

## **Implementing the strategic management of the value chain in the service. Case: Soluciones Inalámbricas**

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**ABSTRACT:** *The main objective of the study is to develop the strategic management plan of the Soluciones Inalámbricas (SOIN) service value chain, which allows it to take advantage of the opportunities in the environment, achieving the positioning of the company and improving the processes within the company, as well as the quality of customer service. The proposal plan was mapped out through clear goal definition, SWOT analysis, stakeholder analysis, and BCG matrix. This seeks to define the strategy that allows SOIN to have a competitive advantage within the communications business. The management objectives were transformed into indicators so that all staff are aligned with the vision of the company and the objectives are reached. If deviations occur along the way, an analysis is carried out to propose corrective actions regarding the deviation in the indicator. The actors that intervene in the value chain were identified, through the analysis of the interested parties, the prominence of each one was determined, and the level of risk of not attending them. Based on the present study, it is concluded that strategic planning, as well as value chain analysis play a very important role in companies, since the success or failure of the organization depends largely on them. Well, through them, the course and guideline that the entire company must follow is summarized, with the objective of reaching the set goals.*

**KEY WORD:** *Value chain, Strategic management, SWOT, BCG*

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### **I. INTRODUCTION AND LITERATURE REVIEW**

Soluciones Inalámbricas (SOIN), provides wireless internet services in the municipality of Chicontepec, Veracruz, this project will be focused on making a strategic value chain management proposal to serve SOIN clients.

The SOIN company was born in 2014, from the detection of an important need in the area where it is located, that of having an internet connection in rural areas. The initial objective was to provide this service to a few families located within the Chicontepec municipality and in the medium or long term to be able to expand their services to other nearby areas. Currently, SOIN provides coverage in four municipalities of the state of Veracruz: Chicontepec, Benito Juarez, Tantoyuca and Ixcatepec, and a municipality in the state of Hidalgo: Huautla.

Six years after its foundation, this company seeks to expand its coverage and transform its administrative structure and its value chain, to offer customers quality service, as well as to develop internally in the business a greater capacity to face the challenges that are presented. Their motto is: "Committed to give you the best connectivity".

The mission of SOIN is "provide customers connectivity to the international Internet network, stand fast, stable and reliable, through a human capital committed himself and deliver a quality service to the customer".

On the other hand, his vision is: "By 2025, we will be the best positioned wireless internet provider in the region, capable of offering services with the best cost-benefit ratio, with a team of highly effective collaborators and leaders, constantly motivated, focused and busy in satisfying the needs of our customers".

The SOIN principles are as follows:

- Time management. Bear in mind that he who is not capable of managing time is not capable of managing anything.
- Personal fulfillment. Happiness is not in reaching your goal, but on the way to the goal
- Customer orientation. If it's good for customers, it will be good for you in the long run. Doing business with a clear conscience is a worthwhile attitude.
- Savings. Waste of resources is a mortal sin at SOIN.

- Simplicity. Over planning is the leading cause of corporate death.
- Continuous Improvement: we constantly evaluate our processes to identify areas of opportunity and implement improvements that make SOIN processes more efficient.
- Sustainability. We must find more time for ourselves and to regain respect for the environment in which we live.

Its values are listed:

Honesty: Conduct ourselves in an upright and honest manner, observing the established norms and commitments, as well as acting truthfully in front of our clients.

Commitment: Comply with the commitments and obligations acquired with our clients, giving adequate answers to what is expected.

Loyalty: That our employees have a deep commitment to the company and, in turn, the company to its customers.

Friendliness: That our employees behave with a positive and friendly attitude towards their collaborators and clients.

Respect and tolerance: Promote among our collaborators a work environment of respect and tolerance towards their colleagues.

Order: Maintain a clean and organized workplace.

Constancy: Doing more than necessary to meet the proposed goals.

Capacity: Develop the skills to achieve the objectives of the company.

Discipline: Ability to act in an orderly and persistent way to achieve a purpose.

“The needs are different now,” says the administrator, “the competition has increased, as has the number of clients and the number of collaborators. In addition to this, the dreams of the company are optimistic, it is expected that by 2025 the growth in customers will be 300% higher, in relation to 2018. In the same way, it is expected that by 2025, the companies of the same Turnover have improved their processes and their quality of service, likewise, it is expected that the customer's demands will be even greater”.

The strategic management of the value chain must be of vital importance for organizations, since, in its definition, the main activities are summarized and the functions that add value to the customer are identified and the guideline that the entire organization must continue, having as a fundamental objective, the efficiency of the organization and the delivery of a quality service to the client.

## **1.2 Problem Description**

Currently, the SOIN company does not have an analysis of its value chain, since it does not have it, it does not have a clear vision of what activities really add value, as well as their costs, what functions it will provide. It is necessary to implement to have an effective value chain, both primary and support, and who are the actors involved in it.

The strategic management of the value chain is part of the development and growth process that all companies should carry out but is normally only implemented in large companies.

Considering that the greatest difficulties of an organization are concentrated in the loss of the market, in the inadequate financial structure, in an inappropriate administrative training, in a bad organization of the assets and the lack of profitability, it is necessary to carry out an adequate planning strategic and an adequate value chain for the organization.

Due to the aforementioned, the strategic management of the SOIN Company's value chain must be determined to improve its operation and maintain its growth in the coming years.

Due to the above, an analysis of the environment, the strengths, opportunities, weaknesses, and threats (SWOT) of the company, the current conditions of the same, and objectives and strategies for the management of the value chain will be determined. of the company. The expected result is to implement this proposal by the company.

## **1.3 Statement of the problem**

According to the above, what are the main implications of generating a value chain strategy plan for SOIN customer service? Any company wishing to improve its competitiveness can achieve its objectives if it is based on the value chain. This can help you achieve goals related to improving services offered, reducing costs, and creating value for your customers.

Likewise, the strategy plan based on the value chain would allow identifying the competitive advantage of SOIN in relation to other competitors in the Internet services market, if a strategy based on cost leadership will be followed to offer lower prices, if it will be a strategy of innovation, differentiation, or operational effectiveness.

## 1.4 Objectives

### 1.4.1 General Objective

The general objective of this project is to generate the strategic management of the value chain of the services offered by SOIN.

### 1.4.2 Particular Objectives

- a) Prepare a SWOT study of the company, which allows to identify the strengths and weaknesses of the company, as well as the opportunities and threats that affect it within its target market.
- b) Identify SOIN's competitive advantage strategy.
- c) Identify the main activities and main actors within SOIN's current value chain.
- d) Carry out a proposal for a value chain strategy for SOIN services.

## 1.5 Research Questions

- a) What is the current situation of the SOIN market?
- b) What are the strategies that allow a competitive advantage of the business?
- c) How can SOIN improve its service to attract more customers?
- d) Who are the main actors involved in the flow of SOIN's value chain?

## 1.6 Assumption

This study aims to develop the strategic management plan of the SOIN service value chain, which allows it to take advantage of the opportunities in the environment, achieving the positioning of the company and improving the processes within the company, as well as the quality of customer service.

## 1.7 Justification of the problem

SOIN seeks to define its growth and positioning strategy for the coming years, its vision is for the year 2025, to be the best positioned company in the internet service market in the region, however, it is not clear about the way forward to achieve its goal of being one of the most important internet providers in the Huasteca area.

Hence the importance of defining your value chain, which will bring you benefits such as: having well identified the costs of each of the functions of the chain and looking for ways to make them more efficient, identifying areas of opportunity in your processes, in its sales strategy, in its customer service and in its relationships with its social environment, among others; all focused on maximizing SOIN's profits.

## 1.8 Delimitations

The scope of this project is limited. Due to the reduced time available, the proposal of this project will only be the initial phase, which includes the definition of the strategic planning of the value chain, however, the scope does not include the follow-up of the same, the which will be carried out in a second phase.

## II. THEORETICAL FOUNDATION

### 2.1 Conceptual Framework

**Wireless Internet Service Provider:** (WISP) is an Internet service provider with a network based on wireless connections. The solution allows creating a high coverage density without the need to use complementary techniques, something similar to installing 200 ADSL in a city, but with only one Wi-Fi router to give users access wirelessly.

Most people and businesses in an urban setting obtain the internet through a telephone or cable company that already offer physical connections directly to homes and offices. A WISP does not need to install wiring in an area to provide this type of service, which makes it a good solution for individuals and companies located in rural, semi-urban or isolated areas. This business offers the opportunity to its clients to have such coverage.

**Router:** is a device that allows interconnecting computers that work within the framework of a network. It is responsible for establishing the route that will be allocated to each data packet within a computer network.

**ADSL:** (from the acronym Asymmetric Digital Subscriber Line that translates Asymmetric Digital Subscriber Line) is a type of technology for the transmission of digital data and Internet access, which consists of the transmission through symmetric pairs of telephone line copper. It is a method of accessing the Internet through the telephone line (Protocol Switched Telephone Network, - for its acronym PSTN-) that does not prevent the regular use of the line for calls.

**ISP:** (acronym for Internet Service Provider), in computing, is the Internet Service Provider, that is, the company that sells the Internet connection to users.

**INTERNET:** it is a decentralized set of interconnected communication networks that use the TCP / IP family of protocols, which guarantees that the heterogeneous physical networks that compose it constitute a single logical network of global reach. Its origins date back to 1969, when the first computer connection was established. One of the most successful services on the Internet has been the World Wide Web (WWW or the Web), to such an extent that confusion between the two is common terms. The WWW is a set of protocols that allows, in a simple way, the remote consultation of hypertext files. This was a later development (1990) and uses the internet as a transmission medium.

**TCP:** transmission control protocol.

**IP:** internet protocol.

**WiFi:** comes from 'Wireless Fidelity'. It is a wireless data transmission technology used primarily for the Internet.

**HFC:** The hybrid fiber coaxia in telecommunications, is a term that defines a fiber optic network that incorporates both fiber optic and coaxial cable to create a broadband network.

**FTTH:** Fiber optics to the home is a telecommunications technology that consists of the use of fiber optic cabling and optical distribution systems for the provision of Internet services, IP Telephony and Television to homes, businesses and companies.

**EOC:** (Ethernet Over Coax) is a hybrid distribution system that uses fiber optic networks as a backbone platform for the transmission of services and that, upon reaching the node, embeds all the data in the coaxial network.

**GATS:** The General Agreement on Trade in Services, is an international treaty of the World Trade Organization, which entered into force in January 1995 as a result of the Uruguay round negotiations.

**DENUE** (National Statistical Directory of Economic Measurement Units)

**Value chain:** it is a theoretical model that allows describing the development of the activities of a business organization generating value to the final product.

**A plan is an intention or a project.** It is a systematic model that is developed before taking an action, with the aim of directing and channeling it. In this sense, a plan is also a document that specifies the necessary details to carry out a work.

**Planning** is the action of developing strategies that allow reaching an already established goal, so that this can be carried out, several elements are required, first you must understand and analyze a specific thing or situation, and then move on to the define the objectives that you want to achieve, in a certain way, planning something defines the place or time where something or someone is, raises where you want to go and indicates step by step what you must do to get there.

**Strategy** is a plan to address an issue. A strategy is made up of a series of planned actions that help make decisions and achieve the best possible results. The strategy is aimed at achieving an objective following a pattern of action. A strategy comprises a series of tactics that are more concrete measures to achieve one or more objectives.

**Strategic Planning** can be defined as "the effort aimed at generating those decisions and actions considered fundamental by social and economic agents to make the desired vision of the future come true, through a list of objectives and measures to achieve them with well-established priorities".

## 2.2 Contextual Framework

The service provided by SOIN is currently located in Mexico, covering 4 municipalities in the state of Veracruz: Chicontepec, Benito Juárez, Tantoyuca and Ixcatepec, and in the state of Hidalgo Huautla.

### WISP in Mexico

Currently, traditional internet providers are beginning to sell residential internet through 4G technology, entering the era of greater capacities with networks such as FTTH (Fiber Optic to the home), EOC (Internet of coaxial network), HFC (The hybrid of coaxial fiber), also with low-cost plans, but with many limitations, for example:

AT & T® offers internet at home without appointments or technicians, they have two types of plans: the basic (5 Mbps) and the full (10 Mbps), in both the data limit is 150 Gb, approximately equivalent to 50 hours of video HD, but in studies carried out the consumption of an average house is above 200 Gb per month, so this type of plan has many limitations.

Which brings us to the next question: What is the idea of traditional ISPs? The answer is very simple, lower the cost to compete with the WISPs and try to recover the residential market.

What the various operators do not tell us are the limitations of 4G services, which are designed for traffic on demand, which is why it is very limited in the plans, because 4G mobile networks could quickly become saturated, where the main one priority is telephony; We add to this the problem that ISPs are not building a new network, they are only taking advantage of a small capacity of their current infrastructure.

Other limitations are the 4G modems that are used inside the house, the problem with them is coverage, stability, and quality, these being inside the houses without Line of Sight, affect the stability and quality of the connection degrading global customer service.

**WISP in Chicontepec**

The geography of the municipality of Chicontepec, Veracruz, provides the population and nearby towns with very limited access to the Internet, and the need is increasing; There are not many competitors in the area so the possibilities for business growth are promising applying the best marketing strategies, as well as strategic business planning.

According to data from the DENUE (National Statistical Directory of Economic Measurement Units) from 2013, the municipality of Chicontepec, Veracruz has 5 internet establishments, this for a population of 54 thousand 982 inhabitants according to the last census carried out in 2010 by INEGI, this added the growth of the region creates an excellent market niche for the installation of networks.

**Company Description SOIN.**

Currently the productive unit of the Company is made up of the Service Network, the Administrative Unit, and the Technical Unit.

**A) Service network**

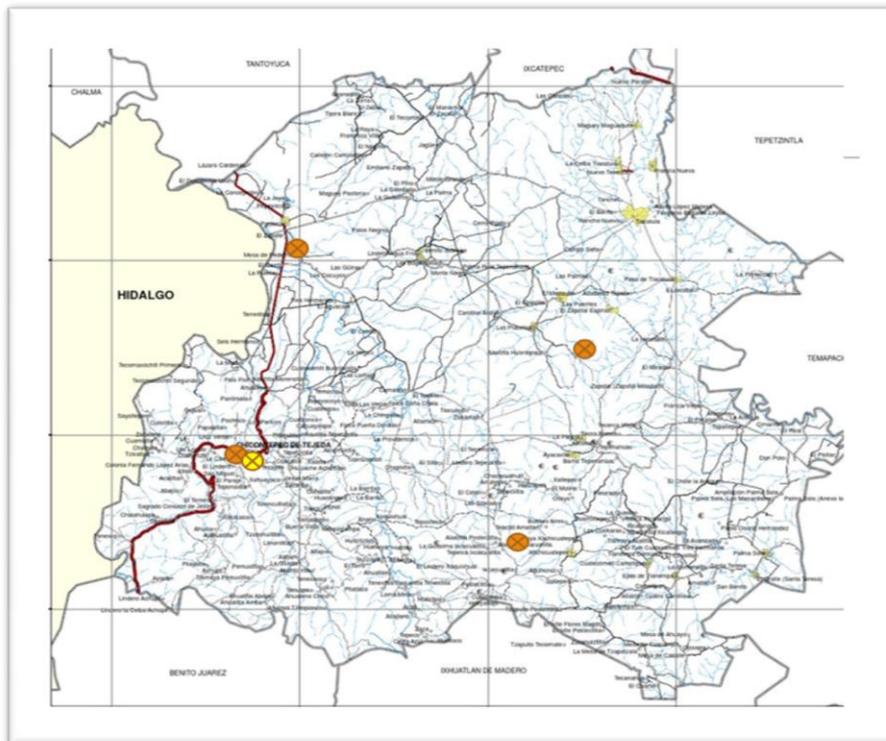
The base structure of the service network as explained above is the “Base Station” and the “Main Base Station”.

Base Station: Transmitting and receiving station located in a fixed location, composed of one or more receiving / transmitting antennas, a microwave antenna, and a set of electronic circuits, and used to handle data traffic. In the area of wireless computer networks (Wi-Fi), a base station is a radio transmitter / receiver that serves as the nexus of the wireless local area network (Wi-Fi).

The "Main Base Station" is the one that will connect the four base stations to the network of servers that are installed in it.

Server Network: It is the set of devices (switches and routers) in charge of managing the equipment that will be connected to the network, among its main functions we have: the activation or suspension of the internet service, bandwidth control, provide security to the service network, control access to those who manage the network, among others.

**Figure 1: Distribution of the "Base Stations"**



According to figure 1, the distribution of the base stations are as follows:

Base Station 1:

Location: Colonia López Arias

Coordinates: 20 ° 57'28.81 "N, 98 ° 11'18.68" W

Coverage: Col. López Arias

Col. Jardines

Acatitla

Chamola

Base Station 2

Location: Zapotal Espinal

Coordinates: 21 ° 01'44.72 "N, 97 ° 58'44.86" W

Coverage: Zapotal Espinal

Las Puentes

Las Placetas

Tlacolula

El Mirador

Paso Tlacolula

Carolino Anaya

Tecerca

La Heredad

Palma Real Tepenahual

Francia Nueva

Maguey Maguaquite

Base Station 3

Location: Tepeica

Coordinates: 20 ° 54'46.20 "N, 98 ° 01'47.74" W

Coverage: Tepeica

Ixcahuatitla

Alaxtitla Ixcacuatitla

Alaxtitla Postectitla

Las Silletas

Xochicuatepec

Tlaica Xicalango

Xococatl

Ayacaxtle

La Pagua

Tecomate

Tiocuayo

Zonamatl

El Tordillo

El Sitio

Chapixtla

Huitzapoli

Lomas de Huitzapoli

Tlanempa Común

Ejido Tlanempa

Base Station 4

Location: Chiliteco

Coordinates: 21 ° 03'50.71 "N, 98 ° 12'26.58" W

Coverage: Chiliteco

Aquetzpalco

La Mesa

Tamoyon I

Tamoyon II

Xóchitl

La Puerta

Banderas

**B) Administrative Unit**

Currently, the SOIN company has a total of 7 people (including the founder), the activities being distributed as follows:

- 1 person: accounting and financial statements
- 4 persons: customer service and technical support
- 1 person: field technicians
- 1 person: founder of the organization in charge of deals with suppliers and accounts with the SAT.

**C) The Technical Unit:**

Technical department and network administration

The Technical Unit is made up of technical personnel specialized in the implementation of wireless networks, as well as solar energy systems. This unit will be made up of an installer technician and a technical assistant. It is the area in charge of maintaining the network of services, attention, and solution of customer reports, as well as making installations for different types of customers.

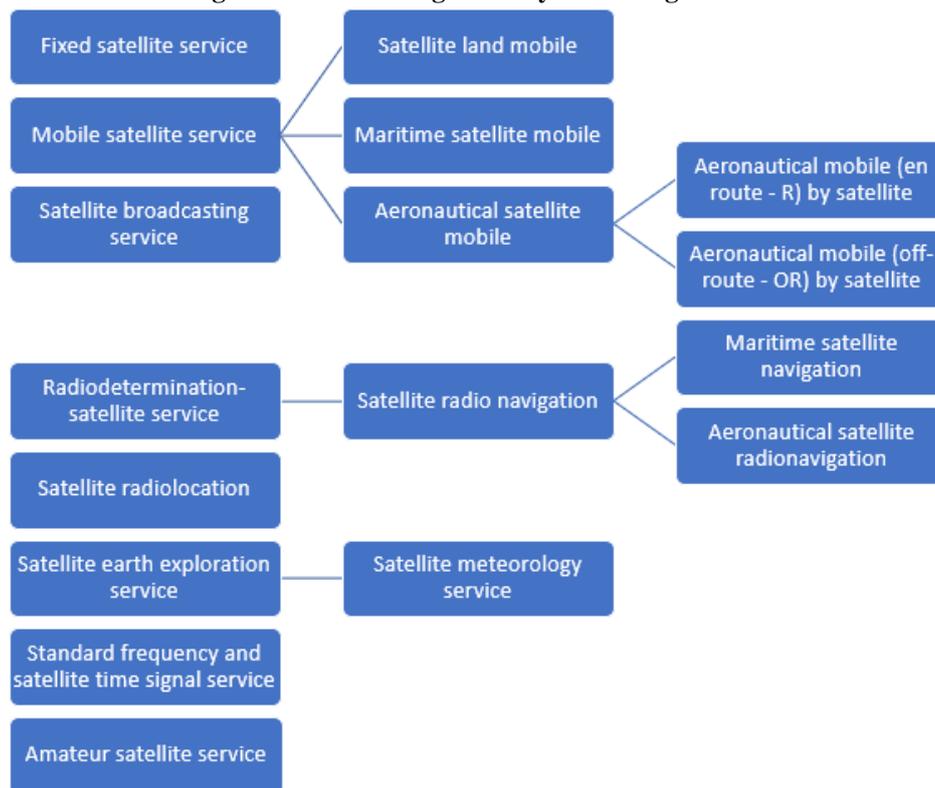
**2.3 Theoretical Framework**

The most traditional applications, such as fixed telephony, and the not so traditional, such as IP networks, use in the vast majority wired infrastructure, be it optical fiber, coaxial cable and ordinary copper cable. In other applications such as radio broadcasting (AM, FM, television), as well as cellular mobile telephony, it is preferable to use wireless technology, taking advantage of radio wave communication, since when an immediate deployment of a network is required, or when too large geographic areas need to be covered, satellite technologies surpass the qualities of any other technology.

Currently there are hundreds of satellites located in orbit that offer global coverage for various applications such as long-distance telephone links, satellite broadcasting, Internet links, links for corporate communications and mobile telephony, to name a few.

Satellite systems have allowed different applications to be developed under the services that can be offered through said systems, services that are regulated as shown in Figure 2.

**Figure 2: Services Regulated by Radio Regulations**



In this research work, these types of planning are analyzed with more specific content and with less time extension.

- a) Strategic planning covers the organization, is decided by senior management, is oriented in the long term to achieve organizational objectives, which is defined in the following section.
- b) Tactical planning is the responsibility of each department, it is oriented in the medium term to achieve objectives of each department of the organization. It requires a more detailed study and leads to corrective actions.

c) Operational planning is aimed at achieving specific objectives, follows the guidelines of the PE and the PT, is executed by the lower hierarchical leaders through short-term action plans.

Strategic planning is the process of creating and maintaining strategic coherence between the organization's goals and capabilities, and its changing marketing opportunities. It involves defining a clear mission for the company, setting supporting goals, designing a strong business portfolio, and coordinating functional strategies.

Strategic planning involves developing an overall strategy for the long-term growth and survival of the business.

The word Method refers to that set of strategies and tools that are used to reach a precise objective.

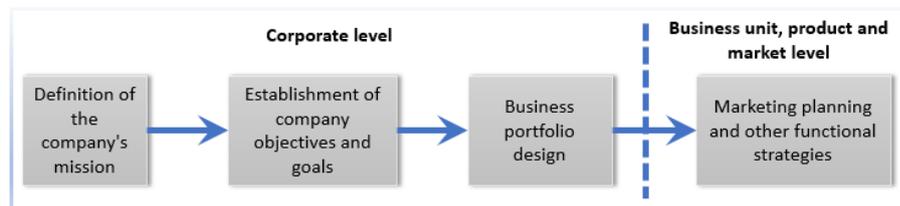
Planning means determining in the present, what are the future actions that are going to be carried out, based on an objective that is previously set.

Strategic planning is long-term planning (3-5 years) that focuses on the organization as a whole.

For a company, long-term planning is not enough to achieve the desired objectives.

Strategic planning gives the philosophical framework for the action that is in the mind of the organization and its employees, it is not only oriented to future decisions, it is related to today's decision-making that affects the future of the company.

**Figure 3: Phases of strategic planning**



PE has 4 phases:

- Definition of mission, vision, values, and objectives (philosophical basis)
- Internal diagnosis of the organization (strengths and weaknesses)
- External diagnosis (opportunities and threats)
- Formulation of strategies (methods)

We observe this path in figure 5.

The EP Methodology has 4 main elements:

- Key strategic areas
- Key success factors
- Strategic objectives
- Tactical plans

On the other hand, the BCG matrix of the consulting company Boston Consulting Group will be used as a tool to carry out an analysis of SOIN's portfolio of services. This matrix classifies the products or services of a company into four categories:

**Star product:** high participation in a market with a high level of growth. They must have one or two stars.

**Dairy cows:** high participation in a market with a low level of growth. You must have one or more dairy cows.

**Dogs:** low participation in a market with a low level of growth. You must have few dogs.

**Question marks:** low participation in a market with low growth level. You must have very few, make them a star or get out of them.

#### **Deployment of Strategic Objectives**

The strategic objectives are deployed through lines of action that allow their achievement. In turn, the lines of action are specified through strategic actions that constitute the steps that are considered necessary to implement the lines of action. In order to measure and control each of the strategic actions, indicators are defined that show what has to be measured and the scheduled goals that must be achieved in said indicators.

#### **Stakeholder Analysis**

Project stakeholders are the stakeholders in the project: individuals and organizations who are actively involved in the project, or whose interests may be affected as a result of the execution or completion of the project. They are all those parts that need to be considered to achieve the goals of the project and whose participation and support are crucial for its success. Therefore, identifying all stakeholders is an important activity of the project manager to ensure the success of the project.

As we already know, stakeholders can be individuals within the project; individuals or departments within the organization; and individuals or groups outside the organization (can be influential). The Stakeholder Management processes for a project involve, among others:

- Identification of all stakeholders.
- Document the needs of stakeholders.
- Evaluate and analyze the interest / influence of stakeholders.
- Management of stakeholder expectations.
- Take actions.
- Status review and repetition.
- Stakeholder Analysis.

Stakeholder analysis is an important technique for identifying and analyzing your needs. It is used to identify all key stakeholders (primary and secondary) who have an interest in the issues related to the project.

The objective of the stakeholder analysis process is to develop a strategic vision of the human and institutional landscape and the relationships between the different actors and the issues that concern them most.

## **2.4 Regulatory Framework**

Mexico, being a Member State of the United Nations, has actively participated in the development of international regulation that governs satellite activity, for which it has had to adapt its regulations to needs, public policies and international principles on matter.

### **Constitutional framework**

Until before March 1995, the Political Constitution of the United Mexican States established in its article 28 that satellite communication was a strategic activity and its exploitation was reserved to the State, by stating the following in the fourth paragraph of said numeral:

"The functions that the State exercises exclusively in the strategic areas to which this precept refers: post, telegraph, radiotelegraph and satellite communication will not build monopolies".

The opening of the satellite market in the national territory to private initiative, demanded that clear and well-defined rules be established that would regulate the provision of satellite communications, while it opened the trade of satellite communications services to foreign participation, to effect to face the behaviors acquired by the Mexican government before the international community with the signing of GATS and various agreements on the matter.

### **Federal Telecommunications Law**

Derived from the constitutional reform made to article 28, fourth paragraph, and given the new trend of satellite communications in Mexico that allow private participation in the matter, on June 7, 1995 the Official Gazette of the Federation (DOF) published the Federal Telecommunications Law (LFT), legal instrument that establishes the guidelines that regulate satellite communication.

Said instrument establishes that the State shall always maintain dominion over the orbital positions assigned to the country (Article 2, second paragraph). Telecommunications and broadcasting are public services of general interest.

In the provision of said services, any discrimination motivated by ethnic or national origin, gender, age, disabilities, social condition, health conditions, religion, opinions, sexual preferences, marital status or any other will be prohibited. another that violates human dignity and aims to nullify or undermine the rights and freedoms of people.

The LFT is a regulatory instrument of public order, whose objective based on its article 1 is to regulate the use, exploitation, and exploitation of the radioelectric spectrum, telecommunications networks, and satellite communications.

The LFT as a legal instrument to regulate telecommunications, among which are satellite communications, aims to promote an efficient development of telecommunications; exercise the leadership of the State in the matter, to guarantee national sovereignty, promote healthy competition between the different telecommunications service providers so that they are presented with better prices, diversity and quality for the benefit of users, and promote a adequate social coverage, the foregoing in accordance with article 7 of the aforementioned legal order.

Thus, the LFT establishes the guidelines that must govern satellite communications, which are regulated by the Satellite Communications Regulation (RCVS).

## **III. METHODOLOGY**

### **3.1 Type of investigation**

The present study, its type is applied research, since it focuses on finding mechanisms or strategies that allow achieving a specific objective, such as achieving an element or that may be useful. Consequently, the type

of field to which it is applied is very specific and delimited, since it is not about explaining a wide variety of situations, but rather trying to address a specific problem (Thesiana, 2017).

### 3.2 Research Design

The research design carried out in the following work:

#### 1. Set the objectives of the company.

With 3 fundamental purposes:

A) Materialize the strategy: Establishing concrete strategic objectives allows the entire team to agree on what exactly the organization must achieve.

B) Help establish goals and evaluate their achievement: Strategic objectives should serve as a guide when management formulates goals at the tactical and operational level.

C) Create organizational alignment: A good definition of strategic objectives should help employees and departments not work with conflicting objectives. Instead, they should help everyone to work with the global image in mind, so that everyone moves in the same direction (Roncancio, 2018).

#### 2. Design of the Business Portfolio.

The business portfolio is the set of businesses and products that make up the company. Portfolio analysis is an important strategic planning tool, through which management evaluates the products and businesses that make up the company. The best business portfolio is the one that best adjusts to the strengths and weaknesses of the organization, compared to the opportunities in the environment (Pearson Education, 2012).

#### 3. Design of the business strategy

Here the appropriate strategies for the business will be developed, based on the SWOT analysis that has previously been prepared, taking into account the considerations, according to Rumelt (2017), for said strategy, which are:

Consistency: The strategy should not present goals that are inconsistent with each other.

Consonance: It must represent an adaptive response to the external environment, as well as to the relevant changes that occur in it.

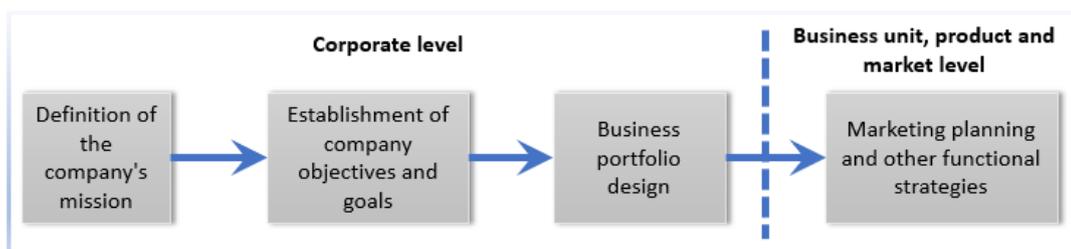
Feasibility: The strategy should not exhaust available resources and neither generate insoluble problems.

Advantage: The strategy should facilitate the creation or preservation of superiority.

### 3.3 Research Method

The methodology used for the development of this project will be based on the scheme of Philip Kotler and Gary Armstrong, in their work "Marketing version for Latin America": the four steps of Strategic Planning, presented in figure 4.

**Figure 4: Steps of strategic planning**



Source: Kotler and Armstrong, 2016

At the corporate level, the company begins the strategic planning process by defining its overall purpose and mission. This mission is then converted into specific support goals that guide the entire company. The operational center (headquarters) then decides which portfolio of businesses and products are best for the company, and how much support each will receive. At the same time, each business and product develop marketing and other plans by area to support the plan of the entire company (Rodríguez, 2017).

## IV. DATA ANALYSIS AND RESULTS

According to what is stated in the methodology, the following points are presented. The mission of the company is already defined, so this project begins with the establishment of objectives and goals.

### 1. Establishment of Goals and Objectives.

For the establishment of goals and objectives it is necessary to previously carry out an analysis of the strengths and weaknesses of the company, likewise, the analysis of its opportunities and threats that affect it within its target market.

It is important to remember that "without a problem there cannot be a solution". Therefore, companies must analyze the situation considering the particular reality of what is being analyzed, the possible alternatives to choose from and the future consequences of each choice.

### 2. Design of the Business Portfolio.

Business wallet:

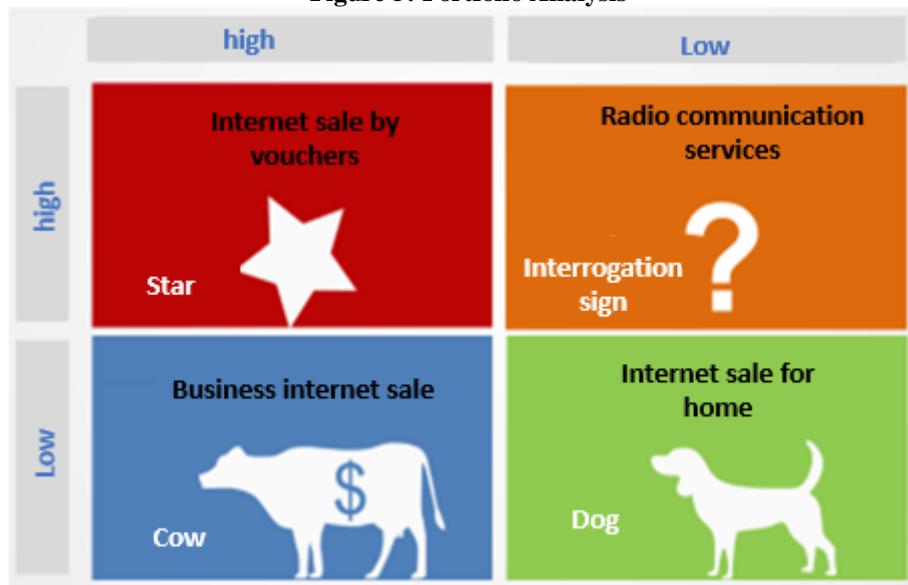
It is the set of branches and products that define the company.

Portfolio Analysis:

It is a tool with the management that identifies and evaluates the various businesses that make up the company.

Designing a portfolio of clients fundamentally to create business strategies, in what is invested, how the market develops, where we are and where the company is going, based on these assumptions, the analysis shown in figure 5 was developed.

Figure 5: Portfolio Analysis



Analyse your current business portfolio or your Strategic Business Units (SBU).

Derived from the analysis of the company, it is inferred that the main business units are:

- Internet sale by Voucher.
- Radio Communication Services.
- Sale of Business Internet.
- Sale of Internet for House Rooms.

Decide which SBUs should receive more, less or no investment.

- Internet sale by Voucher of star product due to its low cost of operation, the product is positioned and is a growing market. This product requires investment since infrastructure is required to expand the coverage area.
- Sale of Business Internet is an empty product because it is positioned in the region, however the market is low-growth, mostly public and private intuitions, since, in the region, economic growth is not constant. They do not require a major investment. It is convenient to maintain this business unit since its profitability is acceptable and does not require a major investment.
- Internet sale for home Room is a dog product because the expenses generated to maintain it are high and its profit margin is from low to nil, no greater investment should be allocated to this business unit, however it is advisable to maintain it by brand positioning.

Develop growth strategies to add new products or businesses to your portfolio.

- Radio communication service is a questionable product because, although it has the infrastructure for its development and is used for internal company communication, it has not been put on sale to the public since it is working on the proper certifications with providers, can be considered within growth

strategies because it helps to diversify the services offered by the company within telecommunications and there is a latent and growing market that has not been served.

### V. PROPOSAL: Analysis of the SOIN value chain

A company's value chain identifies the primary activities that create customer value and the related support activities.

The value chain of a company consists of two broad categories of activities: primary activities, which above all create value for customers, and necessary support activities, which facilitate and improve the performance of primary activities.

Within the company, it carries out several activations, which generate a value, which is why we will be addressing them under the following structure, which is summarized in figure 6.

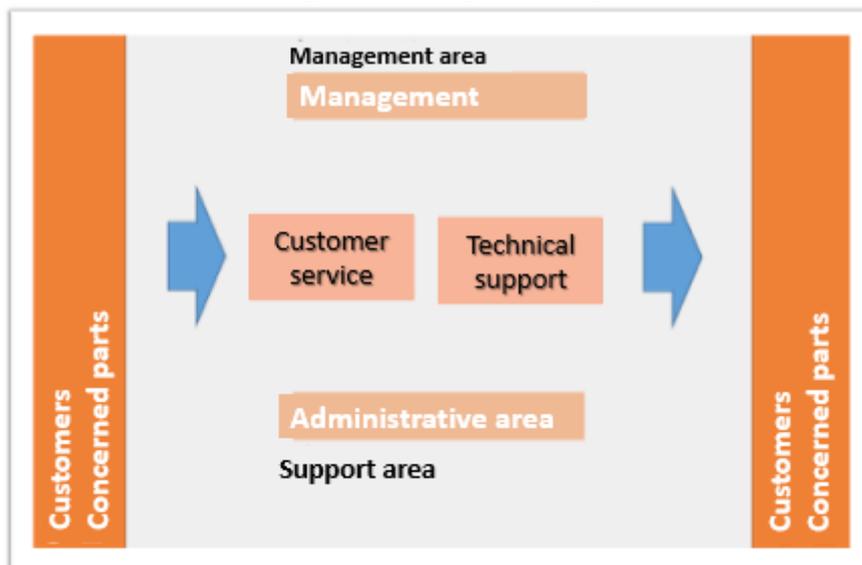
#### Primary activities

- a) Internal Logistics: in this part the customer service area intervenes, who takes the customer's report, whether it has dialed by phone, or it has criminally gone to the department. Once the report is taken, it is turned over to the technical department who will give it the corresponding follow-up.
- b) Operations: in this section the personnel of the technical department intervenes, which is in charge of following up on the clients' reports, which is trained to solve the problems that can be solved from the system, in case they have not solved the problem reported by the client, the person in charge of the technical staff, turns the report to the auxiliary technician. The auxiliary technician, who is the person in charge of following up on the report that could not be resolved from the system, and goes to the customer's home to check, is trained, to check connections and detect failures in the network. If some of the equipment installed in the customer's home has been damaged, these personnel have the skills to replace it.

#### Support Activities

- a) Direction: in the direction is the person in charge of carrying out the operations and supervision for the achievement of the objectives
- b) Administrative Area: Take control of SOIN's finances to maximize profits and reduce costs with marketing and marketing strategies.

**Figure 6: SOIN process map**



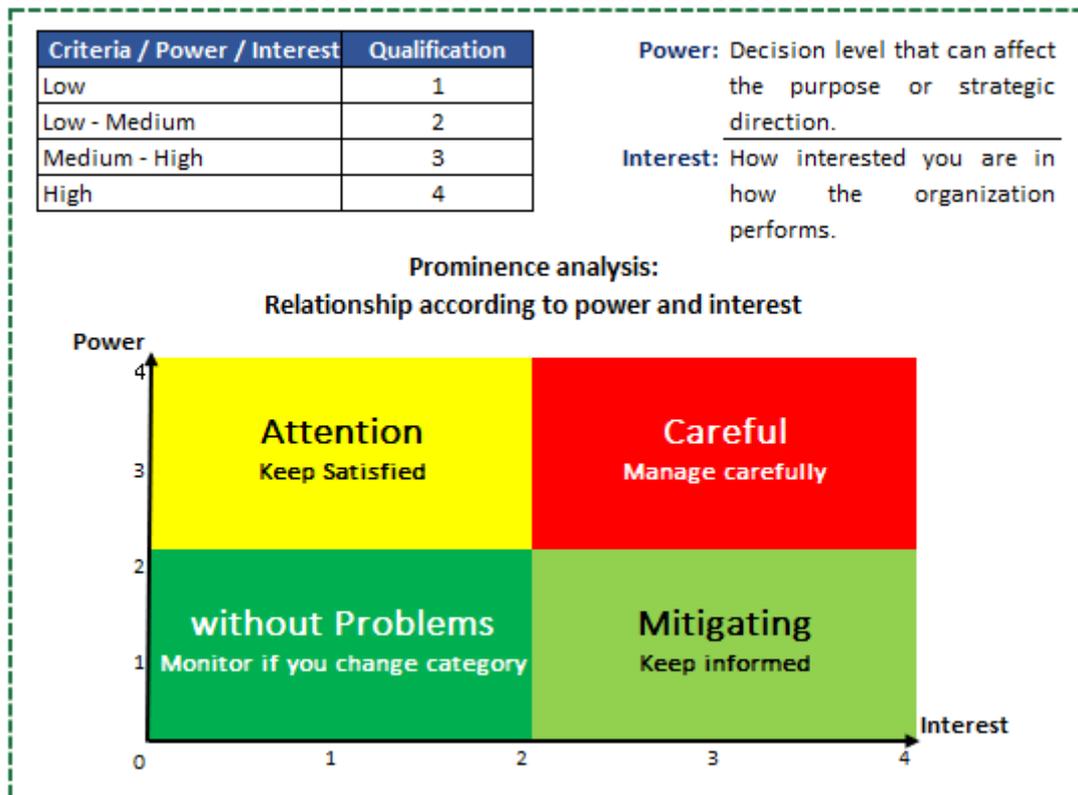
#### Identification of interested part

To strengthen the needs of SOIN, the interested parties in SOIN should be analyzed and based on prominence, carry out a risk analysis to present preventive and corrective actions in case of any problem and address it in the most effective way and that does not put the company at risk business. Table 1 and figure 7 shows the power and interest matrix according to the prominence of the stakeholders.

Table 1: Interested part

Kind	Interested part	Power	Interest	Prominence
Internal	Employees	two	1	NO PROBLEM
Internal	Direction	4	3	CAREFUL
External	Direct clients	3	two	ATTENTION
External	Providers	1	two	NO PROBLEM
External	Market Competition	1	two	NO PROBLEM
External	IFT	3	3	CAREFUL
External	SAT	1	1	NO PROBLEM
External	IMSS, Infonavit, STPS	3	1	ATTENTION
External	Municipal Authority	1	two	NO PROBLEM
External	Commercial Allies (Suppliers)	two	3	MITIGANT
External	Communities	1	two	NO PROBLEM
External	Potential customers	two	two	NO PROBLEM

Figure 7: Analysis of prominence: relationship according to power and interest



**SWOT analysis**

The SWOT analysis within the company is carried out by studying both the weaknesses and the strengths it has with respect to issues such as the availability of capital resources, personnel, assets, product quality, internal and market structure, consumer perception, among others.

*Internal analysis of the company:*

Strengths:

1. Capacity in optimal infrastructure, to continue increasing operations.
2. Committed and qualified staff.
3. The quality of service.

Weaknesses:

1. Legal regularization in process.
2. Lack of Financing.

*External analysis of the company:*

Opportunities:

1. Demand for the services offered by the company in constant growth.
2. Internet access as a constitutional right.

Threats:

1. The arrival of more competitors in the region where the service is provided.
2. Possible damage due to not having the regularization required by law.

By identifying and evaluating the SWOT results, you will begin to develop the necessary short-term or long-term strategies. See table 2.

**Table 2: SWOT matrix of SOIN company  
INSIDE THE ORGANIZATION**

	<b>STRENGTHS</b>	<b>WEAKNESSES</b>
	1.-Ideal capacity in infrastructure, to increase operations	1.-Legal regularization in process
	2.-Committed and qualified staff	
	3.-The quality of the service	2.-Lack of financing
<b>OPPORTUNITIES</b>	<b>SO STRATEGIES</b>	<b>WO STRATEGIES</b>
1.- Wide demand in places near Chicontepec	S1-O1 Implement an expansion project to areas with the highest demand where there is still no coverage	W2-O1 Find sources of financing or partners to invest and expand business coverage
2.- Internet access as a constitutional right	S2-S3-O2 Maintain and / or improve the quality of the service to achieve loyalty with current customers	W1-O2 Take advantage of the facilities provided by the government to legally regularize the business
<b>THREATS</b>	<b>ST STRATEGIES</b>	<b>WT STRATEGIES</b>
1.-Increased competition in the Region	S2-S3-T1 Provide current and future customers with the best service and attention to their needs effectively	W2-W3-T2 Have the financing to complete the business regularization process before the corresponding instance
2.-Possible damage due to not having the required legal regularization		

Once the main opportunities, threats, strengths, and weaknesses of the company have been registered, alternative strategies are formulated that reconcile internal and external factors, as follows:

**STRATEGIES THAT USE STRENGTHS TO SEIZE OPPORTUNITIES:**

**Strategy S1-O1.**

- Implement an expansion project in areas with high demand for the service and that do not yet have coverage.

**Strategy S2-S3-O2.**

- Maintain and / or improve the service to achieve loyalty from current customers.

**STRATEGIES THAT ALLOW TO OVERCOME WEAKNESSES TAKING ADVANTAGE OF OPPORTUNITIES:**

**Strategy W2-O1.**

- Find sources of financing to invest or expand the coverage of the business.

**Strategy W1-O2.**

- Take advantage of the facilities provided by the government to regularize the business.

**STRATEGIES THAT USE STRENGTHS TO AVOID OR REDUCE THE EFFECT OF THREATS.**

**Strategy S2-S3-T1.**

- Provide current and future clients with the best service to attend to their needs efficiently.

**STRATEGIES THAT ALLOW AT THE SAME TIME TO OVERCOME WEAKNESSES AND AVOID THREATS.**

**Strategy W2-W3-T2.**

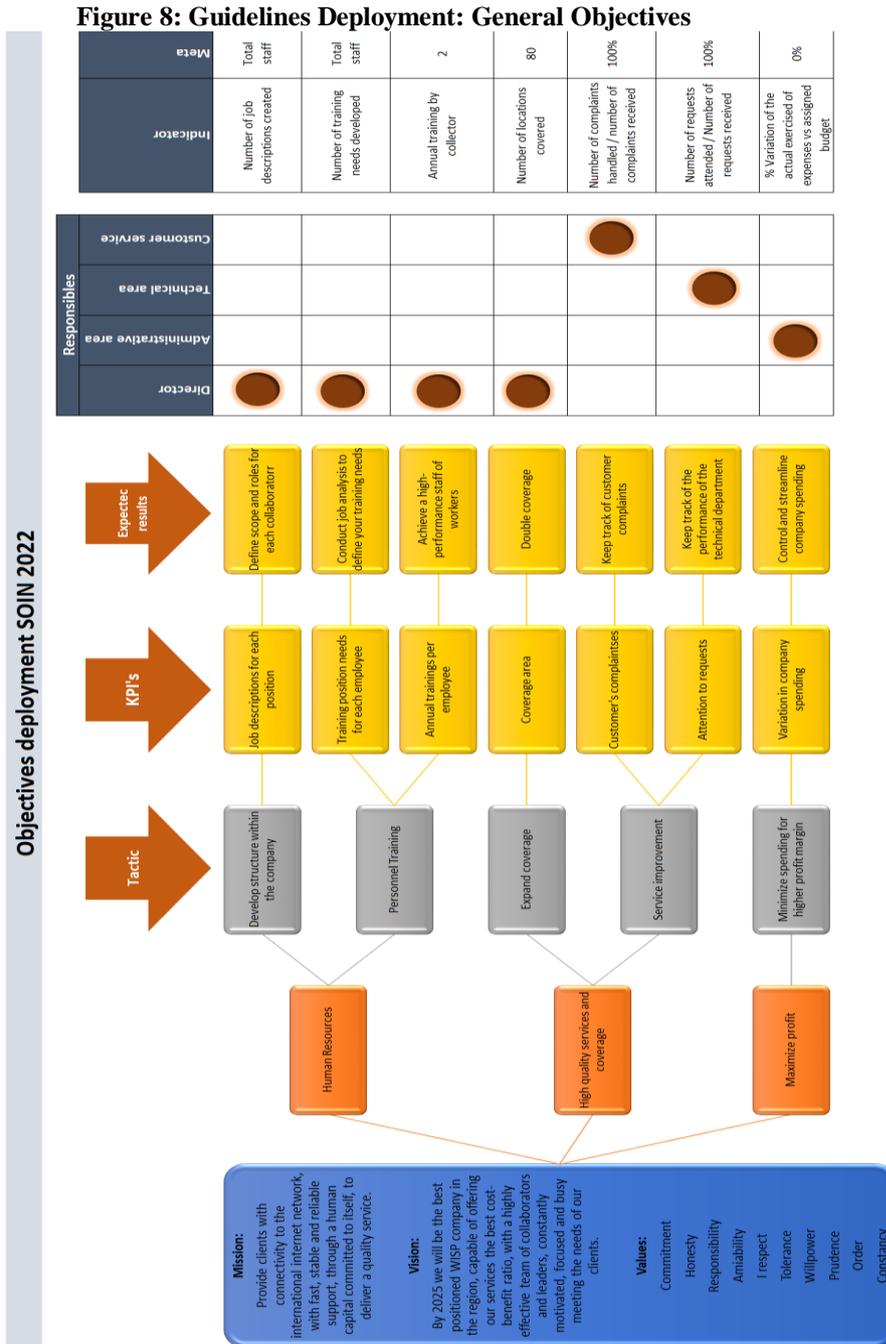
- Have the financing to complete the business regularization process before the corresponding instance.

Once you have the strategies that the company must execute, which were the ones that best fit its strengths and weaknesses, as well as the opportunities and threats in the environment, it is necessary to specify the steps to follow to reach your compliance.

As already mentioned, a strategy is made up of a series of planned actions that help make decisions and achieve the best possible results. The strategy is aimed at achieving objectives by following an action guideline based on a risk analysis. An attack plan must be made where the business will be addressed by level of risk. The following analysis is taken as a basis. See figure 8 and 9.

**Figure 8: SWOT Risk Analysis**

Order	Strategy	Activity	What happens if the activity is NOT carried out?	Immediate effect	Significance criterion		Result	Risk level	Treatment to address risk
					Level	Probability			
1	SW Offensive	Implement an expansion project in areas with high demand for the service and that still do not have coverage.	Losing an emerging market competitors.	Low demand for the service.	3 Severe	4 High	12	Very high	Obtain a greater uptake in the market due to the lack of competition in the region. This is achieved by meeting the objectives of expanding coverage through the creation of new infrastructure.
2	SW Offensive	Maintain and / or improve the service to achieve loyalty from current customers.	Poor quality service.	Possible loss of current clients and low acquisition of new clients.	3 Severe	3 Medium	9	High	Create a marketing strategy to keep customers satisfied through promotions that keep them captive. This is achieved by meeting the objectives of creating a policy to exchange points for products and services; this through an analysis of the promotions that can be offered without affecting profit margins.
3	OW Adaptive	Find sources of financing to invest or expand the coverage of the business.	Losing an emerging market competitors.	Low demand for the service.	3 Severe	4 High	12	Very high	Obtain sources of financing for the star products so that in the long term they become cow products. This is achieved by meeting the objectives of obtaining a bank loan and / or capitalist partners; demonstrating that the company is profitable and that it maintains sustained growth.
4	OW Adaptive	Take advantage of the facilities provided by the government to regularize the business.	Legal and financial problems.	Possible fines for irregularization or closure.	3 Severe	2 Low	6	Half	Take advantage of the facilities provided by the government to regularize the business before the Federal Telecommunications Institute. This is achieved by meeting the objectives of gathering the guidelines presented to the corresponding authorities and providing follow-up.
5	ST Defensive	Provide current and future clients with the best service to attend to their needs efficiently.	Poor quality service.	Possible loss of current clients and low acquisition of new clients.	3 Severe	3 Medium	9	High	Meet the objectives of creating changes in radio communication services, internet and vouchers tailored to the needs of customers.
6	OT Survival	Have the financing to complete the business regularization process before the corresponding instance.	Legal and financial problems.	Possible fines for irregularization or closure.	3 Severe	2 Low	6	Half	Generate liquidity to obtain authorization for the exploitation of telecommunications services, complying with the objectives of implementing the action plan, evaluation and control of the results of the strategic planning of the business.



**Competitive advantage:**

A company gains a sustainable competitive advantage when it meets the needs of consumers more efficiently or effectively than its rivals, and when the basis for doing so is durable despite the efforts of its competitors to match or exceed this advantage.

In SOIN's case, its main competitors are: DIGY NETWORK, L7 NETWORK, MEGARED, EVOLUTION and LA UNION. SOIN has dedicated Internet, that is, a connection between two points with a fixed Bandwidth, which is available 24 hours a day, 7 days a week and its capabilities, both for downloading information and downloading, typically they are the same and are assigned to a single subscriber, commonly a business. This is an advantage over competitors such as MEGARED, EVOLUTION and LA UNION, since they provide their service through residential or business lines of an ISP (Telmex, Izzi, etc).

However, both DIGY NETWORK and L7 NETWORK, like SOIN, have dedicated internet. In relation to these two providers, the dedicated internet is no longer a competitive advantage. Therefore, an important aspect to evaluate is the response time to customer requests due to network failures. While L7 NETWORK takes

weeks to repair its corporate network, this, according to the opinion of some of its customers; SOIN gives an answer in a shorter time and tries to ensure that the Internet connection of its users is constant, to reduce customer complaints.

## **VI. Conclusions and recommendations**

As an assumption of this study, it was proposed to develop the strategic management plan of the SOIN service value chain, which would allow it to take advantage of the opportunities of the environment, achieving the positioning of the company and improving the processes within the company, thus like the quality of customer service. This plan was outlined in the proposal through the clear definition of objectives, the SWOT analysis, the stakeholder analysis, and the BCG matrix. With this we conclude our research question in which we seek to define the strategy that allows SOIN to have a competitive advantage within the communications business.

The general objective of this project was to generate the strategic management of the value chain of the services offered by SOIN, which was defined within the proposal. The management objectives were transformed into indicators so that all staff are aligned with the vision of the company and the objectives are reached. If deviations occur along the way, carry out an analysis to propose corrective actions regarding the deviation in the indicator.

On the other hand, after having carried out the SWOT analysis of the company SOIN, the business strategies were developed taking advantage of the strengths and opportunities, overcoming the weaknesses, and mitigating the threats. As a result of this, it was determined to achieve 6 goals, which for their fulfillment it was necessary to define specific objectives in each of its parts, and the risk in each of the goals was analyzed to define priorities.

As part of the research questions, the actors that intervene in the value chain were identified, through the analysis of the interested parties, the prominence of each one was determined, and the level of risk of not attending them. However, within the scope of this project, a detailed analysis of each of the actors was not carried out.

Currently SOIN competes with a variety of companies, however, within the investigation, its current situation within the communications business was defined, defining those services that allow it to be among the best service providers for this business, highlighting its dedicated Internet, that is, a connection between two points with a fixed Bandwidth, which is available 24 hours a day, 7 days a week and its capabilities, both for downloading information and downloading

Derived from the analysis of the business portfolio, we were able to realize which were the business units of the SOIN company, but even more important, the role that each one of them play within the company, in short, the star product was the sale vouchers, followed by a reasonable cow product, the sale of the business internet service; finally, a dog product, the sale of room service. It was concluded to make a strong investment in the star product, a lower investment than the cow product, and not to invest, but to keep the dog product.

On the other hand, this research made it possible to analyze and define a competitive advantage of SOIN, which is based on differentiation, by giving a shorter response time in relation to its competitors to technical support requests, which allows the company to improve its services and grab more customers, which allows us to conclude with the question related to attracting a greater number of customers for the business.

Based on the present study, it is concluded that strategic planning, as well as value chain analysis play a very important role in companies, since the success or failure of the organization depends to a large extent on them. Well, through them, the course and guideline that the entire company must follow is summarized, with the objective of reaching the set goals. SOIN is no exception, that is why, based on the definition of the company's Mission and Vision, an internal and external analysis of the company was developed, as well as the analysis of the business units, to determine the business strategy design.

### **Recommendations**

- Put into practice the proposals presented in this project.
- Follow-up of indicators to fulfill the objectives.
- Create corrective actions based on an analysis to correct deviations in the indicators
- Perform management to carry out activities resulting from SWOT based on risk analysis.
- Develop an annual staff training program based on training needs.
- Review and adaptation of the procedures carried out by each department.

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