BUSINESS PLAN TO VIABILIZE THE INSTALLATION OF A SEMI INDUSTRIAL SOY MILK FACTORY, LOCATED IN THE INDUSTRIAL PARK OF CANTON DURAN PROVINCIA DEL GUAYAS.

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2. Justification

Consumers are now looking to purchase products that are both beneficial to health and economic. Certain aspects such as work life, household chores and other daily activities make it less time to devote to food, and therefore minimizes consumption of foods, although healthy, very elaborate.

Due to these changes the time that is had for the preparation of food and / or drinks is minino, the work, the obligations, the stress, generates a decrease in the quality of life of Guayaquil. This scenario gives rise to the need to buy and consume products that guarantee quality and safety. This scenario gives the opportunity to serve a market segment that has homogenous tastes, needs and / or characteristics, such as being lactose intolerant; Part of a potential population segmenting the market presented opportunities for the development of new brands. This segment is still waiting for a product to provide: safety, flavor and availability in vegetable drinks.

Soy milk is an excellent option to replace cow's milk, because it has the same contribution of calcium and protein (Nutritionist of the Health Department of Azuay, 2014).

Based on this premise, this business plan proposes to determine the viability of a semi industrial soybean milk plant, located in the Duran canton industrial park province of Guayas.

The product is destined to be commercialized in the northeast and northwest sector, neighborhoods where the target customer is located and the final consumer of medium and medium high economic stratum.
Market Segmentation "is the process of subdividing a market into distinct subsets of customers that behave in the same way or have similar needs. Each subset can be conceived as a goal to be achieved through a distinct marketing strategy "(American Marketing Association, 2014)

Considering the urban population suitable for the consumption of soy milk is determined the buyer client according to the neighborhoods where the study is carried out:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Neighborhood</th>
<th>No. Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lagos Caperia</td>
<td>1</td>
<td>5,286</td>
</tr>
<tr>
<td>1</td>
<td>Las orquídeas</td>
<td>2</td>
<td>13,056</td>
</tr>
<tr>
<td>1</td>
<td>Puerto azul</td>
<td>1</td>
<td>9,686</td>
</tr>
<tr>
<td>2</td>
<td>Samanes</td>
<td>3</td>
<td>12,525</td>
</tr>
<tr>
<td>2</td>
<td>Guayacanes</td>
<td>3</td>
<td>16,485</td>
</tr>
<tr>
<td>2</td>
<td>Cóndor</td>
<td>5</td>
<td>21,482</td>
</tr>
<tr>
<td>2</td>
<td>Sauces</td>
<td>14</td>
<td>76,540</td>
</tr>
<tr>
<td>2</td>
<td>Acuarela</td>
<td>1</td>
<td>4,285</td>
</tr>
<tr>
<td>2</td>
<td>Alborada</td>
<td>8</td>
<td>39,640</td>
</tr>
<tr>
<td>2</td>
<td>Garzota</td>
<td>2</td>
<td>6,921</td>
</tr>
<tr>
<td>2</td>
<td>Alborada</td>
<td>1</td>
<td>5,458</td>
</tr>
<tr>
<td>2</td>
<td>Simón bolívar</td>
<td>1</td>
<td>5,945</td>
</tr>
<tr>
<td>2</td>
<td>Fae</td>
<td>1</td>
<td>5,319</td>
</tr>
<tr>
<td>2</td>
<td>Alamos</td>
<td>1</td>
<td>6,280</td>
</tr>
<tr>
<td>2</td>
<td>Kennedy</td>
<td>3</td>
<td>12,445</td>
</tr>
<tr>
<td>3</td>
<td>Ceibos</td>
<td>6</td>
<td>28,629</td>
</tr>
<tr>
<td>3</td>
<td>Miraflores</td>
<td>1</td>
<td>6,409</td>
</tr>
<tr>
<td>3</td>
<td>Urdesa</td>
<td>7</td>
<td>28,060</td>
</tr>
<tr>
<td>3</td>
<td>Atarazana</td>
<td>2</td>
<td>11,994</td>
</tr>
<tr>
<td>3</td>
<td>Bellavista</td>
<td>2</td>
<td>10,751</td>
</tr>
<tr>
<td><strong>TOTAL, MARKET SEGMENTATION</strong></td>
<td></td>
<td></td>
<td><strong>327,196</strong></td>
</tr>
</tbody>
</table>

Table 1 Customer buyer by neighborhoods
Prepared by: The Author
Source: National Statistics and Census Institute 2010
It has been considered to carry out a situational diagnosis and a technical study to establish the exogenous factors that derive from the external situation such as changes and advances in technologies, change in the values of society, or new opportunities or restrictions of the environment (economic, political, Legal and social), these external components forge the need to make strategic decisions.

2. Problem to solve

Currently, the sale of soy milk in the city of Guayaquil has a marked tendency for growth because of its multiple benefits and the support of the trend to improve food and health habits present in Ecuadorians several years ago.

But it is a market sprayed by unregistered drinks, without labels or sanitary registration, which is why a large number of brands that are on hand, are sold without meeting all health requirements because of the short product life cycle makes it difficult to stabilize the validity of the same in the hangers.

As a main management tool that serves as a guide to the actions to be carried out, minimizing the aforementioned problems, this strategic business plan proposes to potentiate the sales of soy milk through strategies aimed at achieving introduction and positioning of the SOY SALUD brand in the local market.

3. General Objective

To determine the viability of the installation of a soybean semi-industrial soybean factory, located in the industrial park of the canton Duran province of Guayas in the year 2017
3.1 Specific objectives

1. To determine supply and demand for the product, using the survey data collection tool.
2. To propose an operational structure for the installation of a semi industrial factory and commercialization of soy milk.
3. To determine the financial viability of the Project

5. Executive Summary

The soybean seed is between five and 11 millimeters in diameter. The size of this legume is small, but its nutritional value is great. "It is a food rich in proteins," explains Wilman García, president of the National Corporation of Soybeans (Corsoya). For this reason it is used in the production of foods such as milk, flour, vegetable meat and other derivatives. According to García, in Ecuador the consumption of these products is notorious since 2008.

The search for healthier foods fueled demand for products made from soybeans so specifically soy milk is increasingly welcomed. "People are more concerned about taking care of their health." And the main consumers are people with special diets, seniors and vegetarians".

The development of a business plan to make feasible the installation of a semi-industrial soy milk factory, located in the Duran canton industrial park, justifies its preparation in the following opportunities offered by the market, in addition to those already mentioned in the background.

1.- It has always been known that an adequate diet is very important for the health and normal functioning of the body. At the time of making the purchase health is one of the main reasons
that take into account the members of the societies for the choice of food. (Álvarez & Álvarez De Luis, 2009)

2. Ecuador is a country where soybean crops are sufficient to supply the demand of producers throughout the year and have a constant and sustainable production over time. (Figueroa Acuña, 2005)

3. Increased rates of overweight and obesity in recent years in the country. According to data from the National Health and Nutrition Survey (ENSA NUT-ECU 2011-2013), Ecuador registers 8.6% of children under five years of age with excess weight, while in the ages between 5 and 11, this Index is tripled, reaching 29.9% and in the case of adolescents, up to 26%. (UNICEF ECUADOR, 2014)

Analysis techniques are used to explore the micro and external macro-environment in which the organization operates. External political, economic, social, technological, environmental and legal factors, as well as the strengths, opportunities, weaknesses and threats to the implementation of the market mix.

This will also be the study of the operation of silver, a study in which the amounts of investment and operating costs of the project are quantified, such as the size of production, the use of financial, human and technological resources.

6. **Mission and vision**

**Mission**

Produce and commercialize a product of the highest quality to satisfy the tastes, preferences and needs of the customers. Achieving a relationship of mutual trust, based on the
specialization of products aimed at each segment of the market that reaffirms the permanence of the brand over time.

Vision

Consolidate itself in a marketing industry specialized in food, being one of the most important distributors of soy milk in the country, achieving customer satisfaction through products focused on the segment under analysis.

Points of relevance

1. The design of a strategic plan seeks the short, medium and long term success for the company that applies it and the product it offers, but to succeed with a new brand, even more in a competitive market such as food, Must make correct and concrete decisions from the outset. The Province of Guayas, where the development and execution of the project for the SOY Salud strategic plan takes place, focuses on the strategically chosen city of Guayaquil, since it is considered the commercial lung of the country.

2. The product offered in this business plan will comply with all the phytosanitary regulations requested by the entities that control its quality from its inception to reach the hands of consumers, these bodies are the following: ARCSA (National Regulatory Agency, Sanitary control and surveillance), the INEN (Ecuadorian Institute for Standardization) and AGROCALIDAD (Ecuadorean Agency for Quality Assurance of Agro). In addition, our product will have BPM (Good Manufacturing Practices) certification, which complements and HACCP (Risk Analysis and Critical Control Points) with which we ensure from the company the quality of our products.
7. Goal

1.- Go from being a semi-industrial soy milk plant to an industrialized plant
2.- Production of pasteurized soy milk, which leads to an injection of capital

8. Legal feasibility (permits, licenses, trademark registration)

Based on the organic law with specific regulations of COPCI, in book II

The soy milk processing plant SOY SALUD is supported by the following characteristics of the COPCI

- Productive Investment Article 13, literal a) • Flow of resources destined to produce goods and services, to increase productive capacity and to generate employment in the national economy

- New Investment Art. 13, literal b) • Flow of resources destined to increase the capital stock of the economy: by investing in productive assets that allows to expand, that allows to expand the future productive capacity, to generate a higher level of production of Goods and services, or generate new sources of work.

- National Investor Art. 13, literal e) • Ecuadorian natural or juridical person who owns or exercises control of an investment made in Ecuadorian territory.

SOY SALUD, has Tax Incentives of the Organic Code of Production, Trade and Investment, being that "The installation of new industrial processing plants in Durán represents a lower financial cost compared to the rest of the cantons near Guayaquil."
The Code sets out a total exemption from the income tax and the respective advance for five years for new investments in priority sectors of the economy such as fresh food, metalworking, logistics services, among other sectors, involving a substitution of imports.

Incentive in Prioritized Sectors.

Exoneration of income tax for 5 years from the generation of income for: - new investments in Prioritized Sectors and Substitution of Imports (between them total 18 sectors)

REQUIREMENTS

1. New Company (Established as of the issuance of the COPCI - December 29, 2010)
2. New investment developed outside the urban perimeter of Quito and Guayaquil
3. Investment in: • Prioritized sectors, or • Replacement of imports.

According to the Ministry of Public Health, the requirements for new establishments are:

• Request for permission to operate.
• Inspection Worksheet.
• Copy of title of the responsible professional (Eng. In Food)
• Certificate of the professional title of CONESUP
• List of products to be elaborated
• Category granted by the Ministry of Industries and Commerce (Industries and Small Industries).
• Plans of the food processing plant with the distribution of the corresponding areas.
• Sketch of the location of the processing plant.
• Certificate of training in Food Handling of the company (see web page). Industry and Small Industry (SECAP, UTE, CAPEIPI, COTEGNA).

• Document manufacturing methods and processes, in case of industry

• Certificate of training in Food Handling of the company (see web page)

• Copy of the Certificate and Voting Certificate of the owner.

• Copy of the occupational health certificate issued by the health centers of the Ministry of Health (the health certificate is valid for 1 year from its issuance)

• Copy of the establishment's RUC

• Fire Department Permit to Operate

Requirements for trademark registration

According to the Ecuadorian Institute of Intellectual Property, to register the SOY SALUD brand, the following aspects must be taken into account.

What is a Brand?

A brand is a sign that distinguishes a service or product from others of the same class or branch. It can be represented by a word, numbers, a symbol, a logo, a design, a sound, a smell, the texture, or a combination of these. For trademark registration purposes, the types and classes of trademarks should be distinguished

How much does it cost to register a trademark in Ecuador and how long does the protection last?

The process of registration applications registration or grant of trademark right $ 208.00 USD. The protection of the mark has a duration of 10 years, and being renewable indefinitely,
the renewal can be carried out between the six months before and six months of the expiration date.

**What is a business name?**

It is the commercial sign or label that identifies a commercial place and the activities that it develops.

**How much does it cost to register a trade name in Ecuador, and how long does the protection last?**

The process of applications for registration registration or concession of Commercial Name right $ 208.00 USD. The protection of the trade name lasts for 10 years, and being renewable indefinitely, the renewal can be carried out between the six months before and six months of the expiration date.

**Who can register a trademark?**

Any natural or legal person, whether national or foreign, may register a trademark.

¿Do you require a law firm to register a trademark, or copyright work?**

No solicitation required

**What can be registered?**

Any sign that can distinguish the products or services that it distributes in the market, with respect to other already existing ones, for which it must be able to represent graphically, constitutes a mark.

**What benefits and rights does the registration of a trademark confer?**
Right to exclusive use, only the holder can make use of the sign.

Protection in the entire Ecuadorian Republic and right of priority in the countries of the Andean Community of Nations (Colombia, Peru and Bolivia) within the first six months of the application in our country.

- Right to file civil, criminal and administrative actions against violators.

- Discourages the use of your brand by pirates.

- Protect your priority from registering these trademarks in other nations.

- Allows you to restrict the import of goods that use trademarks that infringe rights.

- Right to grant licenses to third parties and to collect royalties.

- Right to franchise your product or service.

- Transfer the rights to your brand to third parties.

- Possibility of guaranteeing a credit with your brand.

- By registering your brand, it becomes an intangible asset, which in many cases becomes the most valuable asset of your company.
9. MARKET ANALYSIS

Description of the characteristics of the consumer of a product or users of a particular service. This profile is obtained after a detailed study of the consumers or users, and is a very important variable for the definition of any marketing strategy (establishment of a market segment, realization of a sales promotion, etc.). (CONSUMER PROFILE, 2016)

The size of the market, total sales, niches and target population is not documented because there are no groups or guilds producing soy milk, but based on surveys conducted it is estimated that 6,000 to 8,000 bottles are sold in the city every day in bottles (SAENZ, N, 2013), with label, without label, with sanitary registration, without sanitary registration, very liquid or with good body, good quality, poor quality, elaborated artisan and semi industrial etc.

They are commercialized in fixed points of sale like: bakeries, neighborhood shops, gyms, Spa, bars of institutions, colleges universities etc. And on the street through canillitas or street vendors.

Demand is growing at an average rate of 5-10% a year, says the President of the National Association of Manufacturers and Beverages (ANFAB) (ANFAB, 2010)

Therefore, the target market for the present study is determined as the basis for the commercialization of SOY SALUD.
9.1 Target Market

The target market, therefore, is the sector of the population to which a good is directed. For knowledge of the purchased customer or final consumer, an analysis is performed that goes from the general to the specific. It includes among its most important elements demographic criteria such as age, gender and socioeconomic variables of the demand actors among which are influencers and prospects buyers.

However, other criteria that are also used to accurately determine the target market are people's occupation in society, the cultural level they have, as well as the doctrine they profess and the habits they engage in.

The market that focuses on the marketing of Soya SOY SALUD milk has the following characteristics:

<table>
<thead>
<tr>
<th>Geographic</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>country</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Region</td>
<td>Cost</td>
</tr>
<tr>
<td>Province</td>
<td>Guayas</td>
</tr>
<tr>
<td>Weather</td>
<td>Warm</td>
</tr>
</tbody>
</table>

Table 2 Characteristics of the target market
Prepared by: The Author
Source: INEC: National Institute of Statistics and Census
The basis of the analysis is determined by the population structure of the canton Guayaquil, which represents 26.8 percent of the territory of the province of GUAYAS (approximately 4.1 thousand km), has 2,350,915 inhabitants, of which 49.3% are men (1,158,221) and 50.70 percent are women (1,192,694).

<table>
<thead>
<tr>
<th>DEMOGRAPHY OF CUAYAQUIL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Habitants</strong></td>
</tr>
<tr>
<td>2,350,915</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

Table 3 Demography of canton Guayaquil
Prepared by: The Author
Source: INEC: National Institute of Statistics and Census

The canton presents an annual population growth rate of 1.58 percent and a percentage of population by age groups divided as follows.

<table>
<thead>
<tr>
<th>PERCENTAGE OF POPULATION BY AGE GROUPS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ages</strong></td>
</tr>
<tr>
<td>0_14</td>
</tr>
<tr>
<td>15_64</td>
</tr>
<tr>
<td>65 y mas</td>
</tr>
</tbody>
</table>

Table 4 Percentage of population by age group
Prepared by: The Author
Based on the demographic characteristics of the target market, the study focuses on men and women aged 15-64, who represent 65.40 percent of the total population of the city of Guayaquil. Table 1 shows the total urban population of the northwest and northeast sectors, which has been divided by zone and neighborhood. The total population is 327,196 people.

Of the 327,196 people living in the 20 districts designated for the study, 65.40% represent a total of 213,986 inhabitants.

Subsequently, a micro segmentation will be performed to determine the group of buyers.

Target customer is socio-economic level.

<table>
<thead>
<tr>
<th>SECTORS</th>
<th>NSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>C+</td>
</tr>
</tbody>
</table>

Ecuador's socioeconomic levels are divided into five strata (INEC, 2016), the upper class with 1.9% is at level A, the upper middle class with 11.2% at level B, the middle class with 22.8% at C+ level. (The universe, 2011)
In Ecuador the middle class represents 22.8% of the total population.

Based on this premise, the middle class is a sector that consumes. It is pending the sales, the best prices; Purchase in installments; Use the credit card to travel.

Pay the car in comfortable monthly installments and live comfortably. You can even allocate a portion of your income to not just subsistence expenses.

He buys books, goes to the movies, eats in good restaurants, attends fourth-level studies, goes to the gym, travels. He does not always settle for what he has, he always looks a step further, as long as the budget holds. The middle class is that "by exclusion does not belong to the guild of businessmen and industrialists Personalidad, but has enough capital to not be considered poor."

The middle class in Ecuador is diverse and responds to the territoriality where it is located and the economic process it faces. This has caused the middle class to have faced more directly the processes of consumption, but it is the reflection of the society in general.
"In the middle class has become more evident this dynamics of consumption linked to these new standards of living." While this middle class is diverse, there are certain signs that show that it seeks to look more like the upper class and, at the same time, differentiate itself from those who are not at the same level, this is a phenomenon that predominates in the country.

From the cultural point of view, it can be called a whitening process, in which there is "Inclination to foreign and imported products"

<table>
<thead>
<tr>
<th>Pictográficos</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality</td>
<td>Varied</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavioral</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits sought</td>
<td>Expected benefits in transaction.</td>
</tr>
<tr>
<td>Usage rate</td>
<td>High</td>
</tr>
<tr>
<td>Loyalty Level</td>
<td>To consolidate Beneficios esperados en transacción.</td>
</tr>
</tbody>
</table>

Table 6 Behavioral characteristics
Prepared by: The Author
Source: INEC: National Institute of Statistics and Census

The homogeneous behavioral characteristics of the target market are:
• People who do not tolerate lactose

• Consumption of natural products

• Economic source of sports proteins

Therefore, the target market for soy milk SOY SALUD, are inhabitants of the city of Guayaquil, segmented in 20 neighborhoods the north-east and north-east, with a medium socio-economic level, with an average age between 15 And 65 years of age of all genders, with homogeneous characteristics regarding the consumption of natural products and lactose free.

9.2 PESTAL analysis (political, economic, social, technological, environmental)

The PEST analysis is a useful tool to understand the growth or decline of a market, and therefore the position, potential and direction of a business (Chapman, A, 2004)

Companies are comfortable interacting with customers, suppliers and competitors, seeking to generate profitability by increasing their sales and controlling their costs. However, on many occasions a business strategy that can be considered effective to maximize profits, fails in reality.

This is because companies leave aside the analysis of the political, economic and regulatory environment that conditions business in a society. Moving away from these areas is a common mistake in the day-to-day organization of organizations worldwide. The environment impacts business development, generating opportunities and threats that must be identified, quantified and managed correctly by companies.
Analyzing the environment is fundamental to understanding the reasons that drive a
government to take measures of this nature and to anticipate regulations that can be
introduced by the authority. It is precisely by observing the evolution of the international and
national context in recent years that entrepreneurs can identify the political and economic
factors that are affecting business in Ecuador.

9.2.1 Political Environment

In the political sphere, at the beginning of the 21st century, leftist movements emerged in
the region that aroused the enthusiasm of Latin American society in the face of the
disillusionment with the meager economic results experienced in the past decades under the
paradigm of the Washington Consensus.

These movements, led by charismatic leaders, gave rise to the formation of "progressive"
governments that promoted greater state participation in the economy, denounced social
injustices and questioned economic openness as a conduit for development.

The Ecuadorian government of President Rafael Correa championed this heterodox discourse
and advanced a series of policies aimed at increasing the size of the state, not only with the
aim of increasing social spending and public investment, but also with the purpose of
regulating private activities in the country. In addition, the question was "the silly
aperturismo" and the unjust relations of power at world, regional and national level. These
ideas could be implemented in some countries of the region, including Ecuador, thanks to a
very favorable international economic context for Latin America.
9.2.2 Economic Environment

The Ecuadorian economy is feeling the impact of these changes in the international scenario, seeing the flow of debts entering the country reduced by the collapse of oil exports and the strengthening of the dollar against the currencies of its trading partners.

The trade balance was a deficit of $1,201 million during the first four months of the year, in contrast to the surplus of $236 million observed in the same period of 2014.

The government has resorted to aggressive external debt, from $12,930 million in April 2014 to $19,326 million in April 2015, an increase of 49.5% year-on-year.

A good part of the growth was the placement of bonds in international markets, with the issuance of $2 billion in June 2014 to 7.95 percent and another issuance of $750 million in March 2015 to 10.5 percent, demonstrating the increase in The perception of risk on the country. Financing from multilateral agencies and governments for approximately $1.8 billion was also obtained. Finally, the government made a new debt placement in May 2015 for $750 million to 8.5%, and agreed to bilateral financing, securities that are not included in the debt stock indicated.
These operations seek to generate resources to sustain public spending and prevent further cooling of the national economy, which became very dependent on public spending for its operation. In fact, the pace of GDP growth had already been declining in recent years, from year-on-year increments above 8 percent in 2011, to changes of 3.0 percent in the first quarter of 2015, as the availability of resources was restricted.

9.2.3 Social Environment

Consumers are less confident about the country's economic situation, which will lead them to be more cautious about their purchasing decisions, as shown by the evolution of the ECB's consumer confidence index, which reached a four-year low in the first months of 2015.

Unemployment rate and socioeconomic class

Ecuador recorded a national unemployment rate of 5.7 percent in March 2016, up from 3.8% in the same month last year, an increase of 1.9 percentage points, according to the latest National Employment Survey, Unemployment And Underemployment (Enemdu) (revistalideres.ec, 2016)

The determining factor to explain the current rate of unemployment is the increase in the rate of labor participation. As of March 2016, this indicator stood at 68.6 percent; which means, according to the Inec, that there are more people entering the labor market or a greater labor supply. (Revistalideres.ec, 2016)

The entity points out that this increase, moreover, is reflected in the increase in employed persons. The gross occupancy rate is 64.6 percent. In March 2015, the rate was 63.3%. Underemployment stood at 17.1 percent last month, up from 13.4 percent in March last year. (Revistalideres.ec, 2016)
According to the National Secretariat for Planning and Development (Senplades), there is an increase in the middle class by almost double, from 14 percent to 27 percent in the last decade. According to the president of the College of Economists of Pichincha, Víctor Hugo Albán, in the middle class are people who have a stable employment situation and a safe monthly income. The new middle class earns from $354 (which is a basic salary), to an average of $1,200 to $1,400 a month. (THE CITIZEN, 2015)

9.2.4 Technological Environment

The digital divide between developed and developing countries persists and in Latin America, the lag is "evident." Out of a total of 142 countries analyzed in 2012, Ecuador ranks 96th, up twelve seats compared to the previous year, When-according to the 2011 WEF report, it was at 108.

- Ecuador has climbed in the ranking due to its improvements in the components of the Network Readiness Index (NRI), related to the readiness to take advantage of ICTs (infrastructure, tariffs and population skills), he pointed.

The in Canton Guayaquil the availability of TIC’S

- 83.2% Cell phone
- 17.1% Internet
- 28.6% Computer
- 14.6% cable TV
9.2.5 Environmental Environment

Every factory or company in Ecuador must be regulated under the rules of the Environmental Management Law.

Law on Prevention and Control of Environmental Pollution

This law has the primary objective of controlling and preventing environmental pollution of water, air and soil resources. (Clean Technologies, 2007)

Originally the Ministry of Health was the competent authority at the national level to enforce its provisions since it was a time when pollution problems were addressed from a public health perspective, that is, to the extent that they affected the health of the population but not as a problem that also affects air quality and generally damages the environment. At present, sectional governments are becoming competent authorities and the Ministry of the Environment in cases where there is no delegation or process of decentralization in environmental matters.

They are supplementary to this Law, the Health Code, the Water Law, the Maritime Police Code and other laws governing air, water, soil, flora and fauna.

9.2.6 General Analysis PESTA

1. At this juncture, the government had given signs of an approach to the business sector, in view of the need to promote greater private investment, which would offset somewhat the decline in public investment.
2. The development of public-private partnerships for investments in strategic sectors was promoted.

3. There were also announced reforms to reduce paperwork and paperwork for the formation and operation of companies.

4. Officials closer to business visions were incorporated into the government and a regulatory pause was announced to give predictability to business.

5. Promoting change in the productive matrix, through the substitution of imports with local production, was seen as a window of opportunity for many entrepreneurs. While the recovery of growth in the main destination markets for the country's non-oil products (US, EU) was another source of optimism for export sectors, which in turn applauded the conclusion of negotiations on a trade agreement with the European Union.

6. All of the above points out the importance of the political, economic and regulatory environment for the definition of sound business strategies.

7. Ecuador took a turn in the way in which corporate affairs are handled. The roadmap for economic policy and public policy decisions. On the basis of this reality, more and more companies add political criteria and regulatory scenarios to their strategic and corporate risk analyzes, since they capture opportunities and mitigate threats.

8. In addition, the international context has repercussions on the performance of the Ecuadorian economy and may affect government decisions, with direct impacts on business activities (eg safeguards). Precisely the complex economic context facing Ecuador, will translate into greater political conflict and regulatory instability, with effects on the
development of business in the country. Companies must deal with this environment and explore opportunities in a much more volatile scenario.

9.3 SWOT Analysis (Forces, Opportunities, Weaknesses, Threats.)

In order to assess the internal and external factors of soy milk SOY SALUD, the SWOT tool will be used to obtain a better perspective on the perception of the product.
STRENGTHS

1. Product with high nutritional value.
2. Cultivation that fits all types of soils.
3. The seed produced is of very good quality.
4. High yields per hectare.
5. Growing demand for soy products in the local, national and international markets.
6. There are not so many commercial intermediaries.

OPPORTUNITIES

1. Food Modes Are Changing
2. Our country is a place where soybean sowings are enough to supply us all year round and have a constant and sustainable production over time.
3. High rates of malnutrition in the state that could favor its consumption is a segment that is not well exploited.

WEAKNESSES

1. Lack of habit of consumption among the population.
2. Lack of official support, to seek to increase the area of cultivation, to technify the soybean sector and the commercialization of the product.
3. Little information about soy nutrition.

THREATS

1. Extreme humidity and heat of the region.
2. Trade barriers for products with transgenic ingredients.
3. Prejudice about the taste of soy by certain consumers.
4. Other drinks that replace this product.
9.4 Analysis of the 4 Ps (Square, price, product, promotion)

Product / Product Features

Soy milk is an off-white liquid food that is obtained from the Extraction of whole, selected and clean soya beans, followed by a Processing. Your formula may contain sugar, Flavorings and preservatives.

☐ Appearance: Homogeneous

☐ Odor: A vegetable or legume of the soybean.

☐ Flavor: lightly bean or bean.

☐ Free of strange flavors.

☐ Color: Whitish.

The name of the milk SOY SALUD comes from the combination of the words Soy (SOY) and health (HEALTH), alluding directly to a healthy product.

The product is introduced in the market to meet the requirements of each

One of its clients dedicated to the elaboration and commercialization of a Exquisite Soy Milk, made with the highest quality standards and
Distributed to different parts of the country.

The product is made from 100% soy milk and others

Characteristics are:

- Natural
- Nutritive
- Economic
- Delicious
- Guaranteed

Soy milk lasts for about 1 month as long as it is kept in a good container in cool and well-kept places away from all contamination.

**Price**

The price of this product is estimated at $1.15 which will be established by the Cost of production plus the profit margin, the latter will be fixed based on the Competition, and demand, in order to achieve a balanced price.

**Square**

The product will be distributed through bakeries, shops and supermarkets.

Northern sector of Guayaquil

**Promotion**

To enter the market we will have some ads and small
Promotions.

• Printed materials with information on the benefits of soy milk.

• Creation of web page.

• Promote through different social pages Social networks marked

The change in the behavior of consumers and brands and have consolidated

Channels of interaction, participation and consumption of content that are the

Differentiating factor in the effectiveness of strategies that seek closeness and

Linkage in digital media.

**Promotion for wholesalers**

- Dozen of 13 (pay 12 and receive 12)

- Volume discount

**9.5 Analysis of demand and supply**

**Background**

The market in which the project is going to enter is a perfect competition,

Since there are companies that offer the same product some with the same

Presentation or others that differs in its packaging.

The size of the market, total sales, niches and target population is not

Documented because there are no groups or guilds of our activity

(Producers of soy milk) I can tell you with certainty that there is no

Official (state) or private commercial information regarding it, the truth if one

You need that information you have to get it directly.
But from the information that I have personally raised in order to elaborate
My business plans I can tell you that at present they are sold in
Guayaquil from 6000 to 8000 bottles of soy milk packed in bottles
Plastic bottles (labeled, unlabeled, with registration Sanitary, without
Registry sanitary, very liquid or with good body, good quality poor quality.
Elaborated artisan and industrial sema etc. Etc.) in: fixed points of sale
Such as: bakeries, neighborhood shops, gyms, spa, institutional bars,
Colleges universities etc. And on the street through canillitas or vendors
Ambulantes Demand is growing at a rate of 5% a year.

Population of research

Total, urban population of the northwest and northeast sectors, which has been divided
By zone and neighborhood and age. The total population is 213,986 people.

Sample

Non-probabilistic sampling is applied for the calculation of the sample, being that
The population size is quantifiable, it is determined to be finite.
Total, number of people to be surveyed 382.

Investigation methodology

For the purpose of investigating in situ, the events, causes and effects
Of the motivating factors for the selection of a shirt, will be made
field research. Determining the requirements, needs and Preferences of the target group.

As a tool for collecting data, the survey will be applied, allowing the Analysis of the information with the objective of evidencing influential factors in the decision making. It will consist of questions designed for an easy and total understanding.

**Results of research**

After analyzing the results obtained in the market research, Determine the needs of consumers.

**Surveys**

1.- **Sex**

Of the 382 surveys we conclude that the percentage Of soy milk consumption is higher in women with 62% and with 38% the men.

2.- **How old are you?**

The range of people interviewed is between 15 and 64 years

18-30 years 38%
30-50 years 48%
50-65 years 14
This question determines that the highest percentage of people who consume soy milk are in the range of 30_50 years and that Confirm the current tendency to consume natural or vegetable-based products.

3.- **Do you know the benefits of soy?**

72% of respondents told us that they know Benefits offered by soy milk when consumed. 28% do not know the Benefits of soy milk.

4.- **Have you tried soy milk?**

Of the respondents 59% of the citizens have tried soy milk

5.- **Would you substitute cow's milk for soy milk, since it is**

Last one has bigger benefits for your health?

   It can be said that 64% of people would substitute cow's milk for Of soy because of all the benefits it provides for your body.

6.- **Do you regularly consume this product?**

   Sixty percent of the people surveyed regularly consume milk Of soybeans.

7.- **How often do you and your family consume milk from soy?**

   In asking this question, we conclude that 53% of the population Consumes soy milk 2 times a week.
8.- Why choose this product?

68% of the respondents take soy milk for health because this product is a good nutrient.

9.- Where do you buy this type of products?

Most people buy this product from street vendors in The streets with 55 percent.

10.- How often do you buy soy milk?

Consumers of this product claim that at least once Per week consume this product with 40 percent.

11.- What benefit do you look for when consuming soy milk?

The citizens consume in a 68 percent this product by the high value Nutrition that this offers them.

12.- Given the nutritional importance of the product Would you be willing to pay Of $ 1.65?

61% of respondents would be willing to pay the value of a $ 1.65 Because despite all the benefits that soy milk gives them is a value That is within reach of the population.

13.- What type of presentation do you prefer for the soy milk container?
The consumer will always prefer the best presentation, tetrapak, but will not be willing to pay the cost. Therefore the presentation of Soy Salud will be in bottles.

CONCLUSIONS

It can be said that soy milk has a great acceptance in the market Guayaquileño that people today are looking for a good quality product the which offers them all the necessary benefits for their health and that in the today, the people who consume most are soy milk in the bottle because they do not recognize a brand of this milk so the existing marks are foreign and have no greater publicity in the national market.

9.6 Differentiation strategies

SOY SALUD, will be characterized by the good quality that will offer in the product which will be elaborated with the best in raw material. Our product will have a comfortable cost to be able to reach the different homes of the territory Guayaquil.
9.7 Promotional actions

- For the purchase of two products receive a free glass with the brand of the same
- Offer the sale of two products for the price of one
- The next product at half price
- Discount Coupons

Distribution Channel

The marketing system of SOY SALUD includes the distribution of the product with priority to the stores, bakeries and supermarket chains as shown by market research.

- As a business strategy, SOY SALUD made visits with samples of the product during the installation of the plant to 100%, closing sales with 30 bakeries located in the city of Guayaquil.
- Average of 1 dozen bottles of 250 ml daily for each bakery.
Total, of stores or points of sale that seeks to supply SOY SALUD in the short and medium term: 273 among bakeries, shops and self-services.
10 OPERATIONAL ANALYSIS

10.1 Location and description of facilities

For the assembly of the plant, there is a space of 256.3 m². Distributed as follows:

1. Interior of the plant: 193.8 m². From the area of production and dispatch of soy milk with a rectangular shape (20.4 mx 9.5 m).

2. In addition the area of Warehouse and Offices that occupy an area of 62.5 m² (10.6 m x 5.9 m). It is important to note that the areas outside the building are not considered in the design of the plant.

DIMENSIONS OF DEPARTMENTS

Name of Department. Dimensions

1. Cellar of Raw Material 7.6 m x 5.9 m

2. Sanitary facilities 2 m x 1.25 m

3. Personnel Lockers 2 m x 0.9 m

4. Office 3m x 2.2m

5. Finished Product Dispatch 5 m x 4 m

6. Finished Product Refrigeration Area. 4.3 m x 2.9 m

7. Product Area of Soy Milk Subproducts. 4.3 m x 2.9 m

8. Production Area. 9.5 m x 8.1 m
9. Packaging Area 8.1 mx 2 m

10.2 Method of production

This step is to determine the sequence and quantity of the movements of the products by the different operations during their processing.

From the information on the production process and the production volumes, graphs and descriptive diagrams of the flow of materials are produced.

The P-Q chart, in addition to the above help, reports additional information as a guide to decide the type of analysis of the products:

Simple Route Diagram

Multiproduct Diagram

Matrix Table The choice of one or another type of analysis is directly related to the quantity of products.

10.3 Installed capacity

The distribution in plant consists, therefore, in the optimal ordering of industrial activities, including personnel, equipment, warehouses, systems of maintenance of materials and machinery. This optimal ordering focuses on the distribution of work areas and equipment, which is more economical, to carry out the production process, at the same time, as the safest and most satisfactory for personnel and plant environment industrial.
**Distribution Methods**

Of a Plant There really is a multitude of methods, however for practicality they are classified in quantitative methods and qualitative methods.

- **Quantitative Methods:** These consider the measurement of processes and distances, that is, they minimize the cost of transportation from one process to another.

- **Qualitative Methods:** These are sought to give importance to the subjective tastes or desires that one department is near or far from another. In other words in this type of ordering the criteria that prevail are comfort.

**10.4 Supply chain Process flow diagram, OTIDA (Operation, Transport, Inspection, Delay, Storage)**

In order to determine the machinery necessary for the production of soy milk, it is previously required to know the processes performed prior to the filling of the product, which is explained below for each process:

- **Cooking and Grinding:** The equipment required to carry out these processes are the PristinePlants India brand crusher or also called by the mechanical cow manufacturer model SC-20 Eco and the electric kettle brand reirmers which supplies steam to the crusher.

- **Filtration:** The soybean liquid should pass through a filter press which has 11 plates with an area of 0.4 m²
• Homogenization: In the next stage the ingredients are mixed as sugar and flavoring with already filtered soy milk, for which a tank is designed with a mixer that mixes all the ingredients of the soy milk.

• Packaging: Previously, the bottles are washed with chlorinated water, then packaged in 230 ml glass bottles and 500 ml plastic bottles. The packaging is carried out in hot at an approximate temperature of 80°C.

• Storage: The final product is stored at a temperature of approximately 4°C for 12 hours, until distribution to the nearest schools.

10.5 Human resources

For the start of the Soy Salud plant, the following personnel

1. Full Time Administrator

2. Staff preparation and packaging of soy milk (full time)

3. Staff for product delivery (part time)
Administrator

Staff (full time)

Delivery of product (part time)
11 FINANCIAL ANALYSIS

SOY SALUD determined the availability of the necessary resources to fulfill its objectives.

11.1 Determination of the initial investment

• The equipment, machinery, and supplies necessary for the implementation of SOY SALUD, semi industrial factory

Table 7 Equipment, machinery, and supplies. Semi industrial factory (Annexes)

<table>
<thead>
<tr>
<th>Production machinery soy milk</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold room</td>
<td>$ 19,000.00</td>
</tr>
<tr>
<td>Semi Industrial kitchen. Stainless steel</td>
<td>$ 600.00</td>
</tr>
<tr>
<td>Semi Industrial kitchen with regulating key</td>
<td>$ 500.00</td>
</tr>
<tr>
<td>Soy Mill</td>
<td>$ 7,000.00</td>
</tr>
<tr>
<td>Thermal tank</td>
<td>$ 356.00</td>
</tr>
<tr>
<td>Stainless steel buckets</td>
<td>$ 850.00</td>
</tr>
<tr>
<td>Plastic tank with lid</td>
<td>$ 960.00</td>
</tr>
<tr>
<td>Stainless steel table</td>
<td>$ 730.00</td>
</tr>
<tr>
<td>Motor for milk movement</td>
<td>$ 390.00</td>
</tr>
<tr>
<td>Wooden pallets</td>
<td>$ 380.00</td>
</tr>
<tr>
<td>Soap extractor grinder</td>
<td>$ 832.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 31,598.00</strong></td>
</tr>
</tbody>
</table>

Prepared by: The Author

The investment in machinery from the financial point of view is considered as the way to get the estimated productivity, and incur them for commissioning. It is important to consider what constitutes as primordial since in its beginnings can not have wasted resources.

Below is the initial investment of SOY SALUD related to furniture, fixtures and office equipment.
Table 8 Furniture, fixtures and equipment

<table>
<thead>
<tr>
<th>Furniture, fixtures and equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>$800,00</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>$1,100,00</td>
</tr>
<tr>
<td>Multifunction Printer</td>
<td>$300,00</td>
</tr>
<tr>
<td>Land line phones</td>
<td>$100,00</td>
</tr>
<tr>
<td>Cabinets</td>
<td>$800,00</td>
</tr>
<tr>
<td>Air conditionate</td>
<td>$1,200,00</td>
</tr>
<tr>
<td>Truck</td>
<td>$14,000,00</td>
</tr>
<tr>
<td>Other administrative teams</td>
<td>$300,00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$18,600,00</strong></td>
</tr>
</tbody>
</table>

Prepared by: The Author

This type of investment refers to the tangible part and its assets, which constitutes a depreciable part for the company, the correct use of the themselves, helps the performance of productive activities to originate from the best way, and that the project meets the goals set. The cost of fixed assets is quantified according to changes and prices in the market.

Table 9 Preoperative Expenses

<table>
<thead>
<tr>
<th>Pre Operative Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand Registration + Legal Expenses</td>
<td>$ 500,00</td>
</tr>
<tr>
<td>Sanitary registration</td>
<td>$ 150,00</td>
</tr>
<tr>
<td>Corporate Image Expenses</td>
<td>$ 2,300,00</td>
</tr>
<tr>
<td>Market Research Expenses</td>
<td>$ 1,680,00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 4,630,00</strong></td>
</tr>
</tbody>
</table>

Prepared by: The Author

The need to incur this type of expense because they are the pioneers for the compliance with the legal part that will start other investments, and therefore the correct implementation of the business idea.

Table 10 Initial Investment

<table>
<thead>
<tr>
<th>Initial Investment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL FIXED INVESTMENT</td>
<td>$ 50,198,00</td>
</tr>
<tr>
<td>TOTAL PRE-OPERATIONAL EXPENSES</td>
<td>$ 4,630,00</td>
</tr>
<tr>
<td>WORKING CAPITAL</td>
<td>$ 8,696,00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 63,524,00</strong></td>
</tr>
</tbody>
</table>

Prepared by: The Author
The initial investment for the installation of the semi-industrial milk Factory soy SOY SALUD, is USD 63,524,00 that includes fixed investment, expenses pre-operational and working capital necessary for the implementation of this project.

**Table 11 Production capacity SOY SALUD**

<table>
<thead>
<tr>
<th>Production capacity SOY SALUD</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Liters for every 2 hours</td>
<td>Working hours</td>
<td>Liters</td>
<td>Total bottles daily (1 liter 4 bottles 250 ml)</td>
<td>Total bottles per month (20 working days)</td>
<td>Total annual bottles (12 months)</td>
</tr>
<tr>
<td>150</td>
<td>8</td>
<td>600</td>
<td>2400</td>
<td>48,000</td>
<td>576,000</td>
</tr>
</tbody>
</table>

Prepared by: The Author

The part of the costs represents those monetary values that directly linked to production, in this case express production is focused in a parameter to be met, in this case it is proposed to produce for every 2 hours of 66

150 liters, with an average of eight working hours, an estimate of 600 liters, with an average of 2400 bottles of 500 ml, generating an average monthly production of 48,000. Giving rise to an annual production of 576,000 bottles produced per year.

**Table 12 Total Costs**

<table>
<thead>
<tr>
<th>TOTAL COST DIRECT MATERIALS</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material per unit</td>
<td>$0.61</td>
<td>$0.61</td>
<td>$0.62</td>
<td>$0.62</td>
<td>$0.63</td>
</tr>
<tr>
<td>Units per month</td>
<td>$18,000.00</td>
<td>$18,900.00</td>
<td>$19,845.00</td>
<td>$20,242.00</td>
<td>$20,444.00</td>
</tr>
<tr>
<td>Direct Material Cost / Month</td>
<td>$10,980.00</td>
<td>$11,647.00</td>
<td>$12,356.00</td>
<td>$12,733.00</td>
<td>$12,733.00</td>
</tr>
<tr>
<td>Direct Material Cost / Year</td>
<td>$131,760.00</td>
<td>$139,774.37</td>
<td>$148,282.08</td>
<td>$152,806.33</td>
<td>$152,806.33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DIRECT LABOR (FIXED)</th>
<th>No. of personnel</th>
<th>Gross monthly salary</th>
<th>Monthly remuneration</th>
<th>% Social benefits</th>
<th>Monthly LABOR COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workers</td>
<td>1</td>
<td>$372.00</td>
<td>$372.00</td>
<td>41.30%</td>
<td>$525.64</td>
</tr>
<tr>
<td>Plant Supervisor</td>
<td>1</td>
<td>$600.00</td>
<td>$600.00</td>
<td>41.30%</td>
<td>$847.80</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2</strong></td>
<td><strong>$972.00</strong></td>
<td></td>
<td></td>
<td><strong>$1,373.44</strong></td>
</tr>
<tr>
<td>TOTAL DIRECT COST</td>
<td>Year 1</td>
<td>Year 2</td>
<td>Year 3</td>
<td>Year 4</td>
<td>Year 5</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>LABOR COST/ month</td>
<td>$ 1,373.44</td>
<td>$ 1,373.44</td>
<td>$ 1,373.44</td>
<td>$ 1,373.44</td>
<td>$ 1,373.44</td>
</tr>
<tr>
<td>LABOR COST/ Year</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BUDGET IN INDIRECT MANUFACTURING COSTS</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electric Power for Prod.</td>
<td>$ 130.00</td>
<td>$ 131.34</td>
<td>$ 132.70</td>
<td>$ 134.07</td>
<td>$ 135.45</td>
</tr>
<tr>
<td>Water for cleaning of work area</td>
<td>$ 80.00</td>
<td>$ 80.82</td>
<td>$ 81.66</td>
<td>$ 82.50</td>
<td>$ 83.35</td>
</tr>
<tr>
<td>Fuels and lubricants</td>
<td>$ 90.00</td>
<td>$ 90.93</td>
<td>$ 91.87</td>
<td>$ 92.82</td>
<td>$ 93.77</td>
</tr>
<tr>
<td>Maintenance Equipment</td>
<td>$ 180.00</td>
<td>$ 181.86</td>
<td>$ 183.74</td>
<td>$ 185.63</td>
<td>$ 187.54</td>
</tr>
<tr>
<td>PP &amp; E Depreciation</td>
<td>$ 119.07</td>
<td>$ 120.29</td>
<td>$ 121.54</td>
<td>$ 122.79</td>
<td>$ 124.05</td>
</tr>
<tr>
<td>Monthly CIF</td>
<td>$ 599.07</td>
<td>$ 605.24</td>
<td>$ 611.51</td>
<td>$ 617.81</td>
<td>$ 624.16</td>
</tr>
<tr>
<td>CIF ANUALES</td>
<td>$ 7,188.80</td>
<td>$ 7,262.92</td>
<td>$ 7,338.09</td>
<td>$ 7,413.63</td>
<td>$ 7,489.96</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TOTAL PRODUCTION COST</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Material Cost / Year</td>
<td>$131,760.00</td>
<td>$139,774.00</td>
<td>$148,282.00</td>
<td>$152,806.00</td>
<td>$152,806.00</td>
</tr>
<tr>
<td>LABOR COST/ Year</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
<td>$ 16,481.23</td>
</tr>
<tr>
<td>Indirect manufacturing cost</td>
<td>$ 7,188.80</td>
<td>$ 7,262.92</td>
<td>$ 7,338.09</td>
<td>$ 7,413.67</td>
<td>$ 7,489.96</td>
</tr>
<tr>
<td>COSTO PRODUCCIÓN TOTAL</td>
<td>$155,430.03</td>
<td>$163,518.52</td>
<td>$172,101.40</td>
<td>$176,701.23</td>
<td>$176,777.00</td>
</tr>
</tbody>
</table>

| Unit cost | $ 0.72 | $ 0.72 | $ 0.72 | $ 0.72 | $ 0.72 |

Prepared by: The Author

The production cost of each bottle of 500 ml soy milk is USD 0.72 which is the expense required to maintain the processing line to carry out the business plan.

Considering that the value established per unit is based on each of the costs of production that have been intervened between it the total cost of production divided for units produced in the first month.
11.2 Financial sources

The form of financing for the implementation of SOY SALUD, is with its own capital of USD $ 33,524.00 and the remaining value through of a bank loan at an interest rate of 12% monthly capitalizable to 5 years term, since it is of greater profitability that part of the investment is the external borrowing (bank loans), considering that the banks are currently encouraging enterprises through the granting of loans to mypimes, more when these are performed by new actors, so this would be a viable option for SOY SALUD.

Table 13 Funding Source

<table>
<thead>
<tr>
<th>Initial investment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed investment</td>
<td>$ 50,198.00</td>
</tr>
<tr>
<td>Pre-operational expenses</td>
<td>$ 4,630.00</td>
</tr>
<tr>
<td>Working Capital</td>
<td>$ 8,696.00</td>
</tr>
<tr>
<td></td>
<td>$ 63,524.00</td>
</tr>
</tbody>
</table>

| Own capital                  | $ 33,524.00 |

| Required capital             | $ 30,000   |

Prepared by: The Author

<table>
<thead>
<tr>
<th>Principal</th>
<th>Interests</th>
</tr>
</thead>
<tbody>
<tr>
<td>1er.</td>
<td>4,658.71</td>
</tr>
<tr>
<td>2do</td>
<td>5,249.55</td>
</tr>
<tr>
<td>3er.</td>
<td>5,915.27</td>
</tr>
<tr>
<td>4to.</td>
<td>6,665.53</td>
</tr>
<tr>
<td>5to.</td>
<td>7,510.94</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30,000.00</td>
</tr>
</tbody>
</table>

Credit Terms

| Loan Amount | $ 30,000.00 |
| Payment periods | 60 |
| Interest rate   | 12% |
| Form of capitalization | monthly to 5 years |
| PAYMENT       | $ 667.33 |

51
Prepared by: The Author

Table 14 Projected income

<table>
<thead>
<tr>
<th>INCOME FOR SALE</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units Sold per Month</td>
<td>$ 18,000,00</td>
<td>$ 18,900,00</td>
<td>$ 19,845,00</td>
<td>$ 20,242,00</td>
<td>$ 20,444,00</td>
</tr>
<tr>
<td>Sale price</td>
<td>$ 1,15</td>
<td>$ 1,16</td>
<td>$ 1,17</td>
<td>$ 1,19</td>
<td>$ 1,20</td>
</tr>
<tr>
<td>Monthly income</td>
<td>$ 20,700,00</td>
<td>$ 21,959,09</td>
<td>$ 23,295,68</td>
<td>$ 24,006,46</td>
<td>$ 24,50</td>
</tr>
<tr>
<td>ANNUAL INCOME</td>
<td>$248,400,00</td>
<td>$263,509,05</td>
<td>$279,548,19</td>
<td>$288,077,51</td>
<td>$293,946,20</td>
</tr>
</tbody>
</table>

Prepared by: The Author

The projection of income is the tool for the company to know how much to produce in relation to its installed capacity, considering units to sell in the month, units price, and what would be my income monthly, with this forecast we advance to future scenarios to know how much and how to produce it to meet the sales targets already established.

Table 15 Projected results statements.

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALE</td>
<td>$ 248,400,00</td>
<td>$ 263,509,05</td>
<td>$ 279,548,00</td>
<td>$ 288,077,51</td>
<td>$ 293,946,20</td>
</tr>
<tr>
<td>(-) Cost of Sale</td>
<td>$ - 155,430,03</td>
<td>$ - 163,518,52</td>
<td>$ - 172,101,40</td>
<td>$ - 176,701,23</td>
<td>$ - 176,777,52</td>
</tr>
<tr>
<td>(=) Gross Profit</td>
<td>$ 92,969,97</td>
<td>$ 99,990,53</td>
<td>$ 107,446,60</td>
<td>$ 111,376,28</td>
<td>$ 117,168,68</td>
</tr>
<tr>
<td>(-) Administrative expenses</td>
<td>$ - 32,867,23</td>
<td>$ - 28,326,93</td>
<td>$ - 28,417,90</td>
<td>$ - 28,509,37</td>
<td>$ - 28,601,70</td>
</tr>
<tr>
<td>(-) Selling expenses</td>
<td>$ - 9,762,00</td>
<td>$ - 9,925,39</td>
<td>$ - 10,094,67</td>
<td>$ - 10,226,90</td>
<td>$ - 10,346,66</td>
</tr>
<tr>
<td>(=) OPERATING INCOME</td>
<td>$ 50,340,74</td>
<td>$ 61,738,21</td>
<td>$ 68,934,03</td>
<td>$ 72,640,01</td>
<td>$ 78,220,32</td>
</tr>
<tr>
<td>(-) Financial expenses</td>
<td>$ - 3,349,29</td>
<td>$ - 2,758,45</td>
<td>$ - 2,092,68</td>
<td>$ - 1,342,47</td>
<td>$ - 497,11</td>
</tr>
<tr>
<td>(=) UAIT</td>
<td>$ 46,991,45</td>
<td>$ 58,979,76</td>
<td>$ 66,841,35</td>
<td>$ 71,297,54</td>
<td>$ 77,723,21</td>
</tr>
<tr>
<td>(-) Participation Workers</td>
<td>$ - 7,048,72</td>
<td>$ - 8,846,97</td>
<td>$ - 10,026,23</td>
<td>$ - 10,694,63</td>
<td>$ - 11,658,48</td>
</tr>
<tr>
<td>(-) Income tax</td>
<td>$ - 10,338,12</td>
<td>$ - 12,975,55</td>
<td>$ - 14,705,14</td>
<td>$ - 15,685,46</td>
<td>$ - 17,099,11</td>
</tr>
<tr>
<td>Net profit</td>
<td>$ 29,604,61</td>
<td>$ 37,157,25</td>
<td>$ 42,109,98</td>
<td>$ 44,917,45</td>
<td>$ 48,965,62</td>
</tr>
</tbody>
</table>

Prepared by: The Author

Use of the aforementioned financial statement is for the purpose of forecasting projected sales, its estimate is for periods of 5 years, in order to know upcoming behaviors in relation to sales.
In the statement of income, the first item to consider is sales income in function with the costs and expenses in order to obtain the net profit in our investment project.

**Table 16 Cash flow**

<table>
<thead>
<tr>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FIXED INVESTMENT</td>
<td>$ - 50,198.00</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
<tr>
<td>PRE-OPERATIONAL EXPENSES</td>
<td>$ - 4,630.00</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
<td>$ -</td>
</tr>
</tbody>
</table>

Income before taxes
- Year 0: $46,991.45
- Year 1: $58,979.76
- Year 2: $66,841.35
- Year 3: $71,297.54
- Year 4: $77,723.21

Payment Part. Workforce.
- Year 0: $7,048.72
- Year 1: $8,846.97
- Year 2: $10,026.23
- Year 3: $10,694.63

IR pay
- Year 0: $10,338.12
- Year 1: $12,975.55
- Year 2: $14,705.14
- Year 3: $15,685.46

**NET CASH**

<table>
<thead>
<tr>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$46,991.45</td>
<td>$41,592.92</td>
<td>$45,018.84</td>
<td>$46,566.17</td>
<td>$51,343.12</td>
<td></td>
</tr>
</tbody>
</table>

(+) Deprec. Prod Area.
- Year 0: $1,428.80
- Year 1: $1,428.80
- Year 2: $1,428.80
- Year 3: $1,428.80
- Year 4: $1,428.80

(+) Deprec. Adm Area.
- Year 0: $2,130.00
- Year 1: $2,130.00
- Year 2: $2,130.00
- Year 3: $2,130.00
- Year 4: $2,130.00

(+) Amort. Pe-operative expenses
- Year 0: $926.00
- Year 1: $926.00
- Year 2: $926.00
- Year 3: $926.00
- Year 4: $926.00

(+) Shareholder Contribution $33,524.00

(+) Loan granted $30,000.00
- Year 0: $4,658.71
- Year 1: $5,249.55
- Year 2: $5,915.27
- Year 3: $6,665.53
- Year 4: $7,510.94

**NET PERIOD FLOW**

<table>
<thead>
<tr>
<th>Year 0</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>$8,696.00</td>
<td>$46,817.54</td>
<td>$40,828.17</td>
<td>$43,588.37</td>
<td>$44,385.44</td>
<td>$48,316.98</td>
</tr>
</tbody>
</table>

(+) Initial Balance $8,696.00
- Year 0: $8,696.00
- Year 1: $55,513.54
- Year 2: $96,341.71
- Year 3: $139,930.08
- Year 4: $184,315.52

(=) ACCUMULATED FLOW $8,696.00
- Year 0: $8,696.00
- Year 1: $55,513.54
- Year 2: $96,341.71
- Year 3: $139,930.08
- Year 4: $184,315.52
- Year 5: $232,632.50

Prepared by: The Author

With this method we are verifying how profitable the incursion of the company in a highly competitive market, the estimated projections are established with data obtained from the market, therefore their simulation is adjusted to real parameters.
The budgeted balance sheet has its origin in the operating flows: income statement and cash flow.

They determine the value of each of your balance sheet accounts for each period you have planned. Its basis is the dynamics of operations and their minimum membership to two flows at a minimum, in summary the income statement is causation, cash flow is when that causation becomes cash, the balance is cumulative.
It is elaborated from the initial balance sheet containing at least the value of the investments in working capital, fixed investments and deferred investments, operational assets necessary for the development of the business or project activities, in addition to the contributions of the shareholders or investors, who are part of the heritage.

**Table 18 Breakeven analysis**

<table>
<thead>
<tr>
<th>FIXED COSTS</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>LABOR COST (fixed)</td>
<td>$16,481.23</td>
</tr>
<tr>
<td>Deprec. Plant</td>
<td>$1,428.80</td>
</tr>
<tr>
<td>Salaries and wages / year</td>
<td>$16,481.23</td>
</tr>
<tr>
<td>Serv. Basic / Year</td>
<td>$1,800.00</td>
</tr>
<tr>
<td>Supplies per year</td>
<td>$1,440.00</td>
</tr>
<tr>
<td>Counseling / year</td>
<td>$3,000.00</td>
</tr>
<tr>
<td>Internet and Cellular</td>
<td>$720.00</td>
</tr>
<tr>
<td>Permits / year</td>
<td>$300.00</td>
</tr>
<tr>
<td>Deprec. Area Adm. / Year</td>
<td>$2,130.00</td>
</tr>
<tr>
<td>Mant. Vehicle / year</td>
<td>$1,440.00</td>
</tr>
<tr>
<td>Pre-operational expenses</td>
<td>$4,630.00</td>
</tr>
<tr>
<td>Annual Advertising</td>
<td>$7,200.00</td>
</tr>
<tr>
<td>Financial expenses</td>
<td>$3,349.29</td>
</tr>
<tr>
<td><strong>TOTAL FIXED COST</strong></td>
<td><strong>$60,400.56</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VARIABLE COSTS</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>$131,760.00</td>
</tr>
<tr>
<td>Electric Power for Prod</td>
<td>$1,560.00</td>
</tr>
<tr>
<td>Cleaning water</td>
<td>$960.00</td>
</tr>
<tr>
<td>Fuels and lubricants</td>
<td>$1,080.00</td>
</tr>
<tr>
<td>Maintenance Equipment</td>
<td>$2,160.00</td>
</tr>
<tr>
<td>Transp. - Com. / year</td>
<td>$1,320.00</td>
</tr>
<tr>
<td>Annual Commissions</td>
<td>$1,242.00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$140,082.00</strong></td>
</tr>
</tbody>
</table>

**# Units Prod. / Year** 216000

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Variable Cost</td>
<td>$0.65</td>
</tr>
<tr>
<td>Unit Price</td>
<td>$1.15</td>
</tr>
</tbody>
</table>

BE = FC / (P - uVC)
Break-even point is that level of production and sales that a company achieves to cover the costs and expenses with their income.

The break-even point is in the 120,446 units per year generating a sale value of 138,513.44 ie here exists the balance between quantity price by intervening forces of supply and demand, depending on each one of the variables that affect the purchase. And as for the balance reached a month is in the amount of 10,037.21 units at the price of 11,542.79

Table 19  Analysis of the Internal Rate of Return, Profitability Index, Value current net, return on Investment.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>216000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable Cost</td>
<td>$ 0.65</td>
</tr>
<tr>
<td>Margin Contribution</td>
<td>$ 0.50</td>
</tr>
<tr>
<td>% MC</td>
<td>44%</td>
</tr>
<tr>
<td>Fixed costs and expenses</td>
<td>$60,400.56</td>
</tr>
<tr>
<td><strong>BE</strong></td>
<td><strong>120,446</strong></td>
</tr>
</tbody>
</table>

Prepared by: The Author

The analysis made allows us to verify when the investment project is profitable, in the case of the Van it indicates a value of $ 91,218.03 which indicates how profitable the project is, financial rules indicate that when the NPV is greater than 0, the project must be accepted and therefore feasible to attract investment.
The project financial rate of return is 72.19% the decision rule consists of accepting projects whose IRR is greater than the cost of capital for assets of the same risk level, in the case of the business idea to implement **SOY SALUD** shows that having a higher internal rate of return

Accept the project the reason is because it generates a higher profitability to the required. In the case of Payback, the period of capital recovery, shows that the project investment will be recoverable within 1 year 3 months, 5 days.
12 PROJECT FEASIBILITY

CONCLUSIONS

This business plan has been developed with the objective of optimizing the process of soybean milk, implanted in a semi industrial Factory which has specialized semi-industrial equipment for its optimum production and duration in hanger. The necessary equipment has been designed to meet quality standards and increase production, decreasing the costs and improving the life time of the product; from where we concluded

1. According to the market research conducted there is a high acceptance by the final consumer.

2. Initial investment of $63,524

3. A rate of return (IRR) of 72.19 percent is obtained.

4. Net present value (NPV) of USD 91,218.33.

5. The Soy Salud project is profitable after 5 years of analysis.

6. Break-even point: 120,446 units of bottles 500 ml.
Bibliography


Decision Empresarial. (s.f). Recuperado el 2016 de Enero de 28, de http://decisionempresarial.com/


Attachments

Attachments 1: Machines

The cold room
Is the place determined for the reception of goods so that later they are ordered in the different refrigerators.

Semi_industrial kitchen. Stainless steel
Semi_industrial kitchen with regulating key

Soybean mil
Heat tank, with lid and key for 27 liters