

ORIGINAL

Creation of a WISP (wireless internet service provider) in the business and residential sectors, called Conectándote SAS BIC, for the municipality of Ipiales Nariño and the former province of Obando, 2020-2024

Creación de un WISP “proveedor de servicio de internet inalámbrico” en la modalidad empresarial y residencial, denominado Conectándote SAS BIC para el Municipio de Ipiales Nariño y la ex provincia de Obando, año 2020-2024

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Cite as: Guerrero J, Solarte Solarte ML. Creation of a WISP (wireless internet service provider) in the business and residential sectors, called Conectándote SAS BIC, for the municipality of Ipiales Nariño and the former province of Obando, 2020-2024. Multidisciplinar (Montevideo). 2024; 2:156. <https://doi.org/10.62486/agmu2024156>

Submitted: 30-01-2024

Revised: 07-05-2024

Accepted: 28-08-2024

Published: 29-08-2024

Editor: Prof. Dr. Javier Gonzalez-Argote 

ABSTRACT

Introduction: to begin the development of this important project, information is recorded with general topics and data, followed by an introduction that presents a business plan for the creation of a WISP (wireless internet service provider) for business and residential use, aimed at the communities of the municipality of Ipiales Nariño and the former province of Obando. The objective is to create a wireless internet service provider (WISP) in the municipality of Ipiales Nariño and the former province of Obando, aimed at the rural sector of strata 0, 1 and 2 for the period 2020 to 2024, with all the relevant studies to determine supply and demand in order to guarantee customer satisfaction in the provision of this service, which consists of providing internet access in their homes, enabling them to carry out their activities using information and communication technologies on the web without having to migrate to the city. Therefore, for the implementation of this project, business opportunity aspects based on people's needs were taken into account, especially young people in rural areas who are pursuing their studies and businessmen, the former to continue their studies and the latter for the development of their economic activities, trade and research. To this end, various variables were taken into account that provided insight into aspects related to financial, commercial, administrative and technical activities, as well as explanatory aspects in Porter's 5 forces model and the PESTEL model, which reveal the relationship between customers, competitors, suppliers, substitute products, political, economic, social, technological, ecological and legal factors and other regulations that surround and govern companies that offer this internet service through the Radio Enlace modality, and thus comply with the achievement of this valuable objective proposed in this venture aimed at social welfare and care for the environment. To achieve this objective, we will generate market strategies and conduct a technical study to determine how the service will be received. We will identify and calculate costs, profitability and financial strategies, and propose other strategies, such as environmental and social strategies, aimed at achieving recognition for the organisation. In addition, a detailed financial study is carried out, and the results are positive and highly profitable. Furthermore, in social and environmental terms, there is a significant impact, as it enables the comprehensive development of families in their daily activities and research and preserves the environment in a way that sets it apart from other companies offering the same service in other ways. The project focuses on offering a sustainable service aimed at protecting and caring for the environment, as it involves families by motivating them to engage in research and the future of education. After analysing the competition and through the design, analysis and strategies applied in the MEFE, MEFI and DOFA matrices, it was possible to identify both the weaknesses and threats, as well as the opportunities and strengths of the project under study. Finally, it was confirmed that there is an opportunity for the service offered to be well received by the communities and that it is profitable with a view to significant economic and social development and growth. A structured plan has therefore been

organised with a team committed to ensuring that the project is sustainable and benefits the community. Once the complete study and analysis have been carried out, it has been concluded that the project is viable and will continue to be implemented for its intended purpose.

Method: descriptive and explanatory research, as the study seeks to identify the causes of the lack of internet access in rural areas of the municipality of Ipiales, the former province of Obando and its surrounding areas.

Conclusions: once the market study has been carried out and local supply and demand have been identified, it has been concluded that it is feasible to provide internet service to the communities of the municipality of Ipiales and the former province of Obando in compliance with the regulations established by the competent authorities and as set out in this business plan and its principles. Taking into account the different administrative, technical, organisational and legal structures, it was possible to conclude what the rules, functions, personnel and type of company will be for the entrepreneurial project to develop its corporate purpose in order to guarantee efficiency in the service provision process wherever it is present. After developing the accounting and financial processes and analysing the results and relevant financial indicators, it was concluded that the project is profitable and generates benefits for all those involved. It can therefore be said that its implementation as a sustainable project is viable. At the end of the process, it was discovered that there are various market niches to be explored and that there is room for growth as a company, meaning that it has a bright future ahead of it. It can therefore be concluded that it is fully profitable and motivates us to continue with its implementation and launch, to make this venture a commitment to social development for the good of future generations. Finally, it can be said that this project has been warmly welcomed by communities and government entities because its essence and origin generate positive economic, social, and environmental impacts, thanks to the regulations that govern its existence as a service provider. It is also innovative and admired by the communities and families who are part of it as users when they receive the signal in remote areas of the city.

Keywords: Wisp; Bic; Vpn; Mac; Mb; Voip; Anydesk; Clokey; Winbox; Routerboard.

RESUMEN

Introducción: para dar inicio al desarrollo de este importante proyecto se registra una información con unos temas y datos generales y luego una introducción que da a conocer el estudio de un plan de negocios para la creación de un wisp “proveedor de servicio de internet inalámbrico” en la modalidad empresarial y residencial dirigido a las comunidades del municipio de Ipiales Nariño y la ex provincia de Obando. El objetivo es crear un proveedor de servicios de internet inalámbrico WISP, en el municipio de Ipiales Nariño y la ex provincia de Obando, dirigido al sector rural de los estratos 0, 1 y 2 para el año 2020 al 2024 contando con todos los estudios pertinentes que permitan conocer la oferta y demanda para garantizar a sus clientes satisfacción en la prestación de este servicio consistente en obtener internet en sus hogares que les permita realizar sus actividades mediante el uso de las tecnologías de la información y las comunicaciones en la web sin tener que emigrar a la ciudad. Por ello, para la implementación de este proyecto se tuvo en cuenta los aspectos de oportunidad de negocio basado en la necesidad de las personas, en especial los jóvenes del sector rural que adelantan sus estudios y los hombres de negocio, los primeros para dar continuidad a sus estudios y los siguientes para el desarrollo de sus actividades económicas y del comercio y la investigación. Para lo anterior se tuvo en cuenta diversas variables que permitieron conocer aspectos relacionados con las actividades financieras, comerciales, administrativas y técnicas; además aspectos explicativos en el modelo de las 5 fuerzas de Porter y el modelo PESTEL que permiten dar a conocer la relación entre los clientes, competidores, proveedores, productos sustitutos, factores políticos, económicos, sociales, tecnológicos, ecológicos y legales y otras normas que rodean y rigen a las empresas que ofertan este servicio de internet mediante la modalidad de Radio Enlace, y así dar cumplimiento al logro de este valioso objetivo propuesto en este emprendimiento encaminado al bien social y al cuidado del medio ambiente. Es así que para lograr este objetivo se toma como base, generar estrategias de mercado y realizar un estudio técnico a fin de conocer la acogida que tendrá el servicio; es así que se identifica y calcula los costos, la rentabilidad, las estrategias financieras y se plantea otras estrategias como ambientales y sociales encaminadas a lograr el reconocimiento de la organización. En otra instancia se realiza el estudio financiero de forma detallada y sus resultados son positivos y muy rentables; además en lo social y ambiental, se observa un gran impacto ya que permite en desarrollo integral de las familias en el desarrollo de sus actividades cotidianas y de investigación y conserva el medio ambiente de forma diferencial con relación a otras empresas que ofertan el mismo servicio con otras modalidades. El proyecto está enfocado a ofertar un servicio encaminado a la protección y el cuidado del medio ambiente y de carácter sostenible ya que involucra a las familias mediante la motivación de la investigación y el futuro en la educación. Una vez analizada la competencia y mediante el diseño, análisis y estrategias aplicadas en las matrices MEFE, MEFI y DOFA se pudo conocer tanto las debilidades y amenazas, como las oportunidades y fortalezas que el proyecto en estudio tiene. Finalmente, se comprueba que existe oportunidad de que el servicio que se oferta tiene gran acogida por las

comunidades y que si es rentable con miras a un gran desarrollo y crecimiento económico y social. Es así que se organiza un plan estructurado con un equipo comprometido a lograr que sea un proyecto sostenible y de beneficio social comunitario. Una vez realizado el estudio completo y su respectivo análisis se concluye que el proyecto es viable y se continúa con su implementación para lo que fue creado.

Método: investigación descriptiva y explicativa ya que mediante su estudio busca detectar las causas que originan la falta de internet en los sectores rurales del municipio de Ipiales, la ex provincia de Obando y sus sectores aledaños.

Conclusiones: una vez realizado el estudio de mercado y logrado identificar la oferta y demanda a nivel local, se concluye que si es viable llegar con el servicio de internet a las comunidades del Municipio de Ipiales y la ex provincia de Obando cumpliendo con las normas establecidas por las entidades competentes y lo plasmado en el presente proyecto de emprendimiento y sus principios. Teniendo en cuenta las diferentes estructuras: administrativa, técnica, organizacional y legal, se pudo concluir cuáles serán las normas, funciones, personal y tipo de empresa a lo que se inclinará el proyecto de emprendimiento para el desarrollo de su objeto social con el fin de garantizar la eficiencia en el proceso de la prestación del servicio donde haga presencia. Desarrollado los procesos contables y financieros, analizados sus resultados y los indicadores financieros pertinentes, se pudo concluir que el proyecto es rentable y que genera beneficios para todos los actores que intervienen en él, por lo tanto se puede decir que es viable su implementación como un proyecto sostenible. Terminado el proceso se descubre que existen diversos nichos de mercado por explorar y que es un espacio de oportunidad para crecer como empresa y por tanto le espera un gran futuro. Es así que se puede concluir que es totalmente rentable y motiva a seguir adelante con su implementación y puesta en marcha, para hacer de este emprendimiento un compromiso de desarrollo social para bien de las futuras generaciones. Por último se puede decir que es un proyecto de gran acogida por las comunidades y las entidades del Estado porque su esencia y origen para lo que fue creado genera impactos positivos tanto económicos, sociales y ambientales, por las normas que lo rigen para su existencia como empresa prestadora de servicio. Además es novedoso y admirado por las comunidades y familias que forman parte de él como usuarios, al momento de recibir la señal en lugares apartados de la ciudad.

Palabras clave: Wisp; Bic; VPN; Mac; Mb; VoIP; AnyDesk; Clokey; Winbox; Routerboard.

INTRODUCTION

According to figures from a study conducted by the Ministry of Information Technology and Telecommunications, Eastern Europe (92 %) and Northern Europe (95 %) had the highest internet penetration, closely followed by North America (88 %). On the other hand, the regions with the lowest internet penetration were East Africa (23 %) and West Africa (36 %).⁽¹⁾

The report notes that internet users worldwide have reached 4,66 billion people, representing 59,5 % of the population (7,83 billion people).

Fixed internet connections in Colombia exceeded 8 million, and mobile connections exceeded 32,9 million. During the first quarter of 2021, 273 668 new fixed internet accesses were registered in Colombia, bringing the total number of connections in the country to 8,05 million.⁽²⁾

The country increased connections for each service, and Mintic says it is close to its goal of 70 % of households connected by 2022.

The Internet Law was enacted in Colombia as an essential and universal public service.⁽³⁾

After the Congress of the Republic approved the bill declaring the Internet an essential and universal public service in Colombia by amending Law 1341 of 2009, President Iván Duque and ICT Minister Karen Abudinen enacted it yesterday in the municipality of Arroyo Hondo (Bolívar). See more news on Politics.⁽⁴⁾

‘With this law, the Internet becomes an essential public service. This means its importance and necessity for Colombians is comparable to water, electricity, and gas. Therefore, operators must guarantee the continuous provision of the service for everyone, and in emergencies, such as the pandemic, they may not suspend the installation, adaptation, and maintenance of the networks,’ explained President Duque.

In the Department of Nariño, several telecommunications companies offer Internet service and access to information technology tools, including multinationals such as Movistar, Claro, Tigo, Azteca Communications, Intercom, Internet, HughesNet, Media Commers, Your Network Colombia, and at the southwestern and departmental level, such as Sistemas Palacios, Double Click, and IP Technologies, which provide service to only a small percentage of the urban sector, leaving most families in the townships and villages isolated without this valuable and essential service. This does not include the many individuals who provide this service informally.^(5,6)

Few companies provide this service in the municipality of Ipiales and the former province of Obando and only in urban areas for various reasons, such as the distance between townships and villages, travel costs, lack of knowledge, or avoiding risks.⁽⁷⁾

This important project was initiated in response to the need for access to information and telecommunications by the citizens of the municipality of Ipiales and the former province of Obando, where the Internet provider has given me the guarantee to expand, mainly due to the deficiency of the Internet communications system operating in these localities and the high unmet demand for the services they currently have. To meet this need and demand, a Wireless Internet Service Provider (WISP) company is proposed due to its rapid deployment through wireless links as a means of access.⁽⁸⁾

Connecting you SAS BIC is created to meet various needs, such as enabling telephone communication with VoIP through the Internet, increase the socio-cultural information available online so that small businesses in the sector can interconnect their offices and branches, reduce the costs that individuals, families, and businesses spend on this service, and enable the development of education by providing modern technological tools in line with those used in the country's main cities via the web, with a commitment to reaching rural areas and promoting environmental care.⁽⁹⁾

To get the idea off the ground, headquarters have been set up in the city of Ipiales at Calle 10 No. 7-66, where the customer service office, the device laboratory, and the main internet line provided by INTERNEXA, AZTEKA, and MOVISTAR are located.

According to the economic activities classification and the International Standard Industrial Classification (ISIC) Connecting you SAS BIC belongs to the telecommunications sector, and its business plan includes activities 4321, 6120, 6190, 6202, and 6202: consulting, Administration, and Computer Installation Activities.

Since its inception (mid-2018), Connecting you SAS BIC has built two stations and five trunk lines and provides residential internet service to 273 users, mainly in rural areas where companies offering this service do not reach. Thus, it has gained recognition from communities through word of mouth (satisfied customers).

General Aspects

Subject: information and telecommunications technologies

Approach and description of the business opportunity

Problem: despite being in the fourth industrial revolution, which is dominated by the use of new technology in all areas of society and is required to improve information connectivity, there are still regions where these tools are unknown and unattainable for communities in many regions of the country.

The entrepreneurial project called Conectándote SAS BIC was created to reach the rural sector of the municipality of Ipiales Nariño and the former province of Obando with business and residential internet service via radio link codes using long-range devices with a range of up to 40 kilometers with point-to-point links for greater effectiveness and care for the environment, connecting these communities with global information that is useful in their daily lives.

The lack of internet connectivity and the economic recession caused by the pandemic are among the factors that negatively impact virtual classes. Community spokesperson and mother Doris Muñoz stated this, arguing that this setback affects normal development.⁽⁴⁾

General objective

To create a wireless internet service provider (WISP) in the municipality of Ipiales Nariño and the former province of Obando, aimed at the rural sector of strata 0, 1, and 2 from 2020 to 2024.

METHOD

Type and approach of research

The research belongs to the field of Information Technology and Telecommunications

Conectándote SAS BIC belongs to the descriptive and explanatory type of research, as its study seeks to detect the causes of the lack of Internet in rural areas of the municipality of Ipiales, the former province of Obando, and its surrounding areas.

Hypothesis: wireless networks offer many advantages, as a computer can connect to the network and be moved to any location without the need for guided media, such as UTP cable or fiber optics, among others. This is a technology for growing companies, as they can bring the wireless network to the floors or buildings of a company with a wireless network. Public or private agencies can use this network, and mobile and landline telephone companies can purchase this service.

It belongs to the mixed approach, as it takes into account both quantitative and qualitative factors. It measures the number of households that do not have internet service and those that do, as well as their satisfaction or perception of the quality of the service.

Population and Sample

Population

Refers to the universe, set, or totality of elements being researched or studied.

Sample

This is a part or subset of elements selected in advance from a population to carry out a study. The population is considered the number of participants to analyze the data based on their typical characteristics.

Definition of population: the population is considered the number of participants in order to analyze the data based on their common characteristics.

For our study, we took a finite population, as the municipality's inhabitants can be counted, and their needs, tastes, and desires can be identified.

Sample size

The study's sample strictly takes into account those who are part of the population without excluding or including anyone other than that group or community and at random without preference; the questions were related to the topic under study.

Based on the number of inhabitants, 10 % of the population was taken as a sample for the study.

A simple random cluster sampling method was used to carry out the study, as the municipality is divided into districts and villages, and it is necessary to know the different opinions and arguments behind the answers given by each family.

Population and Sample

Where:

- N= POPULATION SIZE
- n= Sample size
- Z= CONFIDENCE LEVEL
- P= Probability of success
- Q= Probability of failure
- D= Margin of error.

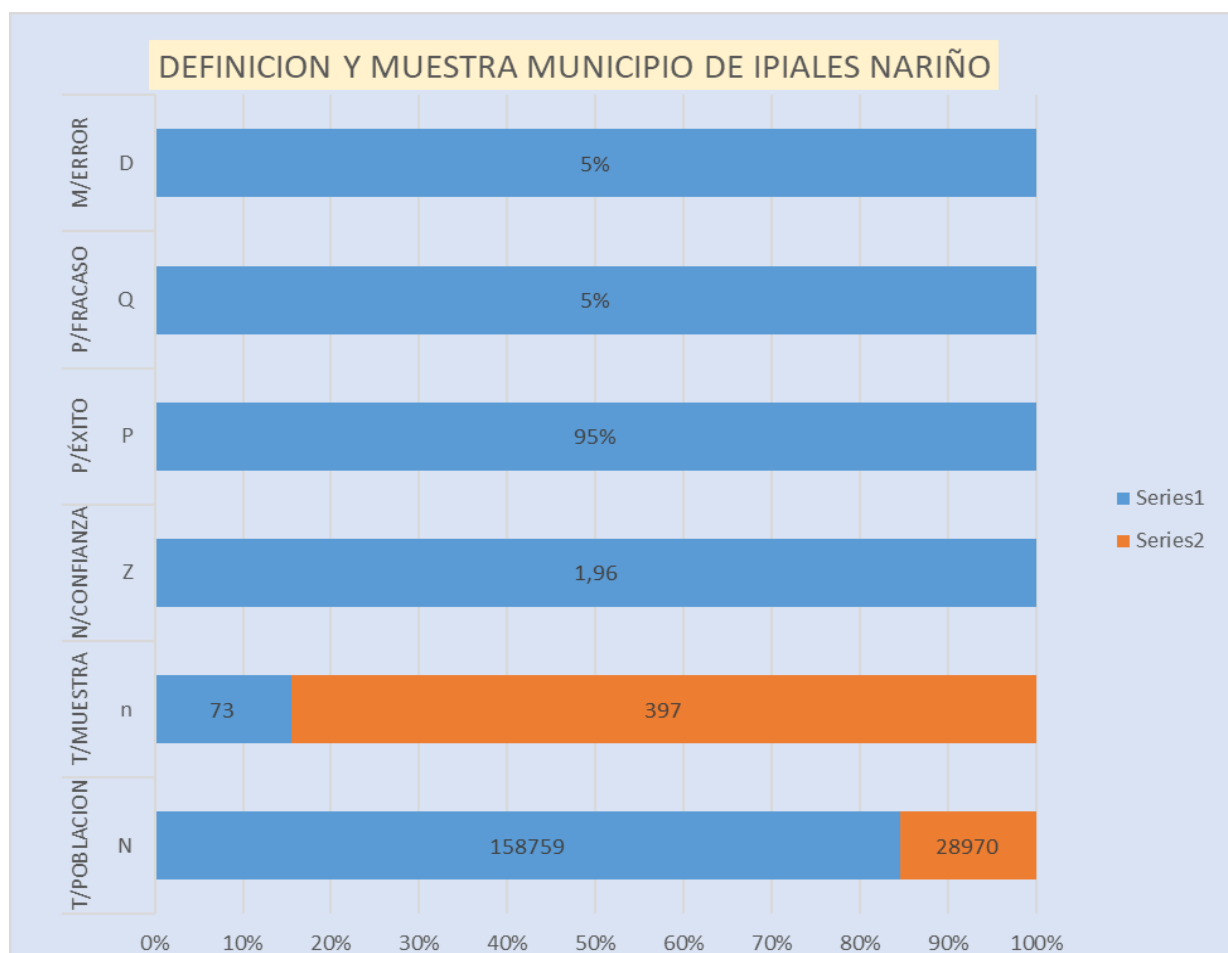


Figure 1. Population and Sample Chart

Figure 1 depicts the results of table 1 by scale.

Table 1. Population and Sample			
Population and sample			
Municipality of Ipiales			
Data for data collection			
Sample design and definition			
Ipiales Nariño		Data	Values
T/POBLATION	N	158 759	28 970
T/ SAMPLE	n	73	397
N/CONFIDENCE	Z	1,96	
P/SUCCESS	P	95 %	
P/FAIL	Q	5 %	
M/ERROR	D	5 %	

Table 1 register the inhabitants of the municipality of Ipiales and calculate the sample.

$$n = \frac{N \cdot (Z^2) \cdot p \cdot q}{((D^2) \cdot (N-1)) + ((Z^2) \cdot p \cdot q)}$$

Instruments to collect information

Instruments are the material means, such as mobile phones, cameras, agendas, among many others, used to collect and store data, and data collection techniques are the different ways used to get accurate and reliable information.

The main tools used for the CONECTANDOTE SAS BIC entrepreneurship project were direct observation and the survey, which are presented in the document in the following format.

Perception Survey

This survey aims to determine the perceptions of the community of the municipality of Ipiales Nariño, its villages, and hamlets regarding the implementation of a new Internet service in urban and rural areas.

Please answer the following questions set out below:

1. Levels of satisfaction
 - a) Do you have internet service? YES ___ NO ___ if NO, go to item 5__.
 - b) How do you feel about your current service? Satisfied ___ Dissatisfied ___ Fair ___ Poor ___
 - c) How do you rate the quality of the service? Excellent ___ Good ___ Bad ___ Very Bad ___ Very Bad ___
2. Internet providers. If you have internet service, please provide an answer.
 - a) Do you know the company that offers you the service? YES ___ NO ___
 - Name of the company _____
 - Customer service. Excellent ___ Good ___ Regular ___ Bad ___
 - Is the internet you have fast? ¿YES ___ NO ___ DOES IT WORK THROUGHOUT THE HOUSE?
 - Does it work throughout the house? ¿YES ___ NO ___ DOES IT WORK THROUGHOUT THE HOUSE?
 - Technical assistance. Excellent ___ Good ___ Fair ___ Poor ___ Poor ___
 - How much do you pay per month for service? From \$10 to \$30k ___ \$31 to \$50k ___ \$51 to \$70k ___ \$70k and up ___ Do you know what speed internet service you get?
 - Do you know what internet speed you contract? YES ___ NO ___
 - Which of the following? 3 MB ___ 4 MB ___ 5 MB ___ 6 MB ___ 10 MB ___ 20 MB ___ OTHER ___
3. Customer needs
 - a) Is the service quality? YES ___ NO ___
 - b) What do you use the service for? Doing homework ___ Listening to music ___ Watching movies ___ Tutorials ___
4. Would you be willing to change your internet provider? YES ___ NO ___

- a) Why do you need it? _____
- b) That you would like to be included in the service? _____
- c) How much you would pay for the service? _____
- d) Why you choose the package? _____
- e) Why do you think it is necessary? _____

5. Why don't you have internet service at home?

- a) Because you don't have money ____
- b) You don't see the need for it ____
- c) You have not been offered the service ____
- d) Would you like to contact the internet service? YES __ NO __

We thank you for your interest and collaboration in this research process to know the viability of this project.

Sector Analysis (Porter's Diamond Analysis)

Fixed internet connections in Colombia exceeded 8 million, and mobile connections exceeded 32,9 million. During the first quarter of 2021, 273 668 new fixed internet accesses were registered in Colombia, reaching 8,05 million connections there.⁽²⁾

The country increased connections for each service, and Mintic says it is close to the goal of having 70 % of households connected by 2022.

Conectándote SAS BIC is an entrepreneurial project. It was born in mid-2018 as WISP and is governed by law 1341 of the telecommunications sector. It started as a simple idea and, at the end of the same year, managed to get 28 customers, 2020 reached 120 and to date has 275 customers between residential and business without taking into account those who have used the service through the system of codes as they are customers who do so without defined periods and aims in 2024 to reach 620 customers.

Considering the enactment of Law 1341 in its modification, which declares the internet service a public and essential service, the project has a great advantage as it has a greater opportunity to access new markets.

To date, the Conectándote SAS BIC project is being developed at the local level with a view to providing the service and obtaining a regional market in 2024.

For a more precise analysis of the sector to which the venture belongs, Porter's Diamond and its quadrants have been taken as a model, as follows:

Bargaining power of customers: customers

The service is aimed at households with children from 7 to 18 years of age who are studying primary and secondary education as a technological tool of great help for the development of their academic activities and to people with a desire for self-improvement who wish to train and undertake. The families in these communities belong to strata 0, 1, and 2 and are a minority in strata 3 and 4, and between 60 % and 75 % of them need access to information and communication technology. Some 80 % of the families live in small businesses, fixed-term jobs, agriculture, livestock, and day labor. These communities manage products and services based on quality and price; therefore, they seek to know in depth the products or services offered to contract one that meets their needs.

Bargaining power of suppliers: suppliers

The companies that provide the devices and the internet signal for the development of Conectándote SAS BIC's corporate purpose have the capacity to supply and cover various countries on the continent: among the suppliers are INTERNEXA, AZTECA, MOVISTAR, MEDIACOMMERS for the signal and MICROTİK, MIMOSA, TPELINK, and UBIQUITI for the devices.

The threat of new entrants to offer the service

There are too many in all market niches; moreover, it is known that there are always customers for all companies in this sector, and there are too many dissatisfied customers in the different regions.

The threat of substitute products

There is a medium that can replace or substitute this service and tool in very distant places, which is the insert, the encyclopedias, the pedagogical DVDs, and media of a minimum level that can substitute or replace this service and tool since everything is currently based on the tools of information technologies; we are waiting for the 5G to show the world other alternatives.

Market Analysis

PESTEL Model Analysis

Table 2. PESTEL Model

PESTEL variable	Threats	Opportunities
Economic <ul style="list-style-type: none"> - Size of its industry or sector. As an entrepreneurial project, CONECTANDOTE SAS BIC is a small or micro company that corresponds to group III of the IFRS and develops its corporate purpose at a local level; moreover, it belongs to a large sector such as Telecommunications and Tics. -Inflation in the sector. In this case it is favourable for this sector since every period the amount of data or reuse of the signal per Megas and lower cost to the consumer increases -The world crisis influences the sector. If we are talking about the analysis of the pandemic, it influences positively to a high degree; in the same way and positively by saving books, printing, and others by the low cost of monthly fees and family use. -Consumer decisions to save influence the sector. Too much since with a basic plan they cover the need of the whole family in the use of the platforms and data consumption. -Barriers to entry in their industry. Especially topography, climate and forests. -Unemployment rate. For this sector, as of January 2021, it is 17,3 %. -Scenario for entrepreneurship. The rural sector and strata 0, 1 and 2. 	<p>In the first instance it is that in this era a number of companies have been created that offer the same service and are likely to link into these markets. In another instance it is the widespread insecurity and the risk of theft of the devices.</p>	<p>In the rural sector the demand is lower than in the urban sector. To date, few companies have decided to provide the service in these sectors.</p>
Politician <ul style="list-style-type: none"> -Trade agreements with other countries. The telecommunications and ICT sector maintains a wide coverage, usefulness and recognition worldwide and all companies, regardless of size or market coverage, can access the information. -Conflicts, initiatives, incentives or taxes. As an initiative, the CONECTANDOTE SAS BIC venture is created to grow. de la mano In accordance with law 1780 of 2016 on youth entrepreneurship and law 1901 of 2019 as a project of entrepreneurship BIC has various incentives and according to law 1341 of 2009 and decree 1078 of 2015 must contribute to the MINTIC 0,060 % of the gross income of the company. -Statutes and/or laws that regulate the sector. As youth entrepreneurship (since more than 50 % of its shares are held by young people under 30 years old), law 1780 of 2016, as a BIC entrepreneurship project, law 1901 of 2019 and as ISP law 1341 of 2009. -Influencing national or municipal government policies. Law 1978 of 2019 on the modernisation of the ICT sector and distribution of competences, access to ICTs, infrastructure deployment and spectrum use. 	<p>That there are likely to be impassés in the future due to a lack of knowledge of the rules. and some parts are not complied with.</p>	<p>That the sector of information technology and telecommunications is used in various branches of knowledge and economy, therefore it is very useful for communities, especially in the rural sector, for which CONECTANDOTE SAS BIC was created.</p>
Legislation <ul style="list-style-type: none"> -There is a special regulation for this sector or activity. It is governed by Law 1341 of 2009 and Decree 1078 of 2015. -Government regulations. National regulations that are involved. Law 170 of 1994 on technical regulation in Colombia. -Marketing regulations that regulate the sector for products and/or services. At all levels of this sector, regulatory entities are the MINTIC (law 1341 of 2009), Intendencia de Industria y Comercio (law 1480 of 2011 Consumer Protection Statute), Ministry of the Environment (law 99 of 1993 protection and conservation of the environment and renewable natural resources), DIAN, Chambers of Commerce, and at the municipal level the mayor's offices with their dependencies. 	<p>The cumbersome process of paperwork and tabs possible by the entities and audits by the auditing bodies.</p>	<p>The existence of various market niches that require this service; furthermore, once the company is formalised, there are possibilities of contracting with companies from other sectors and the State, which will allow it to grow and reach many communities.</p>
Technological <ul style="list-style-type: none"> - Technological systems or programmes used in this medium. For the development of wireless networking activities, especially the CONECTANDOTE SAS BIC entrepreneurship project, the ubiquiti platform, unms, UISP, winbox, telegram, Excel, DOS, python, anydesk, dreamweaver, and wasap are used. 	<p>The emergence of new technologies, standards and competition from big business.</p>	<p>As an entrepreneurial project aimed at the rural sector, there is the certainty of growing with the communities</p>

-The emergence of new technologies. Structured cabling, fibre optics, satellite internet, VOIP, IPV6.

-Virtual platforms for knowledge in this sector: ubiquiti, unms, UISP, winbox, mintic.gov.co.

-Projections for the future. With the commitment of the team that forms part of the CONECTANDOTE SAS BIC project, the aim is to be a legally constituted company by 2024 with recognition at departmental level and with 560 affiliated clients who are part of the company as active users.

-New forms of production and distribution. Long range wireless networks WWAN, WIFI networks, WIMAX (broadband for WAN networks) with 802,16 standard that allows to cover distances up to 50 Km. Also by means of the Router board and the antennas mechs for the distribution of internet by codes in places of agglomeration like the parks, coliseums, schools and sports centres.

Socio-Cultural

-Changes in tastes or fashions that have an impact on the level of consumption. From the year 2020 onwards, notable changes were generated worldwide and at the same level, tastes in the use of ICTs and these habits have become fashionable or usual behaviour in virtuality and for this reason web platforms are a useful and essential tool for education, medicine and business; this is why internet service is required in homes no longer as a distraction or vanity but as a necessity.

-Beliefs surrounding the sector. The main belief and conviction according to the demands of large and multinational companies is that there are rules and regulations for accessing the service and that when it comes to withdrawing, there is a rigorous process and these beliefs and realities make them elusive and indecisive when it comes to contracting.

-Educational level. The educational level of the communities targeted by the CONECTANDOTE SAS BIC project and its service is mostly low and medium, as it is aimed at the rural sector for strata 0, 1 and 2.

-Growth trends. The rural sector tends to grow in population per family and each family seeks access to the service. In addition, technology is always part of the generations.

-Trends that are expected in the coming years.

Environmental

-Ecological restrictions for this sector. In particular, only the felling of forests or cutting of trees is restricted, which is a minimal possibility that is part of the obstacle for families to access the service.

-Standards on packaging, transport and packaging. The 4E's of logistics are taken as a basis for prevention and with a view to avoiding risk, since the end user is not delegated any responsibility other than the payment of the fee agreed in the service provision contract.

-There are environmental protection rules. Although the CONECTANDOTE SAS BIC project has as a principle the Collective Interest Benefit established by law 1901 of 2018, decree 2046 of 2019, article 2.2.1.15.5 numeral 3.4 Environmental practices in BIC companies, it is also subject to law 99 of 1993 for the protection and conservation of the environment and renewable natural resources.

-Is there a special rule or restriction for this sector? Yes, there is law 1341 of 2009 and decree 1078 of 2015 that regulates the ICT sector in Colombia; in addition to law 170 of 1994 on technical regulation in Colombia and the super Intendencia de Industria y Comercio (law 1480 of 2011, consumer protection statute).

Climate change. In the case of the CONECTANDANDOTE SAS BIC project, climate change has a great influence on the project, as the vast majority of the service and product activity is carried out by RADIO ENLACE, which is the *raison d'être* of the project. Therefore the rains, clouds, winds and devices of other generations and companies do have an impact on the transmission capacity of the frequency; but therefore it is planned to reach 4th and 5th generation devices and alignment techniques with the client with effectiveness and routing parameters and configuration at high DBds (decibels).

Economic Activity.

due to the advantages and guarantees that are offered, as other companies are unaware of the reality.

In the use of the devices by users, variation in economics, voluntary and forced displacement, possible disinterest by some communities and unfair competition.

The arrival of the pandemic at a global level sowed the demand for ICTs as a priority activity of interest in the communities and this became something usual since many communities were unaware of the importance of these tools and to date everyone requires this service and most of them will remain forever.

Weather conditions decrease the frequency and therefore the signal received by the end user or consumer. The growth of trees on the pavements

There are high hills in the topography in all sectors and these have allowed us to pass over the heights of the mountains and make the point to point link with the trunk lines by means of high capacity rockets to reach the towns and villages of those who to date have been the base, the best tool and one of the assets to start with the project.

-Check the ISIC code. Identify at least (2) activities to which your business idea belongs. The Conectándote SAS BIC project develops the following activities which were registered on March 17, 2021 in the chamber of commerce of Pasto, as follows: 4321. Electrical Installations, 6120. Wireless Telecommunications Activities, 6190. Other Telecommunications Activities, 6202. Consultancy, Administration and Computer Installation Activities. It will also carry out related activities in accordance with the provisions of law 1901 of 2018, decree 2046 of 2019, article 2.2.1.15.5, numeral 3.1 Business model, 3.4 Environmental practices, 3.5 practices with the community.

Table 2 explains each of the external variables that affect the venture project.

RESULTS

Results of the market research

Identify the Real Customer

To perform the market segmentation of the Conectándote SAS venture project, BIC will apply the appropriate techniques and a marketing plan to make the community known through its wireless internet service.

The type of market segmentation is local as it seeks to satisfy the need for internet service exclusively to the communities of the municipality of Ipiales Nariño and the former province of Obando, especially the rural sector to the strata 0, 1, and 2.

Geographic: according to the DANE, the municipality of Ipiales is located southwest of Colombia. The Department of Nariño, near the border with Ecuador and 82 kilometers from the city of Pasto, had 145,00 in 2017 and 2021, with approximately 158 759 inhabitants at an altitude of 2892 meters above sea level.

Mediterranean climate: The main economic sectors are agriculture and livestock. The most important crops are potatoes, maize, wheat, and barley (one of the few places in Colombia where these crops still survive).

Demographics: the service is aimed at households with children between 7 and 18 who are studying primary and secondary education as a technological tool to help them develop their activities. The families in these communities belong to strata 0, 1, and 2 and are a minority in strata 3 and 4, with 60 % and 75 % needing access to information and communication technologies.

Socioeconomic: 80 % of the families live in small businesses, fixed-term jobs, agriculture, livestock, and day labor.

Behavioural: these communities manage products and services based on quality and price; therefore, they seek to know in depth the products or services offered to contract one that satisfies their needs. The client's needs are situations, desires, lacks, longings, dissatisfactions, or problems that stimulate the clients' demand for a product (tangible and/or intangible), starting from the pyramid of Maslow; describe them.

Conectándote SAS BIC is a project of emprendimiento that is looking for communities to obtain great longevity.

Needs of self-realisation: since worldwide, all processes, especially education, medicine, and various events, have been taken to virtuality. This is where the tools of information and ICT have become a necessity of primary character and where people can achieve their goals, solve their problems, and overcome and achieve personal and family development.

Social needs: through this service, families can interact and relate to different people from other places, whether they are family members or friends, and form part of different groups in society and thus feel part of the development of activities of collective interest. Security needs. In this section, we will take into essence the importance of covering this need with the provision of this service because it allows communities and families to have access to technological tools without having to go to distant places either to make a medical appointment, fill out a form and be instructed to acquire knowledge of various processes avoiding expenses, time and risks.

The service is aimed at households with children between the ages of 7 and 18 who are studying primary and secondary education as a technological tool of great help for the development of their academic activities and to people with a desire for improvement who wish to train and undertake. The families in these communities belong to strata 0, 1, and 2 and are a minority in strata 3 and 4, and between 60 % and 75 % of them need access to information and communication technology. Some 80 % of the families live in small businesses, fixed-term jobs, agriculture, livestock, and day labor. These communities manage products and services based on quality and price; therefore, they seek to know in depth the products or services offered to contract one that meets their needs.

For the development and analysis of the value proposition, it has been taken into account that even though we are in the fourth industrial revolution, in which the use of new technology predominates in all actions of

society, it is something that is required to improve connectivity in information; there are still regions where these tools are alien and unattainable for the communities in many regions of the country.

The entrepreneurial project called Conectándote SAS BIC was created to reach the rural sector of the municipality of Ipiales Nariño, the former province of Obando, and surrounding areas with residential internet service by RADIO LINK through the use of long-range devices up to 40 kilometers with DOT to DOT links for greater effectiveness and environmental care, linking these communities with global information that is useful in their daily lives, for this has been taken as a basis the slogan that identifies Conectándote SAS BIC. Technology without limits at your fingertips....! and its Value Proposition. INTERNET FOR ALL allows families, without cumbersome requirements and at a low cost, access to the service in an agile and timely manner; in the same way, technical assistance when required.

Competition: rivalry between companies: competition in the market. In our department, several telecommunications companies offer internet service and access to information technology tools, including multinationals such as Movistar, Claro, Tigo, Azteca Comunicaciones, Intercom, Internet, HughesNet, Media Commers, and their Colombia network, and at the south-west and departmental level, such as Sistemas Palacios, Doble Clic, IP Technologies, unimos, Sur conexiones, which is a minimum percentage provide the service only to the urban sector, leaving mostly isolated families in the villages and hamlets without this valuable and important service; This is without registering the various people who informally provide this service.

Analysis of the identified competition: for the analysis of the competition, we have taken three companies that offer similar services to Conectándote SAS BIC such as Unimos SA, Movistar SA, and Sur Conexiones SAS, using as a tool the competitive profile matrix MPC obtaining the following results.

1. Unimos SA.
2. Movistar SA.
3. Sur Conexiones SAS.

Matriz del Perfil Competitivo MPC de CONECTÁNDOTE SAS BIC									
Conectándote SAS BIC				Unimos SA		Movistar SA		Sur Conexiones SAS	
FACTORES CLAVE	PESO RELATIVO	Calificación	Peso ponderado	Calificación	Peso ponderado	Calificación	Peso ponderado	Calificación	Peso ponderado
Participación en el									
1 mercado	0.20	3	0.60	3	0.60	1	0.20	1	0.20
2 Precios	0.02	3	0.06	1	0.02	2	0.04	3	0.06
3 Posición financiera	0.30	2	0.60	3	0.90	4	1.20	4	1.20
4 Calidad del producto	0.10	4	0.40	2	0.20	1	0.10	3	0.30
5 Lealtad del cliente	0.10	2	0.20	3	0.30	1	0.10	3	0.30
6 Imagen de marca	0.10	2	0.20	3	0.30	4	0.40	2	0.20
Localización de									
7 planta	0.08	4	0.32	2	0.16	2	0.16	2	0.16
8 Innovación	0.10	4	0.40	2	0.20	3	0.30	3	0.30
Resultados	1.00		2.78		2.68		2.5		2.72

Figure 2. Competitive Profile Matrix

Figure 2 evaluate the competition according to key factors and generate results with relative weights.

Marketing strategies

For this section, we will take the primary factors and variables that will allow the step-by-step analysis:

Sales strategy

Concept of product or service

A service can be defined as something that manages to supply a need to a person, family, or community. The service is intangible and can neither be seen nor touched. An Internet service is one that allows access to information through the use of information technologies and special devices designed especially for this function.

Brand: INTERNET FOR ALL

Name: CONECTANDOTE SAS BIC

Logo:



Figure 3. Logo

Slogan: technology without Limits at Your Reach...!

Design:

- Product design or service features: the service offered is residential and business wireless Internet via link beam.
- Functions or benefits: to allow access to ICTs that will enable the development of educational, academic, business, and research tasks through the web, enabling communities to improve knowledge and quality of life.
- Uses or applications: for family and personal business use, either through mobile devices, personal computers, or internet rooms.

Distribution strategy

- Sales advisors: since the beginning of the development of the Conectándote SAS BIC project, the VOICE to VOICE method has been used as a basis since, in the rural sector, all the people know each other, and once one or two families take up the service, they are the ones who have been in charge of informing the neighbors in the sector.
- Other: secondly, they handle the cards with the numbers they call when they need the service.
- Online distribution: Website. www.conectandote.com.co. Social networks: the WASP service and mobile phone calls are used to communicate with customers and those who wish to have the service installed.
- Transport: the devices and materials are received by land from Bogotá or Cali, cities where Ubiquiti, Mikrotik, Tenda, Tplink, and mercusis are suppliers.
- Packing, packaging: to carry out the installation, the devices arrive first by ship until they reach Colombia, then by transporters, and finally by land until they reach the end customer, where the installation is carried out. Plus, the signal service uses high-range antennas in point-to-point trunks with the CLIENT-SERVER link beam system (Access Point-Station).
- Describe the app, if applicable, and explain how it will be implemented.
- Description of the platform: UBIQUITI, MIKROTIK, and WINBOX platforms are used to configure the stations and devices that provide service to the customer.
- How inventories will be kept (if any). It is carried in the Excel program
- As will be the process of orders: the registration was made to the companies, and each time that requires devices is made the quote to a consultant, and the invoice then will be consigned to the account; we send the guide number, and in 3 days, the order arrives to the carrier or the address established.
- Payment methods: Sis made through the bank or by PSE from the Bancolombia savings account.

Price strategy

1. Price of the competition: it has been noted that the competition maintains similar prices, but they cover few market niches and are not committed to the community, which is why customers do not accept their service. For example, the 5 MB Residential plans cost between \$50 and \$60 000, which most families buy.
2. The price the customer is willing to pay is between \$45 000 and \$70 000 for residential plans.

Producto o Servicio				
Plan de internet Empresarial 10 MB (\$70.000)				
MATERIAS PRIMAS				
	Unidad de Medida	Valor Unitario	Cantidad por Unidad	Total costo Unitario
Cable UTP categoría 6 ex	metros	\$ 544	15	\$ 8.16
Cable UTP categoría 6 interior	metros	\$ 472	4	\$ 1.89
Chazo plástico polipropileno con puntilla	unidad	\$ 100	4	\$ 400
Amarra corredilla plástica 200 mm	unidad	\$ 55	6	\$ 330
Cable eléctrico dúplex calibre 2x10 <u>centel</u>	metro	\$ 1,300	6	\$ 7.80
Cinta aislante NITO	metro	\$ 160	1	160
Grampa plástica 2mmx20mm con puntilla	unidad	\$ 26	15	\$ 390
Tornillos 6 mm	unidad	\$ 30	4	\$ 120
Cinta adhesiva doble cara 5mm	centímetro	\$ 3	10	\$ 30
Conector de red RJ45 blindado categoría 6	unidad	\$ 549	4	\$ 2.20
Mano de Obra por instalación	unidad	\$ 10.00	1	\$ 10.00
Transporte dispositivos	unidad	\$ 10.00	1	\$ 10.00
TOTAL costo Unitario (única vez) del servicio internet residencial				\$ 41.47
Precio de venta (mensual) del servicio Internet residencial				\$ 70.00

Producto o Servicio No.1				
Plan de Internet Residencial 5 MB (\$60.000)				
MATERIAS PRIMAS	Unidad de	Valor	Cantidad	T/Coso
	Medida	Unitario	por unidad	Unitario
Cable UTP cat 6 ex	metros	\$ 544	15	\$ 8.16
Cable UTPcat 6 int	metros	\$ 472	4	\$ 1.89
Chazo plástico polipropileno con puntilla	unidad	\$ 100	4	\$ 400
Amarra corredilla plástica 200 mm	unidad	\$ 55	6	\$ 330
Cable eléctrico dúplex calibre 2x10 centel	metro	\$ 1,300	6	\$ 7.80
Cinta aislante NITO	metro	\$ 160	1	160
Grampa plástica 2mmx20mm con puntilla	unidad	\$ 26	15	\$ 390
Tornillos 6 mm	unidad	\$ 30	4	\$ 120
Cinta adhesiva doble cara 5mm	centímetro	\$ 3	10	\$ 30
Conector de red RJ45 blindado cat 6	unidad	\$ 549	4	\$ 2.20
Mano de Obra por instalación	unidad	\$ 10.00	1	\$ 10.00
Transporte dispositivos	unidad	\$ 10.00	1	\$ 10.00
TOTAL costo Unitario (única vez) del servicio N1 internet residencial				\$ 41.47
Precio de venta (mensual) del servicio No 1 Internet residencial				\$ 60.00

Figure 4. Cost and selling price

Market development: it is a strategy of expansion that deals with the growth of a company from the conquest of new markets; starting from this concept, Conectándote SAS BIC has taken as a base this strategy since it knows the needs of the market to which the service is directed as it is the rural sector where the other companies have not put the look. This is why we use a platform that allows us to be in complete contact with the customer to give solutions to their concerns and thus get them loyalty to our services. This has allowed us to grow through the method of VOICE to VOICE; a client has brought us 10 and 15 customers in each sector. In another instance, we have applied the collaborative process with (alliances) landowners in the rural industries and hotels in the urban sector, allowing us to reduce costs and grow in exchange for the knowledge and service provided. Finally, we are constantly learning the platforms and software of each new device to know its operation and scope in depth to maintain the quality of service.

Figure 4 calculates the necessary cost incurred for a customer's installation and the selling price, both business and residential.

Communication Strategy

To establish communication with customers, different important media are used, such as:

Trade fairs: we participate in all events where the community is integrated to publicize the services and products offered:

- Billboards: these are intended to be placed in the two capitals (Ipiales and Leiva in the urban center) to publicize the company's name, numbers, e-mails, plans, costs, and other details.
- Flyers: from the date the MINTIC registration is obtained, flyers will be produced to publicize the different plans and their prices.
- Others: personal cards.

Online channels

- Facebook: this has been and will be a means to publicize each sector's success stories and achievements by sending photographs and videos of the towers and civil works.
- Wasap: this has always been used to communicate with clients in different situations.
- YouTube: i uploaded the videos required for each program subject through the university's academic activities.
- Blog: under construction.
- Website: (conectándote.com.co).
- Hospot.es: conectándote.com.co linked to personal email.

Market mix budget

Sales Strategy: to reach the sectors and especially the families that require internet service, a variety of processes, devices, and tools are needed, as follows:

Raw material costs \$439 155 per user, taking into account that there is then a period of 5 years' useful life to receive income from the monthly payment of the fee established in the agreement.

In labor, the cost is \$1 170 587 for payment to a monthly worker, taking into account that several installations

and improvements can be carried out by one person during the calendar month covered by this value.

Indirect manufacturing costs per year are \$1 849 140, which allows the company to cover various activities.

Distribution strategy: sales advisors, online distribution, and transport.

Price strategy: to calculate the price to the customer, raw materials, transport, labor, and an increase in projected profits are considered. The cost per customer, whether residential or business, is \$41 474, and the value paid is \$60 000 and \$70 000 per month.

Communication strategy. Advertising expenses, purchase of uniforms, flyers, logo design, and home visits, among others. Total value of \$1 848 000.

Commercial alliances strategy: to achieve the proposed objective, the Conectándote SAS BIC team maintains direct communication with distributors of devices required to reach customer service, such as Ubiquiti, Mimosa, Mikrotik, Tenda, Tp-link, Mercusis, and hardware stores, among others. It also communicates with the owners of hotels, buildings, and land with high topography.

Sales projection

PROYECCION DE CLIENTES CONECTANDOTE SAS BIC 2020-2024							
Y=A+BX		Y	633	CLIENTES AL 2024			
		A	374	633	620		
B=YX/SUMAXm2		B	86				
N	AÑOS	Y	X	Xm2	YX	Y''	
1	2020	203	-2	4	-406	-114	
2	2021	294	-1	1	-294	259	
3	2022	368	0	0	0	633	
4	2023	442	1	1	442	1006	
5	2024	561	2	4	1122	1380	
SUMAS=3		1868	0	10	864	3164	

Figure 5. Projected Revenues and Expenditures 2020-2024

Figure 5 allows to know the number of clients per year and the projection to 2024.

Table 3. Production Budget for Connecting you SAS BIC 2020-2024

Raw material	Cant	Price	Subtotal	Inflation	
	12	544	6531	261	4 212 262
utp category 6 outdoor cable	1	472	472	19	304 501
utp category 6 cable Indoor	1	160	160	6	103 192
insulating tape	6	30	179	7	115 317
1 1/4" screws	6	19	115	5	74 298
1/4" in. screws	10	26	260	10	167 687
plastic clips	4	549	2196	88	1 416 310
shielded RJ-45 connectors	3	1300	3900	156	2 515 304
electrical cable	5	55	275	11	177 361
Plastic clamps	1	341 000	341 000	13 640	219 927 868
19 dBi nb-m5 nano bean	1	60 000	60 000	2400	38 696 986
Tenda N300 two antenna router	1	35 000	35 000	1400	22 573 242
POE 24V 0,5ª POE		439 155	450 088	18 004	290 284 327
TOTAL MAT/PRIME	figures	Value	Subtotal	INFLATION	
Labour	4	908 526	43 609 248	1 744 370	45 353 618
Salaries	4	106 454	5 109 792	204 392	5 314 184

Transport allowance	4	109 023	5 233 110	209 324	5 442 434
Pension (salary) 12	4				-
Tax contributions	4	36 341	1 744 370	69 775	1 814 145
Family Compensation Fund (CAFAM) 4 % Cesanties (salary + Transport allowance)*8,33 % Pension (salary + Transport allowance)	4	4258	204 392	8176	212 567
Severance payments (salary + Transport allowance)*8,33 % Interest on severance payments (salary + Transport allowance)	4	4361	209 324	8373	217 697
Interest on severance payments (salary + Transport allowance) 1 % ARL (Risk Management)	4	-	-	-	-
ARL (Occupational Risks Administrator) level II \$1,044 % Service premium (salary + Transport allowance)*8,33 % Service premium (salary + Transport allowance)*1,044	4	1454	69 775	2791	72 566
Service Bonus (salary + Transport Allowance) 8,33 % Vacation (salary) 4,17 %	4	170	8176	327	8503
T/LABOUR		1 170 587	56 188 186	2 247 527	58 435 714
CIF	CANT	Value	Subtotal	INFLATION	
PUBLIC SERVICES First year (year 2020)	12	30 000	360 000	14 400	374 400
Water and sewerage	12	100 000	1 200 000	48 000	1 248 000
Electricity	12	500 000	6 000 000	240 000	6 240 000
Internet service Internexa			-	-	-
LEASES First year (year 2020)	12	400 000	4 800 000	192 000	4 992 000
Lease of office space	12	30 000	360 000	14 400	374 400
Lease of space for towers	12	50 000	600 000	24 000	624 000
Warehouse lease	1	30 000	30 000	1200	31 200
Logo Design	4	5000	20 000	800	20 800
Caps	4	6000	24 000	960	24 960
T-shirts	4	45 000	180 000	7200	187 200
Jeans	4	60 000	240 000	9600	249 600
Jackets	8	3000	24 000	960	24 960
Prints	3000	50	150 000	6000	156 000
Surveys	4	40 000	160 000	6400	166 400
Payment for pollsters	4000	90	360 000	14 400	374 400
Flyers	4	40 000	160 000	6400	166 400
Delivery of flyers	10	50 000	500 000	20 000	520 000
Installation of substation towers			-	-	-
Notary fees First year (year 2020)	1	280 000	280 000	11 200	291 200
Legal fees for chamber of commerce registration	1	100 000	100 000	4000	104 000
Value of preparation of financial statements	2	70 000	140 000	5600	145 600
TOTAL CIF		1 839 140	15 688 000	627 520	16 315 520
			632,8		
units to be produced		633			
estimated sales		2	2		
ending inventory of finished goods		0			
ending in-process inventory		2	2		
beginning inventory of finished goods		0			
TOTAL PRODUCTION BUDGET 365 035 561					
TOTAL PRODUCTION BUDGET 365 035 561					
UNIT COST		576 858			
SELLING PRICE		824 082	620	Customers to 2024	
T/SALES/PRONOSTIC		521 479 373	104 295 875	Income per year	

Table 3 provides the total costs of raw materials, labor, indirect costs, sales, and income from 2020 to 2024.

Once the estimates of the projection for the 5 years (2020-2024) and taking into account the production budget, we can see that following the guidelines, in the year 2024, we will have 620 customers who will be part of our company as users of internet service and taking into account the production costs, labor, CIF and administrative expenses will get an income per year of \$104 295 875 value taken from the income statement of the last period.

Operating module

Technical sheet

Table 4. Operation Module Technical Data Sheet

Specific service	Service: it is an intangible that has the function of providing an activity that people need to satisfy their needs. CONECTÁNDOTE SAS BIC is an entrepreneurial project (WISP or ISP) that offers unlimited wireless internet service to the communities of the Municipality of Ipiales and the former province of Obando, especially the rural sector of the 0,1 and 2 strata, through RADIO LINK with the use of long-range devices up to 40 kilometres with POINT to POINT links for greater effectiveness and environmental care.
Production sector	Tertiary or Service Sector Enterprises: their main element is the human capacity to perform physical or intellectual work. This includes transport companies, banks, commerce, insurance, hotels, consultancy firms, etc., education, restaurants, etc. Its economic activity belongs to the tertiary or service sector (wireless residential Internet via radio link) related to information technologies and telecommunications, commercial activity of social community interest aimed at regional development.
Trade name	This is the name by which the company or establishment is identified. From its conception to its existence, it will be identified with the name Conectándote SAS BIC (Public Limited Company with Collective Interest Benefit (Public Limited Company with Collective Interest Benefit), as a company name and trade name).
Measurement of the service	<p>The service offered is unlimited internet signal and is specified to the user with the unit of Megas (MB) according to the plan that the user chooses, from the following scale:</p> <ol style="list-style-type: none"> 1. 5 MB residential plan for \$60 000 per month with capacity for households with 1 to 3 floors and for the use of 1 to 6 devices for normal household activities. 2. 10 MB residential plan for \$70 000 per month for 1 to 3 storey homes and for use of 1 to 6 devices and for household activities and other more extensive activities such as video editing, internet room, video games television, video conferencing, code sales. 3. Business plan of 50 MB for \$200 000 per month with capacity for buildings with 3 floors and up to 10 floors and for use of 1 to 100 devices and for home activities and others of greater scope such as video editing, internet room, video games television, video conferences, sale of codes and frequent customers such as restaurants, hotels, businesses, banks, schools and others. <p>Service measurement: to measure the service CONECTÁNDOTE SAS BIC has taken as experience the following factors:</p> <p>Quality of service average term for the reason that in rural areas there is the problem of deficiency of electricity and as part of the solution has been taken as a preventive measure the use of UPS, gasoline-based power plants and the implementation of solar panels with battery system and voltage controllers.</p> <p>Response times: in order to respond to customers, microtik, ubiquiti, mimosa, unms, uisp, winbox, VPN and direct communication with customers are used.</p> <p>Process improvement: the central points of the stations and trunks are being improved step by step and using devices with greater capacity and reach for customers who, for certain reasons already identified, suffer signal problems such as attenuation or total loss of service.</p> <p>Level of care: to date, it has been classified as excellent, as it has a small number of customers and has the knowledge and experience necessary for the purpose for which this venture was created.</p> <p>Customer orientation: each client who installs the internet service is given an explanation of the handling of the devices, prevention, use of the service and the lines of communication for the solution of possible difficulties that may arise, which has given excellent results and has reduced costs for both the client and for the members of Conectándote SAS BIC.</p> <p>Service coordination: it can be classified as regular as it does not have to date with a manual of functions, an organizational chart, an inventory and sufficient capital to meet the needs of families and communities that request our service.</p> <p>PQRSF: at the moment we have wasap where customers can write and send coordinates and photos of the situation when there is a service failure in their home, telegram that allows us to detect the fault seconds after the failure occurs, UISP ubiquiti that shows us the devices that are outside the network and the failure that presents and VPN that allows us to connect to the different network segments to perform service improvement and recovery.</p> <p>Level of customer satisfaction: to date it is good and there is a good image of the community and users towards the service, hoping to maintain and improve every day.</p>

Table 4 records the name of the service, the sector to which it belongs and the measure with which the service is measured.

Description of the Process

Service Flow Chart

To represent the processes of the origin and sequence of the service that Conectándote SAS BIC offers to the users, it will be demonstrated by means of a flow diagram and illustrative graphs, as follows:

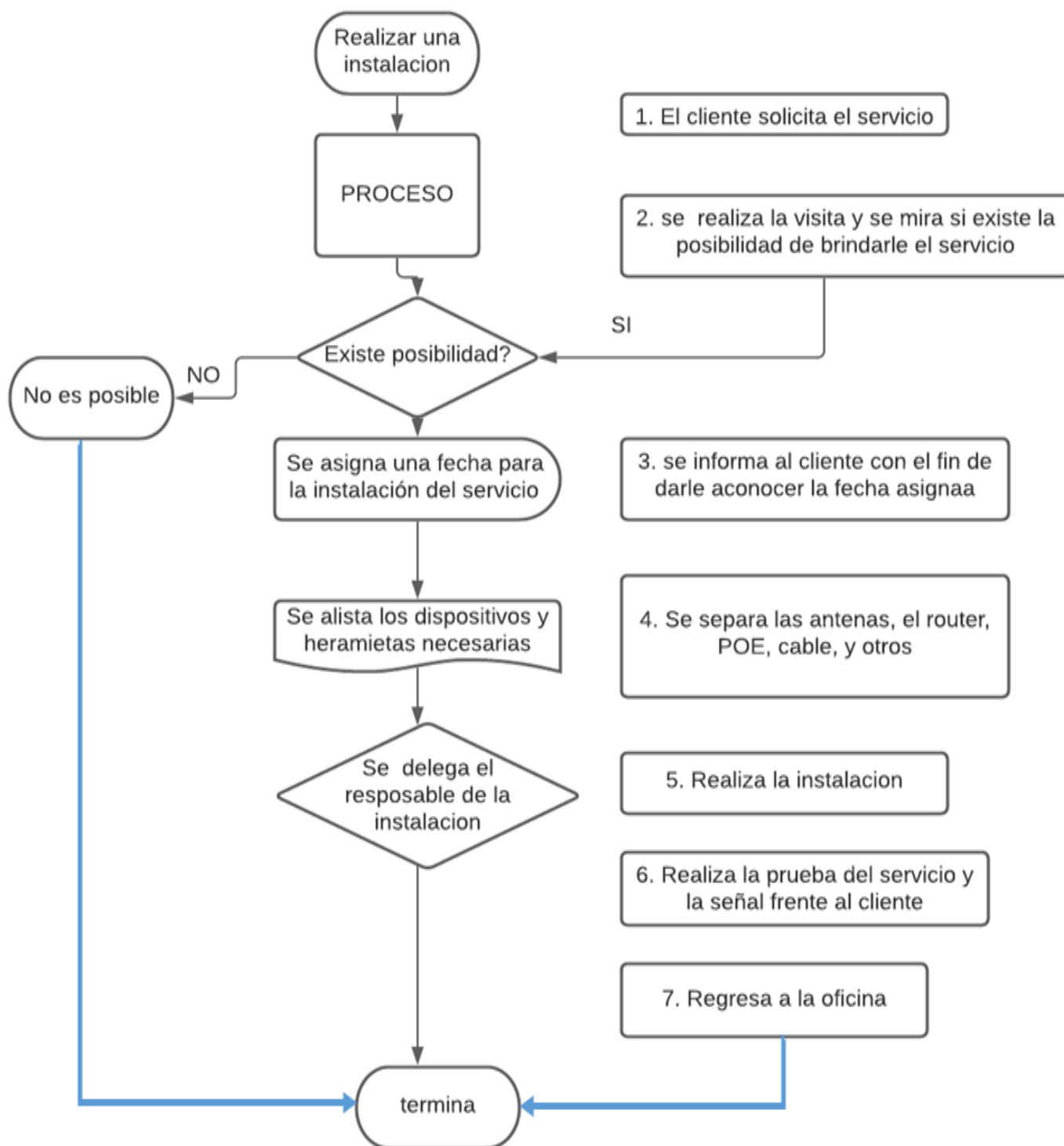


Figure 6. Flow chart of the service

Service flowchar: it represents the route and steps to follow in the process of a service installation.

Development Status

Table 5. General Description of the Service

General Description of the Service			
Technical characteristics of the service			
Unit	Modality	Capacity	Cost Per Month
Megabytes MB	Residential	5 to 10 MB, for households with 1 to 3 floors and for use of 1 to 6 devices that will serve for normal household activities	\$60 000
Megabytes MB	Residential	10 to 20 MB, for households with 1 to 3 floors and for use of 1 to 6 devices and for household and larger activities such as video editing, internet room, video games television, video conferencing, code selling.	\$70 000
Megabytes MB	Corporate	50 MB, capacity for buildings with 3 floors and up to 10 floors and for use from 1 to 100 devices and for home and other larger activities such as video editing, internet room, video games television, video conferencing, code sales and frequent customers such as restaurants, hotels, businesses, banks, schools and others.	\$200 000
Special conditions			
<p>It is an entrepreneurial project that is well regarded by the community, users and customers who have the opportunity to learn about our work because we are a team made up of the family and we have a diversity of knowledge and have demonstrated the ability and service to households in the rural sector not only for what it was created but also our principles have generated confidence of families and individuals. In another instance, to date we have managed to carry out activities of the social object without the help of the State and entities that support entrepreneurship and support the creation of companies and employment generation; in addition this idea has allowed us to explore levels of knowledge in various fields that have been and will be of great enriching value for life and social service.</p> <p>Handling, temperature and maintenance. It is a constant task related to handling and maintenance, as every time there is a fault in the trunks, repeaters or in an end user, these actions are required.</p>			
Composition			
<p>In order to provide the end user with the service, various materials and devices are required that are already prepared, but it is up to us to use what is necessary for each client. Among them we have: UTP cable category 6 ex, UTP cable category 6 interior, Polypropylene plastic cable tie with lace, Plastic sliding tie 200 mm, Duplex electric cable calibre 2x10 centelsa, Insulating tape NITO, Plastic clamp 2mmx20mm with lace, Screws 6 mm, Double-sided adhesive tape 5mm, Shielded RJ45 network connector category 6, Labour for installation, an antenna, a router and a POE.</p>			
Other			
<p>Response time and useful life. Since the beginning of the project in the area, we have taken customer satisfaction as a priority with the aim of achieving loyalty, and that is why the response time to their requests, if not in less time when requested, are before because it has pending the platform where we show the signal loss and antenna downtime. So we make decisions as soon as possible.</p> <p>As far as the useful life is concerned, our purpose is to change the devices every time new devices of better generation and range appear on the market in order to prevent other companies from interfering and causing signal loss.</p> <p>In addition it is worth clarifying that the devices used to develop the social object to take the service to the user has a useful life of 10 years approximately as long as it does not suffer damages different to its technical card of manufacture.</p> <p>Conectándote SAS BIC like all companies is governed by some rules that regulate it, but it has some special level according to its origin for what it was created such as: law 1341 of 2009 and decree 1078 of 2015 as ISP or WISP, law 1780 of 2016 as youth entrepreneurship, law 1901 of 2019 as BIC entrepreneurship.</p>			

Table 5 record the unit of the service, the modality and the cost.

Prototype and evidence



Figure 7. Service prototype

Prototype of the service: image that allows to visualize the general scheme of the prototype and some moments of the development process of the CONECTANDOTE SAS BIC venture.



Figure 8. Image of Evidence

Image to showcase some members of the entrepreneurial team and events organised with the communities.
<https://youtu.be/9UbW2DmQqgs>: link to one of the videos as proof of the experiences of the process of improvement in entrepreneurship.

Production plan

Tabla 6. Proyección de clientes						
Customer projection by connecting you SAS BIC 2020-2024						
Y=A+BX		Y	633		Costumers AL 2024	
		A	374	633	620	
B=YX/SumsXm2		B	86			
N	Years	Y	X	Xm2	YX	Y''
1	2020	203	-2	4	-406	-114
2	2021	294	-1	1	-294	259
3	2022	368	0	0	0	633
4	2023	442	1	1	442	1006
5	2024	561	2	4	1122	1380
Sums=3		1868	0	10	864	3164

Table 6 record and calculate the customer projection process to 2024. According to the projection process for 2020-2024, Conectándote SAS BIC aims to reach 620 customers by the end of the period.

Investment requirements

Place of operation

For the operation of Conectándote SAS BIC, physical places of operation are required, as it is necessary to maintain the laboratory spaces where the central devices are organized, where the internet lines of the leading providers arrive, and which allow the antennas, router boards, regulators and various devices to receive the signal, balance it and be routed to each trunk and network segment, in addition to the location of the towers where the different antennas that generate the long-range links are supported.

About the map or plan of the distribution of the plant, the technical conditions of the infrastructure of the site of operation of the company, the location defined for the land use plan, and other related regulations, it is fully known that it is a project of entrepreneurship and is supported and backed by the people who have decided to help that are owners of hotels and buildings where these elements are and therefore already have the standards required by the State and the law.

Organisational module: Organizational Strategy

SWOT nuance

For the development of the analysis, the MEFE, MEFI, and DOFA matrices with their respective strategies have been used as a basis, as follows:

Table 7. MEFE and MEFI Matrix			
MATRIZ MEFE y MEFI de CONECTANDOTE SAS BIC			
Opportunities	Weighting	Value	Total
1. Existence of free market niches	0,35	4	1,40
2. Trends in the use of technology	0,25	3	0,75
3. Purchasing power of rural customers.	0,04	4	0,14
4. People's interest in joining	0,23	4	0,92
5. Friendships and credibility for communities	0,08	4	0,31
6. Ease of access to communities	0,30	3	0,90
	1,24		4,42
Subtotal Opportunities			
1. Competition in the rural market	0,06	2	0,13
2. Possibility of free State service	0,10	1	0,10

3. Price instability in our country.	0,02	2	0,04
4. Unfavourable economic situation in the country	0,04	1	0,04
5. Conflict between armed groups and state forces	0,02	2	0,04
6. New legal standards	0,01	1	0,01
	0,24		0,34
Total Threats	1,00		4,76
	Weighting	Value	Total
1. Pioneers in innovative service for the rural sector.	0,03	4	0,10
2. Strategic positions	0,02	3	0,06
3. Lower prices than competitors.	0,20	4	0,80
4 Possibility of implementing strategies in the urban sector	0,15	3	0,45
5. Commitment of staff to growth and service	0,21	4	0,84
6 Knowledge and experience in the structure and assembly of networks.	0,25	4	1,00
	0,86		3,25
Subtotal Strengths			
1.Poor consumer image.	0,04	2	0,08
2. Low capital	0,04	1	0,04
3. Poor organisation of tasks and functions	0,02	2	0,04
4. Lack of communication and capacity with first-tier distributors	0,02	1	0,02
5. Lack of own means of transport	0,02	2	0,04
6. Little time for the company	0,02	1	0,02
	0,15		0,23
Total Weaknesses	1,00		3,48

Table 7 records by means of a matrix the internal and external evaluation factors of the venture.

MATRIZ DOFA y Estrategias de CONECTANDOTE SAS BIC		
	FORTALEZAS	DEBILIDADES
MATRIZ DOFA	1. Pioneros en el servicio innovador para el sector rural.	1. Poca imagen frente al consumidor.
	2. Posiciones estratégicas	2. Escaso capital
	3. Precios inferiores al de la competencia.	3. Poca organización de tareas y funciones
	4. Posibilidad de aplicar estrategias en el sector urbano	4. Falta de comunicación y capacidad con distribuidores de primer nivel
	5. Compromiso del personal con el crecimiento y el servicio	5. Carencia de medios de transporte propio
	6. Conocimiento y experiencia en la estructura y montaje de redes	6. Poco tiempo para la empresa

OPORTUNIDADES	ESTRAGIA FO	ESTRATEGIA DO
1. Existencia de nichos de mercado libres	F3, O1. Mantener los precios siempre inferior de las empresas que ofrecen el mismo servicio, para lograr llegar a mas comunidades donde requieren este servicio y así ganar más clientes	D6,O1. Dedicar más tiempo del actual a la empresa, para cubrir más nichos de mercado y así incrementar el número de clientes
2. Tendencias al uso de la tecnología		
3. Poder adquisitivos de los clientes del sector rural.		
4. Interés de las personas por asociarse	F6,O2. Aplicar el conocimiento y la experiencia, para motivar, orientar e inclinar a las personas y familias en el uso de las herramientas de las tecnologías de la información, para lograr que adquieran el servicio y mejoren el nivel cultural	D1,O2. Realizar publicidad impactante por diferentes medios, donde se resalte el nombre de la empresa, para hacer que las comunidades conozcan nuestros servicios y así motivarlos a ser parte de la organización como clientes
5. Amistades y credibilidad por las comunidades		
6. Facilidad de acceso a las comunidades		
AMENAZAS	ESTRATEGIA FA	ESTRATEGIA DA
1. Competencia en el mercado rural	F3,A1. Ofrecer siempre el servicio de calidad y a bajos costos, para que las comunidades se afilien y sean nuestros clientes fidedignos por siempre sin importar que lleguen otras empresas al sector	D1,A6. Realizar publicidad donde resalte además de los servicios que ofrecemos, las normas y decretos que rigen nuestras actividades; este objetivo nos permite estar investigando día a día los cambios y reformas reglamentarias de las telecomunicaciones en Colombia y permanecer actualizados constante
1. Competencia en el mercado rural		
2. Posibilidad de servicio Estatal gratuito		
3. Inestabilidad del precio en nuestro país.		

4. Situación económica del país desfavorable	F6,A6. Dar buen uso al conocimiento que se tiene e investigar cada día sobre las reformas Estatales en lo relacionado con las normas legales vigentes, para mantener siempre actualizada la empresa con las actividades que exige el	D6,A1. Dedicar mas tiempo de lo actual para poder competir con las empresas que están ofreciendo el servicio en el sector rural y así lograr permanecer y que en vez de que los clientes nuestros se retiren, más bien otros de la
5. Conflictos de grupos armados y fuerzas Estatales		
1. 6. Nuevas normas legales	Ministerio de Comunicaciones y las TICs y evitar contratiempos y sanciones, y de esta forma ganar credibilidad en	competencia hagan parte de nuestra organización
<hr/>		
los sectores y comunidades donde se pueda hacer presente		
<hr/>		

Figure 9. SWOT Matrix and Strategies

Figure 9 the matrix records the venture's weaknesses, opportunities, strengths, and threats and also applies improvement strategies.

Support Organisations

As is well known, to start an idea, various sectors must provide a voice of impulse, guidance, logistics, resources, and other factors that support the purpose of those seeking to undertake. This is how in the entrepreneurship project called CONECTANDOTE SAS BIC has required those, such as: the centre progresses with guidance, training and continuous advice in the teaching of linear processes for the structures of the project for more than 2 years, the teachers of the faculty with the curricular teaching in each of the semesters from the 4th semester of the career and in the advice and assistance when required, university welfare Pasto regional centre with the economic support of the scholarship to continue studies and get to fulfill the dream of making a degree project in the form of entrepreneurship, international entities with seminars and wibenars both in training and in competitions, the owners of the land, The community leaders with the guidance and dissemination of the service, the clients with the reception of the service and its timely payment, the clients committed to receive the payments in order to reduce expenses to the clients of the sector and to the members of the project for collections, the financial institutions with the granting of credits to cover the start-up expenses, and the members of the entrepreneurial team with their dedication, commitment, knowledge and tireless hard work to make the dream of creating a company a reality.

Organizational Structure

Legal Aspects

Type of company: Simplified Joint Stock Company (SAS) with Collective Interest Benefit BIC.

According to the classification of economic activities and uniform international industrial classification ISIC, Conectándote SAS BIC belongs to the services and telecommunications sector and includes in its business project activities 4321. Electrical Installations, 6120. Wireless Telecommunications Activities, 6190. Other Telecommunications Activities, 6202. Consultancy, Administration, and Computer Installation Activities.

Procedures for the formation of the company. The first step is the decision to include the partners and the number of their shares, then the detailed organization of the minutes according to the rules governing SAS BIC companies, authentication of the minutes and recognition of signatures of the partners before the notary,

registration in the chamber of commerce to obtain the (commercial register) and its respective NIT, registration of the RUT in the DIAN, sending the supports to the Ministry of Communications to get the registration of MINTC for being Internet Service Providers (ISP).

Tax, commercial, and labor implications associated with the type of company. According to the kind of company, SAS is part of group 3 of the IFRS (micro-enterprises), but because they are companies, they belong to the standard regime and must pay taxes; in this case, the central tax to be paid is the renewal of the commercial registration every year, the MINTIC registration every 5 years and 0,060 % of gross income to the Ministry of Information Technology and Telecommunications MINTIC.

Rules and procedures on the commercialization of their products. According to the BIC, companies must maintain environmental practices throughout the development of the social object and practice with communities, something that is at the heart of the project CONECTANDOTE SAS BIC; they comply with what the Ministry of Information Technology and Telecommunications requires, and the super intendency of industry and commerce related to consumer protection.

Special laws to its economic activity. As a youth enterprise, it is governed by Law 1780 of 2016; as a BIC Company Law 1901 of 2018, Decree 2046 of 2019; and as an ISP or WISP company, it is governed by Law 1341 of 2009 and Decree 1078 of 2015, about the modernization of the ICT sector and the distribution of competences, access to ICT, the deployment of infrastructure and the use of the spectrum, Law 1978 of 2019 governs it, about technical regulation in Colombia it is governed by Law 170 of 1994 on consumer protection, Intendencia de Industria y Comercio, Law 1480 of 2011 consumer protection, protection and conservation of the environment and renewable natural resources, Law 99 of 1993.

Administrative Costs

Personnel expenses: record the estimated payments for salaries (salary, social benefits, subsidies, parafiscal), piecework payments or wages, and fees to be canceled once the company starts operating, identifying the values per position every month during the first year.

Start-up expenses (Pre-operational): list and quantify the expenses for the company's start-up and operation, such as registrations, certificates, permits, licenses, studies, etc.

Annual Administrative Expenses: record the estimated administrative expenses, valued annually. Example: utilities.

Financial module

This is the process through which the viability of a project is analyzed. Based on the necessary economic resources and the total cost of the production process. Therefore, it allows us to see if the project we are interested in is viable in terms of economic profitability. It does not matter if it is an entrepreneur with a business idea, a company that wants to create a new business area, or even an investor who is interested in putting his money into a company in order to obtain profitability.

Fixed Asset Investment

Based on all the specifications of the technical analysis, the amounts, moments of investment, and tax regime applicable to the following Concepts (machinery, plant, and equipment requirements) have been determined.

To develop this critical project and consider the difference between the plans offered and those accepted by customers, as shown in the following table, various equipment and materials are required to provide excellent service.

1. 5 MB residential plan for \$60 000 per month for 1 to 3-storey homes and for use of 1 to 6 devices for normal household activities.
2. 10 MB residential plan for \$70 000 per month for 1 to 3-storey homes and for use of 1 to 6 devices and for home and more extensive activities such as video editing, internet room, video games, television, video conferencing, code sales, etc....
3. 50 MB business plan for \$200 000 per month with capacity for buildings with 3 floors and up to 10 floors and for use of 1 to 100 devices and for home activities and other larger activities such as video editing, internet room, video games, television, video conferencing, code sales and frequent customers such as restaurants, hotels, businesses, banks, schools and others.

Working Capital Investment

Working Capital Investment per year.

It records and calculates the expenses, materials, and working capital necessary for the venture's operation each year.

Table 8. Working capital investment

CIF	CANT	Value	Subtotal	Inflation	Subtotal
PUBLIC SERVICES First year	12	30 000	360 000	12 600	372 600
Water and sewerage	12	100 000	1 200 000	42 000	1 242 000
Electricity	12	500 000	6 000 000	210 000	6 210 000
Internet service Internexa	12	400 000	4 800 000	168 000	4 968 000
Lease of office space	12	30 000	360 000	12 600	372 600
Lease of space for towers	12	50 000	600 000	21 000	621 000
Warehouse lease	1	30 000	30 000	1050	31 050
Logo Design	4	5000	20 000	700	20 700
Caps	4	6000	24 000	840	24 840
T-shirts	4	45 000	180 000	6300	186 300
Jeans	4	60 000	240 000	8400	248 400
Jackets	8	3000	24 000	840	24 840
Prints	3	50 000	150 000	5250	155 250
Surveys	4	40 000	160 000	5600	165 600
Payment for pollsters	4	90 000	360 000	12 600	372 600
Flyers	4	50 000	200 000	7000	207 000
Delivery of flyers	10	50 000	500 000	17 500	517 500
Installation of substation towers			0	0	0
Notary fees First year (year 2020)	1	280 000	280 000	9800	289 800
Legal fees for chamber of commerce registration	1	100 000	100 000	3500	103 500
Value of preparation of financial statements	2	70 000	140 000	4900	144 900
Total CIF		1 989 000	15 728 000	550 480	16 315 520

The investment listed in the table above is a budget organized to start the corporate purpose of the project venture CONECTÁNDOTE SAS BIC that allows canceling utilities of \$ 7 862 400 leases for \$ 5 990 400 and other expenses of \$ 2 462 720 per year for a total of \$ 16 315 520. The value that does cover expenses about existing revenues and hopes to maintain to cover the costs and have profits.

Investment schedule and funding sources:

- Equity Capital: \$150 000 000. This is the money that is counted as initial capital for the purchase of devices and tools necessary for the development of the activities that conectándote SAS BIC requires.
- Capital is required to supplement the missing tools and machinery for the development of the company's corporate purpose. Thus, an obligation was acquired with Bando de Occidente for a value of \$20 000 000 (twenty million pesos) for four years at a monthly effective interest rate of 1 % with a fixed quota of 526 677 pesos that is canceled on the 5th of each month, month in arrears.
- Obligation with the Bando de Agrario for a value of \$15 000 000 (Fifteen million pesos) for 3 years and at a monthly effective interest rate of 0,9 % with a fixed installment of 489 662 weights to be paid on the 11th of each month, in arrears.

Expenditure projection (costs and expenses)

Cost budget

In all productive activities to offer to manufacture a product or provide a service, costs are generated, understanding that the costs are monetary disbursements related precisely to the manufacture of the product or the provision of the service, either directly or indirectly. Conectándote SAS BIC presents in the following table the budget of costs that will allow it to maintain and solve the pertinent issues to benefit the service to the communities.

Cost Budget: calculate the projected customers' raw material, labor, and indirect manufacturing costs.

The above table lists raw material costs of \$290 284 327 as direct costs incurred in the devices to provide service to the projected number of customers (620) and \$16 278,48 as indirect manufacturing costs necessary to provide internet service to customers, indicating that the customer is not required to purchase materials for quality of service and less risk and responsibility to him.

Table 9. Cost Budget

RAW MATERIAL	CANT	Price	Subtotal	N/PX Inflation	Total
	12	544	6531	261	4 212 262
utp category 6 outdoor cable	1	472	472	19	304 501
utp category 6 cable Indoor	1	160	160	6	103 192
insulating tape	6	30	179	7	115 317
1 1/4" screws	6	19	115	5	74 298
1/4" in. screws	10	26	260	10	167 687
plastic clips	4	549	2 196	88	1 416 310
shielded RJ-45 connectors	3	1,3	3,9	156	2 515 304
electrical cable	5	55	275	11	177 361
Plastic clamps	1	341	341	13,64	219 927 868
Nano bean nb-m5 19 Bdi	1	60	60	2,4	38 696 986
Tenda N300 Dual Antenna Router	1	35	35	1,4	22 573 242
POE 24V 0,5 ^a POE		439 155	450 088	18 004	290 284 327
CIF	CANT	Price	Subtotal	Inflation	Subtotal
PUBLIC SERVICES First year	12	30 000	360 000	12 600	372 600
Water and sewerage	12	100 000	1 200 000	42 000	1 242 000
Electricity	12	500 000	6 000 000	210 000	6 210 000
Internet service Internexa	12	400 000	4 800 000	168 000	4 968 000
Lease of office space	12	30 000	360 000	12 600	372 600
Lease of space for towers	12	50 000	600 000	21 000	621 000
Warehouse lease	1	30 000	30 000	1050	31 050
Logo Design	4	5000	20 000	700	20 700
Caps	4	6000	24 000	840	24 840
T-shirts	4	45 000	180 000	6300	186 300
Jeans	4	60 000	240 000	8400	248 400
Jackets	8	3000	24 000	840	24 840
Prints	3	50 000	150 000	5250	155 250
Surveys	4	40 000	160 000	5600	165 600
Payment for pollsters	4	90 000	360 000	12 600	372 600
Flyers	4	50 000	200 000	7 000	207 000
Delivery of flyers	10	50 000	500 000	17 500	517 500
Installation of substation towers			0	0	0
Notary fees First year (year 2020)	1	280 000	280 000	9 800	289 800
Legal fees for chamber of commerce registration	1	100 000	100 000	3 500	103 500
Value of preparation of financial statements	2	70 000	140 000	4 900	144 900
Value of chamber of commerce registration form		1 989 000	15 728 000	550 480	16 278 480

Expense budget

These expenses comprise, for example, the salary of the manager, secretaries, office assistants, etc.

Table 10. Payroll expenses

Labour	Figures	Value	subtotal	Inflation	Total
Salaries	4	908 526	43 609 248	1 744 370	45 353 618
Transport allowance	4	106 454	5 109 792	204 392	5 314 184
Pension (salary) 12	4	109 023	5 233 110	209 324	5 442 434
Tax contributions	4		-	-	-
Family Compensation Fund (CAFAM) 4 %	4	36 341	1 744 370	69 775	1 814 145

Severance payments (salary + Transport allowance)*8,33 %	4	4 258	204 392	8 176	212 567
Interest on severance payments (salary + Transport allowance)					
Interest on severance payments (salary + Transport allowance) 1 % ARL (Risk Management)	4	4 361	209 324	8 373	217 697
ARL (Occupational Risks Administrator) level II \$1,044 %	4	-	-	-	-
Service premium (salary + Transport allowance)*8,33 % Service premium (salary + Transport allowance)*1,044					
Service Bonus (salary + Transport Allowance) 8,33 % Vacation (salary) 4,17 %	4	1 454	69 775	2 791	72 566
Holidays (salary) 4,17 % Vacations (salary) 4,17 % Vacations (salary) 4,17 % Vacations (salary) 4,17	4	170	8 176	327	8 503
T/LABOUR		1 170 587	56 188 186	2 247 527	58 435 714

Table 10 records the expenses incurred for labor per year.

The previous table relates the expenses caused by the payment of salaries and different values related to the personnel who work for a value of \$58 435 714, which is required to provide internet service to the client and other labors of the company in relation to its social object.

Purchase plan

Income projection

PRODUCTION BUDGET FOR CNECTÁNDOTE SAS BIC 2020-2024

	CANT	PRICE	S/TOTAL	INFLATION	TOTAL
RAW MATERIAL	12	544	6.531	261	4.212.262
utp cable category 6 outdoor	1	472	472	19	304.501
utp cable category 6 Indoor	1	160	160	6	103.192
insulating tape	6	30	179	7	115.317
1 1/4" screws	6	19	115	5	74.298
1/4" inch screws	10	26	260	10	167.687
plastic clips	4	549	2.196	88	1.416.310
shielded RJ-45 connectors	3	1.300	3.900	156	2.515.304
electrical cable	5	55	275	11	177.361
Plastic clamps	1	341.000	341.000	13.640	219.927.868
19 dBi nb-m5 nano bean	1	60.000	60.000	2.400	38.696.986
POE de 24V 0,5A	1	35.000	35.000	1.400	22.573.242
TOTAL RAW MATERIAL		439.155	450.088	18.004	290.284.327

	figures	Value	subtotal	INFLATION	TOTAL
Labour	4	908.526	43.609.248	1.744.370	45.353.618
Wages	4	106.454	5.109.792	204.392	5.314.184
Transport allowance	4	109.023	5.233.110	209.324	5.442.434
Pension (salary) 12	4	-	-	-	-
Tax contributions	4	36.341	1.744.370	69.775	1.814.145
Family Compensation Fund (CAFAM) 4%					
Cesanties (salary + Transport allowance)*8.33% Pension (salary + Transport allowance)	4	4.258	204.392	8.176	212.567
Severance payments (salary + Transport allowance)*8.33% Interest on severance payments (salary + Transport allowance)	4	4.361	209.324	8.373	217.697
Interest on severance payments (salary + Transport allowance) 1% ARL (Risk Management)	4	-	-	-	-
ARL (Administradora de Riesgos Laborales) level II \$1,044% Service premium (salary + Transport allowance)*8,33% Service premium (salary + Transport allowance)*1,044	4	1.454	69.775	2.791	72.566
Service Bonus (salary + Transport Allowance) 8.33% Vacation (salary) 4.17% 4.17	4	170	8.176	327	8.503
TOTAL MANPOWER		1.170.587	56.188.186	2.247.527	58.435.714

PROYECCION DE CLIENTES CONECTANDOTE SAS BIC 2020-2024							
Y=A+BX		Y	633	CLIENTES AL 2024			
		A	374	633	620		
B=YX/SUMAXm2		B	86				
N	AÑOS	Y	X	Xm2	YX	Y"	
1	2020	203	-2	4	-406	-114	
2	2021	294	-1	1	-294	259	
3	2022	368	0	0	0	633	
4	2023	442	1	1	442	1006	
5	2024	561	2	4	1122	1380	
SUMAS=3		1868	0	10	864	3164	

CIF	CANT	VALUE	Subtotal	INFLATION	TOTAL
PUBLIC SERVICES First year (year 2020)	12	30.000	360.000	14.400	374.400
Water and sewerage	12	100.000	1.200.000	48.000	1.248.000
Electricity	12	500.000	6.000.000	240.000	6.240.000
Internet service Internexa			-	-	-
LEASES First year (year 2020)	12	400.000	4.800.000	192.000	4.992.000
Lease of office space	12	30.000	360.000	14.400	374.400
Lease of space for towers	12	50.000	600.000	24.000	624.000
Warehouse lease	1	30.000	30.000	1.200	31.200
Logo Design	4	5.000	20.000	800	20.800
Caps	4	6.000	24.000	960	24.960
T-shirts	4	45.000	180.000	7.200	187.200
Jeans	4	60.000	240.000	9.600	249.600
Jackets	8	3.000	24.000	960	24.960
Prints	3.000	50	150.000	6.000	156.000
Surveys	4	40.000	160.000	6.400	166.400
Payment for pollsters	4.000	90	360.000	14.400	374.400
Flyers	4	40.000	160.000	6.400	166.400
Delivery of flyers	10	50.000	500.000	20.000	520.000
Installation of substation towers			-	-	-
Notary fees First year (year 2020)	1	280.000	280.000	11.200	291.200
Legal fees for chamber of commerce registration	1	100.000	100.000	4.000	104.000
Value of preparation of financial statements	2	70.000	140.000	5.600	145.600
TOTAL CIF		1.839.140	15.688.000	627.520	16.315.520

units to be produced	632,8	
estimated sales	633	
ending inventory of finished goods	2	2
ending in-process inventory	0	
beginning inventory of finished goods	2	2
beginning inventory of work in process	0	
TOTAL PRODUCTION BUDGET 365.035.561		

TOTAL PRODUCTION BUDGET 365.035.561		
UNIT COST	576.858	
SELLING PRICE	824.082	620
Customers to 2024		
T/SALES/PRONOSTIC/2024	521.479.373	104.295.875
Income X year		

Figure 10. Projected Revenues and Expenditures 2020-2024

The projection is an estimated budget at a specific date, based on the expectations held during the period until that date and taking into account the actual data obtained so far. It is also based on assumptions or speculations on market behaviour and possible internal and external events. It applies a set of policies and needs specific to each business.

It is the determination of the quantity of articles the company wishes to sell and that the consumer can acquire at a given price.

Once the projection estimates for the 5 years (2020-2024) have been made and taking into account the production budget, we can see that following the guidelines, in the year 2024, we will have 620 clients who will be part of our company as users of the internet service and taking into account the production costs, labor, CIF and administration expenses, we will obtain an income per year of \$104 295 875, a value taken from the last period's income statement.

Break-even point

As noted in the supports and processes, CONECTANDANDOTE SAS BIC shows that to achieve the break-even point, it must have 192 customers. This is verified according to the table and the following graph, whose values are in the intervals of 180 to 210 clients and some utility values between—\$4 557 236 and \$6 662 589, data that are related in the table of results; it can be demonstrated that from client 193, it generates utilities.

Table 11. Break-even point			
Break-even point for CONECTANDOTE SAS BIC			
PE=	CF	Fixed costs	
	P - CV	Unit Price - Variable Unit Costs	
Fixed Costs	71 876 186		
Variable Costs	450 088		
Selling price	824 082		
Point of equilibrium	192		
utilities	-		
quantity	sales	costs	Utility
30	24 722 473	85 378 835	60 656 361
60	49 444 947	98 881 483	49 436 536
90	74 167 420	112 384 131	38 216 711
120	98 889 894	125 886 780	26 996 886
150	123 612 367	139 389 428	15 777 061
180	148 334 841	152 892 076	4 557 236
210	173 057 314	166 394 725	6 662 589
240	197 779 787	179 897 373	17 882 414
270	222 502 261	193 400 021	29 102 239
300	247 224 734	206 902 670	40 322 064
330	271 947 208	220 405 318	51 541 890
360	296 669 681	233 907 967	62 761 715
390	321 392 155	247 410 615	73 981 540
420	346 114 628	260 913 263	85 201 365
450	370 837 101	274 415 912	96 421 190
480	395 559 575	287 918 560	107 641 015
510	420 282 048	301 421 208	118 860 840
540	445 004 522	314 923 857	130 080 665
570	469 726 995	328 426 505	141 300 490
600	494 449 469	341 929 153	152 520 315
630	519 171 942	355 431 802	163 740 140
660	543 894 415	368 934 450	174 959 965

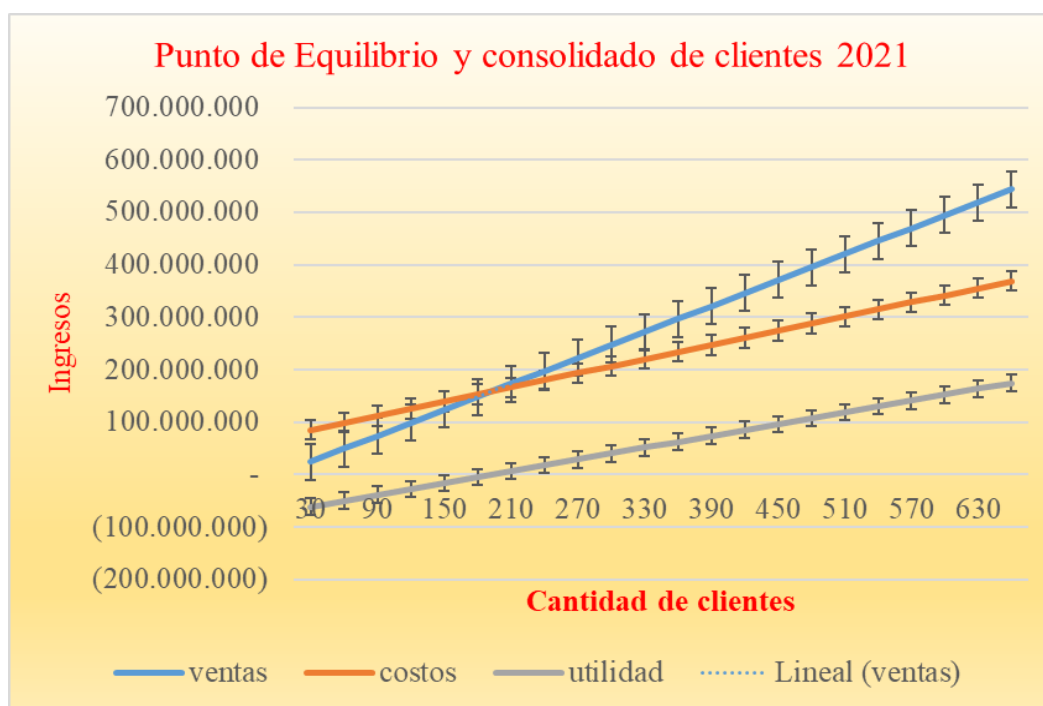


Figure 11. Breakeven point

Represents the exact point where the project makes neither profit nor loss. It shows the process, the graph, the scale and the number (192 customers).

Cash flow

Table 12. Cash Flow						
Free cash flow	0	1	2	3	4	5
Operating Profit		74 517 049	80 509 498	88 203 254	96 474 042	105 365 138
Tax		23 409 251	25 727 709	28 648 608	31 706 964	34 770 496
UODI		51 107 798	54 781 789	59 554 646	64 767 078	70 594 642
+Depreciation		22 073 912	22 073 912	22 073 912	22 073 912	22 073 912
Gross Cash Flow		73 181 709	76 855 701	81 628 557	86 840 989	92 668 554
-Variation KNT0		- 15 263 862	- 1 804 125	- 2 271 420	- 2 360 165	- 2 312 977
- CAPEX		-	-	-	-	-
Free cash flow		88 445 571	78 659 825	83 899 977	89 201 155	94 981 532
+ Partner contributions	185 739 116					
+ Credit disbursement.	35 000 000					
-Capital Credit Credit		10 000 000	10 000 000	10 000 000	5 000 000	
-Interest payment. Credit		2 196 056	2 196 056	2 196 056	1 320 121	
	220 739 116	76 249 515	66 463 770	71 703 921	82 881 034	94 981 532
Cash flow						
Net cash for the period	220 739 116	76 249 515	66 463 770	71 703 921	82 881 034	94 981 532
Cash Ant.			76 249 515	142 713 285	214 417 206	297 298 240
Cash flow	- 220 739 116	76 249 515	142 713 285	214 417 206	297 298 240	392 279 771

The table above, Cash Flow, allows me to know the status by period of the cash that the company has available. We can see that in the year 2024, the cash flow has grown considerably and is \$392 279 771.

Balance Sheet

Table 13. Balance Sheet						
Balance	0	1	2	3	4	5
Activo						
Cash		76 249 515	142 713 285	214 417 206	297 298 240	392 279 771
Account Receivable		9 343 172	10 043 910	10 797 203	11 606 993	12 477 518
Inventories		48 071	55 553	59 719	64 198	69 013
Fixed Assets	220 739 116	220 739 116	220 739 116	220 739 116	220 739 116	220 739 116
Deprec. Acum		- 22 073 912	- 44 147 823	- 66 221 735	- 88 295 646	- 110 369 558
Total assets	220 739 116	284 305 963	329 404 040	379 791 509	441 412 901	515 195 860
Passive						
Obli. Finan	35 000 000	26 383 868	16 734 554	5 927 787	0	
C x Pay		1 245 854	1 439 740	1 547 720	1 663 799	1 788 584
Tax		23 409 251	25 727 709	28 648 608	31 706 964	34 770 496
Total Liabilities	35 000 000	51 038 973	43 902 003	36 124 116	33 370 763	36 559 080
Heritage						
Capital	185 739 116	185 739 116	185 739 116	185 739 116	185 739 116	185 739 116
Utilities		47 527 874	52 235 046	58 165 357	64 374 744	70 594 642
Accumulated Profits			47 527 874	99 762 921	157 928 277	222 303 022
Total assets	185 739 116	233 266 990	285 502 037	343 667 393	408 042 138	478 636 780
Total P + P	220 739 116	284 305 963	329 404 040	379 791 509	441 412 901	515 195 860
Difference	-	-	-	-	-	-

The balance sheet reflects a gradual return on assets, from \$220 739 116 in year zero (0) to \$515 195 860, favorable and increasing profits per period, growth in equity, and a controlled value of liabilities with a minimal increase. In addition, the accumulated profits exceed the equity, which allows us to know the company's solidity.

In another instance, from the fourth period, the company has already managed to cover the expenses for financial obligations. This will allow us to acquire new obligations with financial entities if it is necessary to open new market niches.

Profit and Loss Statement

Table 14. Performance Status and Indicators of Goodness						
DTF 4,52 %	IPC	3,3 %	CRECIMI WAIT	6 %	GROWTH EMPR	2,5 %
	0	1	2	3	4	5
Total Income		112 118 065	120 526 920	129 566 439	139 283 922	149 730 216
Fixed costs		576 858	666 631	716 629	770 376	828 154
Gross Profit		111 541 207	119 860 289	128 849 811	138 513 546	148 902 062
Expenditure						
Admin & Sales Expenses		14 950 247	17 276 879	18 572 645	19 965 593	21 463 013
Depreciation		22 073 912	22 073 912	22 073 912	22 073 912	22 073 912
Operating Profit		74 517 049	80 509 498	88 203 254	96 474 042	105 365 138
Financial Expenses		3 579 923	2 546 742	1 389 289	392 333	
Profit Before Taxes		70 937 126	77 962 756	86 813 965	96 081 708	105 365 138
Tax		23 409 251	25 727 709	28 648 608	31 706 964	34 770 496
Net income		47 527 874	52 235 046	58 165 357	64 374 744	70 594 642

	0	1	2	3	4	5
Free cash flow						
Operating Profit		74 517 049	80 509 498	88 203 254	96 474 042	105 365 138
Tax		23 409 251	25 727 709	28 648 608	31 706 964	34 770 496
UODI		51 107 798	54 781 789	59 554 646	64 767 078	70 594 642
+ Depreciation		22 073 912	22 073 912	22 073 912	22 073 912	22 073 912
Gross Cash Flow		73 181 709	76 855 701	81 628 557	86 840 989	92 668 554
- Variación KNTD		- 15 263 862	- 1 804 125	- 2 271 420	- 2 360 165	- 2 312 977
- CAPEX		-	-	-	-	-
Free cash flow		88 445 571	78 659 825	83 899 977	89 201 155	94 981 532
+ Partner contributions	185 739 116					
+ Disbursement Credit	35 000 000					
- Capital Credit Credit		10 000 000	10 000 000	10 000 000	5 000 000	
- Interest payment. Credit		2 196 056	2 196 056	2 196 056	1 320 121	
Cash flow Acc	220 739 116	76 249 515	66 463 770	71 703 921	82 881 034	94 981 532
- Payments of Div						
Net cash for the period	- 220 739 116	76 249 515	66 463 770	71 703 921	82 881 034	94 981 532
Cash Ant.			76 249 515	142 713 285	214 417 206	297 298 240
Cash flow	- 220 739 116	76 249 515	142 713 285	214 417 206	297 298 240	392 279 771

Table 14 shows each one of the results and indicators that allow us to measure the performance and the economic state of the company, showing in the first instance that the income increases period by period, that the net profit increases in the same way.

Financial Indicators

Table 15. Financial Indicators						
Financial Indicators						
VPN	581 472 581	Money that can be recouped from the investment				
TIR	64,42 %					
R/CB	1,34	Cost-benefit				
		0,34 pesos are recovered				
	0	1	2	3	4	5
KTNO	-	- 15 263 862	- 17 067 987	- 19 339 407	- 21 699 572	- 24 012 549
CAPEX	220 739 116	220 739 116	220 739 116	220 739 116	220 739 116	220 739 116

In relation to the indicators, we can see that the OER is high, at 9,72 %, and that investors would be willing to invest in the company. According to the CAPEX, the company has investment capital in assets that has grown period by period and, therefore, has reinvested capital for its economic solvency.

According to the NPV, the company has a high value of \$581 472 581, so we can say that this figure is higher than the opportunity rate and that its income is higher than the income; therefore, the project CONECTÁNDOTE SAS BIC is viable.

According to the Internal Rate of Return (IRR), it is a high possibility as 64,42 % allows us to know that every peso invested can be recovered more than 64 pesos per year. The return on capital is high.

The Cost-Benefit Ratio (R/CB) shows that for every peso invested, we recover \$0,34 pesos, showing that it does have a high return.

Financial Conclusions and Feasibility Assessment

To carry out this analysis has been taken as a basis the purpose of the development of the specific objectives

that are the basis for achieving compliance with the general objective, giving priority to the virtuality and loyalty of customers who are part of this vital project of entrepreneurship Conectándote SAS BIC as one of the fundamental pillars that will be the permanent force in the development and growth of the organization, since the income and profitability depend on them through the monthly payments they make and that allow to cover expenses and grow every day.

In addition, it was estimated that the project will generate positive cash flows after deducting the amounts corresponding to the fixed and miscellaneous expenses derived from the company's corporate purpose, interest payments, and taxes corresponding to the projected periods, which means that there will be liquidity to cover the costs and expenses incurred by the company during the planning period considered. From the above, it was determined that the Conectándote SAS BIC project is economically profitable according to the results obtained once the different evaluation methods and criteria that allow us to consider the value of money over time have been carried out.

The financial indicators show that since the company's assets, profitability, and equity are growing, it would be essential to recapitalize the company and improve its working tools and devices. This would keep the company financially stable.

Operational plan

Área de Gestión	Procesos básicos de gestión	Descripción Actividades Año 1	Resultados Esperados	Responsables	Inicio Actividad	Final Actividad	Control y seguimiento
Tecnológica	Mantener la ruta del crecimiento en las herramientas tecnológicas y su manejo.	Estar informado de forma constante sobre nuevos dispositivos y generaciones que salen al mercado, reemplazar a los clientes los dispositivos que se consideren obsoletos ya sea por el uso, fallas o tiempo de vida útil, capacitarse junto con el personal que labora en el manejo de las nuevas herramientas tecnológicas que salen al mercado con nuevas generaciones, investigar sobre nuevos proveedores, nuevos medios y formas de desarrollo de lenguajes en los software de cada dispositivo, observar con detalle las	Crece día a día y lograr ser reconocida a nivel regional en el periodo proyectado.	Equipo emprendedor	Año 2021	Siempre y constante	Se realizará de forma constante investigación de los proveedores y sus productos con el objetivo de mantener bien el servicio y estar informados de los dispositivos que salen al mercado

		posibles funciones de uso y seguridad de la interfaz de los dispositivos, investigar sobre las nuevas tendencias de mercado en empresas que ofrecen el mismo servicio y que tienen mayor trayectoria y experiencia en el mercado con el propósito de mejorar la calidad.					
--	--	--	--	--	--	--	--

Comercial	Generar estrategias de mercado acordes a las necesidades de la comunidad.	Se debe mantener la estrategia del VOZ a VOZ que es la que ha generado desarrollo y reconocimiento, <u>darle mayor</u> importancia a las herramientas de redes sociales para darse a conocer, realizar campañas con descuentos especiales a los familiares de los clientes para que formen parte de la empresa como usuarios.	Lograr dar cumplimiento a cabalidad con la proyección del número de clientes propuestos en el proyecto	Mercadeo y ventas	Año 2021	Diciembre 31 del mismo año	Teniendo en cuenta que no solo busca ganar <u>clientes</u> sino que además es mantener la calidad y fidelidad, se debe realizar a diario y paso a paso con los integrantes del equipo.
Financiera	Control de ingresos y gastos	Teniendo en claro la importancia de esta área, se debe controlar de forma estricta todo lo relacionado con los recursos económicos con el objetivo de mantener claridad de lo que realmente tiene la empresa y conocer de fondo su solidez y liquidez. Se debe manejar pleno conocimiento de las decisiones de inversión y gastos a diario y mantener el estado de las obligaciones y compromisos financieros 100% controlados y con fiel cumplimiento. No permitir que por malos manejos su patrimonio disminuya. Para	Lograr que el proyecto crezca cada día y cumplir con la misión propuesta.	Área Financiera y representant e legal.	Año 2021	Indefinida mientras exista la empresa	Revisión constante y minuciosa de todos los pedidos, inventarios y movimientos tanto en pagos de los clientes, libros y cuentas bancarias
		ello se realizará: 1. Oferta del servicio constante. 2. Manejo adecuado de los gastos. 3. Financiación con entidades financieras y personal de confianza. 4. Administración y control del capital de trabajo. Recapitalización de la empresa.					

Ambiental	Formación en el valor del medio ambiente, la naturaleza, las especies y el planeta.	Reconocer en primera instancia los fundadores del proyecto la razón de ser BIC, formar a los socios y familiares en lo relacionado con la importancia de cuidar el medio ambiente, formar e informar a las comunidades donde se haga presencia con el servicio sobre la importancia de conservar el medio ambiente, realizar publicidad alusiva al cuidado del medio ambiente, obsequiar elementos que permitan generar hábitos con el cuidado y conservación del medio ambiente, capacitar a las familias del sector rural, en especial a las que sean parte del proyecto con las normas del cuidado al medio ambiente, organizar campañas comunitarias orientadoras a este fin.	Que las comunidades donde la empresa haga presencia con el <u>servicio</u> , entiendan, se comprometan y aporten al cuidado del medio ambiente en su contexto.	Equipo emprendedor	Año 2021	Indefinida mientras exista la empresa.	Estar pendiente <u>que</u> los compromisos adquiridos por las familias en cada <u>comunidad</u> , sean aplicados a la realidad como parte de la vida cotidiana y que sea un hábito el realizar esta labor.
Administrativa	Mantener control en los procesos de	Se debe manejar control de todos los procesos que se adelanten en nombre de la empresa por pequeños que sean con el	Conservar siempre el buen nombre y la	Representante legal y	Año 2021	Indefinida, mientras	Representante legal y socios fundadores,
	toma de decisiones.	objetivo de conservar la credibilidad en los usuarios y las comunidades donde se haga presencia. No se debe permitir ni dar paso para que los socios, empleados o ajenos se tomen el nombre de la empresa para asuntos diferentes a su objeto social y fuera de las normas que lo regulan.	imagen de empresa y su personal que forma parte de ella.	socios fundadores.		exista la empresa	personas colaboradoras de las <u>comunidades</u> <u>que</u> reciben los pagos, y <u>peticiones del</u> cliente final.

Figure 12. Operational plan

Potential impacts

Potential Economic Impact

The entrepreneurial project consisting of the creation of a wisp ‘wireless internet service provider’ in the business and residential modality, called Conectándote SAS BIC for the municipality of Ipiales Nariño and the former province of Obando, generates an economic impact in the region for several significant reasons. In the first instance because the technological tools and information and communication technologies are of vital importance in any society as they allow the development of activities in various fields in an agile, timely manner and at a lower cost and risk; in the second instance, because there is a tendency for most processes to be carried out virtually through social networks and web platforms, and on the other hand, given the situation presented by the pandemic worldwide, education and business were normalized in their virtual majority.

Due to the above, and without any doubt, this great entrepreneurial project generates a significant impact on the economy, not only for the families of the rural sector to which it is directed, but also for the State and society in general, avoiding expenses and risks, improving the level of knowledge and research, and reassuring young students and business people.

Possible Regional Impact

It is well known that every project is born with an idea. In this opportunity, the CONECTANDOTE SAS BIC entrepreneurship project has a great vision that seeks to offer its services locally and on a large scale. Thus, its projection is to become recognized regionally and with the start-up strategy and identified, 'THE VOICE to VOICE,' in its transition period, will achieve with the commitment of his team and commitment to achieving its objectives, gain recognition for its quality and low costs in the regions of the southwest of the country. Where its name, slogan, logo, and value proposition will stand out to the communities.

Potential Social Impact

According to the origin for which it was created and the rules that govern it, the entrepreneurship project is aimed exclusively at forming part of society, both with the communities where it offers its services and with the people and families who wish to be part of the project. Law 1780 Youth Law seeks to generate employment for young people who have graduated from their studies and, in another instance, for people from the community who want to get involved with the company in different fields; an action that since its inception has been taken as a task of great interest and that is being applied in the villages and hamlets as it grows as a company.

Possible Environmental Impact

The environment is a concern of society worldwide. Given these circumstances and observing the current situation, the essence of the project is to conserve the environment, so it is a BIC project (Benefit of Collective Interest) governed by law 1901 of 2018, a law that was created at the national level for this purpose. It is worth noting that it has the BIC character in its registration, and it is one of the priorities to comply with it forever. The impact generated will undoubtedly be of great value, recognition, and benefit for the communities this vital project is part of, as well as society and the species' lives.

Something of great value is that the wireless internet service using a radio link contributes too much help to the environment because from any building or high hill, an antenna of 5 or 10 Kilograms is placed without having to use guided means (crossing of cables, posts, materials of all kinds, vehicles, loads, workers that rake the forests, trails, special constructions, among many more), the internet service is taken with quality to the remote places of the city.

It is with great honor that the project CONECTANDOTE SAS BIC is one of the department's pioneers as a BIC enterprise.

CONCLUSIONS

Once the market study has been carried out and the supply and demand at a local level have been identified, it can be concluded that it is viable to provide internet service to the communities of the Municipality of Ipiales and the former province of Obando, complying with the regulations established by the competent entities and what is set out in this project and its principles.

Considering the different structures: administrative, technical, organizational, and legal, it was possible to conclude which rules, functions, personnel, and type of company the project will be inclined to develop its corporate purpose and ensure efficiency in providing the service where it is present.

Having developed the accounting and financial processes and analyzed their results and the relevant financial indicators, it was possible to conclude that the project is profitable and generates benefits for all the actors involved in it. Therefore, it can be said that its implementation is viable as a sustainable project.

At the end of the process, it was discovered that several market niches need to be explored. This is a space of opportunity for a company to grow, and therefore, a great future awaits it. Thus, it can be concluded that it is totally profitable and motivates to go ahead with its implementation and start-up, making this enterprise a commitment to social development for the good of future generations.

Finally, it is a project that is very well received by the communities and state entities because of its essence and origin. Due to the rules governing its existence as a service provider, it was created to generate positive economic, social, and environmental impacts. It is also innovative and admired by the communities and families that are part of it as users when receiving the signal in remote parts of the city.

Considering the importance of the project, it is recommended to maintain the essence for which it was created and to preserve its principles and values as part of the company and not to form barriers with the communities that are part of it as service users.

In another instance, given that the project is born as an enterprise and is subject to the pace of information technologies, it is recommended that this enthusiasm and energy be maintained to face future challenges and follow the path of technology, which is the driving force behind these companies that offer the service on the web.

Constantly apply successful marketing strategies so that the name Conectándote SAS BIC is in the minds and senses of the communities as a quality company.

Generate new expectations in the communities so that more and more families seek to become part of the company, either as users or as investment partners.

To generate a space of economic reserve in each period for when an emergency is required, to have the capacity to cover expenses, and to achieve organizational stability to maintain credibility with clients and communities.

BIBLIOGRAPHIC REFERENCES

1. Galeano S. Usuarios de internet en el mundo [Internet]. 2021 ene 29 [citado 2025 may 28]. Disponible en: <https://marketing4ecommerce.co/usuarios-de-internet-mundo/>
2. MinTic P. Así está Colombia en cuanto a accesos a internet fijo y móvil [Internet]. 2021 jul 21 [citado 2025 may 28]. Disponible en: <https://www.portafolio.co/economia/infraestructura/conexiones-a-internet-fija-y-movil-que-hay-en-colombia-segun-mintic-554259>.
3. Grisales MV. Ley de Internet fue promulgada en Colombia como servicio público esencial y universal [Internet]. 2021 jul 31 [citado 2025 may 28]. Disponible en: <https://www.valoraanalitik.com/2021/07/31/ley-internet-promulgada-colombia-servicio-publico-esencial/>
4. Miguel J. Falta de conectividad afecta la educación en Ipiales [Internet]. 2021 may 15 [citado 2025 may 28]. Disponible en: <https://www.hsbradio.com.co/2021/05/15/falta-de-conectividad-afecta-educacion-en-ipiales/>
5. Institución Universitaria Politécnico Grancolombiano. Proyecto Radio Enlace Vereda La Argentina [Internet]. 2017 [citado 2025 may 28]. Disponible en: <https://alejandria.poligran.edu.co/bitstream/handle/10823/986/Documento.pdf?sequence=1&isAllowed=y>
6. Alvino C. Estadísticas de la situación digital de Colombia en el 2020-2021 [Internet]. 2021 abr 12 [citado 2025 may 28]. Disponible en: <https://branch.com.co/marketing-digital/estadisticas-de-la-situacion-digital-de-colombia-en-el-2020-2021/>
7. Blaxter H. Definición de marco contextual. En: Universidad Autónoma de México. Aplicación del conocimiento. México: Universidad Autónoma de México; 2000. p. 5.
8. Equipo de ciberseguridad. www.vpnmentor.com [Internet]. 2021 ene [citado 2025 may 28]. Disponible en: <https://www.google.com/search?q=datos+estadisticos+de+usuarios+de+internet+al+2021>
9. Equipo de ciberseguridad. www.vpnmentor.com [Internet]. 2021 ene [citado 2025 may 28]. Disponible en: <https://es.vpnmentor.com/blog/tendencias-de-internet-estadisticas-y-datos-en-los-estados-unidos-y-el-mundo>

FINANCING

None.

CONFLICT OF INTEREST

None.

AUTHORSHIP CONTRIBUTION

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