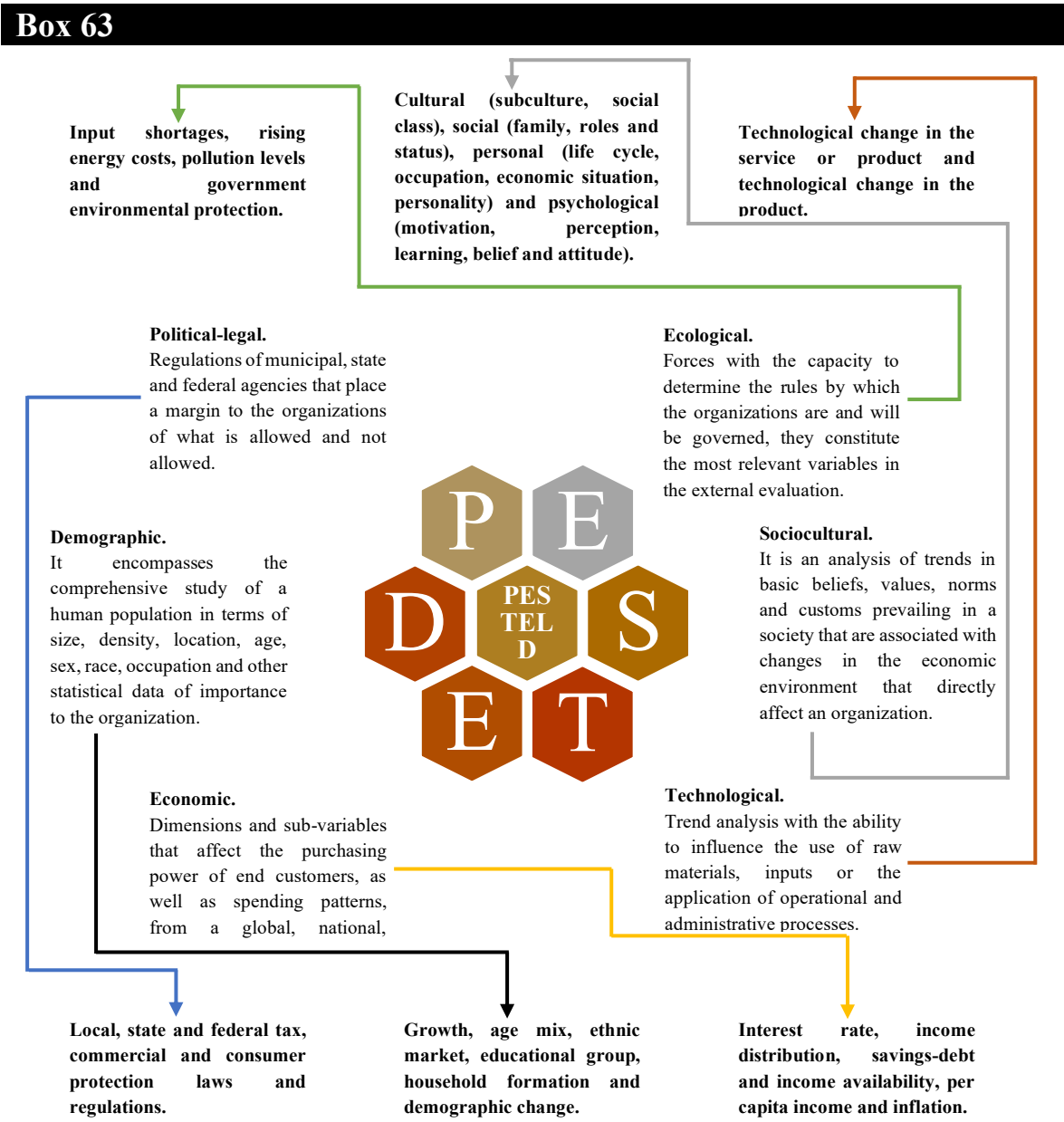


Figure 41
Conceptualization of the PESTELD analysis
Note. Based on Dirección estratégica [p.31], by L. C. Palacios, 2016, ECOE Ediciones.

An important study within strategic planning is the market analysis structured by different dimensions of a specific sector that together provide a commercial horizon of greater certainty in the application of future strategies; its objective is to gather a significant amount of reliable information on the current and future situation of a segment or part of the market.

In this sense, the word market contains two connotations, the first in a general or strategic term, which refers to the part of the environment where the entity develops its activities, the second in a sales and marketing term, which is oriented to a specific aspect, that is, the particularities that help to understand the purchasing behavior of the set of customers to which the company is oriented.

The dimensions of the market analysis are described in detail in Figure 42.

Box 64

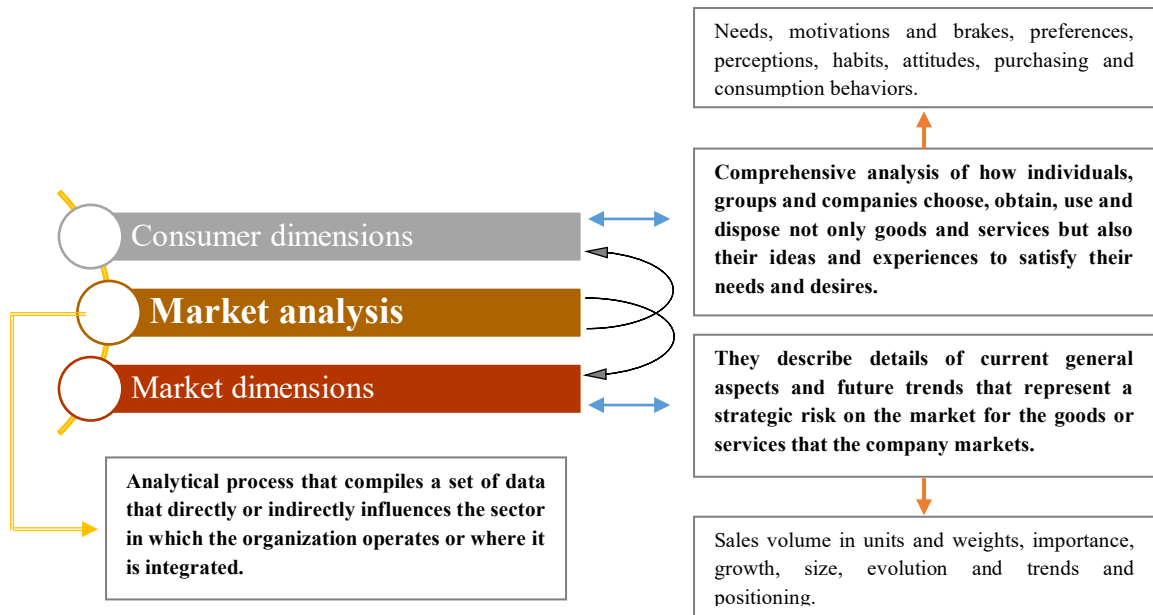


Figure 42

Description of the dimensions that make up the market analysis.

Note: Based on Competitive Advantage [p.263], by M., E. Porter 1991, Grupo Editorial Patria.

The consumer and market dimensions are structured descriptively by means of the proposal shown in Figure 43, where an impact factor is given, whether negative, indifferent or positive, in order to provide a guideline for structuring whether it should be treated as a threat or an opportunity; marking two relevant aspects, the first, an approximate term for the entry into force of said element with the calculation of the corresponding proportion and the second, an average of the impact. Likewise, based on the six averages, a weighting is calculated that evaluates in general terms the impact factor on the scale on which the analysis falls.

Box 65

Evaluation of dimensions.								
1			2			3		
Negative.			Indifferent.			Positive.		
Deadline.								
Short term: 1 year or less.			Medium term: 1 to 3 years.			Long term: more than 3 years.		
Variable	Dimension	Detail.	Deadline.			Impact.	Threat	Opportunity.
			C.P	M.P	L.P			
Market analysis.	Consumer dimensions.	Change in consumer needs, motivations and brakes.						
		Knowledge and change in preferences, perceptions, habits, attitudes, purchasing and consumption behaviors.						
	Ratio of events to C.P, M.P and L.P.						Average.	
	Market size.	Stagnation, increase or decrease in sales volume in units and market weight.						
		Size, importance and growth of the sector in which the organization operates.						
		Evolution, trends and positioning of the market where the services are offered.						
	Ratio of events to C.P, M.P and L.P.						Average.	
General Ratio							General Average.	

Figure 43

Proposed format for the application of market analysis, in the evaluation of macro-environment factors.

Note. Prepared from Fundamentals of Marketing [p.70], by P. Kotler and G. Armstrong, 2017, Pearson.

Once the exhaustive analysis of the external factors [macroenvironment [market analysis and PESTELD] and microenvironment [application of the industrial sector model and study of factors perceived by target customers in the specific geographic area]] has been completed, the necessary elements will be available to build the second part of the SWOT matrix. This is directed to the threats and opportunities with the ability to infer a positive or negative relationship in the company. Some questions to detect these factors more clearly are shown in Figure 44.

Box 66

Opportunities	Threats
What are the market trends in favor?	How is the market landscape changing?
What technological changes may present an opportunity?	What is the competition doing?
What should we do that we haven't done and they have?	Can any weaknesses be a threat to the company?
What events will allow us to expand the brand?	Are our product quality standards changing?
How are people behaving in the face of this issue?	What obstacles are we facing?
Are there any strengths we can exploit?	How are we being affected by government measures?

Figure 44
Basic principles for the construction of the opportunities and threats matrix

In this sense, strengths/weaknesses will clearly emerge from the internal investigation and opportunities/threats from the external analysis, which will require an in-depth evaluation with the support of the internal and external factors evaluation matrix, where each statement will be assigned an order of importance, impact and trend in order to manage a sequence of attention. The proposal to develop the matrix of internal and external factors is based on a cross-study of the elements that make up the SWOT analysis. As shown in Figure 45, a positive value is assigned if, when the variables are combined, they truly represent a strength, opportunity, weakness or threat. Subsequently, the total number of affirmative cases is counted and added up by matrix; the weighting placed in the last row is the result of the total sum of the strengths/weaknesses and opportunities/threats divided by the total number of observations per column. The scale indicating the relative weight of the company ranges from 0.0 -not at all important- to 1.0 -very important.

Box 67

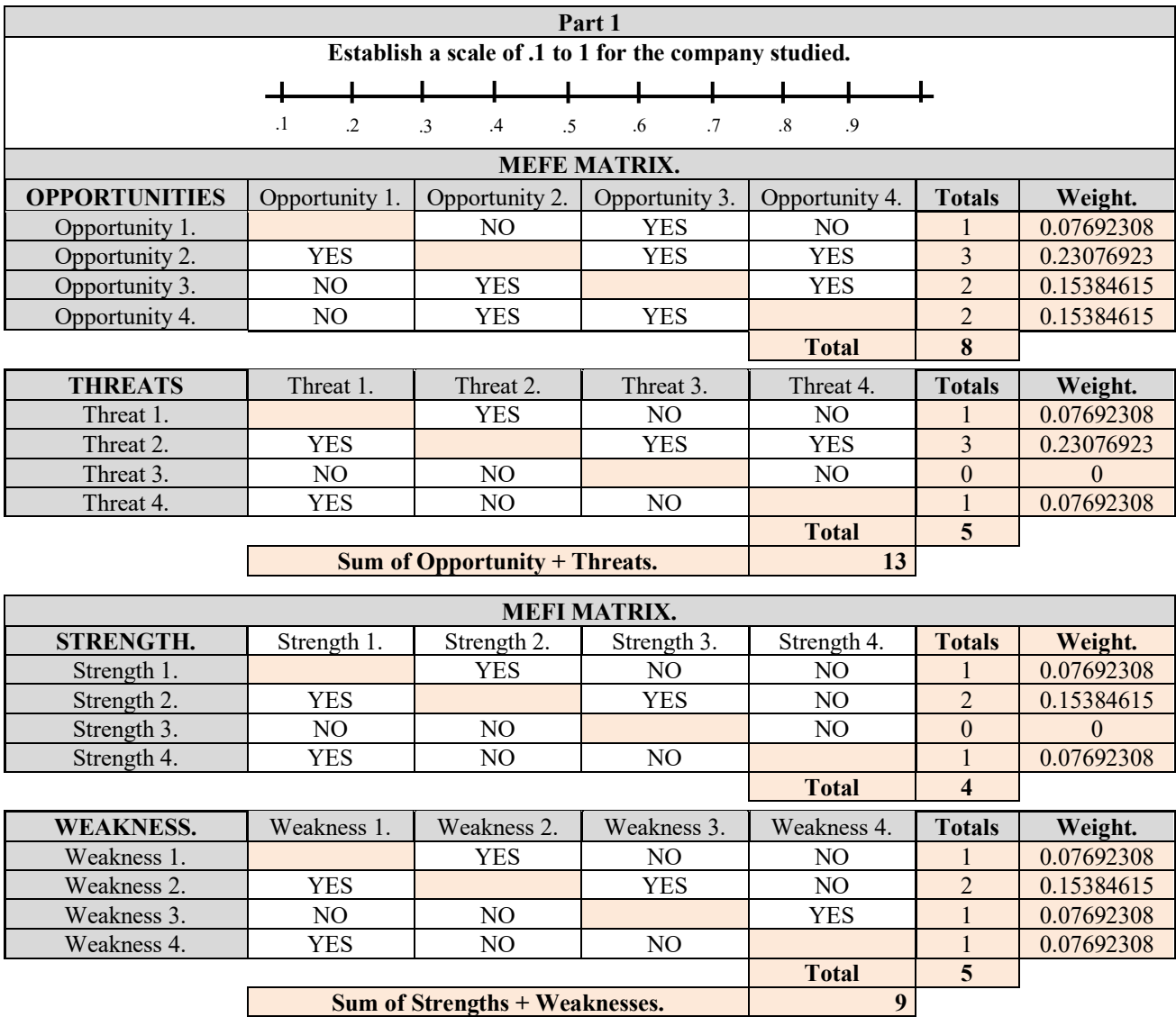


Figure 45
Proposed format 1-2 for the study of the MEFI and MEFE matrix
Note: Based on Matrix: tool for situational analysis [p.54-66], by H. Weihrich, 1982, Printed in Great Britain.

The next part of the matrix begins with the classification of strengths, opportunities, weaknesses and threats, to which a weighting is assigned in a range from the lowest [1] to the highest [4] value. The weighted value is multiplied by the relative weight obtained. Finally, the total of strengths/weaknesses and opportunities/threats is added up, the sum will indicate the consistency of the company's response to opportunities within the market, the response to threats, its use of strengths and the minimization of weaknesses. Figure 46, shows the process outlined above, it is suggested to assign a weighting from at least three teams, averaging these conclusions in the values.

Box 68

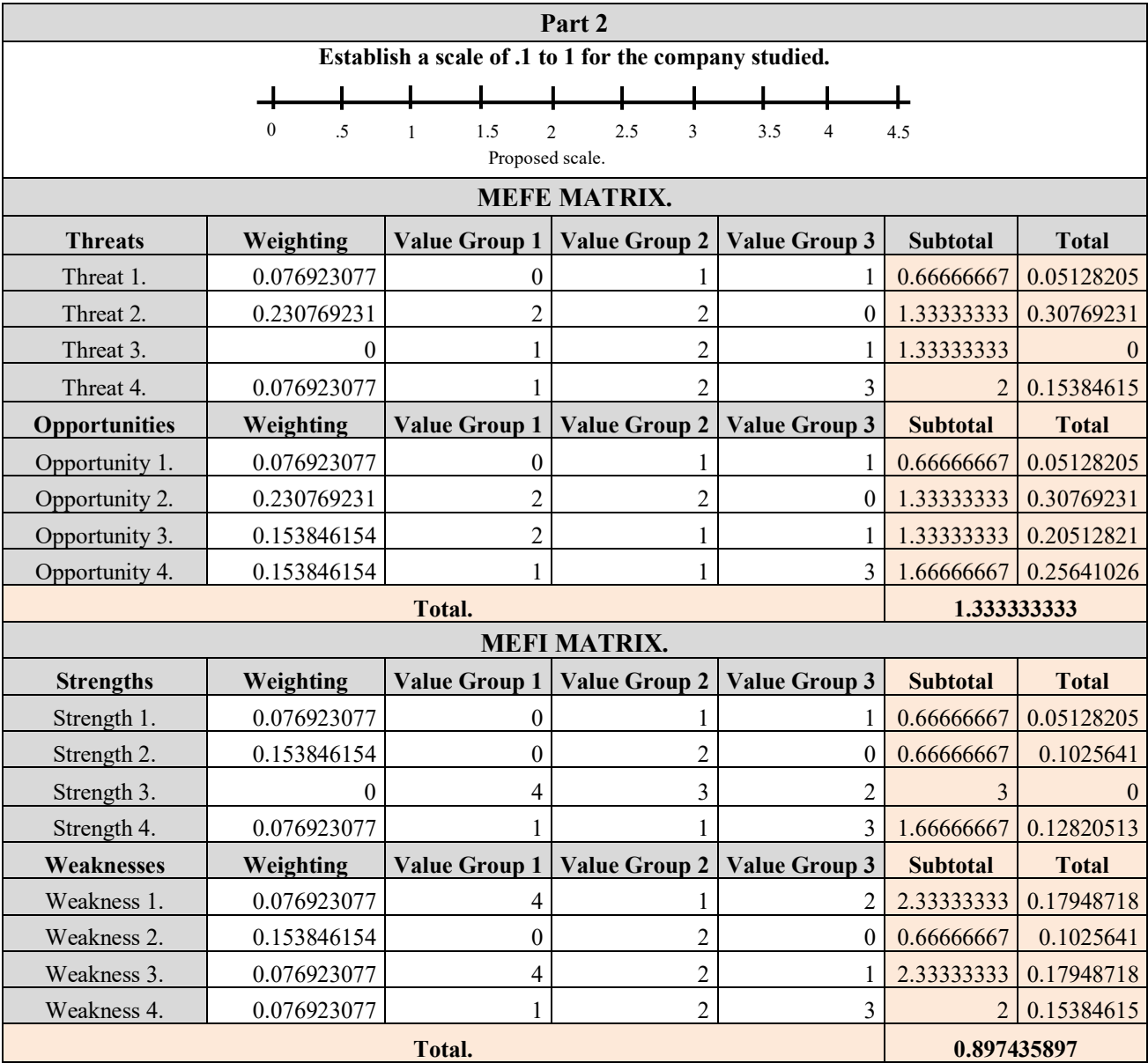


Figure 46
Proposed format 2-2 for the study of the MEFI and MEFE matrix
Elaborated from Matrix: tool for situational analysis [p.54-66], by H. Weihrich, 1982, Printed in Great Britain.

The internal and external evaluation matrix provides the elements to formulate a summary of the diagnosis of the situation that addresses the following proposed indicators: establishment of the differential advantage, a posteriori market segmentation and strategic positioning. Having adequate knowledge of the three previous indicators, the strategic objectives will be established, which will be taken up and interrelated in the order indicated [from the last to the first] from the perspective indicated by Kaplan and Norton [2000]: financial, customers, internal processes, and learning and development.

This is shown in detail in Figure 47, by means of a strategy map.

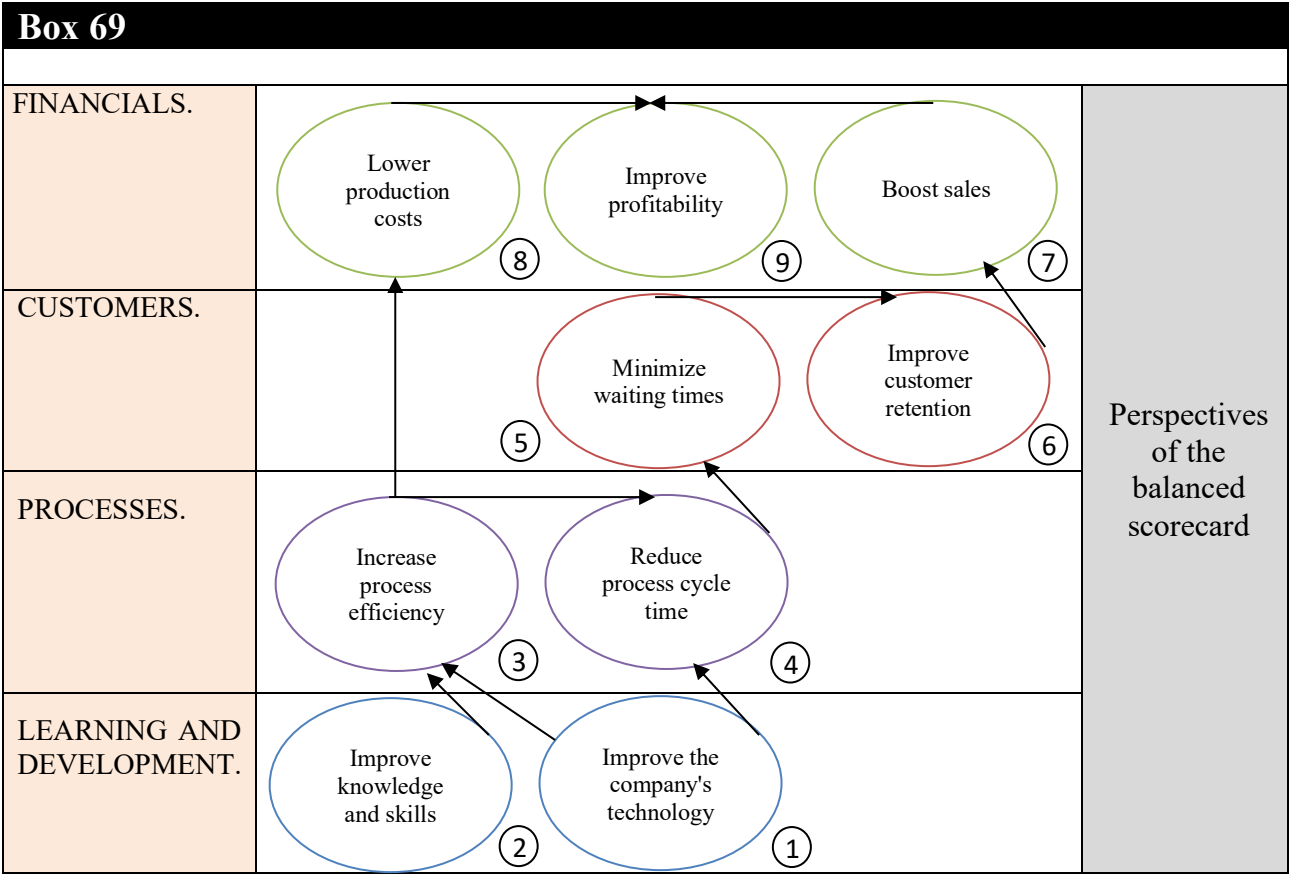


Figure 47
Proposed format for the formulation of a strategy map
Note. Based on *Balanced Scorecard* [p.27], by R. S. Kaplan and D. P. Norton, 2016, Grupo Editorial Patria.

In this sense, each of the four strategic perspectives is associated with a relevant objective, also known as a medium or short-term indicator, and a metric to measure the organization's current and future performance based on this premise.

- Financial [relevant objectives: 10% increase in profitability level, 8% increase in sales revenue] and metrics [net income/total revenue*100%, current period sales - prior period sales / prior period sales *100%].
- Customer: [relevant objective: 15% improvement in customer satisfaction index] and metric [No. of customers with rating higher than 4 / total number of customers surveyed *100%]
- Internal processes: [relevant objectives: percentage increase in process efficiency, reduction in failure rate by 10% and reduction in hours in delivery cycle time] and metrics [units produced / production cost *100, No. failures / total services *100 and line balancing].

Learning and development: relevant objective [increase staff training and increase investment in thousands of pesos in technology and research] and metrics [No. of trainings carried out / trainings planned *100 and amount of investment.

The last part of the strategic process consists of applying the control that resides in the creation of a dashboard that concentrates all the previous information, adding responsible parties, times and measurement parameters to contrast what has been obtained with what has been previously achieved through reports.

This will allow to make a feedback and update if necessary the information collected through internal and external analysis. The above described is done through reports where the data collected from the strategic dashboard are contrasted with the planned. The proposed control panel is shown in figure 48.

Box 70

Perspective	N°	Target	Unit of measurement	Result current	Goal	Frequency Frequency of measurement	Optimum	Tolerable	Deficient	Responsible
Perspective	N°	Target	Unit of measurement	Result current	Goal	Frequency Frequency of measurement	Optimum	Tolerable	Deficient	Entrepreneur
FINANCIAL	9	Increase the percentage of profitability	Percentage	11%	20%	Annual	18%	9%	6%	Entrepreneur
FINANCIAL	7	Increase percentage of sales revenue	Percentage	7%	10%	Annual	8%	6%	4%	Entrepreneur
CLIENT	6	Improve customer satisfaction index	Percentage	85%	90%	Annual	90%	75%	60%	Entrepreneur
PROCESSES	3	Increase the % efficiency of the process	Percentage	75%	90%	Monthly	90%	80%	70%	Entrepreneur
PROCESSES	3	Reduce the % of defects	Percentage	6%	3%	Monthly	3%	6%	10%	Entrepreneur
PROCESSES	4	Reduce cycle time	hours	18	15	Annual	15	20	25	Entrepreneur
LEARNING	2	Increase the % of training to personnel	Percentage	70%	85%	Annual	85%	75%	65%	Entrepreneur
LEARNING	2	reduce the staff turnover rate	Percentage	6%	4%	Monthly	4%	6%	8%	Entrepreneur
LEARNING	1	Increase investment in technology and research	Money invested	2	5	Annual	50 thousand	30 thousand	10 thousand	Entrepreneur

Figure 48
Proposed format for the management of the strategic control panel
Note. Based on Balanced Scorecard [p.27], by R. S. Kaplan and D. P. Norton, 2016, Grupo Editorial Patria.

In summary, this part of the process consists of formulating the business philosophy where the pre-established vision, mission and values are oriented to the market, an exhaustive investigation of the key internal and external factors that will provide the support for its fulfillment, The second part of the process consists of preparing the matrix for the evaluation of internal and external factors and the diagnosis of the situation to formulate the functional strategy and the determination of relevant objectives, also called short and long term objectives, based on the four perspectives indicated by Kaplan and Norton, as well as the establishment of strategic control through a dashboard and results reports that provide feedback on the process.

Likewise, the second part of the process consists of tactical or management planning, which aims to establish a coherent strategy in relation to the three indicators derived from the situation diagnosis, the four interrelated strategic perspectives [objectives] with indicators and metrics to measure business performance.

As shown in Figure 19, this guide proposes formulating a strategy based on the elements of the SWOT analysis, which previously provided the elements for the internal and external analysis of the company:

- Offensive strategies [F-O]: How can we use a strength to exploit an opportunity?
- Defensive strategies [F-A]: How can we use a strength to minimize or neutralize a threat?
- Reorientation strategies [D-O]: How can we correct a weakness in order to take advantage of an opportunity?

- Survival strategies [D-A]: How are we going to work on a weakness to minimize the effect of a threat?

In the initial and upper boxes, the strengths, opportunities, weaknesses and threats identified in the previous analysis are placed in the initial and upper boxes. Subsequently, in the boxes marked in green, the strategies are placed by crossing the SWOT elements. The suggestion of this proposal is to observe the strategy map in parallel to arrive at strategies that are aligned with the strategic objectives.

Box 71

EXTERNAL FACTORS.		O		A	
			OPPORTUNITIES [O]		THREATS [A]
		O1		A1	
		O2		A2	
EXTERNAL FACTORS.		O3		A3	
STRENGTHS [F]		FO	OFFENSIVE STRATEGIES [F-O] How can we use a strength to exploit an opportunity? an opportunity?	FA	DEFENSIVE STRATEGIES [F-A] How can we use a strength to minimize or neutralize a threat?
F1		F1:O1		F1:A1	
F2		F2:O2		F2:A2	
F3		F3:O3		F3:A3	
WEAKNESSES [D]		DO	REORIENTATION STRATEGIES [D-O] How can we correct a weakness in order to take advantage of an opportunity?	DA	SURVIVAL STRATEGIES [D-A] How are we going to work on a weakness to minimize the effect of a threat? the effect of a threat?
D1		D1:O1		D1:A1	
D2		D2:O2		D2:A2	
D3		D3:O3		D3:A3	

Figure 49

Proposed format for strategy formulation.
Note. Based on Matrix: tool for situational analysis [p.54-66], by H. Weihrich, 1982, Printed in Great Britain.

Subsequently, action plans inherently linked to the strategies will be established in order to support the strategic objectives. However, procedures and the correct relationships between the primary functions with which the organization operates must first be defined and reviewed. This interrelationship is formed by adjusting administrative tools [organization charts, departmental manuals, interdepartmental manuals, function manuals, work charts, forms, flow charts, work method studies, etc.].

By correctly correlating and aligning the business unit's operations, we will be able to create action plans in line with these functions in order to implement the planned strategies.

This background is a key element within the process because it allows the functions of those responsible for enforcing the strategic perspectives to be correctly matched with the activities of those responsible for carrying out the action plans. In other words, the existence of a logical cascading sequence to adequately support the strategic objectives through strategies and action plans and thereby achieve the corporate vision.

The proposal shown in Figure 50 is to formulate the plans in parallel to the tactical control board. The information in the first two rows is extracted from the cross SWOT matrix, then the action plan is drafted, which, as the name indicates, is the action or activity that will crystallize the strategy. The control lies in instituting responsible parties, a start and end date and knowing the exact status of the plan [in process, pending or completed].

In other words, through an alignment of functions throughout the organization's structure and the fulfillment of action plans, the management planning process will be monitored, evaluated and fed back [tactical control]. This can be seen more clearly through reports based on the results of the management control board, translated into interactive graphics, where the results obtained are contrasted with those planned.

The last part of the process refers to operational planning where the action plan is fed with a regulation in the direction of the objectives set at the strategic level. Administrative tools are followed up to interrelate functions and procedures or logical sequences of activities are created for their fulfillment.

Box 72

Type of strategy	Strategy description	Action plans	Responsible	Start Date	Date End	State
F1:O2	Provide the target customer with the option of an online purchase.	Create a bimonthly program for launching products and services on electronic platforms.	Sales manager.	25/05/2021	25/07/2021	Pending
						In process
						Completed

Figure 50
Proposed format for the management of the tactical control panel
Note. Based on Balanced Scorecard [p.27], by R. S. Kaplan and D. P. Norton, 2016, Grupo Editorial Patria.

Likewise, programs are formulated in the existence of more than one plan of action in order to establish a chronological order and a sequence of activities where the functions to be carried out simultaneously are clearly established. A time interval is assigned for the set of activities and a budget to carry it out.

The control in this final stage is related to the consistent performance of the functions that were determined and linked in the strategic and tactical planning; therefore, bimonthly reports are required to evaluate and provide feedback on the application of the entire process.

Chapter V Conclusions

The current environment that crosses state barriers, assigns a set of highly complex aggregates for local micro-entrepreneurs seeking to minimize uncertainty and maximize growth in the performance of their organizations. Strategic planning provides the guideline for the analysis of these aggregates by clusters through a logical proposal of various dimensions or factors correlated and preordered in a systemic methodology of medium and long term in which is traced in a coherent way from the philosophy to the organizational structure that allows its operation.

The objective of the current research was to design a strategic planning model that contributes to the growth of microenterprises of scientific and technical professional services in Tulancingo Hidalgo. To address the independent variable [strategic planning], the literature was reviewed in a timely manner, consisting of a solid set of strategic planning models applied in organizations by different authors: the systematic corporate model, sequential strategic planning model, formal strategic planning model, Stanton, Etzel and Walter's strategic model and the balanced scorecard model.

In this sense, all strategic models share homogeneous elements, the main input variables were: business philosophy, internal and external key factors, SWOT analysis, situation diagnosis and strategic control [Hill & Jones, 2015]. Where each of the present elements must be strongly interrelated adapting to the organizational hierarchy of third level, strategic order and proactive character in the planning approach [Fred, 2017].

In this guideline, seven disaggregated and interdependent dimensions were identified: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, within the strategic planning variable in the different models formulated [D'alessio 2015; Hill and Jones 2015; Fred 2017; Fred 2017; Steiner 1986; Staton, et al., 2007; Kaplan and Norton 2016.] From this premise, the research technique was constructed to provide a guideline for the analysis of the results.

In affinity to the above, to address the dependent variable, a simple random sample was applied to 174 microenterprises of scientific and technical professional services in Tulancingo Hidalgo. The research technique used was Likert-type, consisting of 122 items that were requested to be answered under the criteria of five attitude scales: totally agree, agree, undecided, disagree and totally disagree, applying as a means a self-administered questionnaire individually to founders or managers. This research technique was validated by means of Cronbach's alpha coefficient, obtaining a result of .912, synonymous with a solid internal consistency among the items addressed.

After examining the descriptive results in a comprehensive manner, the indicators of the strategic planning and control variable show a homogeneous trend in the application of these dimensions within the microenterprises studied. The mean and mode of the result falls on a score of 4.01 in relation to a scale of agreement, quartile 3 is positioned in the fifth scale. In percentage terms, 75% of the managers are in complete agreement in applying the dimensions of the strategic planning variable in the organizations they manage.

With regard to the principal components technique, the set of dimensions associated with the nine factor loadings infer that the strategic planning model is known and used as an administrative instrument. However, the nature of these components is weakly associated with each other, when observing the results of the transformation matrix. Likewise, their internal constitution does not circulate in relation to what is exposed in the literature, as dimensions of different factors are interspersed, which indicates a different perspective of approaching them once they are taken to reality.

The above is attractive, however, there are indicators that are internally interrelated in an inadequate way, as they do not follow a structured order, which causes problems when applying the current model and thus adapting to the future context. Therefore, an incorrect link between factors in the strategic plan allows it to lose the ability to support the objective for which it was implemented; anticipate and prepare for future changes that are about to arrive or have a high probability of materializing, hence the need to contrast it with what is exposed by the various authors and through this platform design a model that suits these organizations.

This weak association and heterogeneous construction of dimensions is reaffirmed in the multiple correlation analysis, where the factors, business philosophy, internal and external key factors, SWOT analysis, situational diagnosis and strategic control are aligned to a confidence interval ranging from weak to moderate correlation; There is no statistical significance in three of the standardized coefficients, SWOT analysis, situational diagnosis and strategic control. Therefore, it is inferred that when the theoretical strategic model is put into practice, part of it is not analyzed in a disaggregated and interdependent manner as structured in the different strategic planning models.

In this context, after analyzing the descriptive results of the instrument and a preliminary literature review, microentrepreneurs responded with a mean of agreeing to incorporate the dimensions of strategic planning in their organizations. However, the principal component analysis and multiple correlation analysis show an incorrect application of this variable.

Likewise, the comparison between the theoretical model and the one applied by the organizations studied. It is analyzed by means of the results obtained in the rotated component matrix, where nine factorial loadings are obtained, which were denominated:

1. Preliminary comparison of basic elements versus strategic objectives and written business philosophy.
2. Comparison of the results obtained in internal and external strategic areas versus compliance with the corporate philosophy.
3. Integral analysis of the competition.
4. Analysis of the micro and macro environment.
5. Future visualization of the organization based on an interrelation of objectives.
6. Interrelation of market dimensions and organizational structure to support the organizational mission.
7. Dimensions of the human resources area and its contribution to the fulfillment of strategic objectives.
8. Coordination between functional areas to provide feedback on the diagnosis of the situation.
9. Interrelation between marketing, research and development and finance.

In affinity to the above, the internal constitution of the dimensions that make up the strategic model applied within the organizations is grouped differently from what is theoretically exposed in the various strategic models, the dimensions keep relative coherence between the elements that compose them. However, by not following the theoretical structured order, the objective for which a strategic model is implemented becomes more nuanced, and with it the strength of adapting adequately to the coming context.

In terms of the practical correlation between the internal dimensions that make up the independent variable [strategic planning], when examining the nine factor loadings and the transformation matrix, the factors that make up the components show a mostly positive average correlation. However, there is a mostly weak positive association between them. This is reaffirmed in the correlation table where the relationship value is quantified, which in no case has a coefficient greater than .6, its values oscillate between a weak and moderate association, the proportion of correlation between the independent variables is equivalent to 43% and 47% respectively.

In this order of ideas, with respect to the elements that would allow the integration of a strategic model that would contribute to the growth of the microenterprises in question. An answer is granted by making an analogy to what is exposed by Ackoff [2012] & [Chiavenato, 2017], regarding the systems approach, the strategic planning variable is a disaggregated and interdependent whole in seven dimensions: business philosophy, internal key factors, external key factors, SWOT, situation diagnosis, objectives and strategic control, so that, the relevant substantiation of the situation diagnosis, directly affects the fulfillment of the organization's objectives and inversely in a continuous process, in this way, the applied strategic planning is the fruit of the interactions of one dimension with others.

In this guideline, planning is inherently found throughout the organization explicitly or implicitly, requiring for the achievement of the objectives, to hierarchize the different plans through a deductive method [Gallardo, 2016].

In this context, Gómez's [1994] book on business planning and organization points out the hierarchical order of plans: philosophy, long-, medium- and short-term objectives, policies, strategies, rules, procedures, programs and budgets. The above described is related to the approach oriented directly to the future, with the objective of adapting the company to a complex and unpredictable environment, generating a long-term strategic positioning [Ackoff, 2012].

Under this tenor of premises, the strategic management model is proposed, as shown in Figure 51, which aims to correct the weak and moderate correlation between the dimensions that make up the current planning applied in the microenterprises investigated, by strongly interrelating in a logical, defined and structured order of ideas a set of elements, factors and dimensions inherent among themselves in parallel to what is presented in the literature

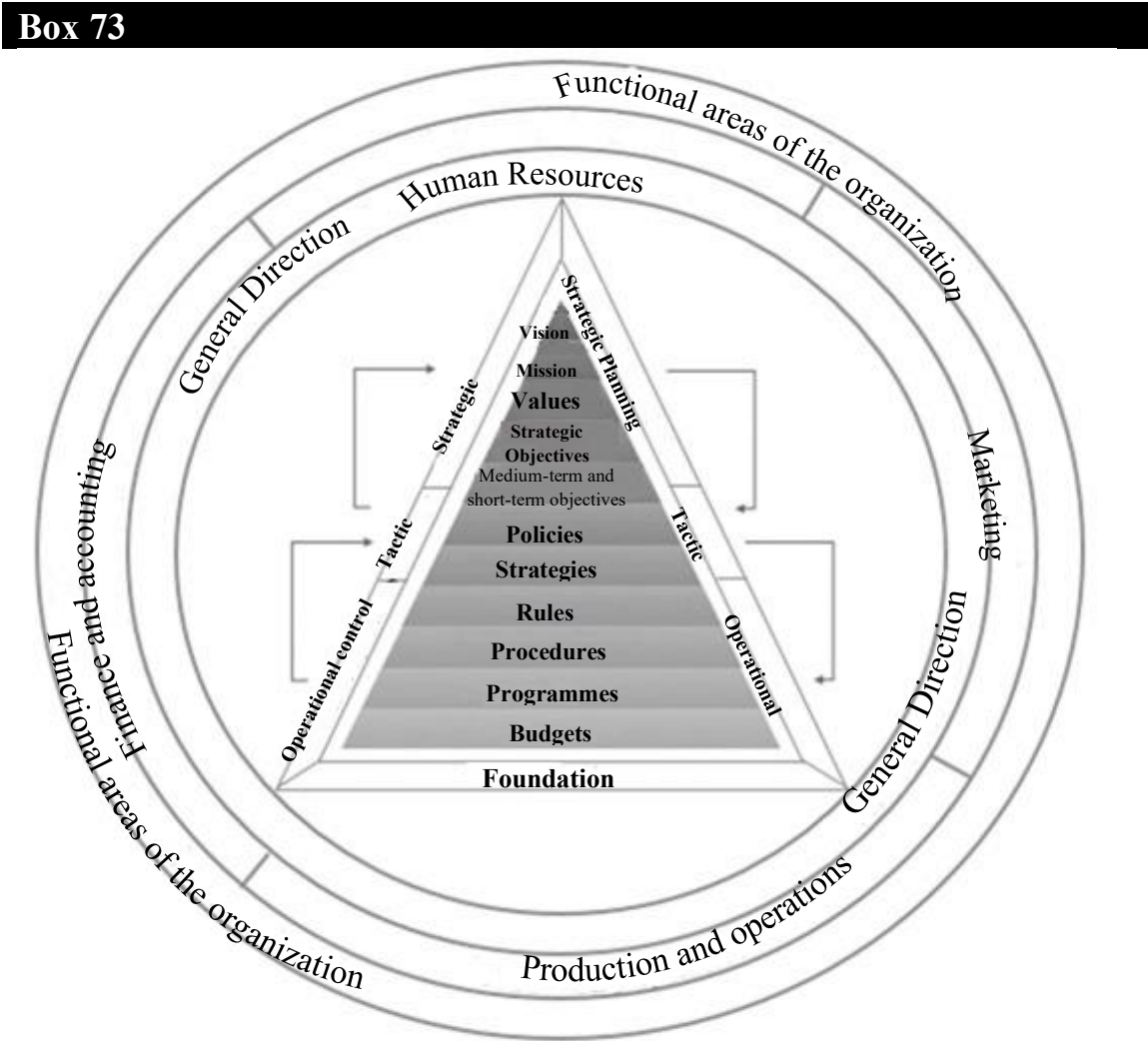


Figure 51

Strategic planning model that contributes to the growth of professional, scientific and technical services microenterprises in Tulancingo de Bravo Hidalgo

Note: Prepared by the authors.

By virtue of the epistemological foundation with which the proposal was designed, which is based on the hierarchy of administration and solves the problems found by means of the statistical technique of principal components, by structuring in a logical order various related elements in dimensions and correlating them strongly through a methodical order in affinity with the literature presented in the strategic planning models, where the strategic control acts as a means to give dynamism to the static time interval in which the analysis of these dimensions takes place.

The design is based on the proposed model in three time intervals, the planning starts in descending order [strategic, tactical and operational] and is inverted at the moment of being applied in ascending order through operational, tactical and strategic control.

The first part of the process consists of formulating the business philosophy where the pre-established vision, mission and values are oriented to the market, an exhaustive investigation of the key internal and external factors that will provide the support for their fulfillment, The second part of the process consists of preparing the evaluation matrix of internal and external factors and the diagnosis of the situation to formulate the functional strategy in the second part of the process and the determination of relevant objectives or also called short and long term based on the four perspectives indicated by Kaplan and Norton, as well as the establishment of the strategic control through a dashboard and reports of results that feed back into this process.

The second part begins with the structure of a coherent strategy that takes information from the three indicators derived from the diagnosis of the situation, from the information gathered in the SWOT analysis based on a cross-referencing of its elements, and from the relevant objectives and metrics indicated in the balanced scorecard. Likewise, in defining processes to correctly interrelate through administrative tools the set of functions with which the economic unit operates and in establishing action plans in parallel to these relationships and activities considering the order of sequence assigned in the external and internal evaluation matrix. Process control is achieved through the alignment of functions in the organizational structure and the supervision, evaluation and feedback of action plans.

The last part of the process refers to operational planning where the action plan is fed with a regulation in the direction of the objectives set at the strategic level. Administrative tools are followed up to interrelate functions and procedures or logical sequences of activities are created for their fulfillment.

Likewise, programs are formulated in the existence of more than one action plan in order to establish a chronological order and a sequence of activities where the functions to be carried out simultaneously are clearly indicated. A time interval is assigned for the set of activities and a budget to carry it out. The control in this final stage is related to the consistent performance of the functions that were determined and linked in the strategic and tactical planning; therefore, bimonthly reports are required to evaluate and provide feedback on the application of the entire process.

In this sense, the hypothesis to be tested is the following:

H1

Strategic planning positively influences the growth of micro organizations in the professional, scientific and technical services sector located in the District of Tulancingo de Bravo Hidalgo.

The research findings affirm, the dimensions with a positive effect on strategic planning within the organizations studied are; philosophy, internal factors, external factors and strategic objectives. This was obtained by validating the multiple regression equation;

$$Y = 2.041 + 2.996(X1) + .712(X2) + .807(X3) + .628(X4) + .011(X5) + 2.5(X6) + .719[X7]$$
through the statistical tool Student's t for related samples, which compares the value of the means between the values of two variables of the same group [Ritchey, 2008]. Where; Y is the dependent variable, represented by the behavior of strategic planning in microenterprises of scientific and technical professional services in Tulancingo Hidalgo; X1 is business philosophy; X2 , internal factors; X3 , external factors; X4 , SWOT analysis, X5 , situational diagnosis, X6 , strategic objectives and X7 , strategic control. The statistical review yields a homogeneous pair result of 0.05 average response error, which allows us to be certain about the theoretical-practical association between the dimensions of strategic planning applied in the study sample.

As previously mentioned, the most important dimensions within the economic units studied are philosophy, internal factors, external factors and strategic objectives. Without an exhaustive analysis and a strong association of these dimensions, the ultimate goal of anticipating the changes that affect the long-term internal operations of these companies could not be achieved and, therefore, growth would not be possible. Therefore, the research hypothesis is accepted since strategic planning is a mechanism that positively influences the growth of the organizations under study

Attachments

Research technique

Research instrument applied to directors and/or managers of micro and small enterprises of professional, scientific and technical services in Tulancingo de Bravo, Hidalgo.

FOLIO: _____

Good morning [afternoon], I am conducting a research, whose objective is: To design a strategic planning model that contributes to the growth of microenterprises of professional, scientific and technical services in Tulancingo de Bravo Hidalgo. Therefore, it is necessary that you answer me honestly since its purpose is only for academic purposes. **Thank you very much for your contribution!**

Identification data.

Company size: Micro: _____ Small: _____ Number of employees: _____ Years of service: _____ Job title: _____
Director: _____ Administrator: _____
Gender: [☐] Male [☐] Female [☐] Male [☐] Female

Instructions: Select the answer according to your criteria using the following scales.

- [5] Strongly agree
- [4] According to
- [3] Undecided
- [2] Disagree
- [1] Strongly disagree

Items	5	4	3	2	1
1. The organization establishes a business philosophy.					
Vision					
Mission					
Values.					
The business philosophy is duly written down.					
There is a periodic review of the elements described above.					
2. The company makes an adequate investigation of the internal key factors.					
Productive area:					
The characteristics and times of the service process are established.					
Knows the overall productivity of the organization.					
A comparison is made of the production costs of the service with those of the competition.					
Surveys are conducted to identify the degree to which the service meets or exceeds customer needs or expectations.					
The above elements are written in reports.					
Marketing Area:					
I perform a potential market analysis					
I identify the life cycle of the service I offer					
I establish the characteristics of the service I offer.					
I compare the prices of the services I offer with those of my competitors.					
I identify the current situation of the brand in relation to that of competitors.					
The above elements are written in reports.					
Financial area:					
I know the working capital necessary for the operation of the organization.					
I determine the financial break-even point of the service[s] I offer to the market.					
I use indicators to measure or quantify the economic and financial reality of the company.					

The above elements are written in reports.					
Human Resources Area: I use a recruitment system in line with the organization's objectives.					
I establish motivational policies to increase staff efficiency.					
I identify the level of HR integration in the organization.					
I put in place policies to develop human capital that serve the company.					
The above elements are written in reports.					
Research and development area: Design new services that meet the needs of end customers.					
I implement improvements to existing processes involved in service delivery.					
I guide the creativity of the staff towards the company's objectives.					
I incorporate new ways of delivering services to the customer.					
The above elements are written in reports.					
Administration area. There is an organizational structure with well-defined functions.					
Coordination mechanisms have been established between the different areas of the organization.					
I compare the established objectives with the results obtained by my organization.					
The above elements are written in reports.					
3. I perform a detailed analysis of each of the variables mentioned above in order to identify the company's strengths and weaknesses.					
Strengths and weaknesses are duly written down.					
There is a periodic review of the company's strengths and weaknesses.					
4. The company makes an adequate investigation of the key external factors: Environment: I analyze the following Macro-environment actors: Demographics.					
Economic.					
Technological.					
Sociocultural.					
Political and legal.					
The above elements are written in reports.					
I analyze the following actors of the Macro-environment: Suppliers.					
Competitors.					
Intermediaries.					
Consumers.					
The above elements are written in reports.					
Market analysis: I take into consideration the dimensions of the consumer. Target audience needs.					
Motivations and Brakes of the target audience.					
Consumer preferences of the target audience.					
Perceptions and Habits.					
Purchasing and consumption behavior.					
The above elements are duly written in reports.					
I examine the dimensions of the market. Sales volume in units and weights.					
Importance and growth.					

Evolution and trends.					
The above elements are duly written in reports.					
Competency dimensions. I study the background of competing companies.					
Competitor services.					
Pricing.					
Commercial distribution.					
Advertising and promotional activities.					
I apply a model for competitive analysis.					
The above elements are written in written reports					
5. I perform a detailed analysis of each of the external factors in order to identify the company's Threats and Opportunities.					
Threats and opportunities are duly written down.					
There is a periodic review of the company's threats and opportunities.					
6. I create a diagnosis of the situation based on the company's internal and external key factors. I have a competitive advantage in the company					
I know the current target audience.					
I have a clear idea of how I want them to visualize my organization inside and outside of it.					
The above elements are listed in writing.					
7. Strategic objectives. Strategic objectives are established based on the diagnosis of the situation.					
I set clear, measurable, achievable objectives, realistic and timely					
The objectives I propose are interrelated.					
I select metrics to measure current and future performance of strategic objectives.					
I establish accountability for meeting objectives.					
The strategic objectives are duly written down.					
8. Strategic Control. I review annually whether the strategic objectives should be modified.					
Periodically evaluated the fulfillment of strategic objectives					
I generate performance metrics reports.					
I perform a diagnostic feedback of the situation.					
9. Strategy at the organizational level: I establish a design structure oriented to one of the following areas: Basic HR administration functions					
Basic finance and accounting functions.					
Basic marketing functions.					
Basic functions to apply ICTS to the organization.					
Basic functions of the operations area [engineering, logistics].					
10. I use one of the following administrative tools to link the primary functions of the company.					
Organizational charts.					
Manuals [departmental, interdepartmental, organizational].					
Forms.					
Flow charts.					
Information systems.					
11. I create action plans aligned to strategic objectives. Oriented to administration functions of human resources					
Oriented to basic finance and accounting functions accounting.					

Oriented to Marketing functions.					
Function oriented to apply ICTs to the organization.					
Operations oriented [engineering, logistics]					
12. I allocate resources to these action plans:					
Human.					
Financial.					
Time.					
13. Management or tactical control.					
I ensure proper coordination between primary business functions and the strategic objectives of the organization.					
I link functional area action plans to strategic objectives.					
I verify compliance with the action plans through their objectives,					
I perform feedback on action plans.					
I prepare budgets and financial statements on a regular basis.					
I formulate reports in which I contrast the budgeted with the applied resource.					
14. Regulations.					
The internal regulations are in line with the organization's objectives.					
15. Communication of the action plan.					
I align the behavior of internal customers to the organization's objectives.					
I know the opinions of internal customers about the strategic plan.					
16. Procedures.					
Link the P.E. model with the departmental manuals, functions and procedures of the company's functional areas.					
I adequately follow the procedures established in these manuals.					
I create protocols [logical sequences] for the fulfillment of certain strategic activities.					
17. Programs.					
I determine the activities to be carried out on a daily basis based on the action plans.					
I establish a chronological order for these activities.					
I determine which activities are to be carried out at the same time.					
For each activity I assign a time interval for its completion.					
18. Budget.					
There is a budget for all activities.					
19. Operational control.					
Periodic reports are made on the performance of strategic areas of the organization.					
Human resources administration area.					
Finance and accounting area.					
Marketing Area.					
ICT area.					
Area of operations.					
There is periodic feedback regarding the performance of the functional areas of the organization.					

Declarations

Conflict of interest

The authors declare that they have no conflicts of interest. They have no financial interests or personal relationships that could have influenced this book.

Authors' contribution

Ortega-De la Cruz, Edwin Chofo: Development of the study.
Gordillo-Benavente, Liliana de Jesús: Advice, mentoring and recommendations.

Availability of data and materials

Most of the information is included in the research. However, if additional information is required, it can be requested from the authors.

Financing

This work has been funded by CONACYT-SECIHTI [grant number 839116].

Acknowledgments

Thanks to SECIHTI

Abbreviations

ICEX	Bank of Spain's Economic and Commercial Office in Mexico City
BBVA	Banco Bilbao Vizcaya Argentaria
COFIDE	Business Training
CONDUSEF	Commission for the Protection and Defense of Financial Services Users
DENUE	Directory of National Economic Units
DOF	Federal Official Gazette
IAI	Institute of Internal Auditors of Argentina
ILO	International Labour Organization
JM	Justice Mexico
MCV	Mexico, How Are We Doing?
SE	Ministry of Economy
SSA	Ministry of Health
INEC	National Institute of Statistics and Census of Costa Rica
INEGI	National Institute of Statistics and Geography
ENAPROCE	National Survey on Productivity and Competitiveness of Micro, Small, and Medium Enterprises
WB	World Bank

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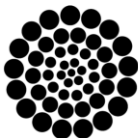
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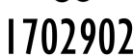


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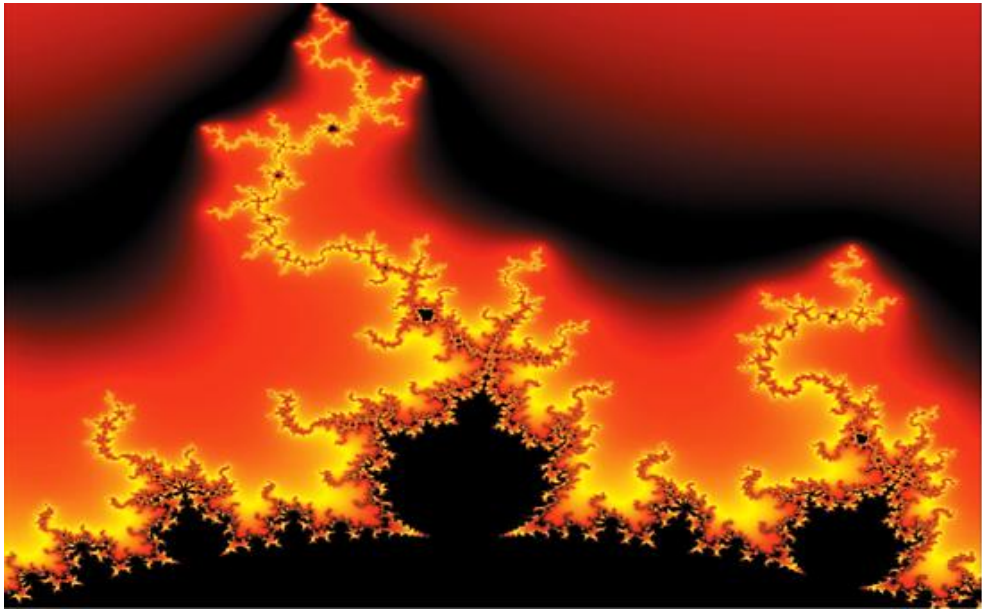


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