



**University of Azuay**

**Law Faculty**

**School of International Studies**

**INTEGRAL MANAGEMENT MODEL FOR THE  
INTERNATIONALIZATION OF THE MACANA IKAT  
OF GUALACEO IN AZUAY**

Graduation work prior to obtaining the title of:

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## **DEDICATION**

To ARTISANS in whose talented hands guard  
one of the most important pieces in the history  
of Ecuador.

To VALERIA, EMILY, ELAYNE and  
MALENA, for allowing us to coincide in this  
life and build dreams together.

And to anybody who are holding it in your  
hands with the same hope with which I began to  
write this research: SERVE OTHERS.

To MATI so that you never let someone tell you  
that you cannot fulfill your dreams.

To my GRANDPARENTS, for teaching me that  
with effort and perseverance everything is  
achieved.

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where we are.

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to teach us to fulfill our dreams, because we are  
sure that wherever we go we will take your  
advice in our heart and soul.

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door to their homes and for letting us summarize  
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ancestral talent.

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collaboration and the constant support of  
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## **ABSTRACT**

In Gualaceo of the province of Azuay, in the south of Ecuador for centuries, macanas have been elaborated under an ancestral technique: the Ikat. Through the occasional experience of several artisans, a comprehensive management model is developed to guarantee national commercialization, but also boost their participation in the international market. Based on the principles of continuous improvement, strategic planning and value proposition, this administrative tool designs the processes of management, production, financing, marketing and human talent, based on scientific theories developed for PYMES.

Based on the homogenization of the main production processes, and the added value of its artisans in the value chain, different tracking options are proposed, so that the Ikat macanas can be offered in European markets, as well as high-end fashion trends, through the government program Exporta Facil with focus of study to the Federal Republic of Germany. In addition, this model takes special attention to the cultural, ancestral and intangible importance of the talent of its artisans. This is perhaps the first advance of commercial, artisanal and economic research for a possibly productive sector, and capable of adapting to any other Ecuadorian craft that guarantees improvements in the current economic model of the country.

**Keywords:** Gualaceo, managment, craft, macanas, Ikat

## RESÚMEN

En el cantón Gualaceo de la provincia del Azuay, al sur del Ecuador durante siglos se han elaborado macanas bajo una técnica ancestral: el Ikat. A través de la experiencia ocasional de varios artesanos se elabora un modelo de gestión integral que garantice la comercialización nacional, pero también impulse su participación en el mercado internacional. Bajo los principios de mejora continua, planeación estratégica y propuesta de valor; esta herramienta administrativa diseña los procesos de gestión, producción, financiación, comercialización y talento humano, en base a teorías científicas desarrolladas para PYMES.

En base a la homogenización de procesos principales de producción, y el valor agregado de sus artesanos en la cadena de valor, se plantean diferentes opciones de seguimiento para que las macanas Ikat puedan ser comercializadas en mercados europeos, como bien de gama alta en tendencia de moda, a través del programa gubernamental Exporta Fácil; con enfoque de estudio a la República Federal de Alemania, Sin mencionar, además, la importancia cultural, ancestral e intangible del talento de sus artesanos. Este es quizá el primer avance de investigación comercial, artesanal y económica para un sector posiblemente productivo, y capaz de adaptarse a cualquier otra artesanía ecuatoriana que garantice mejoras en el modelo económico actual del país.

**Palabras clave:** Gualaceo, gestión, artesanías, macanas, Ikat

## **CHAPTER 1**

# **1. THE IKAT: ANTECEDENTS AND HISTORY**

## **Introduction**

The Ikat is an ancestral technique practiced a few kilometers from Gualaceo in the province of Azuay. Several investigations and experts in the subject show different theories about its origin. Nowadays different clothing is made based on this technique, recently declared Cultural Heritage. Nevertheless, the macana is one of the most representative clothes of the sector and of this technique. Generations of artisans have dedicated their entire lives to the elaboration of this technique, with the firm intention of continuing with this legacy and perpetuating this cultural process.

The productive sector of the macana has little participatory representation in the Ecuadorian economy in comparison with the other industries. However, the potential growth that it has had over time poses one of the most favorable scenarios for its commercialization around the world.

## **1.1.Nature and History**

The term Ikat comes from the malayan word *mengikat*, which means "to bind" or "knot". It is a special weaving technique. It differentiates from the others because the fibers are dyed before starting to weave. The Ikat technique was born in Indonesia and began to be developed by artisans from areas where Islam was not practiced. The zones of greater production were in their essence Christian: Nusa Tenggara and the Moluccan Islands. Being a country with a great diversity of religions, the beliefs and customs of its inhabitants and artisans have made these sacred and spiritual looms (Textiles de Indonesia, 2014).

From its origins this word was an attribute of its own for both the technique and the finished art. This technique has been distributed in different parts of the world adapted to each of its cultures such as: Thailand, Malaysia and other Asian countries; also Africa, Turkey, Greece, etc. In South America, the Ikat technique began 3000 years ago. This technique, according to several authors, was developed before the arrival of the Spanish people. Peru was the center of its artisanal practice. The technique of knotting was commercialized in the areas of Chiclayo, Piura and

Tumbes. However, there are other theories in which it is believed that it was introduced into Mexico from Asia in the sixteenth century, thanks to the extensive trade product of the relationship between the two continents. Countries such as Guatemala, Colombia, Bolivia, Chile and Argentina have been ephemeral scenarios of their development (ibídem).

The Cañaris made their textile creations under the transformation of natural fibers into yarns, among them the cabuya or jute whose dyeing was obtained from the properties of several natural pigments. With the arrival of the Incas, the wool of the camelids was introduced for their elaboration, and the Europeans implemented the cotton of sheep through their looms (Maki Fair Trade S.A, 2017). Some investigations determine that this tradition extended from Cajamarca in Peru, to Cuenca in Ecuador. According to this theory, in the process of adaptation, American artisans begin to translate into their looms the culture and traditions. In Ecuador, for example, the cultural impact that this article brought with it was so important. Nowadays it is part of the typical clothing of traditional characters such as the "Chola Cuencana", or the Feast of the Virgen del Cisne in Loja (ibídem).

The Ikat is considered one of the most complex methods. The dyeing of the fibers occurs before they start to weave to prevent the dye from staining certain sections. With the use of different materials resistant to water, the fibers are grouped with vegetable fiber, cotton rope or raffia, even plastic. After the dye is applied, the knots are released to repeat the process as many times as necessary according to the figures and the color to be achieved. Finally, the fibers ready to be used, are woven in a waist loom. Generally the artisans use their body to maintain the pressure when producing their creations (Textiles de Indonesia, 2014).

Among the different types of Ikat is the one of warp, of weft, and the double Ikat. The first is applied to cotton or other vegetable fibers; it differs from the others because the patterns are identified in the loom even before they are woven. For the weft artisans usually use silk fibers already with established patterns; therefore, the design appears at the time of weaving. The time of processs creation with weft fabric is longer because the artisan must pay special attention to the drawings and design (ibídem).

The double Ikat is the production mixture of the Ikat of warp and weft mode. This technique is even more complicated than the first two. It requires a great skill on the part of the artisan to be able to adjust and coincide with the drawings of the weft, but at the same time guarantee that the warping can demonstrate these drawings before being woven. However, historically this technique has been developed only in Japan, Indonesia and India (ibídem).

In Ecuador, this technique is guarded five kilometers from the center of Gualaceo in the Province of Azuay. José Jiménez, recognized artisan who inherited from his ancestors the process of elaboration of the technique of Macanas Ikat, ensures that the hamlets of Bullcay and Bullzhún were huasipungos of important landowners in Azuay (Jiménez, 2018). In these localities the artisans have dedicated their whole lives to the elaboration of this art with the firm intention of continuing with the cultural traditions that their ancestors transmitted to elaborate the "Paño de Gualaceo" that is commonly known as "Macana" (Abordo, 2017). The "Paño de Gualaceo" has built the ethnic and cultural identity of the canton and Azuay, since about 1860 (GAD Municipal del cantón Gualaceo, 2016). However, its artisans say that this ancient art originated in Gualaceo. The ancestors used this "cloth" for religious or civic celebrations of the town, and important ceremonies; the rest of the time this instrument was carefully guarded for the next occasion.

On June 24, 2015, this ancestral technique was declared Intangible Cultural Heritage of the State by the Ministry of Culture and Heritage. The weavers have an average age of 55 years. This technique has been practiced, mostly, by women. Traditionally, the activities of both men and women are different, making this technique a family and home art. Women take care of the fibers, the warping, the selection of threads, the tied, the dyeing and the untwisting, as well as the confection of the fringe and the final aesthetics. The daughters, on the other hand, learn from 7 to 12 years old. Only after diverse practices and a process of preparation are they will be able to make their own macanas (Miller, 2016).

## **1.2.Sectorial Characteristics**

Up to now, data collection, economic, technical reports, and tabulation of information regarding the economic participation of the macanas have not been

developed. However, for the determination of conclusions of the economic evolution and the participation in the market of the macanas, it was decided to carry out the study in the sector to which they belong within the country, the province and the canton. Although the results obtained from the analysis of this information do not reflect the exercise and economic contribution of the Ikat macanas, they promise encouraging results due to their cultural, patrimonial and ancestral importance that they keep their tissues.

### 1.2.1. Participation in Ecuador

**Table 1** Participation of the Manufacturing sector 2017 GDP

<b>GDP of the Manufacturing Industry (except oil refining)</b>				
	2014	2015	2016	2017
<b>TOTAL GDP</b>	101.726,3	99.290,4	98.614,0	103.056,6
<b>GDP Manufacturing Industry</b>	13.716,7	13.513,0	13.621,6	14.043,7
<b>Porcentual Participation of GDP</b>	13,48%	13,61%	13,81%	13,63%

**Source:** Ecuadorian Central Bank

**Author:** Vélez Carlos; Yungasaca Belén

The amount of Gross Value Added by the Manufacturing Industry has been increasing over the last four years. Although for 2015 the total GDP shows a decrease in its totality. The percentage share of the sector related to this totality increased significantly. This participation decreased for the year 2017; however, it is necessary to point out the significant increase in GDP as a whole.

The quarterly percentage variation of 2017 reflects a continuous growth from the second quarter. Adding the aggregate values of each of the quarters can show the notable growth that has taken place in the last year. In 2015 the variation is negative due to the imbalance and decrease of the gross aggregate amount in millions of dollars. However, its participation increases in comparison to other industries.

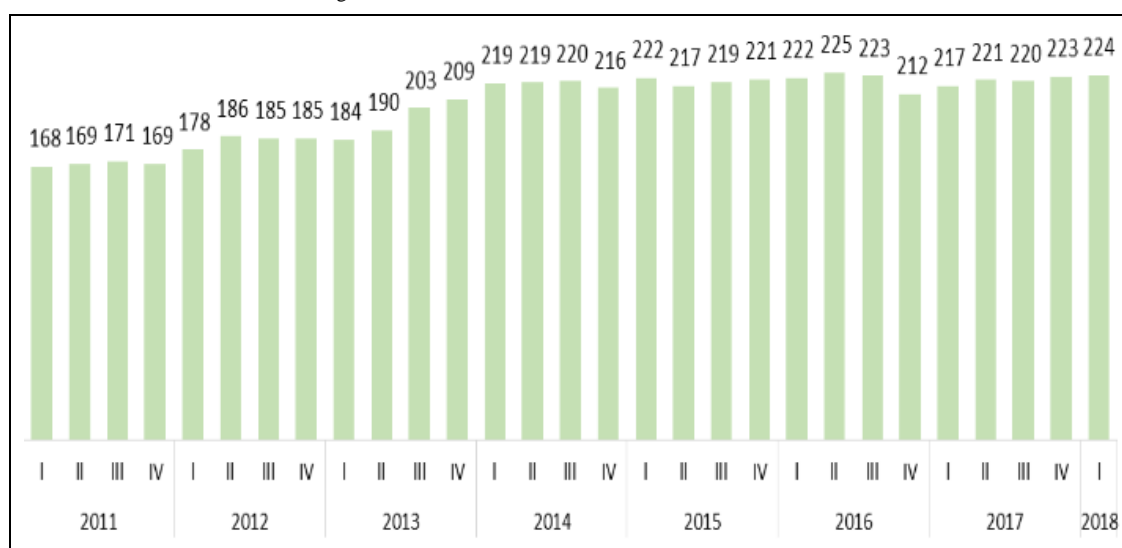


**Table 2** Variation VAB Manufacturing

Variation of the Gross National Added Value of the Manufacturing Industry (except oil refining)			
2014	2015	2016	2017
2,5	-2,2	0,3	1,6
2017			
I	II	III	IV
0,19704642	0,146598493	0,15505813	1,13138545

**Source:** Ecuadorian Central Bank

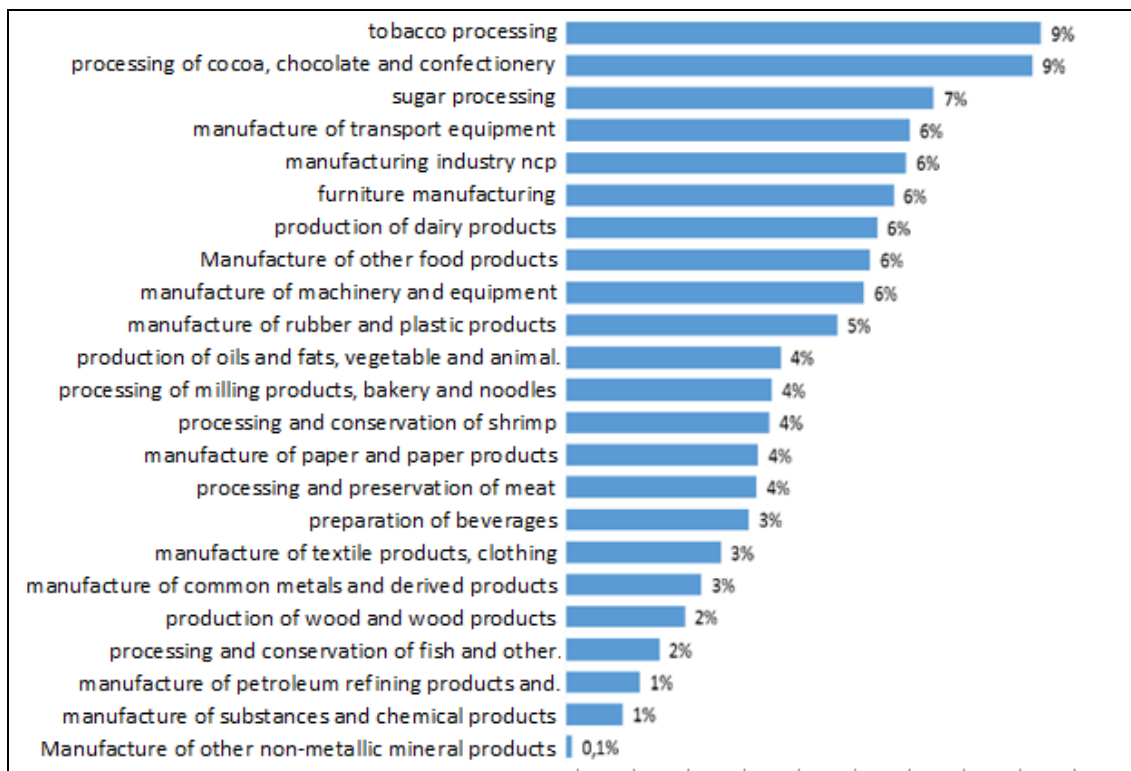
**Author:** Vélez Carlos, Yungasaca Belén

**Illustration 1** GVA per capita manufacturing (Millions of USD)

**Source:** Ecuadorian Central Bank

**Author:** Ministry of Industries and Productivity

For the first quarter of 2018 the GVA per capita manufacturing in millions of dollars is 224. In the first quarter so far this year, the figures have already surpassed the highest of the four quarters of the previous year. It is important to emphasize the significant value that has been achieved in recent quarters, including 2016, 2017, and 2018, when the socioeconomic reality of the majority of the Ecuadorian workforce did not have a significant improvement in its economic level.



**Illustration 2** Participation % of the GVA of the Industries on the total of the Manufacturing Sector (I Trim 2018)

**Source:** Ecuadorian Central Bank

**Author:** Ministry of Industries and Productivity

For the first quarter of 2018 the percentage participation of the industries on the Total of the Manufacturing Sector is 6% located in the third most predominant group. It is important to emphasize the little difference that exists between the first two groups, whose increase in participation can be understood by the amount of trade and people who practice and market it.

**Table 3 GVA 2016**

<b>Position</b>	<b>National Gross Value Added (2016)</b>	
1 Construction	11.871.200	12,92%
2 Wholesale and retail; and repair of motor vehicles and motorcycles	9.636.540	10,49%
3 Public administration, defense; mandatory social security plans	6.849.432	7,46%
4 Professional, technical and administrative activities	6.387.578	6,95%
5 Education	5.419.378	5,90%
6 Transportation and storage	5.139.081	5,59%
7 Real estate activities	4.653.044	5,06%
8 Extraction of oil, natural gas and related service activities	3.375.391	3,67%
9 Social and health services	3.272.944	3,56%
10 Other crops	2.658.766	2,89%
22 Manufacture of textile products, clothing; manufacture of leather and leather goods	964.437	1,05%
<b>Total</b>	<b>91.874.643</b>	<b>100,00%</b>

**Source:** Ministry of Industries and Productivity

**Author:** Vélez Carlos; Yungasaca Belén

The table represents values for 2016 because the regional and cantonal accounts had not been updated until the presentation of this research. The National Gross Value Added by Industry is presented in 2016 to be able to make projections of assumptions regarding the participation of each of the economic activities for the year 2017. Thus, the manufacture of textile products, clothing; manufacture of leather and leather goods are located at position number 22; in this then with a participation of 1.05% that in comparison of the other nontraditional activities does not represent significant difference.

### 1.2.2. Provincial Participation

**Table 4** GAV Azuay 2016

Position	Gross Value Added 2016 Azuay	
1 Construction	795.818	16,80%
2 Wholesale and Retail; and repair of motor vehicles and motorcycles	480.556	10,14%
3 Transportation and storage	327.152	6,91%
4 Real estate activities	298.198	6,30%
5 Education	260.224	5,49%
6 Supply of electricity and water	257.449	5,43%
7 Professional, technical and administrative activities	251.765	5,31%
8 Financial services activities	246.799	5,21%
9 Public administration, defense; mandatory social security plans	226.245	4,78%
10 Social and Health Services	222.445	4,70%
24 Manufacture of textile products, clothing; manufacture of leather and leather goods	34.981	0,74%
<b>Total</b>	<b>4.736.948</b>	<b>100,00%</b>

**Source:** Ministry of Industries and Productivity

**Author:** Vélez Carlos; Yungasaca Belén

In Azuay for 2016, the Gross Value Added of the construction sector ranks first with 16.8% of the general total for that year. It is important to emphasize that the manufacture of textiles, clothing, leather manufacturing and leather goods in the province of Azuay ranks 24th with 0.74%; it is necessary to point out that their position increases at the national level due to the contribution of other provinces.

**Table 5** Gross Value Added in Azuay

Gross Value Added			
1 Agriculture, forestry and fishing	133829	8 Transportation, information and communications	429993
2 Exploitation of mines and quarries	70914	9 Financial activities	278779
<b>3 Manufacture</b>	<b>867720</b>	10 Professional and real estate activities	549964
4 Supply of electricity and water	257449	11 Public administration	226245
5 Construction	795818	12 Education	260224
6 Commerce	480556	13 Health	222445
7 Accommodation and meals activities	93610	14 Other services	69403
Total			<b>4736948</b>

**Source:** Ecuadorian Central Bank

**Author:** Ministry of Industries and Productivity

**Table 6** Gross Value Added Cantons

Provinces	Value Added	Territorial Participation	National Participation
Chordeleg	3216	0,40%	0,00%
Cuenca	<b>854686</b>	98,50%	5,90%
El Pan	50	0,00%	0,00%
Girón	527	0,10%	0,00%
Guachapala	56	0,00%	0,00%
Gualaceo	5805	0,70%	0,00%
Nabón	603	0,10%	0,00%
Oña	83	0,00%	0,00%
Paute	330	0,00%	0,00%
San Fernando	95	0,00%	0,00%
Santa Isabel	552	0,10%	0,00%
Sevilla de Oro	288	0,00%	0,00%
Sígsig	718	0,10%	0,00%
Pucará	193	0,00%	0,00%
Camilo Ponce Enriquez	518	0,10%	0,00%

**Source:** Ecuadorian Central Bank

**Author:** Ministry of Industries and Productivity

In Azuay, the Gross Added Value of Manufacturing was the largest and most important sector in 2016. According to several authors, Azuay is the province with the greatest artisanal and cultural intensity. In Cuenca, the highest concentration of manufacturing activity is located, with 5.9% in national participation and 98.5% in the province. However, after the capital it is Gualaceo with 0.7% provincial participation. This is due to the commercial flows that have been made over time. Most of the textile or manufacturing crafts developed in the cantons of the province and are sold in the capital, increasing the cost of transport and therefore the sale price to the consumer.

The information previously analyzed expresses the evolution and economic development of the textile sector in Ecuador. Due to the scarce development of information regarding the Ikat macana, this management proposal must assimilate the trend of the industry to which the club belongs, so that it can guarantee the expected results.

### **1.3.Production Characteristics**

#### **1.3.1. Production Locations**

In Ecuador, macanas made with the Ikat technique are produced mainly in Gualaceo, in Azuay. According to the technical study of the Ministry of Culture and Heritage of Ecuador, in the center of Gualaceo there are 20 artisans; while in the suburbs 150 between Bullcay and Bulzhún (Abordo, 2017).

Gualaceo is one of the main cantons of Azuay, since its foundation on June 25, 1824. According to historians, different theories arise from the origin of its name. It is said that between the banks of their rivers the Cañari civilization began, with them the first ayllus, then the Incas and their colonists, the Spaniards. This is why it is the scene of one of the greatest cultural diversities and racial mixtures of the province. Nowadays, this Cultural Heritage of Ecuador is known as "place where the river sleeps" or "El Jardín Azuayo" named after poets and illustrious musicians in honor of its beauty (Ilustre Municipalidad de Gualaceo, 2018).

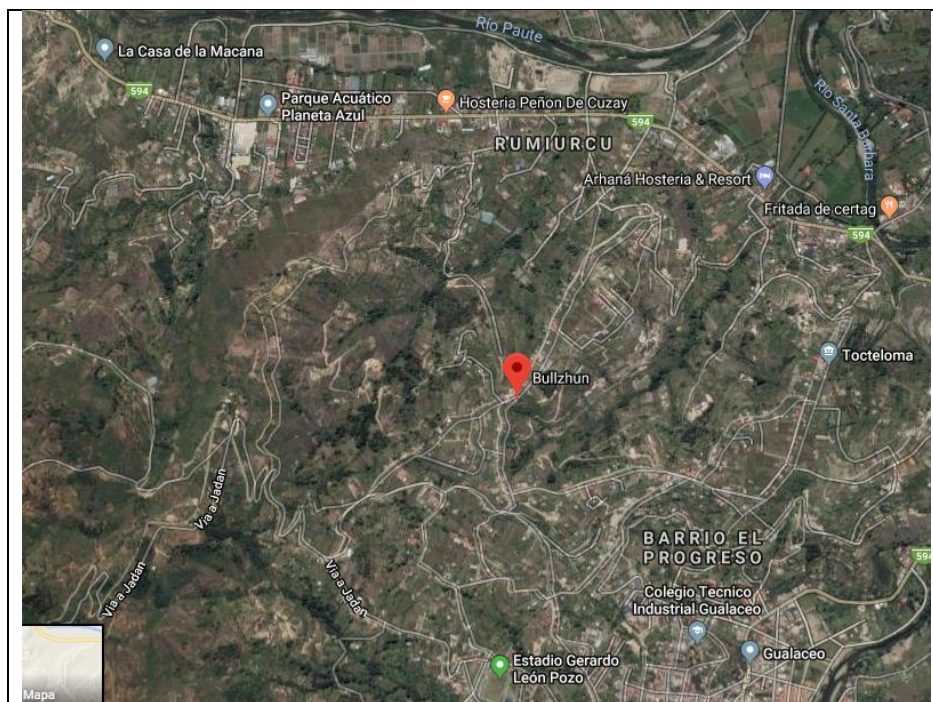
Gualaceo is located in the central-eastern area of Azuay, in the sub-basin of the Santa Bárbara River, which belongs to the Paute River basin. It is limited to the North by the cantons of Paute and Pan; to the South by Chordeleg and Sígig; to the East with Morona Santiago and to the West with Cuenca. Within its territory, Gualaceo covers 38 587 people, distributed in nine parishes (ibídem).



**Illustration 3** Cantons of Azuay

Source: Prefectura del Azuay

Bullcay and Bulzhún are two sets of tile and adobe houses. They are located on the side of the Gualaceo Valley. The majority of its inhabitants have dedicated their lives to the elaboration of macanas, a characteristic feature of the sector and the canton (ibídem).



**Illustration 4** Bullcay y Bulzhún

Source: Google Maps

### 1.3.2. Variety of Products

The diversity of "macanería", as known by the artisans who practice it, is varied in its colors, shapes and size. In the same way, the macana can be used to make shoes, scarves, colorful fabrics with patterns and geometric figures, ponchos, shawls, scarves, belts, etc. Below are macanas and products made by different artisans.



**Illustration 5** Macana

**Author:** Gladys Rodas

**Source:** CIDAP



**Illustration 6** Macana Poncho

**Author:** Carmen Orellana

**Source:** CIDAP



**Illustration 7** Macana Shoes

**Author:** José Jimenez

**Source:** El Comercio



## **1.4.Regulatory Framework**

The normative bodies analyzed later develop the state contribution and the legal framework for artisans and producers of MIPYMES that has considered the normative aspects that enunciate directly the artisan, popular or solidary activity; without prejudice to the fact that the body as a whole can be beneficial for the exercise of these artisans.

### **1.4.1. Ecuadorian Constitution**

In the Seventh Section, referring to the State's Commercial Policy, Article 306 determines the promotion and creation of promotional measures for the exports of the artisanal sector, of small and medium producers. On the other hand, in Title VII, the constitution of Ecuador reflects in Article 348 the support of artisan education in equal measure, and under the same conditions as public education at all levels (Asamblea Constituyente, 2008).

### **1.4.2. National Development Plan “Toda una Vida”**

It is pertinent to focus on the objectives belonging to Axis 2 related to the Economy at the Service of the Society, understood as an economic system for the equal benefit of all market participants, and with reciprocal actions for them. The public, private, popular and solidary subsystems interact. Next, goals 4, 5 and 6 will be analyzed (SENPLADES, 2017).

Objective 4 raises the idea of the promotion and improvement of artisans, protected or regulated under the framework of popular and solidarity economy. Thus, there are relevant aspects such as the reduction of procedures, preferential access to loans and financing, public procurement, and measures for effective inclusion within this new economic system to ensure diversification, differentiation and breadth of exportable supply. All these have the firm commitment to guarantee a greater participation of the MIPYMES and the actors of the Popular and Solidarity Economy. In fact, goals for 2021 are determined as the participation of the Popular and Solidarity Economy in the amount of public procurement; the increase of total purchases of supply chains, among others (ibídem).

Objective 5 seeks to improve the productivity and competitiveness of economic actors with equal opportunities for artisans, micro and small producers. The idea of associativity is seen as an essential tool in the commercialization processes for the different actors of the Popular and Solidarity Economy. Through mechanisms of equal cooperation; the artisanal creations and the products of MIPYMES will be able to respond to the demands of the market (ibídem).

Objective 6 focuses on guaranteeing food sovereignty through a production system that optimizes resources and productivity. It is important to highlight the idea of promoting fair trade for the products and services of artisans and MIPYMES. In this way, the state's commitment to distribute the benefits and real gains to work and artisanal dedication is evident (ibídem).

Thus, the fulfillment of each of the objectives described above can become the path to *glocal development*. Acosta had already proposed it for the exploitation of natural resources in Ecuador (Acosta, 2005), a term coined in the decade of the 80s, so that together with sustainability and a planetary citizenship articulated the global conditions and needs with adaptations and local practices are. In this way it guarantees better living conditions and recognition to Ecuadorian artisans with more possibilities in the global environment (Murga & Norvo, 2017).

#### **1.4.3. Popular and Solidarity Economic Law**

Its purpose is to systematically integrate the productive sectors of Ecuador and include in this group the artisanal sector, small and medium production. It seeks to enhance the practices, traditions and culture of the different nationalities, communities and peoples of the country. However, in order to regulate their activities by this law, it is necessary that the artisan registers before the competent authority. Thus, this law defines the limitations definitions of associations and cooperatives, tools and traditional forms of organization of artisans; develops, refines and determines the requirements for their legal status (Asamblea Nacional, 2011).

The associative sector is, according to article 18 of this normative body, the set of associations of people who exercise similar or complementary economic productive activities with the purpose of commercializing, supplying, producing and consuming in solidarity. On the other hand, article 21 define the cooperative sector as

the set of societies of people that, like the associations, seek to fulfill their marketing needs through a common enterprise (ibídem).

In this way, the business fabric of productive linkages can effectively contribute to the new conception of the productive matrix, by means of putting different alternatives to the traditional ones, new models of products and production with higher added value than the competition. It seeks to generate differentiation based on sustainable and competitive business models that pursue the development and participation of all the productive sectors of Ecuador.

#### **1.4.4. Law of Defense of the Artisan**

This is the legal regulatory body created and formed specifically for the artisanal population sector. Through article 1, the State guarantees efficiency in the recognition of the rights of artisans, trade associations, trade unions, and professionals (Junta Nacional de Defensa del Artesano, 2008).

According to article 2, artisanal activity is defined as the manual activity carried out for the transformation of raw material with or without the aid of machinery. In this way, the artisan can be understood as the executor, worker or workshop teacher; duly authorized by the National Board of Defense of the Artisan, registered in the Ministry of Labor that is dedicated to these activities in a personal way and who has or not destined a capital not superior to 25% of the small industry. Under this same framework, the artisan workshop would be the physical place or the facilities (ibídem).

#### **1.4.5. Environmental Legislation**

In recent times, Ecuador has promoted a better management of natural resources and biodiversity for both the public and private sectors. For the purposes of this study, only the Environmental Management Law approved by the National Congress will be analyzed. Thus, through a decentralized environmental management system, the prevention, precaution, care and non-contamination are guaranteed, with a focus on sustainable development for all the productive sectors of Ecuador. The environmental impact of the artisans in the production of the Ikat macanas does not represent significant values in the established ranges. Although its production requires natural resources such as cotton fiber, wool or plant resources to

dye these fibers, its activity is not considered within the legislative bodies in force in environmental law in Ecuador (Congreso Nacional del Ecuador, 2004).

## **1.5.Socioeconomic Situation of Artisans**

In order to analyze the socio-economic situation of Artisans, the leader or manager of the artisan association of Macanas Ikat was determined with the greatest economic, cultural and historical participation of the sector divided into three segments: the first whose economic activity of the leader is located in the via Cuenca - Gualaceo before arriving at the hamlets of Bullcay and Bullzhún; the second whose home of the leader is in Bullcay; and the third located in the area of Bullzhún. It is important to emphasize several names of great representatives of this art such as Leonidas Ulloa, Zoila Rodas, among others that for reasons of field research are not described below.

### **1.5.1. José Jiménez (“Tejeduría a Mano” Association)**

In an adobe house, old but cozy, surrounded by a large green area; José Jiménez, 59 years old, maintains the current production of what has been his economic activity of survival throughout his life. The elaboration of macanas and other garments such as ties, cushions, sheets and shoes under the Ikat technique has been the scene of the greatest memories in his life. With the exception of 15 years that due to adverse situations such as dollarization and the strong wave of migration that the Azuay faced, José had to stop practicing. This ancestral talent was learned with dedication and perseverance from his parents and grandparents. According to José, they had already tried to market their works to other cities such as Riobamba, even Peru. In 1980, with only 5 sucres in his pocket, as he tells us, José traveled to Quito to promote the macana nationally (Jiménez, 2018).

His family is small but with an unbreakable bond of love and happiness, as he describes them. His wife, Gladys Rodas, also an artisan, is a winner of the UNESCO Prize for her traditional shawls. Her daughter, nowadays, is an Environmental Engineer from the University of Cuenca, while her youngest son is studying Textile Design at the University of Azuay. The latter has developed a textile graphic line that unifies the contemporary trend with the traditional Ikat.

José has taught 60 neighbors and colleagues for generations. Nowadays, he prefers to work alone and independently due to negative experiences they have had with several associations. He expressed that the only thing that motivates him to work as a leader of an association is to generate a handmade brand of ancestral technique that he practiced for a long time. Today, he is writing two books simultaneously, one related to the history of the "Cloth of Gualaceo" and another referring to the techniques for dyeing the threads (ibídem).

"How can you put the cross of the house, without first establishing the foundations" said Jiménez (2018). For a long time there have been several programs, attempts and training that have been given to increase their participation in the Ecuadorian economy; however, you cannot give packing, export, or sale training when the nature of the PYME is not even consolidated with the variability of the crafts (ibídem).

José Jiménez has produced emblematic works for important institutions and celebrities both in Ecuador and around the world. He produced 60 tablecloths for the Carondelet Palace, in the government of Rafael Correa. According to José, the rescue of the value of crafts begins with this government. Under state projects, José's macanas begin to be exported and several copies are used for national and international promotion. Thus several copies have been shown in Hollywood, as in the movie *Frida*, starring Salma Hayek; and even a personalized greeting by Queen Sofia (ibídem).

Despite having worked with designers, merchants, exhibitors, agents of national fairs, etc. José maintains his resentment for the scant cultural recognition that his works have. In fact, he distrusts many of the governments of the day. According to him, no government flourishes, and if it does, handicrafts are the last factor of development. According to his own experiences, both the commercial agents and the public and private institutions with which he has worked are unaware of the origin of this knowledge. Within the same state system and its organs of operation, Ecuadorian art and work are belittled. According to José, previously known as the "Paño Anudado", the "Paño de Gualaceo", by transforming it into the "macana Ikat" lost all the geographical and ancestral essence that Gualaceo had (ibídem).

José Jiménez and the members of his association have devoted the majority of their lives to the elaboration of macanas under the Ikat technique. The added value that he intends to deliver to the market has been a continuous challenge for his family and his association. At present, implements such as Spanish looms and the incursion in new ecological fibers has led the association and its family to continue competing in the national market, with small orders abroad. However, its main objective is the promotion of a patrimonial culture, in which Ecuadorian crafts are valued around the world.

#### **1.5.2. Carmen Orellana (“Los Paños Finos de Gualaceo” Association)**

Carmen Sofía Orellana Rodas makes clothes with the Ikat technique, and receives visitors, tourists and neighbors daily in her humble home located on the main road of the Gualaceo canton, near the Bullcay Community House. At 64 years of age, she is a mother whose only daughter between ropes and girdles is a lawyer. Carmen tells all the visitors the benefits that her art and ancestral talent had brought to her life that her parents taught her when she was only 5 years old. Her parents lived on agriculture and livestock. However, all her life was dedicated to the development of this ancestral technique and Carmen has perfected her technique to offer today shawls, ties, capes, scarves, among others made of silk, cotton or wool (Orellana, 2018).

She has been a beneficiary of the peasant insurance, although she usually complains about the bad decisions of the governments in power and the lack of attention to Ecuadorian handicrafts. For her, no government program has benefited its socioeconomic situation. She narrates with hope and joy in her eyes as in 2014, UNESCO had recognized her internationally for her talent and the cultural secret she hides among her looms. State institutions responsible for the culture and heritage of Ecuador made several calls to invite her to participate in the contest, after the Minister of Culture at that time had visited her home. Lacking scientific and technological knowledge she accepted the proposal with 4 or 5 shawls that had been left over from that month's sale. From one day to the next, Carmen says, she had to send samples to UNESCO (ibídem).

After waiting a long time for a response, as Carmen mentions, the notification of congratulations arrived when she was the winner of the UNESCO Prize. From that

moment, she knew that her culture and tradition could be valued at the international level. She dedicated herself, then, to weaving her works with the firm intention of spreading her culture and the ancestral knowledge that her parents had given her. She has produced emblematic works such as the chasuble for Pope Francisco in 2015. Interestingly, her father, Jesus Aurelio Orellana had made the chasuble for Pope Juan Pablo II. At present several items of clothing and works are exposed in different exhibitions in Carondelet, embassies, etc. She has traveled to Spain, Italy and Sweden with the intention of teaching her talent and the Ecuadorian culture (ibídem).

Carmen has successive experiences when marketing her works. She had the opportunity to export her macanas to Chile and France. Although it would meant large revenues, the conditions under which they were to be marketed were not fair. Neither the replacement of her brand, nor a 30% recognition to the selling agent convinced her. She appreciates the intention of different public and private institutions to promote craft talent and the appreciation of ancestral knowledge based on fair trade and cultural recognition of Ecuador (ibídem).

Carmen is the leader of one of the few associations legally formed by self-management and solidarity. With 11 women and only 1 man, Carmen's association is born out of a bad past experience. Although none of its members believe in cooperativism, "the union of all of us will be able to guarantee recognition of Ikat's ancestral knowledge and work. You cannot work for someone; I need you to recognize our talents" says Carmen (2018). Her sisters: Ligia and Dora Orellana, Elsa Rodas, Carmen Pérez, Sebastián Guillén, Anita Vanegas and her sister make up this association with a life similar to that of Carmen. Most of them deal with all macana production process. However, specialization in certain stages of production is evident. Carmen and her association are in charge of managing the "Macana Heritage Festival" together with the City Hall of Gualaceo (ibídem).

### **1.5.3. Natalia Vanegas (“Ruta de la Macana” Association)**

Fifteen minutes from the main road, in the Bullzhun village of Gualaceo, Natalia Vanegas and her family live. She started this art at 12 years old. The elaboration of macanas under the Ikat technique was learned from their parents and grandparents. However, She was dedicated to its production approximately five years ago due to a latent need of its community when it lost opportunities to sell and

commercialize its works. Thus, at 42 years of age, with a family of four children, who do not pretend, nor do they intend to learn the art, began to form the association "Ruta de la Macana" whose main intention was the sale of their crafts (Vanegas, 2018).

Natalia knows the arduous path she has to take to be able to match the other existing associations. She thanks the intervention of public and private institutions with programs of support and artisanal development. However, the procedures, requirements, and all the resources that are needed to produce are an increasingly compromising obstacle. Natalia and her family have peasant insurance and appreciate the benefits to which they have agreed, but this makes it impossible for them to bill or access the tannery. Natalia and her colleagues think that it was from the declaration of patrimony that made this intangible material more offered and therefore the demand deteriorates in response to the appearance of new producers. This new competition maintains a productive system in which the cost of production is valued and not how valuable talent and ancestral knowledge can be (ibídem).

She believes in the principles of the association, prefers to work in cooperation and to diversify the risk, with majority gains for each of its members. Eight women are the members of their work team. All of them with an average age of 48 years: Ana Matute, Rossana Ulloa, Rosa Peñaranda who is the oldest, Gloria Ruiz, Celia Bueno, Ana Ulloa and María Hurtado live a few kilometers from her house. Not all of them elaborate the process in its entirety. In fact, it was mutual commitment to specialize in different fields to guarantee production. "You do not live by art, but it is satisfying to think that from this small part of Gualaceo, one of the oldest traditional knowledges in the world is born" says Natalia (2018).

## **1.6.Current Situation of the Productive Activity of Artisans**

### **1.6.1. SWOT Analysis**

The technique proposed by Albert Humphrey in the United States during the 60s and 70s. This model was born from research carried out by the Research Institute of Stanford University whose objective was to find a solution to the failures of corporate planning (Stanford University, 2018). The SWOT technique can be



compared to an X-ray because its components analyze the current situation of a company to create practical solutions

Like most projects, it is necessary to establish a base that allows the determination of planning strategies, the establishment of activities and the organization of resources for proper management. All this thanks to a model of information collection, that through a complete and detailed analysis allows the definition of problems and weaknesses, at the same time that the most optimal scenario for the formulation of conclusions is presented.

Applying a SWOT analysis will allow to identify the factors that provide added value and improvements in the socio-economic well-being of the artisanal sector. Thus, the answers to the different economic and business conditions required by small and medium-sized craft companies with the external environment can be guaranteed. That is, through this analysis, this investigation tries to reduce the differences that exist between what it has, what is said and what should be done. This last condition reflected in the identification of the capabilities of the functional areas of the companies to respond efficiently to the requirements of foreign trade and international markets. So that in formulating conclusions, it is possible to determine solutions focused on the search of a series of actions and strategies to export in a sustainable and competitive way the Ikat handicraft industry.

#### **1.6.1.1. Strengths**

Complex technique: Considered one of the most complex methods around the world, due to its different types of production: warp, plot, and double Ikat.

Territorial participation: In the province of Azuay, Cuenca leads the participation with 98.5% of its inhabitants dedicated to this production, followed by the canton Gualaceo (Banco Central del Ecuador, 2018).

Cultural identity: This technique constitutes the ethnic and cultural identity of Gualaceo and the province of Azuay.

#### **1.6.1.2. Opportunities**

Foreign market: This ancestral technique was declared Intangible Cultural Heritage of the State by the Ministry of Culture and Heritage, which allows it to

expand inside and outside the Ecuadorian territory, increasing its exportable offer and therefore its profits.

Variety of designs: The Ikat technique offers an extensive diversity of designs, colors, texture, shapes and products that rescue the traditional and mix it with the current. In this way, continuous innovation is guaranteed.

High-end: In a garment a consumer can find a story created by ancestors that has transcended over the years becoming a legacy that, when intertwined with quality and price, offers a high-end product.

Fair Trade: The artisans are those who sell their products at a price that demonstrates good fair trade practices, that is, limited to a range of basic prices, whether artisans have the autonomy to negotiate their remuneration according to the added value they give to each one of his works.

#### **1.6.1.3. Weaknesses**

No to the associative organization: associating in most cases does not work; it is not used as a tool for development and productivity, even worse when the legislative bodies do not guarantee stability among its members.

Ordinary fabrics: Currently they do not manufacture so many fine fabrics and most are traditional.

Scarce offer: Consumers cannot monopolize large demands for products.

Absence of an administrative model: A model that manage all the activities from the dyeing to the sale of the final product.

#### **1.6.1.4. Threats**

Loss of ancestral essence and cultural value: The majority of the Ecuadorian population is unable to recognize, identify and value the culture and effort that is in a garment.

Inability to export: Most artisans, not to mention everyone, lose the possibility of exporting abroad because they do not have a certificate of artisanal qualification. This is due to the fact that one of the requirements to access the artisan qualification is to renounce peasant insurance.

Internal dumping: Since the Macana was considered in 2015 as "Intangible Heritage of Humanity", people are manufacturing products with the Ikat technique and selling them in values that do not justify the effort and time used to produce a product of excellent quality.

Indirect sale: Artisans cannot receive a direct profit, since their product is bought by merchants who often do not pay the real price of that good.

### 1.6.2. Matrix EIF

The EFI matrix is a tool that allows an internal audit of the administration of a project or company. This technique analyzes the strengths and weaknesses to create effective and efficient strategies within the productive sector (Shum, 2018). In this way, it intends to establish strategies and activities to strengthen the skills of the artisanal textile sector, especially the macana Ikat, in response to market requirements. Thus, through the analysis of the information generated, the correct decision-making will be determined to guarantee high levels of competitiveness and productivity of the sector for the sustainable exportable development of Azuay. For the development of this matrix, it is necessary to provide a weight rating of each factor.

**Table 7** Matrix EIF

Factor	Weight	Calification	Weight Rating
<b>Strengths</b>			
Complex Technique	0,05	3	0,15
Territorial Participation	0,22	4	0,88
Cultural Identity	0,11	3	0,33
Share on GDP	0,1	4	0,4
<b>Total</b>			<b>1,76</b>
<b>Weaknesses</b>			
No to the associative organization	0,2	1	0,2
Ordinary fabrics	0,09	2	0,18
Scarce offer	0,1	1	0,1
Absence of an administrative model	0,13	2	0,26
<b>Total</b>	<b>1</b>		<b>0,74</b>

Author: Vélez Carlos; Yungasaca Belén

The strengths are higher than the weaknesses with a difference of 1.02 points. This means that the territorial participation as the percentage share of GDP overcomes the absence of an administrative model as well as the various attempts to strengthen the technique of association that in most cases is unusable. The mentioned factors have been considered for their high weighting value.

### 1.6.3. Matrix EEF

Achieving the design of a strategic plan for an activity is not possible without analyzing the external environment of a sector. It is necessary to analyze and process information regarding the sector, the competition and the market; in order to assess the current situation of artisans and the level of competitiveness of the textile sector that allows the formulation of strategies and tactics to anticipate and decide on the direction of the sector in the future. The main result to be achieved is the determination of the exportable supply of Ikat macanas with their respective planning in the production, distribution and recognition processes, either as artisans or associations of them.

**Table 8** Matrix EEF

Factor	Weight	Calification	Weight Rating
<b>Opportunities</b>			
Foreign Market	0,2	3	0,6
Variety of designs	0,08	3	0,24
High-end	0,16	2	0,32
Warehouse / Store	0,08	2	0,16
<b>Total</b>			<b>1,32</b>
<b>Threats</b>			
Loss of ancestral essence and cultural value	0,1	3	0,3
Inability to export	0,18	2	0,36
Internal dumping	0,07	1	0,07
Fair Trade	0,13	2	0,26
<b>Total</b>	<b>1</b>		<b>0,99</b>

**Author:** Vélez Carlos; Yungasaca Belén

Once again the positive aspect of the artisanal sector surpasses the negative one, because the opportunities that garments made with Ikat have are more than the threats to which they are exposed. However, the reality is somewhat contradictory

since there are great advantages of increasing sales by exporting high-end products to foreign markets, but only after a feeling of belonging to ancestral history is reconstructed, as well as the consolidation of a scenario that guarantees the participation of public and private companies.

## **CHAPTER 2**

# **2. PROPOSAL OF THE ADMINISTRATIVE SYSTEM FOR ARTISANS IKAT**

### **Introduction**

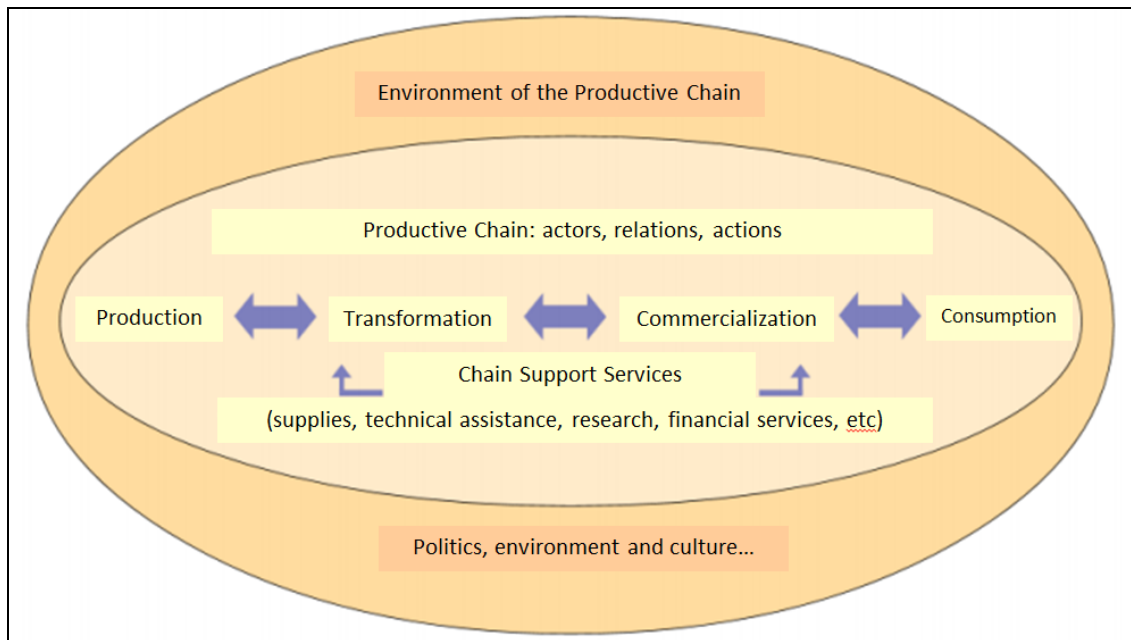
Management models around the world must be constantly evolving and develop the necessary tools to be able to adopt a company's objectives to the requirements of the international market, as well as to the advances of globalization. The following is a proposal for an administrative system for artisans of the Ikat macanas, through which strengths are highlighted in an increasingly demanding market and contingency actions are proposed to overcome the existing weaknesses.

### **2.1.Productive Chain Technique**

According to ECLAC, a productive chain is a system made up of different actors interrelated by the succession of its operations in a specific environment that does not necessarily require a geographical specification. Each productive chain will be composed of different links linked by economic actors, commercial relationships, as well as the transformation of products and services (2016).

The productive chain is a new administrative paradigm that was born in the seventies with the intention of improving the commercial, economic, production and distribution situation (Bada & Rivas, 2009). This paradigm consists of linking the different companies or different production chains that make up each of the stages of a particular production process, with the guarantee that their independently executed activities can be articulated so that they can achieve an increase in competitiveness and productivity (CODESPA, 2011).

According to several authors, the idea of local linkages does not require executive decrees directly related to them; it is enough to create an optimal scenario where local negotiations and the convergence of different interests are allowed. In this sense, we seek to standardize the processes that guarantee Ikat quality macanas, through the contribution of different companies that interact within the same production network (ibídem).



**Illustration 8** Schematization of the Productive Chain

**Source:** Economic Commission for Latin America and the Caribbean (ECLAC)

**Author:** Economic Commission for Latin America and the Caribbean (ECLAC)

The Ikat macana sector should be understood as a local chain. Without risking too much to adapt a production to international demands, the participation of other market players and other productive sectors is allowed, whose main objective is to promote market culture, art, but above all, Ecuadorian talent. These linkages should be understood as the union of several PYMES for the development of Ikat macanas, without the need to associate or cooperate. Therefore, the responsibility falls directly on the efficiency and the exercise of its economic activity, autonomous, free and without condition of the productivity of the others. In other words, the recognition of the economic exercise of each one of the artisans is guaranteed, without avoiding the unfair distribution of the gain given by the difference between the efforts used.

**Table 9** Differences of Productive Chains

Aspects	Traditional Chain	Productive Value Chain (Model raised for Ikat Macans)
<b>Organizational structure</b>	Independent Actors	Interrelated actors among artisans, suppliers and buyers, with autonomy in the production and responsibility of the link.
<b>Orientation</b>	Led by the offer	Decisions taken with a focus on meeting the Ikat macana demand standards.
<b>Market Identification</b>	Market potential	Artisans identify potential based on market studies, through strategic alliances.
<b>Main Element</b>	Cost/Price	Artisans seek to satisfy customers. Perception of value / quality.
<b>Strategy</b>	Basic products	Products that produce differentiation due to the cultural and functional value of the Ikat macanas.
<b>Actors relationship</b>	Informal	Volunteer, in search of common goals among artisans, suppliers and buyers.
<b>Vision of the Relationship</b>	Short term	Activities that guarantee strategic planning.
<b>Confidence level</b>	Low / medium	High among the actors. Negotiations on efficiency and productivity..
<b>Information flow</b>	Scarce or none	Dynamic, multiple direction, allows feedback for the macana artisan.

Source: CODESPA

Author: Vélez Carlos; Yungasaca Belén

The model proposed for the Ikat macana industry must be non-linear, dynamic, collaborative, systematic and stable. Thus, the added value becomes the result of a correct flow of information and the use of resources in each of the links of the production process. Under this model, the differentiated approach is broken down for both the artisan and the buyer (Bada & Rivas, 2009).



### 2.1.1. Advantages and Obstacles

**Table 10** Advantages and Obstacles of the Productive Chain

Advantages	Obstacles
<ul style="list-style-type: none"><li>• Increased sales and sustainability of Ikat macanas makers with high international production standards.</li><li>• Greater possibility of growth, generation of employment and entry into new markets.</li><li>• Greater competitiveness of the Ikat macana locally, nationally and internationally.</li><li>• Know in advance and prepare contingency plans for the supply and international demand for Ikat macanas.</li><li>• Promotes international cooperation in different areas and allows institutional collaboration, both public and private.</li><li>• Guarantees continuous improvement and increased productivity in the manufacturing process of the macana.</li><li>• Reduces risks, produces efficiencies and promotes relationships with suppliers and long-term buyers.</li><li>• Sociocultural identity based on common values of Ikat macana artisans.</li></ul>	<ul style="list-style-type: none"><li>• Initial lack of entrepreneurial spirit on the part of artisans. Need to stick to the craft essence, as an agent of diffusion of the ancestral culture.</li><li>• Lack of confidence among different artisans in relation to the effort taken to ensure the correct fulfillment of the objectives.</li><li>• Bad past experiences and lack of a cooperative identity that seeks the fulfillment of common objectives. Deficient levels of past administration.</li><li>• Lack of communication channels between different economic actors to align the main administration functions.</li><li>• Absence of a correct state regulation that promotes craftsmanship and its economic activity, as well as programs that can promote the marketing of Ikat macans.</li></ul>

**Author:** Vélez Carlos; Yungasaca Belén

## 2.2.Elaboration of the Strategic Plan

A strategic plan can be understood as the process of projecting the future of any company or organization, through the development of necessary goals, objectives and action plans. Thus, the improvement and continuous learning in the four administrative functions become fundamental axes for the future of the company (Evans, 2015). These functions will be described in the following lines so that they can be adapted to the different realities of Ikat artisans. Each stage will conclude with the establishment of technical specification sheets so that they become roadmaps for artisans. The efficient and productive administration of this proposal is guaranteed.

### 2.2.1. Production Area

#### 2.2.1.1. Michael Porter's Value Chain

According to Porter, value is that quality that consumers are willing to pay for the satisfaction generated by the product or service (2008). Thus, a company would be profitable if its value exceeds the production costs. This difference is generally known as margin (ibidem). The value chain concept originated in 1985, its main

objective is to identify and analyze the activities through which the company creates value to the products and services offered to its customers.

The primary activities are those activities that directly intervene in the production of Ikat macanas, located at the bottom of the chain. The secondary ones, on the other hand, are support activities that reinforce the strategic factors to guarantee the delivery of value to the final consumer; generally located at the top. However, Ikat macana artisans will be able to gain a competitive advantage over another, when they are able to increase their margin. In this way, the contribution of value that each activity contributes to the macana can be evidenced (ibídem).

**Table 11** Macana Ikat Value Chain

VALUE CHAIN OF MICHAEL PORTER FOR MACANAS IKAT					
Support Activities	<b>Infrastructure of the Company:</b> Summarizes the efficiency of the four administrative functions. Here you can classify the planning, finance and accounting systems, legality and governance of the artisans of Ikat macanas. These will develop in next chapters.				
	<b>Human Resources Department:</b> Ikat macanas are usually produced entirely by a single artisan. Nevertheless; It is necessary to point out the importance of building a culture of learning and teaching that guarantees the continuity of the ancestral practice; as well as the participation of major economic actors in the production process. It refers strictly to the search, negotiation, contracting, development and compensation between the different participants of the productive chain, and of the artisanal guilds.				
	<b>Technology Development:</b> Although the manufacture of handicrafts does not represent the development of technology itself; It is important to highlight the need for the establishment of a know - how that guards the ancestral technique and the cultural practice of the macanas. However, the use of technology can be understood from the theoretical administrative part how to manage orders and manage portfolio ratios; until the after-sales service that allows commercial relations with the client in future approaches.				
	<b>Supply or Realization:</b> Refers directly to the purchase and dependence of raw material products for the preparation of the final product. However, it will not be called purchases, because the term generally exerts a cost; while supplying guarantees future investment. This focuses on the purchase of wool, fibers and vegetable dyes, weaving and warping instruments, etc.				
Primary activities	<b>Internal Logistics</b> Reception of market trends and orders  Storage of dyes, vegetable fibers, wool, silk and cotton  Control and establishment of inventory and handling of raw material  Return to the provider, payment methods and financial indicators	<b>Operations</b> Determination of the amount and conformation of ties  Pairing of fibers and designs  Development of the design  Planning and control of fabric, dyeing and embroidery	<b>External Logistics</b> Establishment of costs and prices  Forms of sale and collection  Transportation determination	<b>Marketing and Sales</b> Publicity  Market study  Selection of communication channels	<b>Service</b> Customer loyalty programs  Cultural Communication

**Source:** Porter, Michael

**Author:** Vélez, Carlos; Yungasaca, Belén

#### 2.2.1.2. Flowchart

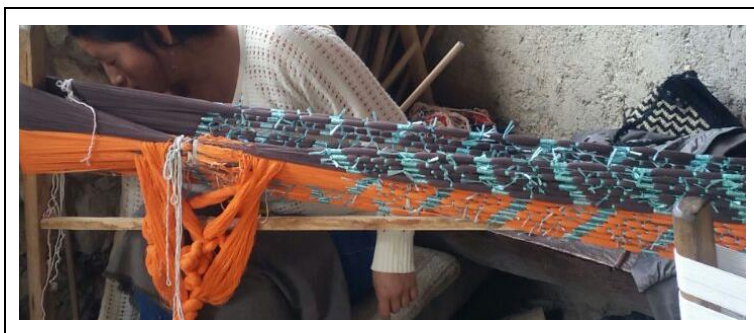
The elaboration of the macana using the Ikat technique is the result of convergence between that ancestral talent of the artisans and the use of different resources granted by nature. In the illustration the manufacturing process of the artisans for the Ikat macana is evident. Next, each one of the stages and the resources used to elaborate the "Paño de Gualaceo" is described.

**Yarn.** It corresponds to the trade of several peasants in converting vegetable fibers into yarn. Today, several industrial factories are responsible for this process, with greater speed, efficiency and productivity. However, the artisans prefer to continue negotiating with the peasants of the sector (Textiles de Indonesia, 2014).



**Illustration 9** Yarn

**Tied.** The process of tying begins by joining the threads, with the appropriate tension in the frame. In the warping the cotton, produced by the factory, and the wool by the peasants is located so that the height of the shawl can be determined with the separation of 10, 20, 30 threads. The threads are positioned horizontally. The artisans must imagine the design, while directly capturing it in the bundles. String bundles are tied with palm, raffia or other vegetable fibers, even plastic. In this way, the quality of the creation will depend directly on the number of threads grouped by each bunch. For a delicate design, you get to group two or four threads at most (ibídem).



**Illustration 10** Tied

**Dyed.** Then the threads of the wooden frame are released and immersed in the natural dye. The time that the threads remain submerged in the dye falls directly on the intensity that color is required. After exposing them to the sun, the knots are released and carefully put back into the frame, while trying to adjust them so that the design matches the main proposal. Again the knots that are considered necessary are put back to avoid that the pigment stains with dye the areas not painted. So this process must be repeated according to the colors and design required (ibídem).



**Illustration 11** Dyed

The acacia or carob tree with 4 hours of ground water with salt produces coffee, as well as the tocte or walnut. Indigo blue, under the same conditions, is used for the blue range; while the cochineal, worm of the tunas, gives the artisans the range of red color. In addition to using other vegetable dyes such as onion, avocado, alfalfa, among others; with several touches of lemon, salt and natural stones, each of the artisans enjoy the art of the properties of nature by playing with obtaining different shades of color (ibídem).

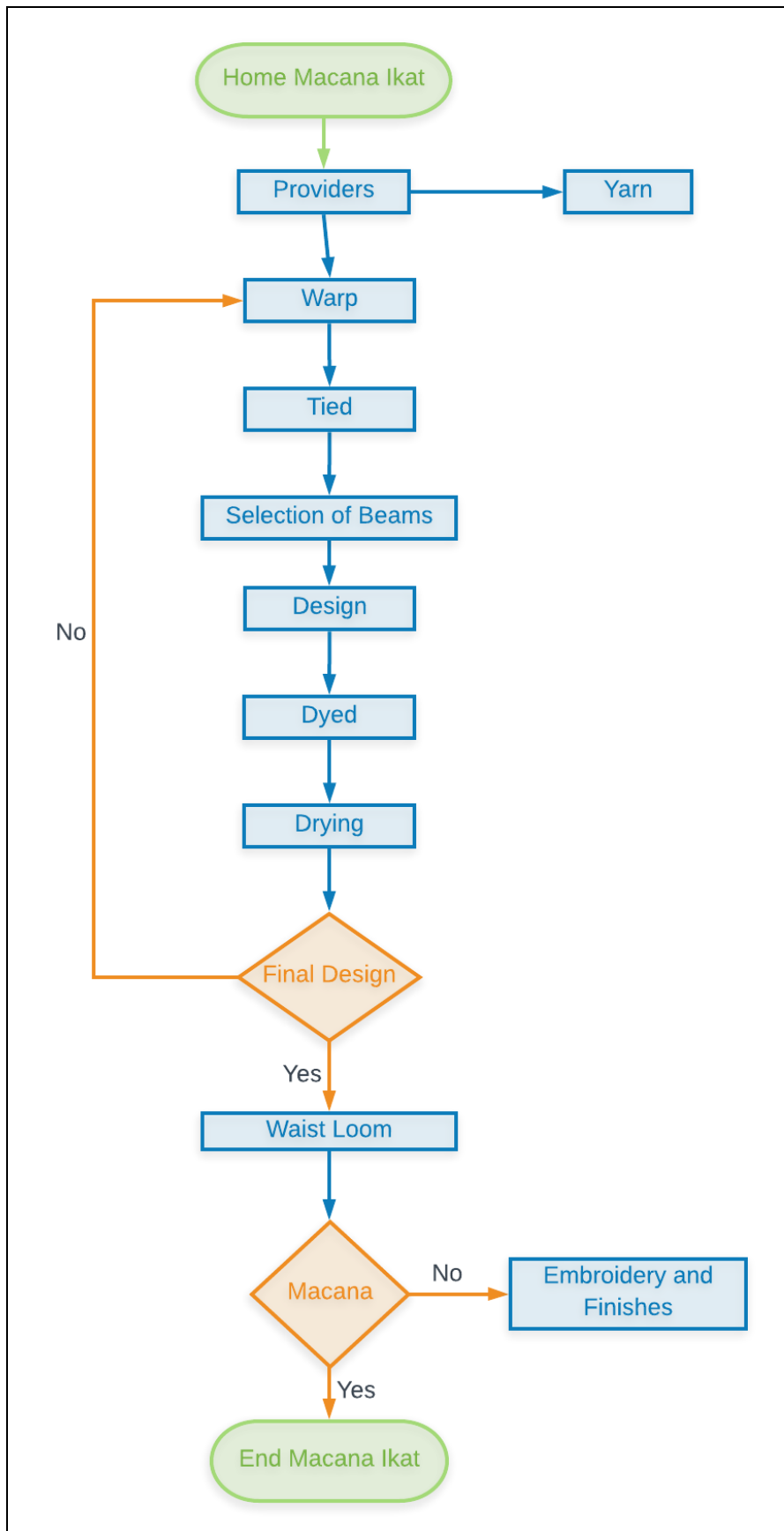
**Tissue.** In the waist loom, the warp threads should be placed as perfect as possible so that the patterns designed can be seen before weaving. The threads are

placed vertically, so that the final fabric appears as the silhouette of a tube. The width of the fabric is predetermined, designed for the arms of the woman. So if a larger width is required, two modified looms are usual (ibídem).



**Illustration 12** Tissue

Source: Diario El Tiempo



**Illustration 13** Flowchart

**Author:** Vélez Carlos; Yungasaca Belén

#### **2.2.1.3. Internal Logistic**

The reception of market trends and orders are the beginning of the production process of the Ikat macana. It requires feedbacks that guarantee the tendencies of preferences of the consumer. It is continuity due to the alternation and dynamism of the nature of the textile sector in the face of new fashion trends and technological advances that undervalue the craft work. On the other hand, the reception of orders must be handled through strategic alliances and different marketing channels. Market studies should be presented once a year, prepared by artisans or export promotion companies, in addition to market trends, marketing channels, distribution, costs and prices. The orders must be received online or physically each month with a production destined to two months of subsequent exercise. In this way, the portfolio and inventory rotation necessary for the productivity to be obtained is guaranteed.

For the manufacture of macanas, the storage of dyes, vegetable fibers, wool, silk and cotton does not require specification needs due to the nature of the raw material. None of these resources presents perishable or decomposing property; in fact, planning resources annually could not alter the quality of the final product. However, it is recommended to receive and control the flow of resources and raw materials quarterly, four times a year, so that the orders described above can be covered with surplus inventory as a contingency plan.

The return to the supplier consists of the strategic negotiation required by Ikat macana artisans for their different suppliers. The intention is that the supplier can have communication channels with the artisan, so that there is a joint improvement with the artisan in terms of the quality of the final product and the delivery time of the raw material. Under the aforementioned specifications, it is necessary to complement it with the financial ratios to be analyzed in chapter 4 to determine the payment time so that the flow of raw material can contribute to the margin of profitability of the company.

#### **2.2.1.4. Obtaining Productivity**

Productivity can be understood as the relationship between production and inputs; that is, the way in which each resource is being used, its efficiency and its contribution of value to the final product (Wheelen & Hunger, 2007). Thus,



according to Evans, productivity could be calculated by dividing the total of finished products for the amount of inputs used in their manufacture (2015). For the calculation of the real productivity in the Ikat macana manufacturing, the average measures of each of the inputs used and of the income received by the different artisans in a month of exercise were adopted. Due to the nature and dynamism of the market, as well as the different commercial relations with the suppliers of the different materials, it was decided to look for a common or equal measure for the different variables, in this case the monetary units, whether they are income or cost:

$$Productivity = \frac{Total\ goods\ or\ services}{Total\ inputs\ used}$$

$$Productivity = \frac{4\ macanas * \$46,25}{(\$10\ color) + (\$30\ cotton, silk) + (\$5\ cabuya) + (\$30\ adm)}$$

$$Real\ Productivity = \frac{185}{75} = 2,46$$

Thus, naturally in a month of exercise, the artisan of the Ikat macana obtains a productivity of \$ 2.46, this expression reflects the positive and real productivity of each of the artisans. After a month, the artisan makes an average of 4 macanas, either wool or silk, whose raw material is included in the supplies. Although there are more complex macanas that demand a higher price from the consumer, for the calculation of the average price, the range of the commonly tradeable macanas that ranges from 35 to 60 dollars was determined. The administrative section contemplates the profit that the artisan has, the legal and accounting part with which they count per month, including the recognition of the artisan's talent.

Under the implementation of this management proposal can be seen the increase in the average sale price, which is intended to recognize the Ecuadorian talent of skilled artisan in the loom with ancestral knowledge. In fact, talent and artisan recognition is seen as one more input. It should be noted that the calculation of productivity under this proposal is intended to generate productive relationships with suppliers which further decreases the cost and increases productivity. Although, there is evidence of a decrease in total productivity, it is important to emphasize that the amount of input referring to the artisan is profit and direct benefit for it.

$$Productivity\ to\ expect = \frac{Total\ goods\ or\ services\ to\ generate}{Total\ inputs\ to\ use}$$

$$Productivity =$$

$$\frac{4\ macanas * \$60,00}{(\$10\ color) + (\$30\ cotton, silk) + (\$5\ cabuya) + (\$10\ adm) + (\$50\ artisan)}$$

$$Productivity = \frac{240}{105} = 2,28$$

#### **2.2.1.5. Long Term Supply System**

Although, in most processes this link is understood as "purchases", it is recommended to understand it as a strategic supply. The latter refers to the interaction between the market and the different types of suppliers. In other words, it is a way to create productive relationships with suppliers so that long-term agreements can be negotiated in pursuit of the company's competitiveness for market satisfaction. With this type of supply, the cost and final price of the Ikat macana ceases to be relevant and takes a back seat. The quality and the guarantee of satisfying the market becomes a main factor. To obtain results under this system, a process of quality management and continuous improvement is required (Mendoza & Cevallos, 2016).

In this way, the Ikat macanas need to be understood as a luxury and high-end good, in which the talent of their artisans, their culture, their customs and traditions can be evidenced. The Ikat macanas express the Ecuadorian talent and their position as a brand is the transcendence that they hide. Subsequently, each artisan must create his portfolio of suppliers; it is recommended three maximums per input if required. After a detailed analysis, a supplier should be selected, with its respective business strategy, in order to guarantee productive relationships for a long term. All this built under the principles of continuous improvement and commitment to growth (ATKearney, 2018).

#### **2.2.1.6. Lean Manufacturing System**

Lean Manufacturing is an administrative paradigm born in the Toyota Company focused on reducing waste and maximizing the value of the product. This philosophy can be applied to the artisans of the Ikat macanas, under the focus of two

fundamental concepts: the conception of the client as the central axis in the operations of the artisans; and zero tolerance to waste (Valencia, 2013).

However, the essential part of this philosophy lies in the construction of an artisanal culture, in the case of the Ikat macanas, which allows and recognizes the talent of the artisan. Lean thinking focuses on building value according to the client's perception, that is, a high-end macana that allows differentiating the country brand around the world, whose elaboration under the Ikat technique makes it unique and reflects a feeling of luxury and elegance. It is required, in addition to a correct description and identification of the value process to avoid dead times and stages in its preparation, with a correct flow of information that becomes a value, in a vision to satisfy the expectations of the client (Hernández & Godínez, 2014).

The definition of waste was limited by several administrative thinkers. Thus, waste can be understood as any stage, activity, operation or link in the value chain that generates a cost and does not contribute with value to the final product (Evans, 2015). For the lean philosophy, there are 7 types of waste within a company: overproduction, the misuse of inventory, high transportation costs, waiting and poor relationship with suppliers and customers, unnecessary or poorly performed movements, over-processing and the absence of correction systems (Hernández & Vizán, 2013).

In this way, the four administrative functions applied to the elaboration of Ikat macanas can guarantee a LEAN paradigm through the measurement of five important conceptions for this philosophy. Artisans must define the value of the macanas by offering a fashionable alternative that responds to new trends. After the definition of its value chain, you must optimize the contribution flow eliminating any factor that stops production, while allowing the client to recognize the cultural importance of the macana. All this has a constant commitment in the pursuit of perfection (Valencia, 2013). There are an extensive number of administrative tools that allow achieving the goal of a lean manufacturing system. In this research several of these are developed with the intention of making the Ikat macanas a high-end product marketed in other parts of the world.

### 2.2.1.7. The Japanese 5 s

This methodology aims to improve safety conditions, motivation, efficiency of the staff and how these contribute to increase the quality, competitiveness and productivity of a company. Artisans must dedicate 10 to 15 minutes of their time to apply this technique daily before starting work. The 5S correspond to the initials of five Japanese words referring to the stages described below (González Correa, 2007).

SEIRI (Organization). Artisans must identify and dispose of materials that will not be used in production, such as those that only consume space and contaminate the work environment. For this stage you can use the strategy of red cards to label some unnecessary element that is obstructing the procedure. Artisans can label the materials around them to speed up their application before starting work (Barcia Villacreses & Hidalgo Castro, 2006).

RED CARD	
DATE:	NUMBER:
AREA:	
ELEMENT:	
QUANTITY:	
PROVISION	
TO TRANSFER	<input type="checkbox"/>
TO REMOVE	<input type="checkbox"/>
TO INSPECT	<input type="checkbox"/>
COMMENT:	

**Illustration 14** Red Card

**Source:** Barcia Villacreses & Hidalgo Castro

**Author:** Barcia Villacreses & Hidalgo Castro

SEITON (Order). Its function is to eliminate dead times. The main materials such as wool, ceda, ink, necessary machinery and secondary materials such as wraps, covers, cleaning equipment must be strategically organized. It is necessary that all sections that exist in the workplace have payroll. The materials must be located in a place of easy access and where waste or losses are avoided. This increases work

safety by preventing accidents due to carelessness and disorder in the production of macanas (ibídem).

SEISO (Cleaning). The idea is not that artisans waste their time cleaning, but it is a prevention technique to avoid dirt. Maintaining a clean environment means that artisans can devote more effort to creating a fabric of higher quality and aesthetic beauty. Together with the order they produce improvement in the work environment for the artisan, since they reduce the labor stress (ibídem).

SEIKETSU (Visual Control). This technique allows the Japanese 3S to be successfully fulfilled since by applying a visual control it will allow identifying and eliminating unnecessary material, keeping the workplace clean and of course avoiding the shortage of materials essential for production. Thus, waste is avoided in overproduction, in sales stocks and in waiting times (ibídem).

SHITSUKE (Discipline and Habbit). This phase is undoubtedly the basis for an adequate production since without these two values it is not possible to meet any of the previous 4S. If this section is not applied, the application of this methodology will end up being useless. The artisan is committed to seeing this methodology in a form of continuous improvement for the organization or workshop. Optimized workflow leads to increased productivity for Ikat macanas. Monthly meetings should be held where artisans should share with their colleagues in the association the results and obstacles that have been presented (ibídem).

To implement this methodology in the production of Ikat macanas, two important phases must be followed:

1. Pilot phase: The artisan should practice the methodology in a gradual way. To carry out this first phase it is necessary to have a facilitator, who will be responsible for reporting on the operation of this methodology. In this phase, the necessary time must be devoted to the main 3S of the methodology (González Correa, 2007).

2. Generalized phase: Here the implementation progressively extends to the rest of the areas within the production of Ikat macanas (ibídem).

The identification of a facilitator within the work teams is important in order to consolidate and strengthen this administrative model. Thus, the director may be the artisan who leads an association; this person must be convinced of the importance of organization, order and cleanliness. The rest of the team must commit and dedicate them to continuous and applied training. They should also propose and devise action plans for each S of the methodology (Oloffson, 2018).

#### 2.2.1.8. Specification Technical Sheet

**Table 12** Production Technical Sheet

5. Lean Manufacturing		
Avoid waste		
5's	Organization	
	Order	
	Cleaning	
	Visual Control	
	Discipline and Habbit	
Artisanal Culture		
4. Long Term Supply		
Selection of Suppliers		
Material Control		
3. Obtaining Productivity		
2. Production		
1. Determination of the Value Chain		

**Note:** Please review the Annexes

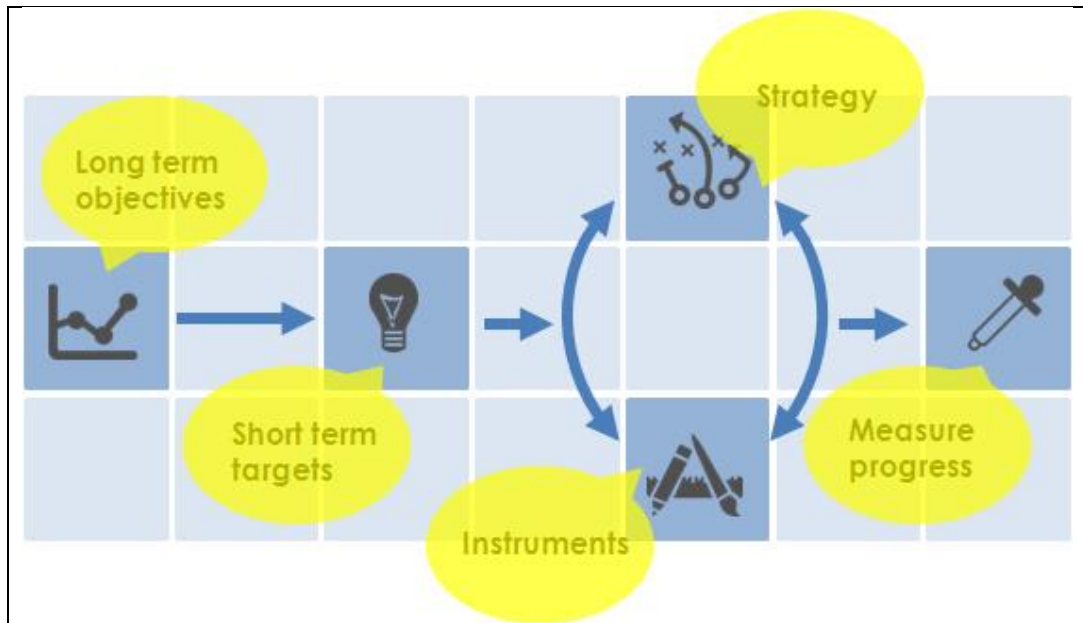
**Author:** Vélez, Carlos; Yungasaca, Belén

#### 2.2.2. Administrative Area

##### 2.2.2.1. OTISM Model

This seeks to enhance the efficiency of the traditional CANVAS planning model, ensuring measurable results in the short, medium and long term, reducing the risk of internationalization. Nick Meijer is the creator of this model which he called OTISM for its acronym in English (Objectives, Target, Innovation, Strategy, Measure). Meijer continually reiterated the intention of this system: to develop a management system that in no more than one sheet can be clearly, concisely and without superfluous details the direction and purpose of the company. When this analysis requires more detail and description, it is sought to focus these objectives towards other analyzes of the company such as financial, market or production. Thus,

the main objectives avoid being replaced by the secondary compliance (Meijer, 2018).



**Illustration 15** OTISM Model

Source: Meijer, Nick

Author: Meijer, Nick

#### 2.2.2.1.1. Objectives

These are long-term objectives, the scenario where the company wants to be located within 10, 15 or 20 years. The objective of this system is to make Ikat macans competitive in the international market. The intention of establishing the objectives as a priority in the system is to have a rapid response to the dynamic and volatile flows of the international market. It begins with the establishment of three essential aspects in the administrative system for the Ikat macanas, described and recommended below (ibídem).

**Table 13 OTISM Objectives**

Aspect	Purpose in the System	Macanas Ikat
<b>View</b>	It is the reason of being of each one of the companies. Determine the horizon and the future of this.	To be transmitters of the Ecuadorian culture and tradition at an international level through the commercialization of macanas elaborated under the ancestral technique of the Ikat, in whose threads the ancestral knowledge of our people is entangled.
<b>Mission</b>	Conforms the successive activities and goals that they will have to achieve to fulfill the vision..	To offer the European market a fashionable alternative, through the commercialization of Ikat macanas that reflect the ancestral knowledge of its artisans.
<b>Corportative Values</b>	Conformed by the convictions and principles of the work team of the company.	National Proud Cultural and Traditional Respect Perseverance Continuous Improvement

Source: Meijer, Nick

Elaborad por: Vélez, Carlos; Yungasaca, Belén

#### **2.2.2.1.2. Short Term Targets**

These are the continuous steps to achieve the objectives outlined in the previous stage. Generally, it refers to the objectives or operations proposed per year, or from 3 to 5 years. They must be concluded through an analysis of sales, profit, new items, productivity or any other indicator that can be measured and that demonstrates real and tangible results (ibídem). Meijer determines 6 nuclear objectives focused on strategic planning. These will be described and applied to the development of the Ikat macana within this administrative proposal.



**Table 14 OTISM Target**

Objective	Purpose in the System	Macana Ikat
Flexibility	A flexible company avoids falling into bureaucracy in any of its processes. It presents alternatives that allow adapting to any change in the environment.	Produce Ikat macanas according to the new fashion trends as a high-end product whose purpose is to transmit the Ecuadorian culture, through continuous market studies.
Agility	A company's ability to act immediately to changes in the environments.	Respond to international demand through the total satisfaction of needs in quality, production and price of Ikat macanas.
Lean	Quality system related to the detailed production proposal in the Lean Manufacturing System.	Guarantee processes of improvement, elimination of waste and continuous learning by artisans of Ikat macanas.
Innovation	Focused both for the final product and for the internal part of the company.	Produce Ikat macanas with designs capable of competing with any other high-end product internationally.
Strong Internal Organization	Company formed by a work team committed to the objectives set.	Use of cultural and ancestral transmission strategies, as well as compliance with quality standards for Ikat macanas.
Competitiveness	It must be reflected in a value / quality balance, after correct market segmentation.	Guarantee efficiency and productivity in the Ikat macana value chain, through a system of lean manufacturing, strategic sourcing and continuous improvement.

**Source:** Meijer, Nick

**Author:** Vélez Carlos, Yungasca Belén

#### **2.2.2.1.3. Instruments**

The instruments are those tools with which short-term objectives can be achieved. There are 4 important tools within this system (ibídem).

**Table 15 OTISM Instruments**

Instruments	Purpose in the System	Macanas Ikat
Analysis	It shows the situation of the company and its capabilities to overcome obstacles.	Continuous analysis on the market, national and international demand, current situation of the sector and the company, etc.
Construction of a Business Model	It schematizes and demonstrates the steps to follow from the production stage to the post-sale stage.	Adaptation of the present investigation for the fulfillment of objectives and the internationalization of Ikat macanas.
Innovation	Commitment to innovation and continuous learning.	Reflected in each of the objectives with the intention of developing Ikat macanas accepted around the world and highly competitive.
Process Alignment	Coordination and direction of the activities and operations to be carried out to guarantee the fulfillment of objectives.	Strategically summarizes the four administrative activities, within the value chain and for the benefit of the artisan.

Source: Meijer, Nick

Author: Vélez, Carlos; Yungasaca, Belén

#### **2.2.2.1.4. Strategy**

This directs and focuses on the fulfillment of the objectives. They are the guidelines through which it is determined how and from whom the instruments to be used will be. In this stage, the strategic link and the long-term supply system are located (ibídem).

The strategies will depend on the market studies and the way in which the Ikat macana intends to venture abroad. Among them it can be evidenced, the market analysis, training processes on the internationalization of the macana, negotiation and articulation strategies with different artisans, suppliers and marketers, brainstorming sessions and focus groups in search of the identification of needs, strengths and weaknesses of the textile artisan sector, among others.

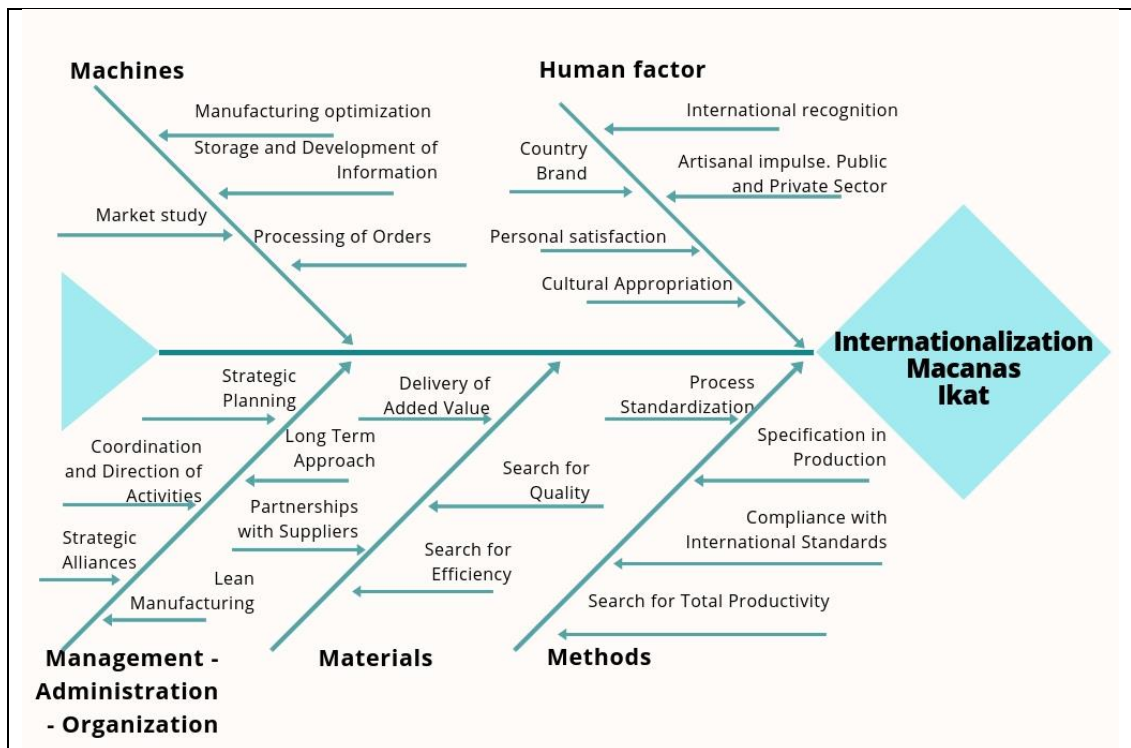
#### **2.2.2.1.5. Measure Progress**

This is essential the measurement stage that allows evaluate and control the results obtained. In this stage, Ikat artisans will have to measure the results achieved, through the analysis of sales, production costs, marketing channels, portfolio

rotation, among others. These results will be evaluated annually in response to the strategic objectives determined (ibídem).

#### 2.2.2.1.6. Connection with Ishikawa and Kanrin

Japanese professor Kaoru Ishikawa in the 1950s popularized one of Hoshin Kanri's greatest principles about organizational management. Nothing, absolutely nothing, would be achieved if one of the members in the process stopped feeling responsible for the long-term goals. Meijer translates this definition to the essence that each entrepreneur must propagate his vision to all the members of his value process. Through its tool known as cause-effect diagram, it allows to identify the real and potential causes of an event, activity or problem. These results motivate the team work in search of common objectives, their understanding and the activities carried out to solve or avoid possible errors (Evans, 2015). Next, the diagram is described with reference to the internationalization of Ikat macanas, based on 5 evaluation groups.



**Illustration 16** Diagram Cause and Effect

**Author:** Vélez, Carlos; Yungasaca, Belén

### 2.2.2.1.7. Benefits and Obstacles

**Table 16** OTISM Benefits and Obstacles

Benefits	Obstacles
Guarantees the internationalization of Ikat macanas.	Absence of mechanisms that reflect the national economic and political reality of the Ikat macana.
Take special consideration of the dynamism and volatility of the clubs in national and international markets.	It requires complementary studies to be able to determine more specific and detailed conclusions.
Express and outline the ideas in a simple way adapted to the Ikat macanas.	It requires constant analysis and control by artisans in order to maintain the focus and guideline of the system.
It allows overcome the obstacles of internationalization.	

**Note:** The previously developed tables are simple recommendations. It seeks to focus and address the purposes of internationalization for this new management proposal. It is important that the artisans can adapt and configure each of the aspects according to their needs.

**Author:** Vélez, Carlos; Yungasaca, Belén

### 2.2.2.2. Balanced Scorecard

Designed by Kaplan and Norton, the balanced scorecard is an administrative management tool through which the evolution of artisans, the fulfillment of their objectives and the results obtained can be evidenced. In the case of the Ikat macanas, it is used to communicate the strategies to the different participants in the value chain. In this way, it is possible to guarantee the correct decision making, the activities and operations to be executed to correct deviations or focus results (2009).

Several academics of the administration recommend the elaboration of this table, to guarantee impressive results in small and medium enterprises. Perhaps it is one of the most efficient tools that summarizes the before, the now and the after a company. Thus, through four perspectives and under financial and non-financial indicators, we conclude results that direct and focus the operations of artisans of Ikat macanas (ibídem). The following is a summary of the different activities adapted for artisans, based on the productive capacity of each of them.

**Table 17** Balance Scorecard

Strategy tree and details of Balance Scorecard		
Objective	Indicator	Description
<b>Finance</b>		
	The volume of orders should increase by 0.1% per year, according to the increase in the number of domestic and foreign customers projected at 3% per year.	Artisans should consider marketing strategies as strategic alliances
Increase in sales, and productivity of Ikat macanas	Revenue should increase by 0.05% annually.	Guarantee a long-term post-sale and negotiation service
<b>Customers</b>		
Consumers of Ikat macanas need clothing alternatives that express luxury and comfort according to fashion trends, through the transmission of culture and traditions	Repurchase percentage in 30% of customers as a base, whether they are national or foreign.	Clients must know the importance of their cultural valuation
	Post-sale percentage and long-term contracts by 5% of buyers.	Clients express the needs met and those still to be met
<b>Internal Process</b>		
Develop a management system that guarantees quality and continuous improvement in the manufacture of Ikat macanas	Long-term contracts with 50% of suppliers that guarantee high quality standards.	Commitment of those responsible for the different stages of the value chain of macanas
	Qualification to 1 or more international recognitions on the Ikat macana.	Create channels that allow the flow of information for the different stages of the macanas chain.
<b>Learning and Growth</b>		
Engage Ikat macana artisans for continuous learning in quality and current fashion trends	Annual feedback of market studies with new fashion trends. Increase of 3% per year in the number of international fairs to participate, guaranteed by private and public institutions.	Ikat macana artisans must know the importance of quality and continuous learning
	Increase of 1% per year in the number of artisans with greater competitiveness.	Artisans should consider market information channels and conclude their analyzes

**Author:** Vélez, Carlos; Yungasaca, Belén

### 2.2.2.3. Specification Technical Sheet

**Table 18** Administrative Technical Sheet

5. Measurement and Indicators			
4. Compliance Strategies			
3. Instruments			
Analysis	Business Model	Innovation	Alignment
2. Short Term Targets			
Must be:	Competitive	Perspectives:	
	Contribute to the Organization	Financial	
	Innovation		
	LEAN	Customers	
	Agile	Internal Process	
	Flexible	Learning and Growth	
1. Objectives			
View			
Mission			
Values			

**Author:** Vélez Carlos; Yungasaca, Belén

### 2.2.3. Marketing Area

#### 2.2.3.1. Marketing Plan

Carrying out and implementing a marketing plan for the production of macanas made with the Ikat technique provides some advantages such as maintaining motivation among artisans by increasing the objectives. It also increases the creativity for the realization of different designs, and improves the relationship of the artisans by increasing the income from the production of high-quality macanas (Agencia Marketing Barcelona, 2018).

##### 2.2.3.1.1. Market Segmentation

The market segmentation aims to find a group of consumers, who accept and give value to the products made by artisans. It will begin by dividing the market into

different groups of consumers based on their characteristics and needs, to evaluate them. The type of segmentation that was used is based on the behavior of consumers, both by the percentage of purchases they make and by the use they have (ibídem).

The following table shows the consumer segmentation of Ikat macanas in three groups: countries, importing wholesalers and natural persons. The first ones related to attracting a target audience in the international market; importing wholesalers refers to national natural or legal persons with direct relation to artisans; while the third group is compounded by the independent consumers. The following describes the values that enter the textile sector thanks to purchases and the trend they project. In addition, a marketing strategy is chosen for each segment, as well as the purchasing intensity of each group, according to the technical studies carried out by PRO ECUADOR and the interviews with artisans of Ikat clubs.

**Table 19** Market Segmentation

Segments	Description	Trend	Marketing Strategy	Type of Purchase										
<b>Importing Countries</b>	<div>-Clients in power, with high purchase capacity.</div> <div>-Ikat products with excellent quality.</div> <div>-Frequency of purchase: biweekly or once a month.</div> <div>-They demand price and quality</div> <table><tr><td>Country</td><td>Imported FOB (miles de dólares)</td></tr><tr><td>United Sstate</td><td>44,5</td></tr><tr><td>Bolivia</td><td>21,1</td></tr><tr><td>Colombia</td><td>15,7</td></tr><tr><td>Chile</td><td>1,9</td></tr></table>	Country	Imported FOB (miles de dólares)	United Sstate	44,5	Bolivia	21,1	Colombia	15,7	Chile	1,9	Upward	Strategic segment: PRIORITY	Strong
Country	Imported FOB (miles de dólares)													
United Sstate	44,5													
Bolivia	21,1													
Colombia	15,7													
Chile	1,9													
<b>Import Wholesalers</b>	Those who buy Ikat macanas and fabrics directly from the artisans and take charge of the commercialization in clothing stores located in Cuenca	Upward	Strategic segment: CONCENTRATE applicable for merchants	Strong										
<b>Individuals: Natural Persons</b>	<div>-Intensity of average use.</div> <div>-Buy: directly to artisans and associations</div> <div>- Customers who buy for personal use</div>	Upward	Strategic segment: CONCENTRATED	Normal										

**Author:** Vélez Carlos; Yungasaca Belén

#### 2.2.3.1.2. Marketing Mix

The marketing mix according to Philip Kotler is the set of marketing tools that can be controlled and combined to meet objectives in the chosen market (2007). Then, the 7ps applied to the Ikat macanas are analyzed.

• **Product:** Ikat macanas must be in constancy with the target audience. The evolution of the design of macanas is necessary according to the evolution of the new and changing needs of the market. Macanas are considered intangible heritage of Ecuador, giving value and support to this garment of excellent quality. However, artisans must innovate with new designs, appliques and colors that vary for an increasingly informed public.



• **Price:** Ikat macanas are represented by a brand with a purpose due to the talent of its artisans. Its price, therefore, must be valued as a unique asset that reflects effort, knowledge and dedication. The monetary price should contemplate quantifiable activities such as the cost of obtaining the cochinea of the pencos to dye the wool until the sacrifice in looking for opportunities to sell the macana.

• **Place:** On several occasions, artisans sell the Ikat macanas to third parties who are responsible for marketing it at a higher price. A minimum percentage represents the clubs sold in the artisan's workshops. Several projects have been tried to encourage tourism and visit the original place of the macanas, but the result is minimal. It is proposed to apply the e-commerce technique, linked to the technological advance of the market. The intention is to show worldwide a cultural product, friendly with the environment.

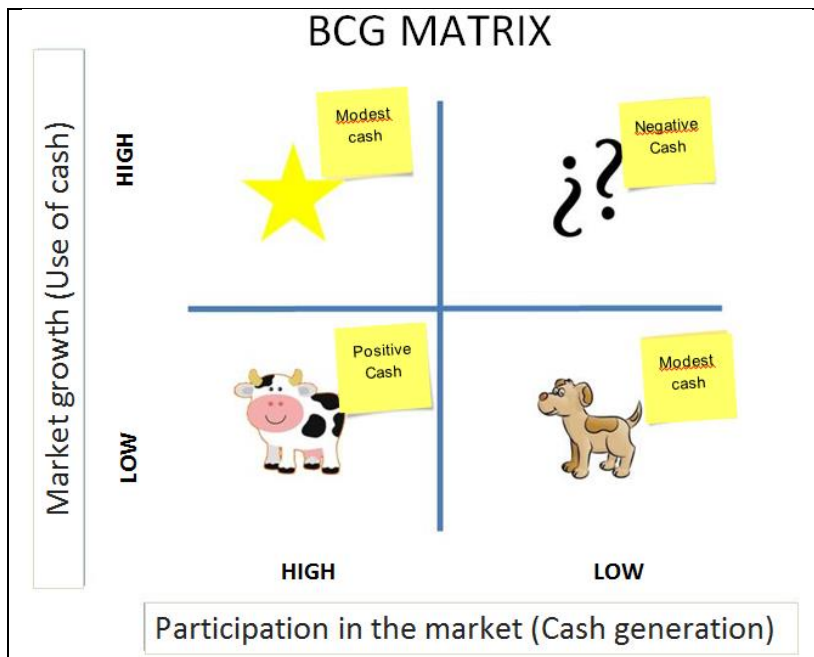
• **Promotion:** Artisans must obtain a higher value for their production. Thus, they must cover the marketing stages of macanas, taking charge of direct sales. For this they must know more about the clients and distinguish the tastes and needs. It is not necessary to offer certain "gifts and prizes" as added value to the sale of Ikat fabric.

• **People:** Attracting customers is simple, but keeping them is complicated. The communication and relationship between producers and consumers must be personalized, the customer must be understood as the central axis of marketing of Ikat macanas.

• **Process:** Customers must know the manufacturing process of the Ikat macanas to feel confident with the artisan. Each management tool like the Japanese 5S shows commitment and dedication in every detail of its manufacture. This produces a strong link of relationship between customers and the Ikat macana culture.

• **Positioning:** Positioning the Ikat brand can be a great obstacle for its artisans. The positioning of this brand must be ensured in each one of the administrative functions of Macanas Ikat, in addition to reflecting its principles in prices and customer service.

### 2.2.3.2. Boston Consulting Group Matrix



**Illustration 17** BCG Matrix

**Source:** Boston Consulting Group

**Author:** Boston Consulting Group

The Boston Consulting Group (BCG) matrix is a methodology used for the business portfolio of a company. This matrix aims to identify what business to focus or desist attention (Kotler, 2007).

**Stars:** The star in the first quadrant symbolizes the personalized designs that have been made to public figures of cinema, television and religious. Products are creating liquidity and become the image of your brand and production. Under this management proposal, it is suggested that artisans invest time and money in innovating with new textures, fabrics and colors (ibídem).

**Dilemma or Question:** Products such as shoes woven by the Ikat technique that have reduced participation in the market and are growing rapidly. These have great potential to become stars and earn more income, but at the same time can be converted after so many attempts on dogs or dead weights because they simply do not fit the needs of consumers. The products that are in this category cause great uncertainty because they do not know if they will benefit the business portfolio or not (ibídem).

**Cows:** In the third quadrant are the Ikat macanas proper. Management and marketing strategies should be provided to maintain profitability and invest money so that they can become star products. In this way, its value would increase and the recognition of the brand will be evidenced in its income (ibídem).

**Dog or Dead Weights:** There are no articles in this category due to the low production that the artisans have (ibídem).

### 2.2.3.3. Specification Technical Sheet

**Table 20** Marketing Technical Sheet

Marketing Plan			
Market Segmentation			
	Natural Persons	Wholesalers	Foreign
Product			
Price			
Place			
Promotion			
People			
Process			
Positioning			

**Author:** Vélez Carlos; Yungasaca, Belén

The subjects shown above are purely strategic, where an X-ray is made of the current situation of artisans working with the IKAT technique, and new actions are proposed to obtain greater benefits with a promising future. On the other hand, for an excellent organizational performance, it is essential to strengthen the operational sector. That is why before providing solutions the reality of the artisan must be understood and the ability to identify their needs, in order to link all the edges of this project to obtain the best result.

### 2.2.4. Human Talent Management Area

The application of human talent to artisans must be adopted individually; due to the work preference of the artisans. The relationship between artisans and external employees must be based on respect, communication and trust. Artisans must develop in each of member attitudes and knowledge that are indispensable for them to do their job well.

The training must be integrated, individual and group. It is individual due to the importance of each artisan to be committed to the goal of their work. In addition, group training is important, through several workshops offered by CIDAP. However, artisans cannot forget the importance of effective communication as the only means for a good work environment (Jaramillo Naranjo, 2005).

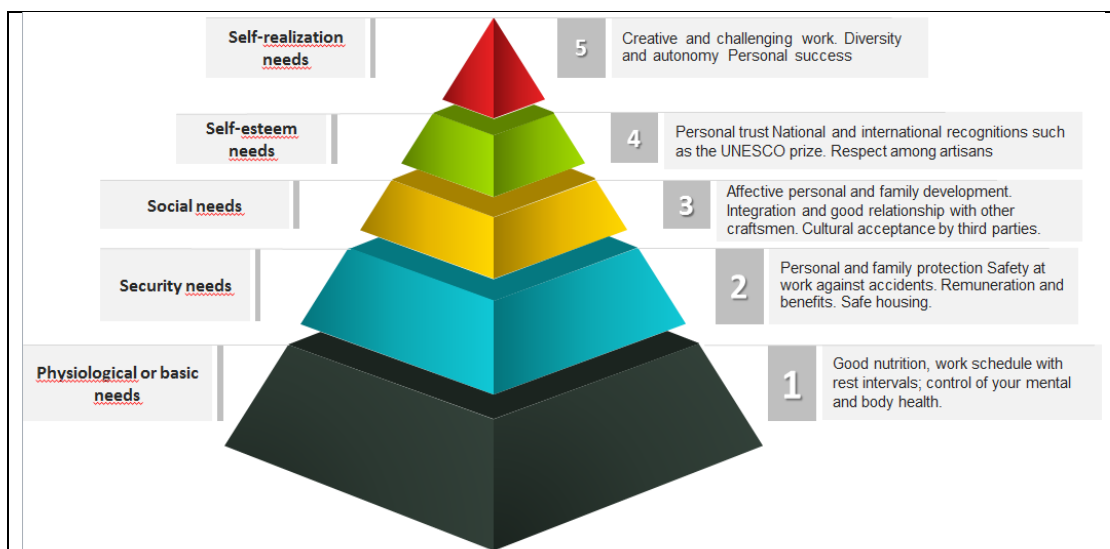
The motivation of the Ikat macana artisan is a predominant factor in this process. By understanding the reality that artisans live in, they can propose solutions that match their essential needs, personal and economic growth. Thus, this tool is undoubtedly the Maslow Pyramid, which explains what drives a human being to reach different levels of satisfaction. The pyramid or theory of Maslow consists of five levels that are organized hierarchically according to the needs of the people (ibídem).

The artisans do not perceive a fixed salary that is why the first level of satisfaction focuses on the basic needs that as a human being must acquire. Thus, the peasant insurance for their family, a guarantee of a dignified life, the determination of work schedules in the macana factory will motivate their production so that their effort can be invested in diet, health, besides acquiring rest time to avoid exhaustion, frustration and exposure to unstable environments for your health.

At the second level, artisans can acquire opportunities to improve the infrastructure of their home, workshop; as well as legal security environments that improve their condition. The guarantee of security in the routine production of macanas, economic benefits and the security of entry of constant income generates greater commitment for this production. In the end, the economic compensation received by artisans and their families is what generates the needs of the next link.

Artisans, in the third and fourth level elevate their self-esteem and therefore increase their productivity. It improves their feelings of belonging to society, without being stopped by the culture to which they belong. At this level, the social, family and individual environment of artisans becomes more real when converting culture into important tangible material such as the Ikat macanas. Finally, in the fifth level, the preparation to which artisans submit must be a commitment marked with determination and professionalism to obtain the best results. The level of self-

realization of artisans is reflected in the economic importance that his activity produces for the national economy.



**Illustration 18** Maslow's Pyramid in the Artisan of Macana Ikat

Source: Maslow, Abraham

Author: Vélez, Carlos; Yungasaca, Belén

## 2.2.5. Quality Management Area

### 2.2.5.1. UNESCO Prize

Among the activities that the United Nations Educational, Scientific and Cultural Organization (UNESCO) carries out to sensitize the world population to a globalization that understands cultural diversity, are the awards to different people who safeguard their cultural identity and the activities that are a legacy of their ancestors. On October 31, 2014, UNESCO recognized Artisan Excellence in the XII edition of the Artisan Festival of America of Cuenca to artisans working in the city (UNESCO, 2018). One year later, on June 25, the Declaration of the Ikat Weaving for the Elaboration of Macanas as Immaterial Heritage of Ecuador was enacted (CIDAP, 2015).

The Ikat macanas to access a “Recognition of Excellence” must be characterized by excellence, traditional authenticity, innovation in design and production, respect for the environment, social responsibility and of course that has the possibility of marketing internationally. The recognition process is simple. First, the artisan must present the Ikat macanas according to the schedule of fairs that UNESCO carries out, either individually or with the help of local artisan centers such

as CIDAP. Subsequently, the characteristic attributes of the macana must be evaluated by experts. Finally, recognition is awarded, valid for a period of 4 years. This can be prolonged for a longer time by decision of the expert committee.

This recognition can be used by the artisans of Ikat macanas for the promotion and communication of their products, the presentation in exhibitions and craft fairs, their access to internet sites and international platforms, and the recognition of intellectual property rights. With the latter, artisans can register their trademark in the intellectual property office of their countries in this case in the National Intellectual Rights Service SENADI (UNESCO, 2014).

#### **2.2.5.2. PDCA Cycle**

The PHVA cycle was developed by Walter Shewhart in 1920 and later applied by Deming. This cycle is a tool for continuous improvement, flexible and dynamic improvement (Evans, 2015). For the purposes of this research, the phases of the Deming cycle will be implemented in the production of artisans by internationalizing the Ikat macanas, with the intention that this analysis can be adopted at different stages of its manufacture.

**Plan.** The internationalization of Ikat macanas requires the homogenization of the basic production processes and the ability of each artisan to respond to the needs of the international market, adding value to their productions in the details and art that interweave in the personalized designs. This research proposes a management model that determines the roadmap for artisans, which describes the operations of the four administrative functions for the Ikat macanas. It is necessary to start with the analysis of the current situation of Ikat macanas. In addition, it is important to emphasize the use of the administrative tools developed in previous lines such as the Ishikawa diagram, the 5S system that reflects the different real and potential causes for this proposal.

This process depends on the participation and commitment of each participant in the value chain of the Ikat macanas. Thus, the artisan must be committed and flexible with the change. Suppliers must contribute with the delivery of value to the final product. The public sector through the opening in fairs and trainings, allows the promotion and repair of the Ikat macanas. The private sector, for its part, must

maintain close ties between both sectors to devise sales strategies in which mutual benefits are obtained for both artisans and suppliers.

The client looks for a macana as a high-end fashion alternative, through which the Ecuadorian culture is expressed in looms of quality, luxury and comfort. Both national and international consumers require a process of analysis to determine their requirements and position the macanas in the market. At present, the artisans of Ikat macanas do not have the tools and information that allows them to participate in different markets. Manufacturing and production requires a system that guarantees quality in the final macana. Re-directing production towards a target market entails structural changes.

**Do.** Putting into practice not only this tool but all the previous ones that are described in this chapter, will facilitate an organization and adequate production for a changing and demanding demand. The results can be evidenced in the increase in sales and income of Ikat macanas according to the indicators established in the table 17, the opening to new markets with strategic alliances and a constant flow of information between suppliers and buyers transformed into added value from the macanas.

**Check.** At this stage we will have to analyze which have been the consequences of the application of these administrative tools with reference to the Ikat macanas. If the results are encouraging, artesians should push this method to obtain better results. However, if expectations are not exceeded, the processes to identify the error should be evaluated.

**Act.** In this way, the description of a management model that allows the artisan to export Ikat macanas to different parts of the world is the option with the greatest possibility of results in its application. At this stage the homogenization of the basic production processes is guaranteed, allowing the artisan to promote this business model through the added value of creativity and dedication in the details. In addition, the artisan should control and monitor each of the administrative functions that are needed to internationalize an Ikat macana.

### 2.2.5.3. Specification Technical Sheet

**Table 21** PDCA Technical Sheet

STEP 1. PLAN					
Definition of the Problem					
Place of the Problem					
Frequency of the Problem					
Possible Cause 1					
Possible Cause 2					
Possible Cause 3					
STEP 2. DO					
PROBLEM	MAIN CAUSE	ACTIONS	START	END	COMMENTS
STEP 3. CHECK					
# Revision	Date	Expected Results	Achieved Results	Observations	
STEP 4. ACT					
PROBLEM					
OPENING DATE					
DEADLINE					
ESTANDARIZATION					
List of Documents			Mistakes to Avoid		
PERSPECTIVES					
New Projects and Ideas			Results to wait		

**Note:** The PDCA cycle can be used for any situation within the production. Thus the template can be adapted to the needs, the situation and the products that is convenient.

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### 2.2.6. Social Responsibility Management

#### 2.2.6.1. Fair Trade Proposal

Fair trade is a global social movement that seeks to promote an alternative to traditional trade, based on dialogue, transparency, respect and equity (WFTO-LA, 2016). Generally, this type of trade responds internationally under the formation of producer organizations; However, managing the principles of Fair Trade for each of the artisans, would make evident the commercialization and recognition as a country



brand for Ikat macanas. The World Fair Trade Organization (WFTO) establishes 10 fundamental principles, which are described below to demonstrate the adaptability of the Ikat macanas for this type of trade.

Opportunities for Disadvantaged Producers. Most of the raw materials from Ikat macanas are made by farmers in the sector dedicated to spinning wool and silk. The different existing associations seek to guarantee marketing opportunities and commitment to the community and the country.

Transparency and responsibility. Artisans proud of their talent and knowledge have long shared their ancestral knowledge. Their legal and administrative responsibility is evident in their legal nature and in the opportunities they obtain from the State.

Fair Commercial Practices. The artisans market the Ikat macanas under legal negotiation terms. Although many of them do not have the capacity to invoice, they guarantee the post-sale service by the formality that is granted to each transaction, either with consumers or with suppliers.

Fair Payment. In the last decades it has been possible to recognize the effort of the artisans in the elaboration of Ikat macanas, it is important the recognition of their ancestral knowledge and their oral knowledge.

No Child Labor, No Forced Labor. None of the artisans employs anti-ethical business practices such as child or forced labor.

No to Discrimination, Gender Equality, Freedom of Association. Artisans and their associations know and seek recognition of their rights as Ecuadorians, and above all as descendants of the Ikat culture.

Good working conditions. Most artisans recognize their work environment and are proud of what they do. They know and guarantee the application of the regulations and the legal bodies in force.

Capacity development. Promotion of the administrative, socioeconomic and financial independence of each of the artisans belonging to an association or who exercise their autonomous production.

Promotion of Fair Trade. The need to demand the recognition of their talent and their ancestral knowledge are evident when they talk about their marketing opportunities.

Respect for the environment. The historical transcendence and the knowledge of their ancestors not only transmitted the technique of the Ikat, but the respect for nature and the indigenous ecologist's conception for being part of it are also reflected in their current practices.

## **CHAPTER 3**

### **3. MACANAS IKAT EXPORT PLAN**

#### **Introduction**

The internationalization of Ikat macanas as an alternative to dress in response to current fashion trends that reflect elegance as an ancestral culture requires a schematic process that guarantees recognition to the artisan and allows their participation in the international market. The governmental incentive to export the products of MIPYMES, together with the administrative and production proposal described in Chapter 2 of this research, generates favorable scenarios for the artisan of Ikat macanas.

Thus, the Ikat macanas logistics is understood as the set of operations required to transfer it from the negotiation process with the buyer, through the market study to be exported, up to the requirements and certifications that are required; fulfilling orders with competitive prices and optimal quality at the time of delivery under the concept of just in time. The description of this logistics will optimize the competitiveness of artisans in the international market in terms of costs, time, quality during transport and other related operations.

#### **3.1. Objectives**

Describe a favorable scenario that allows the efficient and effective internationalization of the Macana Ikat de Gualaceo, as a fashion alternative that reflects elegance and ancestral Ecuadorian culture, focused on the European market, through the involvement of different actors, as well as private entities and governmental whose priority is to facilitate, expedite and act for the benefit of the former; be these exporters or importers.

Promote the Ecuadorian artisan talent, through the positive results of the Ikat macana internationalization process, so that it can be adapted for other crafts with great economic potential.

## 3.2. Product Technical Sheet

The technical sheet summarizes the main characteristics of the product, as well as the conditions and requirements necessary for its commercialization at the international level, according to the proposed proposal. Next, the technical sheet for the Ikat macanas is described, followed by a proposal for a competitive file for future negotiations, based on those published by PROECUADOR.

**Table 22** Ikat Macana Technical Sheet

<b>Section</b>	XI. Textiles and their manufactures
<b>Chapter</b>	61. Garments and accessories, clothing, knitwear.
<b>Harmonized System</b>	61 17. Other made-up clothing accessories, knitted or crocheted; parts of clothing or accessories, clothing, knitwear.
<b>Tariff Subheading Harmonized System</b>	61 17 10. Shawls, neck scarves, scarves, mantillas, veils and similar items.
<b>NANDINA</b>	61 17 10 00. Shawls, neck scarves, scarves, mantillas, veils and similar items.
<b>Commercial Description of the Product</b>	Ikat Macanas
<b>Country of Origin</b>	Republic of Ecuador
<b>Exporting Country</b>	Republic of Ecuador
<b>Exporting Enterprise</b>	Artisans and Associations of Macanas
<b>Importing Country</b>	Federal Republic of Germany
<b>Export Regime</b>	Courier
<b>INCOTERM 2010</b>	FCA (Free Carrier)
<b>Boxes sent per year by artisans</b>	60 Individual / 5 Dozens
<b>Total Kg per year by artisans</b>	27 Kg
<b>Transportation Route</b>	Air (Exporta Fácil Program)
<b>Load Unit</b>	Box
<b>Boarding Place</b>	Ecuador Post
<b>Landing Place</b>	Deutsche Post

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# MACANAS IKAT






## COMPETITIVE ADVANTAGE

Transmitters of Ecuadorian culture and tradition at the international level, elaborated under the ancestral technique of the Ikat, whose threads entangle the ancestral knowledge of our peoples, as an alternative of high-end fashion.



## CERTIFICATIONS









## SEASONALITY



100%  
January - December



## LOGISTICS



Exporta Fácil 100%



## TARIFF






0%      0%      0%      0%



## PRESENTATION

Box per unit and for dozens




## MAIN DESTINATIONS:





Germany      Spain      France



## EXPORTING COMPANIES



Artisans 100%



## ASSOCIATION



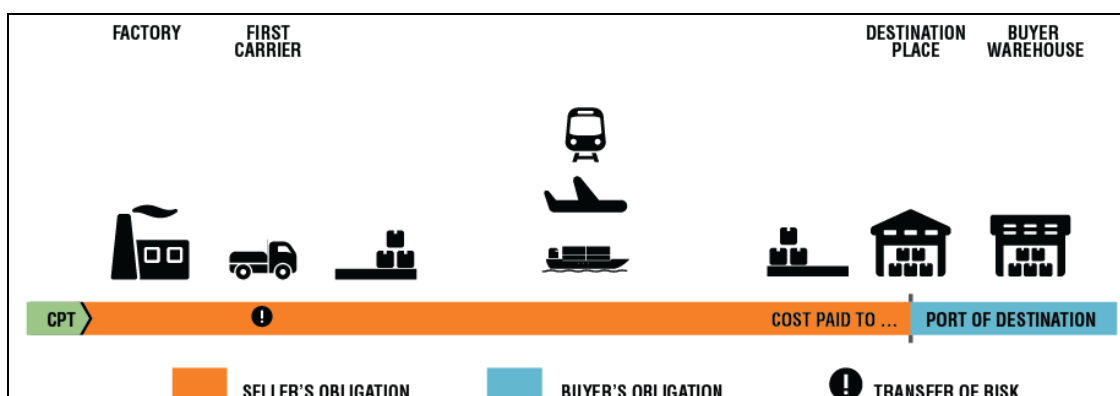
cidap /  
centro interamericano de  
artesanos y artes populares

**Illustration 19** Propuesta de Ficha Comercial

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

### 3.3. Negotiation Conditions

The International Chamber of Commerce issues every 10 years the International Trade Terms (INCOTERMS) whose purpose is to facilitate international trade, through the determination of obligations between the parties, such as the reduction of risk in legal disputes (ICC, 2018).



**Illustration 20** Incoterm CPT 2010

Source: Incoterms 2010

The artisans of Ikat macanas will be able to negotiate with their buyers through strategic alliances, after the macanas are exposed in web pages of electronic commerce, social networks and the impulse of national and international institutions such as CIDAP, the Ministry of Foreign Trade, the Ministry of Industries and Productivity and UNESCO. The terms of negotiation according to INCOTERM 2010 that most favors artisans Ikat macana should be CPT (Carrier paid to), due to the costs involved in managing international logistics for the artisans, and the processing of the risk to a third entity in the sending of the goods.

Thus, the artisans of Ikat macanas must condition the goods for sale with their respective packaging or packaging; be responsible for taking the macanas to the place of embarkation, in this case Correos del Ecuador and complying with all customs requirements and formalities in origin. The transfer of risks occurs when the third carrier, in this case Correos del Ecuador, takes charge of the merchandise; however, it is the artisan who is responsible for defining the contract of transport at origin. On the other hand, the buyer must take responsibility for transport insurance, unloading transport and import procedures.

### 3.4. Market Study

The study to determine the target market for Ikat macanas in international business should be based on the analysis of the main importers in the world of the tariff heading to which the Ikat macans belong.

**Table 23** Global Imports

Importers	Value Imported in 2013	Value Imported in 2014	Value Imported in 2015	Value Imported in 2016	Value Imported in 2017
United States of America	212227	261629	254367	204696	161143
Germany	183202	170415	132162	125113	118530
France	101928	96270	81829	72461	72543
United Arab Emirates	13993	19375	11291	7983	69549
United Kingdom	86125	93708	82687	68124	68794
Japan	88557	70115	57904	44407	46305
Spain	42231	49002	45035	42158	42096

Source: TradeMap

Author: Vélez, Carlos; Yungasaca Belén

Into the 7 main importing countries of the tariff heading analyzed, with a significant participation, the United States tops the list. However, the countries that occupy the following positions with a minimum difference in their import quantity, reflect the purchasing capacity, tastes and acquisition preferences of the European market. The countries that stand out within the continent are, in order of international participation: Germany, France, the United Kingdom and Spain. Within this analysis it is necessary to emphasize the participation of Asian countries such as the United Arab Emirates and Japan.

Ecuador, in the year 2017, exported the products of the analyzed tariff heading to the United States with a total of 150 thousand dollars. Then the Latin American countries follow with a representative FOB in their consumption. However, the presence of 4 European countries and one Asian country that have imported considerable quantities of merchandise should not be ruled out. Thus, it can be deduced that the products classified in this tariff heading are very well received by the European Union, as the table shows, derived from the number of countries in the region compared to others.

**Table 24** Importers of Ecuador

<b>IMPORTADORES (2017)</b>	<b>FOB</b>
United States	150,6
Colombia	23,4
Bolivia	21,2
Italy	11,4
Chile	11,1
Netherlands	1,6
Peru	0,5
Guatemala	0,2
Sweden	0,2
Canada	0,2
Panama	0,1
Spain	0,1

**Source:** Ecuadorian Central Bank

**Author:** Vélez, Carlos; Yungasaca, Belén

According to the information developed by PRO ECUADOR, both articles and handicrafts manufactured in Ecuador such as straw hats, buttons and tagua items, among others, are predominantly appreciated in European cultures with medium-high living standards (2018). Within these analyzes rescues the artisanal production of Latin America and Ecuadorian difference for its quality and design of its production. For this reason, it is decided not to venture into the Latin American markets, to avoid excess supply of craft. On the other hand, the US market is the scene of a growing supply of crafts and American cultures, so it is decided to eliminate this option.

### **3.4.1. Target Market Selection Matrix**

In accordance with analyzes of the previous section, and according to the Market Intelligence Bulletin of PRO ECUADOR, it was decided to analyze the three countries with the greatest presence in international and bilateral trade with Ecuador: Spain, France and Germany (2018). In this way, each country will be described through a PESTEL analysis by its initials of the fields to be identified. In the following chart, the weight given to each evaluation criterion from 1 to 4 will be shown according to its importance within the analysis field, while the qualification to each of the countries will be defined between 1 and 3, where 1 means very favorable



conditions; 2, favorable conditions; and 3, unfavorable conditions (highlighted column).

**Table 25** Country Selection Matrix

Evaluation Criteria	Weighing	Spain	France	Germany
<b>Political</b>				
Transparency and Corruption	3	3	2	1
Political Stability	4	3	3	3
<b>Economic</b>				
Economic Growth of the Country 2017	2	3	2	2
Purchasing Power per Capita 2017	3	2	1	3
Volume of World Imports 2017	3	2	1	3
Volume of Ecuador Imports 2017	3	1	1	3
Barriers to Tariffs and Non- Tariffs	4	3	3	3
Market Maturity	3	3	2	2
Commercial Risks	4	2	2	3
<b>Social</b>				
Size of the Market	4	1	3	2
Facility to do Business	4	2	1	3
Cultural Proximity	3	2	2	3
Consumer Education	3	2	3	1
Tastes and Preferences	2	2	3	3
<b>Technological</b>				
Science, Innovation and Technology Index	2	1	2	3
<b>Ecological</b>				
Environmentally Friendly Innovation Index	3	1	2	3
<b>Legal</b>				
Customs Processing	4	2	2	2
<b>TOTAL</b>		112	112	137

**Author:** Vélez, Carlos; Yungasaca, Belén

Spain has a population of approximately 49 million people by July 2017 (CIA, 2018). Of these, 50, 62% are women and of this group more than half are between 25 and 65 years of age as a target audience (ibídem). Their cultural proximity in relation to Ecuador can be driven by the language, culture, traditions and history they share

(PRO ECUADOR, 2018). According to PRO ECUADOR, Spain presents growing and constant trends regarding its commercial relations with Ecuador. The tastes and preferences of the Spanish market tend to look for comfortable and accessible goods and services for their standard of living. However, according to the Hofstede<sup>1</sup> index, Spain is relatively related to Ecuador, with an average of 62 points, and a difference of 8 points whose closest dimension lies in the distance of power (Hofstede Insights, 2018).

According to the European Commission, Spain has low levels of environmentally friendly undertakings and innovation (2018). Current policies centralize environmental industrialization; however, the results do not propose favorable scenarios for the Ikat macanas proposal. In 2017, Spain ranked 42nd in transparency in its public management (Transparency International, 2018). According to COFACE, its country risk is A2, with some growth intention (2018). The annual economic growth is 3.0% lower than the previous period, while the GDP per capita for 2017 exceeds 5% (International Monetary Fund, 2018). According to TradeMap, Spain in 2017 imported the analyzed item more than 5000 tons (2018). As for the ease of doing business, Spain is in 28th in the world ranking (World Bank, 2018). The rating at market maturity was granted according to the record of the commercial relations with Ecuador.

France, with a population of 67 million people by 2017, has a representative female percentage of 51, 04% (CIA, 2018). Of this value, there is a large proportion of the target audience between 25 and 65 years of age (ibídem). According to PRO ECUADOR, France presents great openness for indigenous goods and services of Latin American cultures, and its commitment to the ethnic impulse. According to the Hofstede<sup>2</sup> world index, France's cultural distance to Ecuador averages 63.16 points, with a difference of 9.16 points (Hofstede Insights, 2018). This places you in the last position of cultural relationship with respect to this business proposal, whose closest dimension refers to the distance of power.

In fact, in the last quarter the proposal was presented for the sale of toquilla straw hats and tagua materials at fair prices with artesains (ibidem). The trends of

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<sup>1</sup> Annexes

<sup>2</sup> Annexes

French consumers are favorable in relation to the export of Ikat macanas. It denotes the access of information and knowledge of consumers to identify quality crafts. According to the European Commission, the French economy has promoted environmental innovation and technology programs and policies with the environment; a suitable scenario for the Ikat macanas proposal (2018).

In 2017, France ranked 23rd in transparency (Transparency International, 2018). The country risk for the date of this investigation is A2, presenting different imbalances in its policies (COFACE, 2018). The annual economic growth is 2.2%, while the GDP per capita for 2017 grew by 0.6% (International Monetary Fund, 2018). France imported more than 4000 tons in 2017 (TradeMap, 2018). In recent times, it is ranked 31 in the world ranking according to its ease of doing business (World Bank, 2018).

Germany has a population of approximately 80 million people, of which 50.89% are women with a large percentage of age between 25 and 65 years of age in reference to the target public of the Ikat Macanas (CIA, 2018). In a favorable way and with a great capacity for acceptance by MIPYMES, PRO ECUADOR has developed constant information on marketing proposals for Ecuadorian handicrafts and its strong commitment to the ethnic impulse. The idea of exporting these goods as high-end products and added cultural value has turned the German consumer trend beneficial for this proposal. Hofstede<sup>3</sup> reflects its greater cultural proximity with Ecuador in this administrative proposal with an average of 59.33 points and a difference of only 5.33 points (Hofstede Insights, 2018). The European Commission places Germany among one of the main countries with the highest results in terms of its environmental policies and programs of innovation and technology (2018). It also shows great openness on the part of its market and a favorable economic paradigm.

Germany ranked 12th in transparency in 2017 (Transparency International, 2018). Its country risk, according to COFACE is A1, that is, the minimum existing level (2018). Annual economic growth is 2.2%, while GDP per capita grew by 5.1% (International Monetary Fund, 2018). For 2017, it imported more than 6000 tons of the item analyzed, of which 1 ton belonged to Ecuador (TradeMap, 2018). It is

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<sup>3</sup> Annexes

ranked 20th in the world ranking for ease of doing business according to DoingBusiness (2018).

### **3.5. Demand Profile**

According to the information analyzed, and according to the results of the country selection matrix, it was decided to develop information for the Ikat macanas export plan as a high-end good whose destination is Germany. However, this does not mean that the potential markets of the European Union, including Spain and France, which have already been analyzed, present favorable scenarios for other Ecuadorian handicrafts.

Germany, its capital Berlin, belongs to the European Union since its inception as a founding member. Its currency is the Euro, and it has an exchange rate of 0.89 in relation to the dollar (PRO ECUADOR, 2018). Its official language is German. Its economic growth and the potential development of its markets in international business have increased the income of German consumers. Due to this, consumer trends have been modified in such a way that luxury goods are used with greater opportunity.

#### **3.5.1. Rules and Regulations of the Chosen Market**

The Federal Republic of Germany, as a member of the European Union, is governed by the rules, regulations and marketing requirements established by this economic bloc; through the European Commission (2018). Thus, the export procedure of Ikat macanas to Germany begins to be described in the following sections.

#### **3.5.2. Bilateral Trade Ecuador- Germany**

Ecuador has a commercial agreement signed with the European Union in force as of 2017, in which, Germany subscribes its acceptance. The Trade Agreement between the European Union and Ecuador seeks to strengthen bilateral trade among the 28 member countries of the European Union and Ecuador, in addition to supporting the fight against poverty, strengthening respect for human rights, increasing employment in good conditions and contribute to sustainable development between both parties. In this way, income from the Ikat macana to the German

market has different benefits such as the elimination of its tariff and preference to the products of the Andean community, related to other crafts of the region (ibídem).

### 3.5.3. Demand: Quantification and Projection

Along with the rapid spread of growing fashion trends, Ikat macanas from Ecuador can be marketed as a high-end good expressing luxury and comfort. These macanas will be preferred throughout the year, with greater intensity in winter and autumn by the target audience, that is, women of 18 years and above with a medium and high economic level. In Germany there are a high number of consumers who value fashion trends.

The Federal Republic of Germany, for the year 2017, ranks 19th in the world ranking with the highest population density with 80 594 017 inhabitants. Of the total population, 50, 89% are women; and of this gender more than 75% is between the ages of 18 and 65 years. With a female average age of 48.2 years, Germany has a GDP per capita of 123 euros for the year 2017; besides having an employment rate of 75.2% for the same population group analyzed (European Commission, 2018). The economically active German group has a minimum professional salary, for 2018, of 1498 euros or 1796.60 dollars in 12 annual payments (ibídem).

**Table 26** German Import 611710 (in thousands of dollars)

Germany imports from Ecuador			Germany imports from the world		
Value in 2015	Value in 2016	Value in 2017	Value in 2015	Value in 2016	Value in 2017
4	10	18	132162	125113	118530

Source: TradeMap

Author: Vélez, Carlos; Yungasaca, Belén

Worldwide, among the five trading partners of Germany with the tariff heading to which the Ikat macana belongs are China, Italy, Turkey, Spain and the Netherlands. However, they are not considered direct competition due to the level of industrialization of the products that are marketed. The German import of the item analyzed has increased significantly in the year 2017. Although Ecuador is not the main partner in its balance of trade, imports from Germany from Ecuador have also meant income from this item.

Fortunately, for the Ikat artisans, this weaving technique is not found in the German market, even less the materials with which the macanas are developed. The only competition identified as a barrier to entry is the offer of other Latin American crafts among Peruvians and Bolivians (TradeMap, 2018). However, the Ikat macanas are differentiated by their origin and the quality they present compared to the former. According to CIDAP studies, Ecuadorian handicrafts differ from those of Latin America because they possess greater properties of aesthetics, treatment and artisanal manipulation. Thus, the macanas, not only will be promoted as fashion alternatives, but as the arduous effort of a unique and ancestral Ecuadorian technique.

The Germans are strict and traditionalists, the Ikat macanas must be manufactured with a range of matte colors and similar patterns among them, according to experts (PRO ECUADOR). This does not mean that they can dabble with new designs and fashion trends. According to studies, German consumers with high social status are the most compulsive when buying and valuing luxury goods. The existing trends of the European consumer refer to the post-sale service, and the environmental changes (ibídem).

### **3.6. Offer: Quantification and Projection**

For the purposes of this research, the descriptions and the development of information will focus on the German market, without prejudice to the fact that this proposal can be adapted to other Ecuadorian handicrafts and other countries of destination.

The production chain starts with the Ikat macana artisan. This international management model seeks to recognize their effort and the transcendent knowledge that they hold from generation to generation. This production can be offered in their workshops or warehouses of associations formed by them, as well as in the web page described above. These artisans decide to export alone or thanks to Ecuadorian intermediaries through the government Exporta Fácil Program.

Ikat macanas can be offered in specialized stores of select shopping centers and different electronic platforms. Also, through international textile fairs, where the artisan's talent is promoted, and the Ikat macana is presented as a fashion alternative for fashion designers and textile companies. By defining the Ikat macana as a luxury

and elegance good, as well as the scarcity of substitute goods, its duration and market research, the sensitivity for the price change is low.



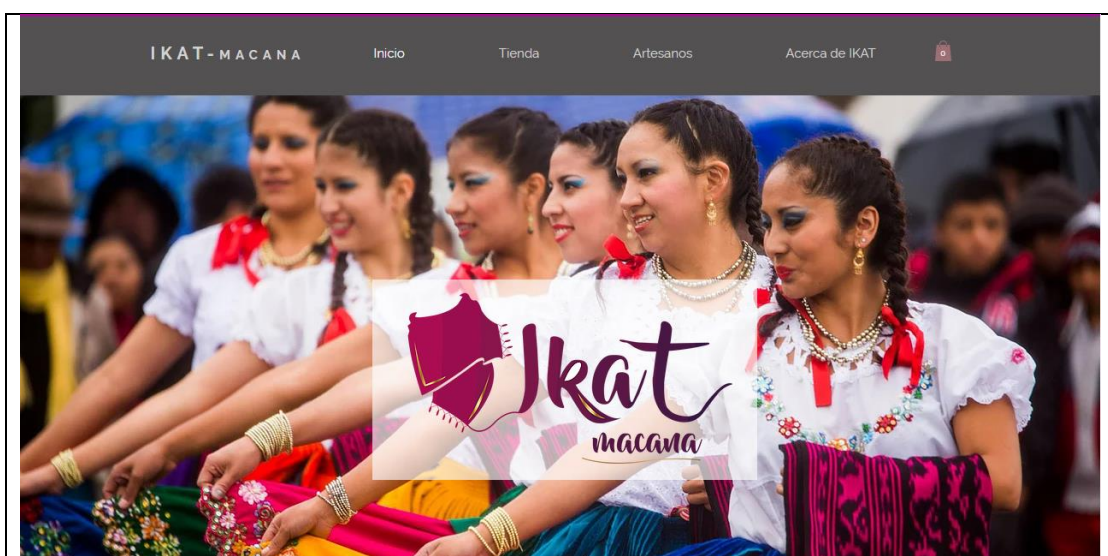
**Illustration 21** Ikat Macana Logo Proposed

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

The artisans who make the Ikat macanas can promote and sell their products individually or collectively through a website that guarantees loyalty and confidence in their transactions. This web page should reflect the importance of the Ikat technique in Latin America for the whole world. In addition it should recognize the transcendent talent of each one of the artisans when designing the macanas. Thus, both the artisans and the associations can offer their designs to international consumers regardless of the country where they are located for independent consumers or wholesalers. The first will consist of natural or legal persons whose purchase frequency is between 1 to 5 macanas per year; while wholesalers must exceed a dozen of this item a month.

The website facilitates the application of the e-commerce business model to the Ikat macanas. Thus, the page covers the Ikat technique as a national cultural brand, while each artisan maintains its autonomy in terms of supply, manufacturing and design. Any person who has an artisan license from Ikat macanas can access the website. Artisans benefit from exporting their product in the safest and fastest way, recognized for their creativity and design. There are no commercial intermediaries for which they receive income directly through PAYPAL described below. CIDAP,

founded in 1975 through an agreement between the government of Ecuador and the OAS, dedicated to promote and develop handicrafts and popular arts with the purpose of improving the lives of artisans of the nation, may be the public institution in charge of manage and control the security of the website.



**Illustration 22** Web Page Front

**Author:** Argudo, Gabriela; Vélez, Carlos; Yungasaca, Belén

Once the order is managed through the website: [www.ikat-macana.com](http://www.ikat-macana.com)<sup>4</sup>; the artisans must respond to it, according to the administrative proposal described in the previous chapter. Under the INCOTERM CPT, the artisan runs the risk of loss or damage until the goods are delivered in the place and time agreed by both contracting parties. If the buyer withdraws the goods after the agreed date, the losses or damages will be under its responsibility. Regarding the distribution of costs, the artisan assumes the relative costs of the export until the merchandise arrives at the agreed place. On the other hand, the buyer assumes the internal costs of the country of destination, applicable to this type of merchandise, apart from the value of the merchandise. .

The production of the Ikat macanas is not on a large scale, due to its ethnic nature and the history it entangles among its hiliaria. The export by Courier is considered. "Exporta Fácil" is a program promoted by several state institutions such as the Ministry of Foreign Trade, PRO ECUADOR, Ministry of Industries and

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<sup>4</sup> For questions of format in this investigation, this link proposal will be used through the link <https://gaby26021.wixsite.com/ikat-macana>



Productivity, among others with the aim of promoting and searching for better markets in international trade for MIPYMEs and handicrafts. This program can be used both by the artisans of Ikat macanas, as well as by their associations (Correos del Ecuador, 2018).

The Ikat macanas will be exported through the Certificate Exporta Facil Modality, with a standard treatment, an average arrival time of 10 working days of transport and 2 days of customs clearance in the average season in Germany (Correos del Ecuador, 2018).



In relation to the exchange and refund policies, the following are proposed: The delivery period of the products varies between 9 to 10 business days, the responsibility of customs clearance falls directly on the postal service of the destination country. Order changes within the national territory can be made in the workshops of artisans presenting the invoice of the purchase together with the product, its labels and packaging without presenting any physical or chemical alteration. To make order changes in other territories, consumers should contact through this website with the artisan, so that they can manage the return of products through the same export regime.

The term for the changes or the return is 15 days from the day of the deposit of the purchase, for the products that are in stock. While for the products on request, the term will be fixed through the corresponding negotiation between the artisan and the consumer as well as the corresponding design test date if applicable. These two conditioned to the presence of the invoice, the packing list, the packaging and the labels without presenting any alteration. To avoid inconveniences, it is necessary for the consumer to check the packaging of the products, as well as their main characteristics at the time of receipt of the purchase, before signing the delivery note. Claims will not be accepted once the agreement has been signed.

In case the products are changed or returned due to deficiencies in their manufacture, the delivery of the replacement of the products will cover all expenses up to the door of the declared address. When the product arrives, the delivery is canceled for a reason beyond artisan responsibility; the cost of the shipment will not be refunded.

### 3.7. Price and Marketing Channels

**Table 27** Ikat Macana Price

Product	Price USD	Price EUR	Details
	110,00	94,99	Ikat Macana 100% wool
	130,00	112,26	Ikat Macana 100% silk

**Note:** The table above describes the average prices that an artisan looks for in the German market of a macana made 100% with a single textile fiber and under an average design. However, custom designs, with embroidery and other constituent fibers will depend on the negotiation between the artisan and the buyer.

**Author:** Vélez, Carlos; Yungasca, Belén

The process to obtain the sale price of the macanas is meticulous and integrates several administrative and operative factors that are taken into account for a fair trade practice. Two prices were obtained, one for wool macana with average design and resources and another for silk macana under the same conditions. In the margin of utility for the artisans their talent, creativity, design and time invested to create a work are recognized. The sale price to the public is calculated with a profit projection of 10% for wool macana and 25% for silk macana, due to its laborious nature. Under the principles of e-commerce, the determined prices are rounded up to: \$ 110 for the wool macana and \$ 130 for the silk macana.

**Table 28 Price Table EXW**

<b>WOOL MACANA PRICE</b>		<b>SILK MACANA PRICE</b>	
<b>OPERATING COSTS</b>	<b>85</b>	<b>OPERATING COSTS</b>	<b>95</b>
Wool	30	Silk	40
Vegetable Tinctures	10	Vegetable Tinctures	10
Cabuya	5	Cabuya	5
Basic Services	15	Basic Services	15
Tools and Instruments	25	Tools and Instruments	25
<b>ADMINISTRATIVE COSTS</b>	<b>60</b>	<b>ADMINISTRATIVE COSTS</b>	<b>60</b>
Office Resources	35	Office Resources	35
Marketing and Sales	25	Marketing and Sales	25
<b>TOTAL COSTS PER MONTH</b>	<b>145</b>	<b>TOTAL COSTS PER MONTH</b>	<b>155</b>
<b>TOTAL COSTS FOR MACANA</b>	<b>36,25</b>	<b>TOTAL COSTS FOR MACANA</b>	<b>38,75</b>
<b>ARTISAN TALENT BY MACANA</b>	<b>50</b>	<b>ARTISAN TALENT BY MACANA</b>	<b>50</b>
<b>MACANA TOTAL INVESTMENT</b>	<b>86,25</b>	<b>MACANA TOTAL INVESTMENT</b>	<b>88,75</b>
IVA 12%	10,35	IVA 12%	10,65
TOTAL + IVA	96,60	TOTAL + IVA	99,40
<b>MARGIN OF PROFITABILITY 10%</b>	<b>106,26</b>	<b>MARGIN OF PROFITABILITY 30%</b>	<b>129,22</b>
<b>ROUNDED PRICE</b>	<b>110</b>	<b>ROUNDED PRICE</b>	<b>130</b>

Author: Vélez, Carlos; Yungasaca, Belén

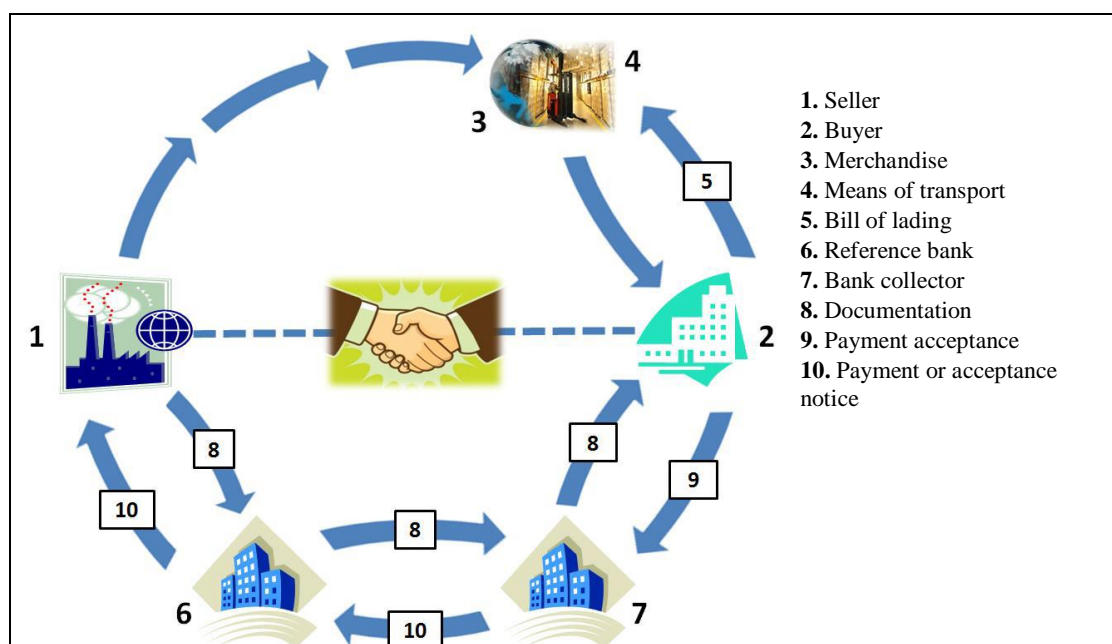
### 3.8. Payment Instrument

According to customs and marketing practices, the form of payment will depend on each negotiation process to satisfy the needs of both the buyer and the seller. Two of the most adaptable ways of adapting to this business model are described below, that do not reflect imminent danger such as credit card transactions, notwithstanding that the Ikat macana artisan can select one of them, or the exercise of their combination. The artisan is concerned about charging at competitive prices with a stable exchange rate, involving transportation, legal aspects and guaranteeing reliability with their customers. On the other hand, importers are concerned about finding strategic suppliers, which at competitive prices and payment facilities, guarantee quality in the goods and reduction of risks.

The first form of payment refers to the Letter of Credit, that is, the payment of merchandise, through a bank against the provision of certain documents, ensuring

compliance with terms and conditions of commercialization between the parties. This form of payment reflects greater trust between the parties to the negotiation since it unifies criteria and discrepancies. The importer will not need to pay in advance, which reduces their risk in transactions; the artisan from Macanas Ikat will have the support and commitment of the issuing bank, as well as the timely payment of his transaction (Daniels, Radebaugh, & Sullivan, 2013).

The procedure of the Letter of Credit begins with the negotiation between the artisan of Macana Ikat and the buyers in any other part of the world. Thus, they set conditions and sign a contract. The importer, in this case German, must request the opening of a letter of credit to any bank in that country. This banking entity must open a letter of credit in an International Bank. The latter must notify the Bank of the Exporter of the Letter of Credit. Finally, the artisan must embark and present the negotiation documents in the bank, so that the international entity can request the payment of the letter of credit and cancel artisans. All this process is summarized in the following illustration (ibídem).



**Illustration 23** Letter Credit Process

**Source:** CORPEI; ¿cómo exportar?, Serie: Cultura Exportadora N° 1, Edición # 4

It is recommended that the negotiation of Ikat macana artisan should be done with a focus on a confirmed irrevocable letter of credit. The letter of credit cannot be canceled or amended without the consent of the parties to the negotiation. To be able to opt for this modality, artisans must approach any public or private bank in the

province, be a client of that entity, have credit approval and submit the request for it, the Proforma invoice, the original application of the insurance policy, the original endorsement of the application of the insurance policy in favor of the bank, copies of the identity card and voter's certificate and RUC (Banco Central del Ecuador, 2018).

The second form of payment is closely related to the e-commerce model that guarantees reliability between the Ikat macana craftsman and the consumers. PayPal is an online payment service; it was founded with the name of Confinity. The function of this service is to send payments to a seller's account using a credit card, in this case, from the Ikat artisan without the need for any of the actors to share their financial information. PayPal allows consumers to send payments around the world as well as receive them. In addition, if used by millions of companies and individuals, this service associates several credit cards of the same account (El Comercio, 2017). Paying with PayPal is the safest and fastest way to buy.

In this way, both artisans and consumers must register for free on [www.paypal.com](http://www.paypal.com). The first with the intention of entering the corresponding information so that the money is deposited from abroad; while consumers to be able to buy the Ikat macanas. Once the credit cards have been associated with the user's account, the consumer must find the PayPal button on the Ikat macanas website when paying, entering only the email and password. The confidence and experience in international trade of this medium, allows protect the consumer and their purchases. Similarly, it gives a serious image of Ikat artisans, since, if the merchandise is not the same, PayPal returns the money to the consumer (PayPal, 2018).

### **3.9. Requirements and Procedures for Exportation**

To be able to export the Ikat macanas under the Postal Traffic Regimen, Courier: the maximum weight allowed in Germany per package will be up to 31.5 kilos. The value declared by the Simplified Customs Declaration cannot exceed \$5,000. The packages must have compulsory insurance in case of loss, damage or spoliation, charged at any post office in Ecuador upon completion of the export process with a premium of 1.5% (Correos del Ecuador, 2018).

The artisans of Ikat macanas and their associations must obtain the RUC, previously authorized by the Internal Revenue Service (SRI) that allows them to export (ibídem). It should be noted the discontent of most of them, discussed in Chapter 1, for the disadvantages that this legal provision entails. However, when executing the administrative proposal described and developed in chapter 2, obtaining the RUC will not be an obstacle. In fact, artisans can benefit from intermediaries in the export process, as long as fair trade is recognized.

The artisan must register the RUC, as a natural person, whose economic activity characterizes as an artisan. You must present the original and copy of the identity card, the voting certificate of the last electoral period in the facilities of the SRI; a copy of a document that certifies the address of the residence, the original or copy of the qualification issued by the National Board of Defense of the Artisan; and the municipal patent (2018). To obtain the commercial patent of the Municipality of the Canton of Gualaceo must be presented to the Municipal Financial Office, the form of declaration of the tax on patents, copy of the identity card, copy of the RUC, certificate of not owing to the Municipality, fire department, and the balances of the previous year (2011).

With the objective that artisans provide a modern service that meets all the requirements of quality and efficiency, they must bill electronically. This is a way of issuing vouchers with the same legal validity as physical documents. This method allows the reduction of time of sending of the vouchers, saving in the cost of stationery, greater security, efficiency and speed. To apply this method, artisans must acquire an electronic signature, software to generate electronic receipts, access to the internet and the online platform of the SRI (2018).

The electronic signature replaces the written signature and has the same validity. There are only four entities in Ecuador that issue an electronic signature: Civil Registry (public), Security Data (private), ANF Certification Authority (private), Judicial Council (public), FEDEXPOR (public). These data are consolidated through different physical means with a validity of 1 to 6 years. In the case of export of Ikat macanas, it is suggested that the artisan request their issuance through the TOKEN or USB for processing in the ECUAPASS (Internal Revenue Service, 2018).

Afterwards, artisans must proceed to submit application through the web page [www.sri.gob.ec](http://www.sri.gob.ec), in the option "Electronic Vouchers", available in "Online Services". Taxpayers wishing to adhere to this scheme must request authorization for the Testing Environment and subsequently authorization for the Production Environment. The Testing Environment is temporary where the facilities are adjusted to proceed to invoice in a real way. Once this period is authorized, the artisan must request on the website the production environment, in order to guarantee the issuance of electronic vouchers (*ibídem*).

They can use private or free software. The latter, for the Ikat macanas, is made available by the official website of the Internal Revenue Service for small and medium-sized contributors (*ibídem*).

Artisans or their intermediaries must register as an exporter at [www.exportafacil.gob.ec](http://www.exportafacil.gob.ec), so that the Simplified Customs Declaration (DAS) can be issued, with the necessary documents attached such as the commercial invoice, the packing list, the certificate of origin, the movement certificate EUR.1 and the certificate of non-property assets (*ibídem*).

For the certificate of origin, the artisan or the intermediary must register in the ECUAPASS as an exporter, after obtaining an electronic signature generated in the Civil Registry. Later they must fill in the fields for the sworn statement of origin for the issuance of their certificate through the Ministry of Industries and Productivity. To continue with the EUR.1 certificate, the corresponding sections must be completed with destination information. Finally, the certificate of non-property assets can be generated by issuing the DAS on the CDE virtual platform. (Correos del Ecuador, 2018).

### **3.10. Charge Characteristics**

Within the export logistics process, there is a delicate stage: the transfer of the macanas to the foreign market. This stage depends on the macana arriving in good condition to the final consumer. The packaging refers to all the necessary material to contain, protect, manipulate and present the final consumer. The function of this package is to contain the product to simplify distribution and storage. The packing that covers the macanas takes its name, the brand, the country of origin and the name

of the artisan who made this garment. On the other hand, the packaging will be manufactured with cardboard for the comfort and safety of the macanas. It is necessary to emphasize that they only take packing whose order is of 12 macanas in future, for concept of protection and security for wholesalers.

Directive 94/62 /CE determines that containers and their waste must be limited in weight and volume to ensure the level of safety, hygiene and consumer acceptability. The aim is to minimize the substance content of the material in the packaging, designed so that it can be reused. All member states of the European Union must control that the packages that are marketed comply with the established specifications (EUR-Lex, 2014).

Ikat macanas must be exported in a package designed exclusively for transportation and have a label indicating the percentage of the elements that make it up. Based on EU Regulation 1007/2011 on textile fibers, denominations and labeling, the Ikat macanas must indicate the fibers used in their manufacture and indications for washing and drying; in this case in German language. For the Ikat macana, whether woolen or natural silk, the textile fiber must be identified and the "Schurwolle" denomination of "100%" predicted. Now, if the design of the macana contemplates two types of textile fiber, the name of the fiber preceded by "85%" should be written (European Commission, 2018).



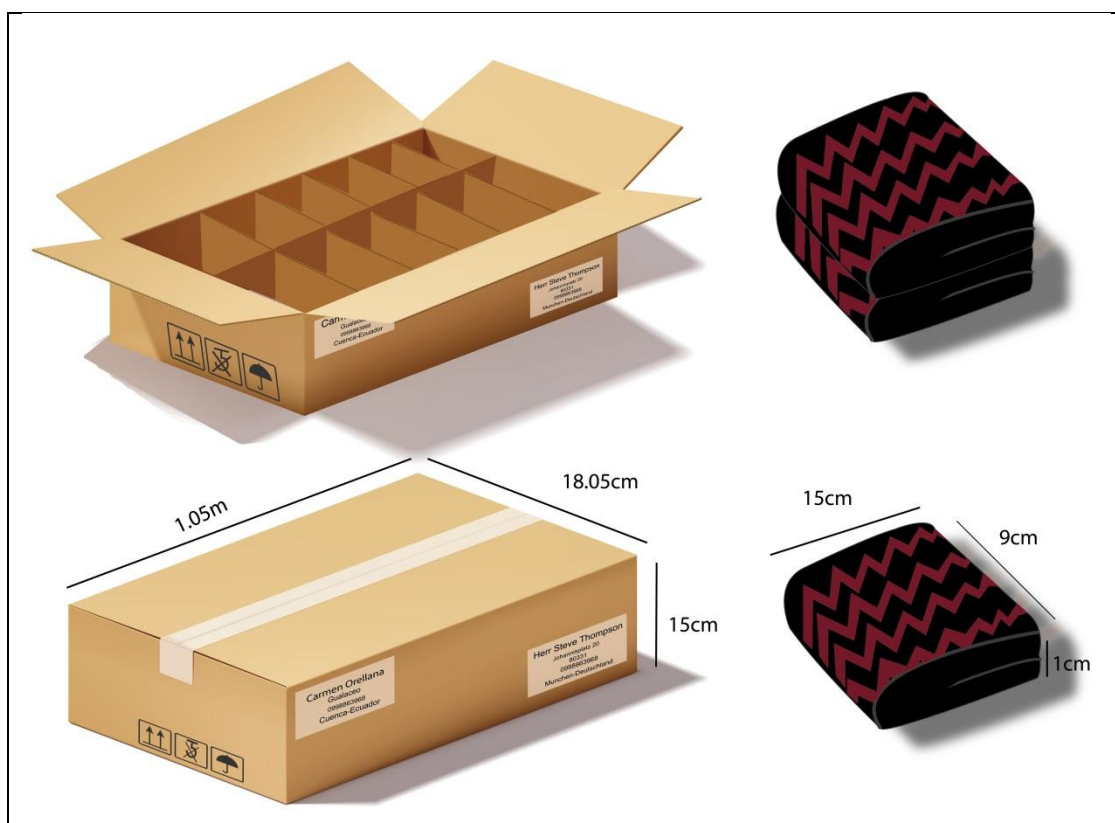
**Illustration 24** Ikat Macanas Label

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén



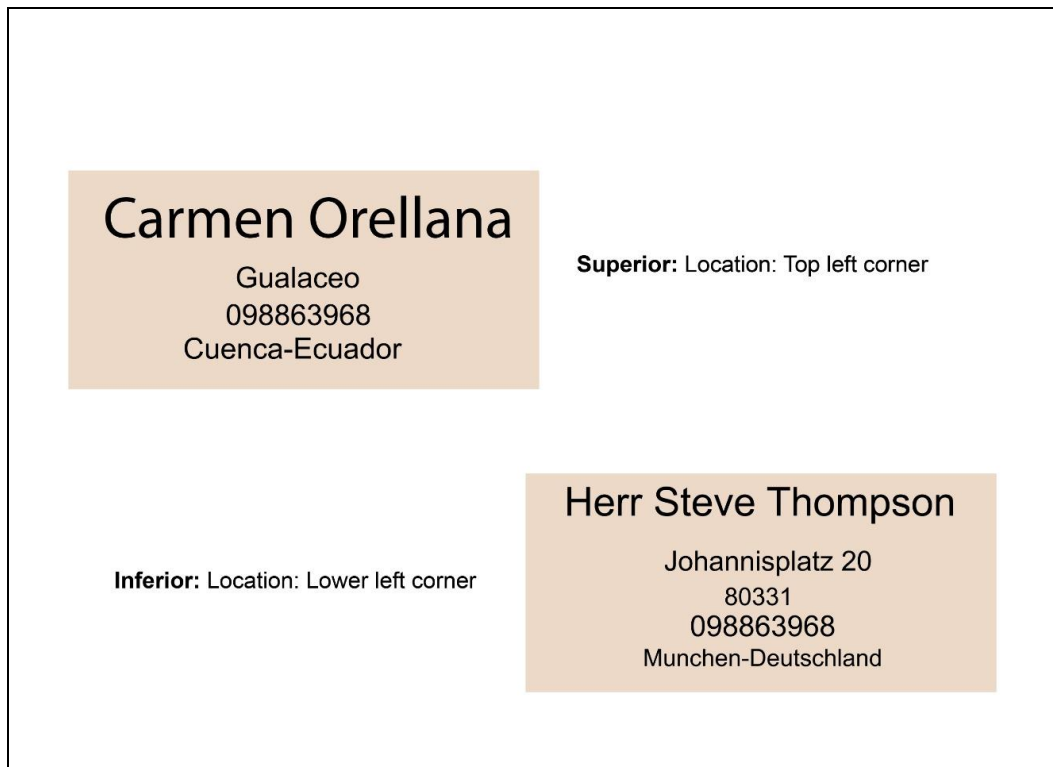
The packaging must comply with the specifications of PRO ECUADOR. In this, the recipient's information must be written on the front, in the lower right corner: the name of the person to whom it is sent; your address; zip code, if any; the telephone of the artisan or intermediary; city and country where it is headed (Correos del Ecuador, 2018). While the information of artisan or intermediary must be written on the same side in the upper left corner: the name of the artisan or commercial intermediary; their full address; phone; and the city and country where they does it (Correos del Ecuador, 2018). The packing list should detail the contents of the package outside the box.

The marking and labeling are used to facilitate the handling and the location of the packaging. For the correct application, the ISO 7000 and ISO 780 standards will be used, which indicate the technical aspects that the packages must contain to facilitate the shipment and the instructions on the handling and care of charge through international pictograms.



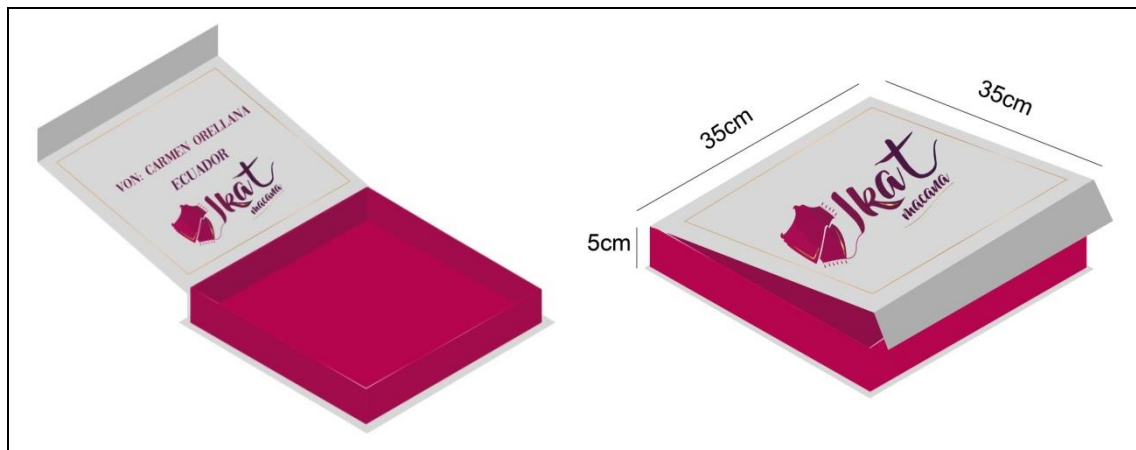
**Illustration 25** Packing Wholesaler

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén



**Illustration 26** Packaging Description

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén



**Illustration 27** Retail Packaging

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

### 3.11. Restrictions and Tariffs

Since the entry into force of the Trade Agreement, almost 95% of the tariffs have been liberalized by the EU and by Ecuador around 60%. Within this group is the item 61 17 10 00 that has now been released 100%. The possibility of exporting macanas to the other countries of the European Union is not ruled out; however, the objective of this research is to export this product to the country of Germany. This

country applies the following tariff to imports with the national subheading: 61 17 10 00 from Ecuador.

**Table 29** Ikat Macanas Customs Duties

Product Code	Product Description	Description Commercial Regime	Applied Rate	Total Ad Valorem Equivalent Tariff
61.17.10.00.00	Shawls, neck scarves, scarves, mantillas, veils and similar items	Commercial Agreement between the EU and Ecuador	0%	0%

Source: European Commission

Author: Vélez, Carlos; Yungasaca, Belén

### 3.12. CPT

**Table 30** Macanas CPT

Detail	Retailer		Wholesaler (12)	
	Wool	Silk	Wool	Silk
Final Price	110,00	130,00	110,00	130,00
Packing per Macana	2,50	2,50	0,05	0,05
Packaging per Macana	-	-	0,30	0,30
Label per Macana	0,25	0,25	0,25	0,25
Internal Transportation per Macana	3,00	3,00	0,25	0,25

	Exporta Fácil			
	Wool	Silk	Wool	Silk
-- Subtotal per shipment	19,7	19,7	103,5	103,5
-- IVA per shipment	2,36	2,36	12,42	12,42
<b>-- TOTAL SHIPMENT</b>	<b>22,06</b>	<b>22,06</b>	<b>115,92</b>	<b>115,92</b>
Insurance	2,206	2,206	11,592	11,592
Shipping per Macana	24,266	24,266	10,626	10,626
<b>CPT per Macana</b>	<b>140,016</b>	<b>182,076</b>	<b>121,476</b>	<b>141,476</b>

Author: Vélez, Carlos; Yungasaca, Belén

The previous table shows the total price that the consumer will pay in relation to the purchase of an Ikat macana, be it wool or silk, with a retail or wholesale nature. It also shows the costs of internal transport and the Exporta Fácil program due to the CPT Incoterm with which this business proposal is proposed. In this way, the decrease in prices and costs can be evidenced if the Ikat order is given as a wholesaler, because the cost of both packaging, packaging and shipping is distributed to each of the macanas.

### 3.13. International Certifications

The European certifications focused on the Ikat macana are based on the fair trade accreditations elaborated in the first chapter of the present investigation. Thus, Ikat macanas artisan associations can decide to apply to any of the European certifications, due to the equality of their guidelines. Next, you can find European certification options that are in the decision-making capacity of your artisans. It should be noted, the existence of other certifications that issues its standards from the operations of its suppliers.



**Illustration 28** EcoCert Certifier

Source: [www.ecocert.com/es/](http://www.ecocert.com/es/)



**Illustration 29** EcoLabel Certifier

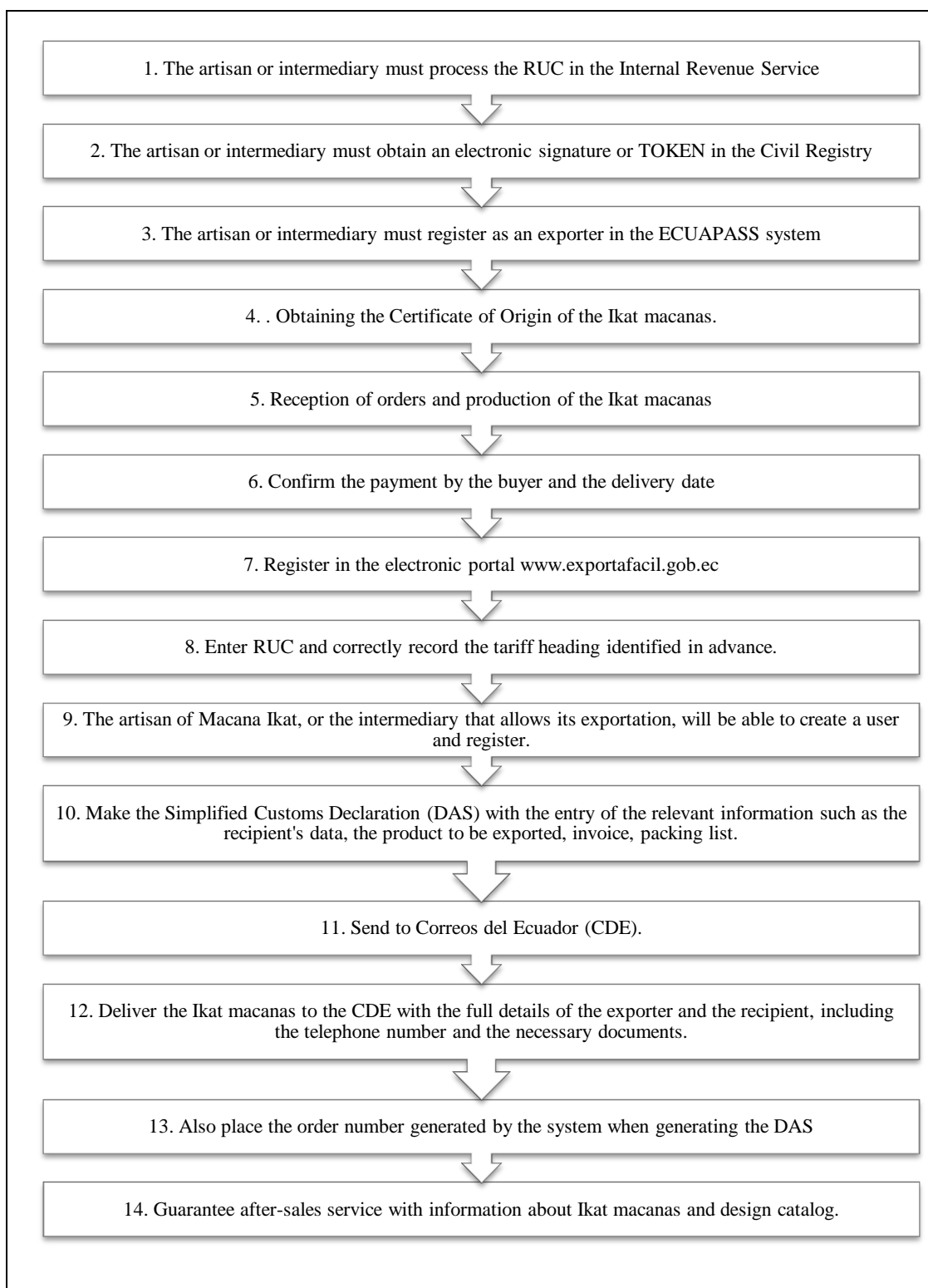
Source: [ec.europa.eu/environment/ecolabel/index\\_en.htm](http://ec.europa.eu/environment/ecolabel/index_en.htm)



**Illustration 30** OekoTex Certifier

Source: [www.oeko-tex.com/es/business/certifications\\_and.../ots.../ots\\_100\\_start.xhtml](http://www.oeko-tex.com/es/business/certifications_and.../ots.../ots_100_start.xhtml)

### 3.14. Flowchart of the Export Process



**Illustration 31** Flujograma de Exportación

**Author:** Vélez, Carlos; Yungasaca, Belén

## CHAPTER 4

# 4. ACCOUNTING, FINANCIAL AND ECONOMIC SYSTEM

### Introduction

Like the approaches determined in Chapter 1 of this research, this proposal for international management could not guarantee high levels of profitability and competitiveness of Ikat market makers if the results of their exercise in the first years are not evaluated. Although, the objectives of this proposal must be modified according to the principles of strategic planning, below, strategic financial tools are described that allow the artisan to make decisions in the short and long term, while guaranteeing the maximize your results.

### 4.1. Cost and Financing of the Project

The costs, expenses and accounts in general described below, contemplate unforeseen 2% due to changes in future regulatory bodies, the dynamism of the market and its operations.

#### 4.1.1. Tangible Fixed Assets

The tangible fixed assets are investments of the project, because they cannot be discarded for their exercise.

**Table 31** Tangible Fixed Assets

Tangible Fixed Assets			
DETAIL	PARTIAL	SUBTOTAL	TOTAL
<b>Tangible Investments – Fixed Assets</b>			<b>1851,70</b>
<b>Tangible Investments – Fixed Assets – Operacional</b>		<b>694,00</b>	
Workshop – Office	490,00		
Loom and Weaving Instruments	204,00		
<b>Tangible Investments – Fixed Assets – Administrative</b>		<b>1157,70</b>	
Computer equipment	938,40		
Furniture and fixtures	219,30		

**Author:** Vélez Carlos; Yungasaca, Belén

Within the operational fixed assets is the workshop - artisan's office; as well as the necessary tools to be able to operate.

**Table 32** Workshop - Office Cost

Workshop Ground Cost				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Ground	m <sup>2</sup>	7	70,00	490,00
			Subtotal	490,00
			Unforeseen 2%	9,80
			<b>Total</b>	<b>499,80</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 33** Cost Production Workshop

Cost Production Workshop				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Waist Loom	Unit	1	140,00	140,00
Tissue Tools	Unit	3	5,00	15,00
Urdiembre Tools	Unit	1	20,00	20,00
Tincture Tools	Unit	5	5,00	25,00
			Subtotal	200,00
			Unforeseen 2%	4,00
			<b>Total</b>	<b>204,00</b>

Author: Vélez Carlos; Yungasaca, Belén

Tangible administrative fixed assets are investments that are related to the administrative process, for this management proposal it is considered necessary computer equipment and the necessary furniture.

**Table 34** Cost Computer Equipment

Cost Computer Equipment				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
HP Notebook Computer	Unit	1	750,00	750,00
HP L350 Printer	Unit	1	170,00	170,00
			Subtotal	920,00
			Unforeseen 2%	18,40
			<b>Total</b>	<b>938,40</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 35** Cost Furniture and Appliances

Cost Furniture and Appliances				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Desk (3 drawers)	Unit	1	200,00	200,00
Chair (Main)	Unit	1	15,00	15,00
			Subtotal	215,00
			Unforeseen 2%	4,30
			<b>Total</b>	<b>219,30</b>

Author: Vélez Carlos; Yungasaca, Belén

#### 4.1.2. Deferred Assets

Deferred assets are composed of those accounts that cannot be considered consumed in their entirety in a single economic period, due to their nature. However, it has caused the advance payment for its exercise. .

**Table 36** Intangible Deferred Assets

Intangible Deferred Assets		
DETAIL	PARTIAL	TOTAL
<b>Intangible Investments – Deferred Assets</b>		<b>85,68</b>
Permits and Patents (annual cost)	14,28	
Export Procedures (annual cost)	66,30	
Electronic Page	5,10	

Author: Vélez Carlos; Yungasaca, Belén

**Table 37** Cost Permits and Patentes

Cost Permits and Patentes				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Municipal Patent	Unit	1	13,00	13,00
Fire Permit	Unit	1	1,00	1,00
			Subtotal	14,00
			Unforeseen 2%	0,28
			<b>Total</b>	<b>14,28</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 38** Cost Electronic Page

Cost Electronic Page				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Software	Unit	1	5,00	5,00
			Subtotal	5,00
			Unforeseen 2%	0,10
			<b>Total</b>	<b>5,10</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 39** Cost Export Requirements

Cost Export Requirements				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Token or Electronic signature	Unit	1	65,00	65,00
			Subtotal	65,00
			Unforeseen 2%	1,30
			<b>Total</b>	<b>66,30</b>

Author: Vélez Carlos; Yungasaca, Belén



### 4.1.3. Working Capital

It refers to the amount represented by the additional capital required by the artisan or the association, for the operation of the company, without counting the resources described above. That is to say, they are those additional items that the company requires in order to operate and comply with short-term obligations and needs.

**Table 40** Working Capital

Working Capital			
Detail	ANNUAL VALUE	DAILY VALUE	WORKING CAPITAL VALUE 1 MONTH (30 DAYS)
Operational Working Capital	6908,58	19,19	575,71
Administrative Working Capital	1011,33	2,81	84,28
Sales Work Capital	807,84	2,24	67,32
Total Working Capital	8727,75	24,24	727,31

**Author:** Vélez Carlos; Yungasaca, Belén

### 4.1.4. Project Financing

It is proposed that the project can be financed by internal and external sources. The first ones related as a contribution of the artisans while the external ones, through the management of loans to financial entities. Thus, the financing will be structured with 19% of own resources and 81% by the Pacific Entrepreneur Loan of the Bank of the Pacific in alliance with the Ecuadorian Government and the National Finance Corporation, at an interest rate of 8.5%.

The requirements that must be met are 12 months of verifiable sales, RISE o RUC, credit application, 2 copies of identity card and voting certificate, worksheet for a basic service of one of the last two months, 3 references, income detail, projected cash flow, business plan, internal balance and certificate of compliance of the SRI, IESS, Superintendence of Companies.

**Table 41** Chart of sources and uses

Chart of sources and uses	
Detail	Investment Amount
Tangible Investments – Assets Fixed	1851,70
Intangible Investments – Deferred Assers	85,68
Working Capital	727,31
<b>TOTAL INVESTMENT</b>	<b>2664,69</b>
Artisan Contribution	500
Credit Contribution	2164,69

**Author:** Vélez Carlos; Yungasaca, Belén

This chart is made up of tangible and intangible assets that represent the net uses of funds held by artisans or associations. Likewise, the patrimony constituted by the working capital and by the investments symbolizes the sources.

#### **4.1.5. Investment Plan**

This systematic model reflects the successive investments that must be made in the projected future of the organization, in fixed, intangible assets and working capital. In this way, risk reduction is guaranteed, and reliability in the continuous commercial operation.

**Table 42** Investment Plan

DETAIL	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>Tangible Investments – Fixed Assets</b>	<b>1851,70</b>	-	-	-	<b>938,4</b>	-	-	<b>938,4</b>	-	-	<b>938,4</b>	<b>913,3</b>	-	<b>938,4</b>	-	-
<b>Tangible Investments- Fixed Assets- Operational</b>	<b>694,00</b>	-	-	-	-	-	-	-	-	-	-	<b>694</b>	-	-	-	-
Workshop- Office	490,00	-	-	-	-	-	-	-	-	-	-	490	-	-	-	-
Loom and Weaving Instruments	204,00	-	-	-	-	-	-	-	-	-	-	204	-	-	-	-
<b>Tangible Investments – Fixed Assets - Administrative</b>	<b>1157,70</b>	-	-	-	<b>938,4</b>	-	-	<b>938,4</b>	-	-	<b>938,4</b>	<b>219,3</b>	-	<b>938,4</b>	-	-
Computing Equipment	938,40	-	-	-	938,4	-	-	938,4	-	-	938,4	-	-	938,4	-	-
Furniture and fixtures	219,30	-	-	-	-	-	-	-	-	-	-	219,3	-	-	-	-
Intangible Investments- Deferred Assets	85,68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Permits and Patents (anual cost)	14,28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Export Procedures (anual cost)	66,30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electronic Page	5,10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Working Capital</b>	<b>727,31</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Operationa Capital of Work	575,71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Administrative Working Capital	84,28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sales Work Capital	67,32	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>TOTAL INVESTMENT OF THE PROJECT</b>	<b>2664,69</b>	-	-	-	<b>938,4</b>	-	-	<b>938,4</b>	-	-	<b>938,4</b>	<b>913,3</b>	-	<b>938,4</b>	-	-

Author: Vélez Carlos; Yungasaca, Belén

#### 4.1.6. Production Cost

Production costs are the expenses required to guarantee operations, that is, those costs involved to obtain a finished product. Production costs can be classified as direct or indirect. The first are those that directly intervene in the production of a finished product; among these can be found: the labor that guarantees the unified basic salary for the artisan; the raw material that allows responding to the planned demand, so that artisans can guarantee their participation in the German market; indirect materials that generate added value to the final consumer such as packaging, labeling and packaging.

**Table 43** Labor Cost

Labor Cost (Artisan)							
Detail (Artisan)	Annual Basic Salary	Thirteenth	Fourteenth	Employer Contribution	Reserve funds	Total Year 1	Total Year 2
Artisan	4632,00	386,00	386,00	516,47	43,02	5920,47	5963,49

Author: Vélez Carlos; Yungasaca, Belén

**Table 44** Raw Material Cost

Raw Material Cost				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Wool	Carrier bag	9	30,00	270,00
Silk	Carrier bag	6	40,00	240,00
Vegetable Tinctures	Unit	15	10,00	150,00
Cabuya	Carrier bag	15	5,00	75,00
Subtotal				735,00
Unforeseen 2%				14,70
Total				749,70

Author: Vélez Carlos; Yungasaca, Belén

**Table 45** Indirect Material Cost

Indirect Material Cost				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Packing	Unit	60	2,50	150,00
Packaging	Unit	5	1,50	7,50
Label	Unit	60	0,25	15,00
Subtotal				172,50
Unforeseen 2%				3,45
Total				175,95

Author: Vélez Carlos; Yungasaca, Belén

#### 4.1.7. Indirect Production Cost

Indirect costs are those that cannot be distributed to the amount of produced macanas, because their generality is applied to the entire production. That is, among these can be found items such as the maintenance of operational activities; for these, 1% of the investment cost of the asset was determined.

**Table 46** Cost of Asset Maintenance

Operating Asset Maintenance Costs				
Detail	Unit of Measurement	Quantity	Unit Value	Total Value
Workshop- Office	Unit	1400	1%	14,00
Loom and Weaving Instruments	Unit	331,5	1%	3,32
Computing Equipment	Unit	938,4	1%	9,38
Furniture and fixtures	Unit	321,3	1%	3,21
Office materials (anual cost)	Unit	76,5	1%	0,77
Others	Unit	30	1%	0,30
Subtotal				30,98
Unforeseen 2%				0,62
Total				31,60

Author: Vélez Carlos; Yungasaca, Belén

#### 4.1.8. Depreciation and Amortization

Depreciation is considered as the gradual loss of the value of physical assets due to attrition or obsolescence (Evans, 2015). On the other hand, the amortizations mean the annual charge that is made to recover the investment. These items can be recovered by 20% per year, according to the accounting theory.

**Table 47** Depreciation and Amortization

Depreciation and Amortization of Fixed Assets						
Detail	Value of the Asset	Useful life	% Depreciation	Residual Value	Value to Depreciate	Expenditure Depreciation
<b>DEPRECIATION EXPENSES</b>						
<b>Tangible Investments – Fixed Assets</b>						391,87
<b>Tangible Investments – Fixed Assets - Operacional</b>						<b>62,46</b>
Workshop- Office	490,00	10	10%	49	441,00	44,10
Loom and Weaving Instruments	204,00	10	10%	20,4	183,60	18,36
<b>Tangible Investments – Fixed Assets - Administrative</b>						<b>329,41</b>
Computing Equipment	938,40	3	33%		938,40	309,67
Furniture and fixtures	219,30	10	10%	21,93	197,37	19,74
<b>Total Expenditure Depreciation</b>						<b>391,87</b>
<b>ARMOTIZATION EXPENSES</b>						
<b>Intangible Investments – Deferred Assets</b>						<b>17,14</b>
Permits and Patents (anual cost)	14,28	5				2,86
Export Procedures (anual cost)	66,30	5				13,26
Electronic page	5,10	5				1,02
<b>Total Expenditure Amortizations</b>						<b>17,14</b>
<b>Total Depreciation + Amortizations</b>						409,01

**Author:** Vélez Carlos; Yungasaca, Belén

It is necessary to emphasize that it has been decided to project a period of 5 years of useful life for the amortization expenses such as permits and patents, export formalities and electronic page; because this management model must be reviewed and evaluated every 5 years as a principle of strategic planning. This was analyzed in Chapter 2.

#### 4.1.9. Administrative Expenses

These expenses are related to the management and administration of this business proposal. In the case of the artisans of Ikat macanas, this expense does not include their salary, since it is already included in the cost of direct labor. Thus, inside these you can contemplate the office supplies; cleaning materials, for which the average monthly cost was determined; the basic services within which is the cost of the production of macanas, due to the nature of the workshop - office; internet service.

**Table 48** Office Tool Expenses

Office Tool Expenses				
Detail	Unit of Measurement	Quantity	Unit Cost	Final Cost
Ream Bond Paper	Unit	5	5,00	25,00
Pens	Unit	5	0,35	1,75
Subtotal				26,75
Unforeseen 2%				0,54
<b>Total</b>				<b>27,29</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 49** Cleaning Materials Expenses

Cleaning Materials Expenses				
Detail	Unit of Measurement	Quantity	Unit Cost	Final Cost
Cleaning	Unit	10	3,50	35,00
Subtotal				35,00
Unforeseen 2%				0,70
<b>Total</b>				<b>35,70</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 50** Basic Services Expenditure

Basic Services Expenditure		
Detail	Mensual Cost	Annual Cost
Water	8,00	96,00
Light	10,00	120,00
Telephone	8,00	96,00
Subtotal		312,00
Unforeseen 2%		6,24
<b>Total</b>		<b>318,24</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 51** Internet Service

Internet Expenditure		
Detail	Mensual Cost	Annual Cost
Internet	22,00	264,00
Subtotal		264,00
Unforeseen 2%		5,28
<b>Total</b>		<b>269,28</b>

Author: Vélez Carlos; Yungasaca, Belén

#### 4.1.10. Sales Expenditure

These expenses are those items related to the cost incurred in marketing the good, in this case, Macanas Ikat. For this management proposal you can refer to the export expenses.

**Table 26** Export Cost

Export Cost		
Detail	Cost per Shipment	Annual Cost
Shipping Average	36,00	432
Documents (Commercial Invoice – Packing list)	5,00	60
Export Certificates	10,00	120
Bank fees	15,00	180
	Subtotal	792
	Imprevistos 2%	15,84
	<b>Total</b>	<b>807,84</b>

**Author:** Vélez Carlos; Yungasaca, Belén

#### 4.1.11. Financial Expenses

These are strictly related to the expenses incurred by the need to request a loan or credit from any bank. For this project, the amounts or items to be calculated are described below:

**Table 52** Credit conditions

Amount	2164,69
Interest	8,50%
Grace period	1 año
Capital repayment	5 años
Type of Amortization	Annual

**Author:** Vélez Carlos; Yungasaca, Belén

**Table 53** Loan Amortization

Period	Residue	Interest	Payment of Capital	Dividend
1	2164,69	184,00		184,00
2	1731,75	184,00	432,94	616,94
3	1298,82	147,20	432,94	580,14
4	865,88	110,40	432,94	543,34
5	432,94	73,60	432,94	506,54
6	0,00	36,80	432,94	469,74

**Author:** Vélez Carlos; Yungasaca, Belén



#### **4.1.12. Projection of costs**

For the projection of the costs, the inflation value according to the Central Bank for September 2018 of 0.39% will be considered, as a constant value in relation to the projection of income.

**Table 54** Projection production costs

Projection Production Costs															
Detail	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>DIRECT COSTS</b>															
Direct Labor	5920,47	5963,49	5986,75	6010,10	6033,54	6057,07	6080,69	6104,40	6128,21	6152,11	6176,10	6200,19	6224,37	6248,65	6273,02
Raw Material	749,70	752,62	755,56	758,51	761,46	764,43	767,41	770,41	773,41	776,43	779,46	782,50	785,55	788,61	791,69
Packaging	175,95	176,64	177,33	178,02	178,71	179,41	180,11	180,81	181,52	182,22	182,93	183,65	184,36	185,08	185,80
<b>Total Direct Production Costs</b>	<b>6846,12</b>	<b>6892,75</b>	<b>6919,63</b>	<b>6946,62</b>	<b>6973,71</b>	<b>7000,91</b>	<b>7028,21</b>	<b>7055,62</b>	<b>7083,14</b>	<b>7110,76</b>	<b>7138,49</b>	<b>7166,33</b>	<b>7194,28</b>	<b>7222,34</b>	<b>7250,51</b>
<b>INDIRECT COSTS</b>															
Maintenance		31,60	31,72	31,85	31,97	32,10	32,22	32,35	32,47	32,60	32,73	32,85	32,98	33,11	33,24
<b>Total Indirect Production Costs</b>		<b>31,60</b>	<b>31,72</b>	<b>31,85</b>	<b>31,97</b>	<b>32,10</b>	<b>32,22</b>	<b>32,35</b>	<b>32,47</b>	<b>32,60</b>	<b>32,73</b>	<b>32,85</b>	<b>32,98</b>	<b>33,11</b>	<b>33,24</b>
Subtotal	6846,12	6924,35	6951,35	6978,47	7005,68	7033,00	7060,43	7087,97	7115,61	7143,36	7171,22	7199,19	7227,27	7255,45	7283,75
Depreciation expenses	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46	62,46
<b>TOTAL COSTS AND PRODUCTION EXPENSES</b>	<b>6908,58</b>	<b>6986,81</b>	<b>7013,81</b>	<b>7040,93</b>	<b>7068,14</b>	<b>7095,46</b>	<b>7122,89</b>	<b>7150,43</b>	<b>7178,07</b>	<b>7205,82</b>	<b>7233,68</b>	<b>7261,65</b>	<b>7289,73</b>	<b>7317,91</b>	<b>7346,21</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 55** Projection Administrative Expenses

Projection Administrative Expenses															
DETAIL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Office suppliers	27,29	27,39	27,50	27,61	27,71	27,82	27,93	28,04	28,15	28,26	28,37	28,48	28,59	28,70	28,81
Office clean	35,70	35,84	35,98	36,12	36,26	36,40	36,54	36,69	36,83	36,97	37,12	37,26	37,41	37,55	37,70
Basic services	318,24	319,48	320,73	321,98	323,23	324,49	325,76	327,03	328,31	329,59	330,87	332,16	333,46	334,76	336,06
Permits and patents	14,28	14,34	14,39	14,45	14,50	14,56	14,62	14,67	14,73	14,79	14,85	14,90	14,96	15,02	15,08
Internet	269,28	270,33	271,38	272,44	273,51	274,57	275,64	276,72	277,80	278,88	279,97	281,06	282,16	283,26	284,36
Subtotal	664,79	667,38	669,98	672,59	675,22	677,85	680,49	683,15	685,81	688,49	691,17	693,87	696,57	699,29	702,02
Depreciation	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41	329,41
Amortization	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14
<b>TOTAL ADMINISTRATION EXPENSES</b>	<b>1011,33</b>	<b>1013,92</b>	<b>1016,53</b>	<b>1019,14</b>	<b>1021,76</b>	<b>1024,39</b>	<b>1027,04</b>	<b>1029,69</b>	<b>1032,36</b>	<b>1035,03</b>	<b>1037,72</b>	<b>1040,41</b>	<b>1043,12</b>	<b>1045,83</b>	<b>1048,56</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 56** Projection Expenses Sales

Projection Expenses Sales															
DETAIL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Gasto de Exportación	807,84	810,99	814,15	817,33	820,52	823,72	826,93	830,15	833,39	836,64	839,90	843,18	846,47	849,77	853,08
<b>TOTAL GASTO VENTAS</b>	<b>807,84</b>	<b>810,99</b>	<b>814,15</b>	<b>817,33</b>	<b>820,52</b>	<b>823,72</b>	<b>826,93</b>	<b>830,15</b>	<b>833,39</b>	<b>836,64</b>	<b>839,90</b>	<b>843,18</b>	<b>846,47</b>	<b>849,77</b>	<b>853,08</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 57** Summary Costs and Expenses

Summary Costs and Expenses															
DETAIL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Production Cost	6908,58	6986,81	7013,81	7040,93	7068,14	7095,46	7122,89	7150,43	7178,07	7205,82	7233,68	7261,65	7289,73	7317,91	7346,21
Administration Expenses	1011,33	1013,92	1016,53	1019,14	1021,76	1024,39	1027,04	1029,69	1032,36	1035,03	1037,72	1040,41	1043,12	1045,83	1048,56
Selling expenses	807,84	810,99	814,15	817,33	820,52	823,72	826,93	830,15	833,39	836,64	839,90	843,18	846,47	849,77	853,08
Financial expenses	184,00	616,94	580,14	543,34	506,54	469,74									
<b>TOTAL COSTS AND EXPENSES</b>	<b>8911,75</b>	<b>9428,66</b>	<b>9424,63</b>	<b>9420,73</b>	<b>9416,96</b>	<b>9413,31</b>	<b>8976,86</b>	<b>9010,27</b>	<b>9043,82</b>	<b>9077,49</b>	<b>9111,30</b>	<b>9145,24</b>	<b>9179,31</b>	<b>9213,52</b>	<b>9247,85</b>

Author: Vélez Carlos; Yungasaca, Belén

**Table 58** Determination of costs and Unit Expenses

Determination of costs and Unit Expenses															
DETAIL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Total Costs and Expenses	8911,75	9428,66	9424,63	9420,73	9416,96	9413,31	8976,86	9010,27	9043,82	9077,49	9111,30	9145,24	9179,31	9213,52	9247,85
Output	85	91	97	103	109	120	126	132	138	144	155	161	167	173	179
Unit Costs	104,84	103,61	97,16	91,46	86,39	78,44	71,24	68,26	65,53	63,04	58,78	56,80	54,97	53,26	51,66

Author: Vélez Carlos; Yungasaca, Belén

## 4.2. Projection of Sales and Supply

Through the application of this management model, it is expected that artisans can increase income through the growth of their international sales, without contemplating the revenues from national negotiations. These revenues are projected for the first year of management with the average sale of five monthly macanas, three of wool and two of silk. For the next 5 years, the artisan of Ikat macana will be enough to sell 6 macanas monthly between silk and wool. This way, the minimum recognition of an professional salary of 386 dollars for the artisan is guaranteed, besides contemplating the recognition of their talent and the ancestral technique within the price of the macanas.

Under the strategic sourcing system described in Chapter 2 of this research, the relationship of the artisans with the suppliers will have greater productive capacity, due to the ability of the artisan to be able to respond to their suppliers, evidenced in the table elaborated below.

The table below describes the projection of local and foreign sales in response to market dynamism; that is, the sale of silk or wool macana units is projected while the other factors of the market remain constant. On the other hand, because the macanas are a luxury good, it was decided each year to increase their exportation by 0.05% from the first year of exercise, that is to say, 3 successive units per year; as a result of the production growth capacity of each artisan according to CIDAP (2018). In the same way, a similar strategy was proposed for local sales without losing of course the originality and individuality that characterizes the Ikat macanas.

**Table 59** Revenue Macanas Ikat

Detail	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>EXPORT INCOME</b>															
Exportation Volume Wool Macana	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78
Exportation Volume Silk Macana	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66
Export Prices Wool Macana	110	110	110	110	110	110	110	110	110	110	110	110	110	110	110
Export Prices Silk Macana	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Total Income for Exportation	7080	7800	8520	9240	9960	10680	11400	12120	12840	13560	14280	15000	15720	16440	17160
<b>LOCAL SALE INCOME</b>															
Local Sales Volume Wool Macana	15	15	15	15	15	15	15	15	15	15	20	20	20	20	20
Local Sales Volume Silk Macana	10	10	10	10	10	15	15	15	15	15	15	15	15	15	15
Local Prices Volume Wool Macana	60	60,14	60,28	60,41	60,55	60,69	60,83	60,97	61,11	61,25	61,39	61,54	61,68	61,82	61,96
Local Prices Volume Silk Macana	75	75,17	75,35	75,52	75,69	75,87	76,04	76,22	76,39	76,57	76,74	76,92	77,10	77,27	77,45
Total Income Local Sales	1650,00	1653,80	1657,60	1661,41	1665,23	2048,39	2053,11	2057,83	2062,56	2067,31	2379,03	2384,50	2389,99	2395,48	2400,99
<b>TOTAL INCOME</b>	<b>8730,00</b>	<b>9453,80</b>	<b>10177,60</b>	<b>10901,41</b>	<b>11625,23</b>	<b>12728,39</b>	<b>13453,11</b>	<b>14177,83</b>	<b>14902,56</b>	<b>15627,31</b>	<b>16659,03</b>	<b>17384,50</b>	<b>18109,99</b>	<b>18835,48</b>	<b>19560,99</b>

**Author:** Vélez, Carlos; Yungasaca, Belén

### 4.3. Projected Financial Statements

#### 4.3.1. Statement of Financial Position

**Table 60** Statement of Financial Position

STATEMENT OF FINANCIAL POSITION			
DETAIL	PARTIAL	SUBTOTAL	TOTAL
<b>ASSET</b>			<b>2664,69</b>
<b>Current Asset</b>		<b>727,31</b>	
Cash- Banks	727,31		
<b>Fixed Assets</b>		<b>1851,70</b>	
<b>Tangible Investments – Fixed Assets - Operacional</b>		694,00	
Workshop – Office	490,00		
Loom and Weaving Instruments	204,00		
<b>Tangible Investments – Fixed Assets - Administrative</b>		1157,70	
Computer Equipment	938,40		
Furniture and fixtures	219,30		
<b>Intangible Investments- Deferred Assets</b>		<b>85,68</b>	
Permits and Patents (anual cost)	14,28		
Export Procedures (anual cost)	66,30		
Electronic page	5,10		
<b>TOTAL ASSETS</b>			<b>2664,69</b>
<b>LIABILITIES</b>			<b>2164,69</b>
Long-term liabilities		2164,69	
Debt or credit	2164,69		
<b>HERITAGE</b>			<b>500</b>
Capital	500		
<b>TOTAL LIABILITIES + HERITAGE</b>			<b>2664,69</b>

**Author:** Vélez, Carlos; Yungasaca, Belén

#### 4.3.2. Statement of Integral Results

The projection of the Statement of Integral Results allows know the profit or in the worst cases the net loss of the accounting period. It was decided to project its scope to 15 years, so that the profitability of this proposal can be evaluated. In the previous table you can see the income, costs and corresponding expenses of the commercial activity carried out by artisans.

**Table 61** Projection of the State of Integral Results

DETAIL	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Sales	8730,00	9453,80	10177,60	10901,41	11625,23	12728,39	13453,11	14177,83	14902,56	15627,31	16659,03	17384,50	18109,99	18835,48	19560,99
(-) Sale Costs	6908,58	6986,81	7013,81	7040,93	7068,14	7095,46	7122,89	7150,43	7178,07	7205,82	7233,68	7261,65	7289,73	7317,91	7346,21
<b>= Gross Profit in Sales</b>	<b>1821,42</b>	<b>2466,99</b>	<b>3163,78</b>	<b>3860,49</b>	<b>4557,09</b>	<b>5632,93</b>	<b>6330,21</b>	<b>7027,40</b>	<b>7724,49</b>	<b>8421,48</b>	<b>9425,35</b>	<b>10122,86</b>	<b>10820,26</b>	<b>11517,57</b>	<b>12214,79</b>
(-) Administrative Expenses	1011,33	1013,92	1016,53	1019,14	1021,76	1024,39	1027,04	1029,69	1032,36	1035,03	1037,72	1040,41	1043,12	1045,83	1048,56
(-)Sales Expenses	807,84	810,99	814,15	817,33	820,52	823,72	826,93	830,15	833,39	836,64	839,90	843,18	846,47	849,77	853,08
<b>= Operational Utility</b>	<b>2,25</b>	<b>642,07</b>	<b>1333,11</b>	<b>2024,02</b>	<b>2714,81</b>	<b>3784,82</b>	<b>4476,25</b>	<b>5167,55</b>	<b>5858,74</b>	<b>6549,81</b>	<b>7547,73</b>	<b>8239,26</b>	<b>8930,68</b>	<b>9621,97</b>	<b>10313,14</b>
(-)Financial Expenses	184,00	616,94	580,14	543,34	506,54	469,74									
<b>= Utility Before Distribution and Taxes</b>	<b>-181,75</b>	<b>25,13</b>	<b>752,97</b>	<b>1480,68</b>	<b>2208,28</b>	<b>3315,08</b>	<b>4476,25</b>	<b>5167,55</b>	<b>5858,74</b>	<b>6549,81</b>	<b>7547,73</b>	<b>8239,26</b>	<b>8930,68</b>	<b>9621,97</b>	<b>10313,14</b>
(-)15% Workers' Participation	-27,26	3,77	112,95	222,10	331,24	497,26	671,44	775,13	878,81	982,47	1132,16	1235,89	1339,60	1443,30	1546,97
<b>= Utility before taxes</b>	<b>-154,48</b>	<b>21,36</b>	<b>640,02</b>	<b>1258,58</b>	<b>1877,03</b>	<b>2817,82</b>	<b>3804,81</b>	<b>4392,42</b>	<b>4979,93</b>	<b>5567,34</b>	<b>6415,57</b>	<b>7003,37</b>	<b>7591,07</b>	<b>8178,67</b>	<b>8766,17</b>
(-)5% Income Tax	-7,72	1,07	32,00	62,93	93,85	140,89	190,24	219,62	249,00	278,37	320,78	350,17	379,55	408,93	438,31
<b>= Utility of the exercise</b>	<b>-146,76</b>	<b>20,30</b>	<b>608,02</b>	<b>1195,65</b>	<b>1783,18</b>	<b>2676,93</b>	<b>3614,57</b>	<b>4172,80</b>	<b>4730,93</b>	<b>5288,97</b>	<b>6094,79</b>	<b>6653,20</b>	<b>7211,52</b>	<b>7769,74</b>	<b>8327,86</b>

Author: Vélez, Carlos; Yungasaca, Belén



### 4.3.3. Cash Flow

**Table 62** Cash Flow

DETAIL	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>I. Operational Income</b>	-	<b>8730,00</b>	<b>9453,80</b>	<b>10177,60</b>	<b>10901,41</b>	<b>11625,23</b>	<b>12728,39</b>	<b>13453,11</b>	<b>14177,83</b>	<b>14902,56</b>	<b>15627,31</b>	<b>16659,03</b>	<b>17384,50</b>	<b>18109,99</b>	<b>18835,48</b>	<b>19560,99</b>
Sales	-	8730,00	9453,80	10177,60	10901,41	11625,23	12728,39	13453,11	14177,83	14902,56	15627,31	16659,03	17384,50	18109,99	18835,48	19560,99
<b>II. Operational Expenses</b>	-	<b>8727,75</b>	<b>8811,72</b>	<b>8844,49</b>	<b>8877,39</b>	<b>8910,42</b>	<b>8943,57</b>	<b>8976,86</b>	<b>9010,27</b>	<b>9043,82</b>	<b>9077,49</b>	<b>9111,30</b>	<b>9145,24</b>	<b>9179,31</b>	<b>9213,52</b>	<b>9247,85</b>
Production Costs	-	6908,58	6986,81	7013,81	7040,93	7068,14	7095,46	7122,89	7150,43	7178,07	7205,82	7233,68	7261,65	7289,73	7317,91	7346,21
Administrative expenses	-	1011,33	1013,92	1016,53	1019,14	1021,76	1024,39	1027,04	1029,69	1032,36	1035,03	1037,72	1040,41	1043,12	1045,83	1048,56
Sales Expenses	-	807,84	810,99	814,15	817,33	820,52	823,72	826,93	830,15	833,39	836,64	839,90	843,18	846,47	849,77	853,08
<b>I-II. Operational Flow</b>	-	<b>2,25</b>	<b>642,07</b>	<b>1333,11</b>	<b>2024,02</b>	<b>2714,81</b>	<b>3784,82</b>	<b>4476,25</b>	<b>5167,55</b>	<b>5858,74</b>	<b>6549,81</b>	<b>7547,73</b>	<b>8239,26</b>	<b>8930,68</b>	<b>9621,97</b>	<b>10313,14</b>
<b>III. Non- Operational Income</b>	<b>2664,69</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>91,33</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>727,31</b>
Credit	2164,69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shareholders Contribution	500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fixed Asset Recovery	-	-	-	-	-	-	-	-	-	-	-	91,33	-	-	-	-
Recovery of Working Capital	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	727,31
<b>IV. Non- Operational Expenses</b>	<b>1937,38</b>	<b>149,01</b>	<b>621,78</b>	<b>725,08</b>	<b>1766,77</b>	<b>931,63</b>	<b>1107,89</b>	<b>1800,08</b>	<b>994,75</b>	<b>1127,81</b>	<b>2199,24</b>	<b>2366,24</b>	<b>1586,06</b>	<b>2657,56</b>	<b>1852,23</b>	<b>1985,28</b>
Tangible Investments – Fixed Assets	1851,70	-	-	-	938,40	-	-	938,40	-	-	938,40	913,30	-	938,40	-	-
Intangible Investments – Deferred Assets	85,68	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15% Workers' Participation	-	-27,26	3,77	112,95	222,10	331,24	497,26	671,44	775,13	878,81	982,47	1132,16	1235,89	1339,60	1443,30	1546,97
5% Income Tax	-	-7,72	1,07	32,00	62,93	93,85	140,89	190,24	219,62	249,00	278,37	320,78	350,17	379,55	408,93	438,31

Interest Payment	-	184,00	184,00	147,20	110,40	73,60	36,80	-	-	-	-	-	-	-	-	-
Payment of Capital	-		432,94	432,94	432,94	432,94	432,94	-	-	-	-	-	-	-	-	-
<b>V. Non- Operational Flow</b>		-149,01	-621,78	-725,08	-1766,77	-931,63	-1107,89	-1800,08	-994,75	-1127,81	-2199,24	-2274,91	-1586,06	-2657,56	-1852,23	-1257,97
<b>VI. Net Generated Flow</b>		-146,76	20,30	608,02	257,25	1783,18	2676,93	2676,17	4172,80	4730,93	4350,57	5272,82	6653,20	6273,12	7769,74	9055,17
<b>VII. Initial Cash Balance</b>			-146,76	-126,46	481,56	738,81	2521,99	5198,92	7875,09	12047,89	16778,82	21129,40	26402,22	33055,42	39328,54	47098,28
<b>VIII. Final Balance of Cash</b>		-146,76	-126,46	481,56	738,81	2521,99	5198,92	7875,09	12047,89	16778,82	21129,40	26402,22	33055,42	39328,54	47098,28	56153,45

**Author:** Vélez, Carlos; Yungasaca, Belén

The cash flow allows know the liquidity that the artisans will have when applying this management model. The first year there is a negative cash balance which represents that the outflows were greater than the income; nevertheless, we can observe a future and prosperous growth of the positive balances which encourages the production of Ikat macanas.

**Table 63** Projected Cash Flow

DETAIL	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Net profit		-146,76	20,30	608,02	1195,65	1783,18	2676,93	3614,57	4172,80	4730,93	5288,97	6094,79	6653,20	7211,52	7769,74	8327,86
Investments	-2664,69				938,40			938,40			938,40	913,30				
Depreciation		391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87	391,87
Amortization		17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14	17,14
Credit	2164,69															
Debt payment			-432,94	-432,94	-432,94	-432,94	-432,94									
Recovery of Working Capital																727,31
Fixed Asset Recovery												91,33				
<b>Net Cash Flow</b>	-500,00	262,24	-3,64	584,09	2110,12	1759,25	2653,00	4961,97	4581,81	5139,94	6636,38	7508,43	7062,21	7620,53	8178,74	9464,18

Author: Vélez, Carlos; Yungasaca, Belén

The projection of cash flow allows artisans and associations to detect possible deficits or lack of cash that hinders the commercialization of Ikat macans. In this case, the projection table shows a deficit in year 2 due to the fact that in this year the first capital payment of the debt that was acquired with Banco del Pacífico is made; however, the remaining years the projection is quite promising.

## 4.4. Evaluation Indicators

### 4.4.1. Cost of Capital Opportunity

According to Gitman and Zutter, the opportunity cost of capital represents the minimum rate of return required by a company to increase the value of the company (2012). This is an important financial concept, because its result reflects the combination between long-term decisions and the maximization of the company's sales. Thus, the cost of capital reflects the amount of other goods or services that must be renounced to decide to invest on this management proposal.

The Ikat macanas companies, theoretically, will be able to obtain long-term capital through four main sources: long-term debt, preferred shares, common stock and retained earnings. In this case, artisans should refer only to the first because of the nature of their exercise and their ability to respond through long-term loans. Financially, the opportunity cost of capital is the discount rate used for the net present value.

$$k = (\% \text{ Own Resource} * TPR) + [\% \text{ Foreign Source} * TAR(1 - T)] + TLR$$

k = Capital Cost

TPR = Referential Passive Rate

TAR = Referential Active Rate

T = 15% Workers payment + 5% Income Tax

TLR = Risk- Free Rate

$$k = (0,19 * 0,0527) + [0,81 * 0,0834(1 - (0,15 + 0,005))] + 0,07875$$

$$k = 0,010013 + 0,05708313 + 0,07875$$

$$k = 0,14584613$$

$$k = 14,58\%$$

The opportunity cost of capital represented by 14.58% is the return on this investment plan with the same risk. This means that this project has greater profitability.

#### 4.4.2. NPV

Also known as Net Present Value for its direct translation in English, it is a financial indicator that reflects the feasibility of implementing this management model for Ikat artisans (Gitman & Zutter, 2012). That is, the NPV means bringing future flows to present values and discounting the investment made. In order to obtain this value, the discount rate and the cost of capital are required according to the general formula proposed by Gitman and Zutter.

$$VAN = \sum_{t=1}^n \frac{FE_t}{(1+k)^t} - FE_0$$

Where:

$FE_0$  = Initial investment of the project

$FE_t$  = Present Value of Cash Flows

$k$  = Discount rate

In this way

If  $NPV = 0$  The project is indifferent. The investment for this management proposal will not produce profits or losses.

If  $NPV > 0$  The project is feasible. That is, this Ikat macana proposal will produce profits above the required profitability.

If  $NPV < 0$  The project is not feasible. The investment in this management proposal will produce profits below the required profitability.

#### 4.4.3. TIR

The internal rate of return is the interest or profitability rate offered by the application of this management proposal to Ikat macanas artisan; that is, the discount rate that equals the NPV of an investment opportunity with 0 dollars, that is, the rate of return that the company will obtain if it decides to invest in the proposal and receives the expected cash inflows (Gitman & Zutter, 2012 ). The internal rate of return is understood as the average of the expected future returns of said investment.

In this way, if the rate of return exceeds the cut-off rate or the cost of capital, the investment is accepted; otherwise, it is rejected.

$$TIR = k \quad ; \quad VAN = 0$$

$$VAN = \sum_{t=1}^n \frac{FE_t}{(1 + TIR)^t} - FE_0$$

$$0 = \sum_{t=1}^n \frac{FE_t}{(1 + TIR)^t} - FE_0$$

$$\sum_{t=1}^n \frac{FE_t}{(1 + TIR)^t} = FE_0$$

Where:

$FE_0$  = Initial investment of the project

$FE_t$  = Present Value of Cash Flows

$$TIR = 101\%$$

**Table 64** Net Present Value

DETAIL	YEAR 0	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
Flow of Net Generated Cash Flows	-500,00	262,24	-3,64	584,09	2110,12	1759,25	2653,00	4961,97	4581,81	5139,94	6636,38	7508,43	7062,21	7620,53	8178,74	9464,18
Discount rate	1	0,87	0,76	0,66	0,58	0,51	0,44	0,39	0,34	0,29	0,26	0,22	0,20	0,17	0,15	0,13
Flow of Net Boxes Generated Updated	-500,00	228,87	-2,77	388,29	1224,25	890,81	1172,42	1913,78	1542,29	1510,01	1701,54	1680,17	1379,22	1298,88	1216,64	1228,71
<b>NPV</b>	<b>16873,12</b>															
<b>NPV EXCEL</b>	<b>\$ 16.873,12</b>															

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#### 4.4.4. Benefit/Cost

The benefit / cost reflects how much will be recovered for each dollar that is used in the operation of the Ikat macanas.

**Table 65** Benefit/Cost

	FLOW OPERATIONAL INCOME	FLOW OPERATIONAL EXPENSES	DISCOUNT RATE	FLOW UPDATE INCOME	FLOW UPDATE EXPENSES
YEAR 1	8730,00	8727,75	0,87	7619,13	7617,17
YEAR 2	9453,80	8811,72	0,76	7200,93	6711,86
YEAR 3	10177,60	8844,49	0,66	6765,80	5879,58
YEAR 4	10901,41	8877,39	0,58	6324,81	5150,51
YEAR 5	11625,23	8910,42	0,51	5886,51	4511,84
YEAR 6	12728,39	8943,57	0,44	5624,98	3952,38
YEAR 7	13453,11	8976,86	0,39	5188,73	3462,28
YEAR 8	14177,83	9010,27	0,34	4772,43	3032,97
YEAR 9	14902,56	9043,82	0,29	4378,06	2656,88
YEAR 10	15627,31	9077,49	0,26	4006,78	2327,44
YEAR 11	16659,03	9111,30	0,22	3727,80	2038,84
YEAR 12	17384,50	9145,24	0,20	3395,13	1786,03
YEAR 13	18109,99	9179,31	0,17	3086,76	1564,57
YEAR 14	18835,48	9213,52	0,15	2801,90	1370,57
YEAR 15	19560,99	9247,85	0,13	2539,56	1200,63
<b>TOTAL</b>	<b>212327,24</b>	<b>135121,02</b>	<b>5,97</b>	<b>73319,31</b>	<b>53263,56</b>

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$$Benefit/Cost = 1,38$$

This means that for every dollar of income in the management model, artisans will recover and get \$ 1.38.

#### 4.4.5. Period of Recovery of Investment (PRI)

The PRI reflects the time required for the Ikat macana artisan to recover the initial investment in the management model proposed by this research, calculated from the cash inflows (Gitman & Zutter, 2012).



**Table 66** Period of Recovery of Investments

YEAR	Updated Net Flows	Cumulative Net Flows
0	-500,00	-500,00
1	262,24	-237,76
2	-3,64	-241,39
3	584,09	342,69
4	2110,12	2452,81
5	1759,25	4212,06
6	2653,00	6865,06
7	4961,97	11827,03
8	4581,81	16408,84
9	5139,94	21548,78
10	6636,38	28185,15
11	7508,43	35693,58
12	7062,21	42755,79
13	7620,53	50376,32
14	8178,74	58555,06
15	9464,18	68019,24

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#### 4.5. Balance Point

It was decided to determine the equilibrium point of the production of Ikat macanas by artisan on an annual basis to the foreign market. The equilibrium point is understood as the level of production in which the revenues are equal to the costs; that is to say, the artisan will obtain neither gain nor loss. To determine the quantity to be sold, it is decided to use the following formula:

$$\text{Incomes} = \text{Expenses}$$

$$\text{Units} \cdot \text{Price} = \text{Fixed Costs} + \text{Variable Costs}$$

$$\text{Units} \cdot \text{Price} = \text{Fixed Costs} + (\text{Units} \cdot \text{Variable Costs})$$

$$\text{Units to Sell} (\text{Price} - \text{Variable Costs}) = \text{Fixed Costs}$$

$$\text{Units to sell} = \frac{\text{Fixed Costs}}{(\text{Price} - \text{Variable Costs})}$$

After determining and separating the fixed and common fixed costs, and determining the price for the wool and silk macanas; the point of equilibrium is as follows. So that the artisans do not win or lose, they must sell at least 60 macanas

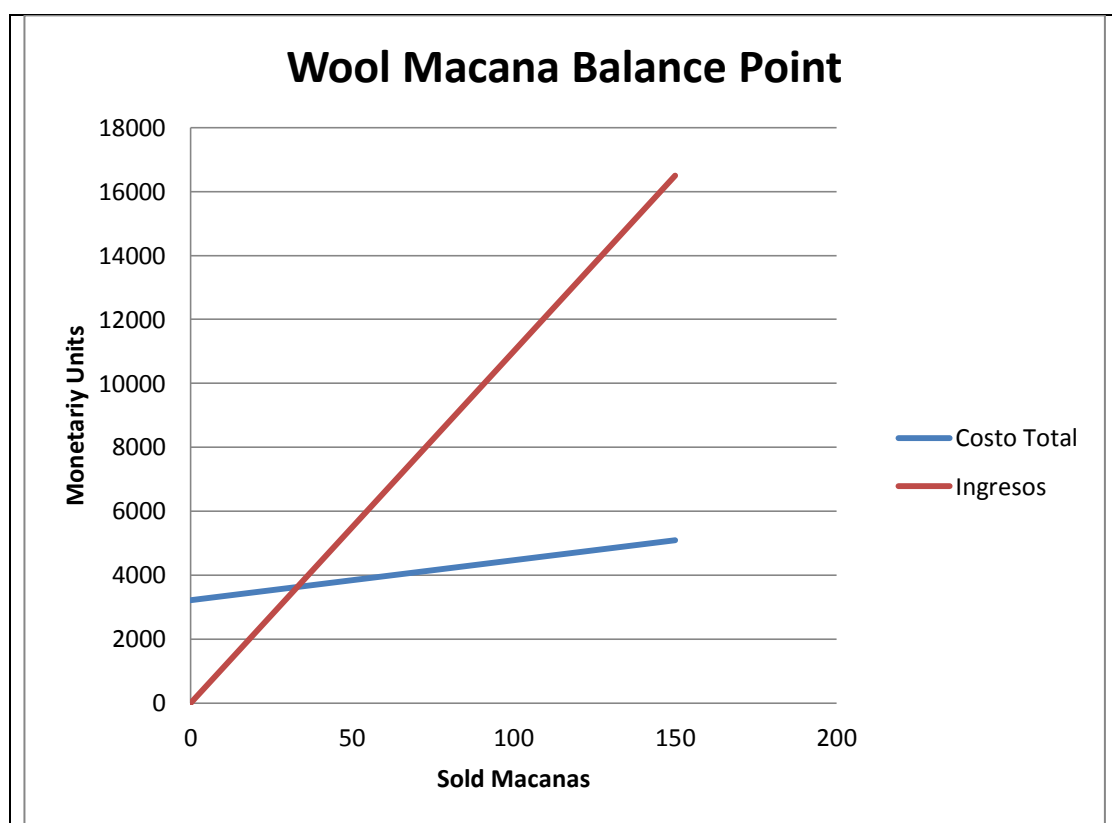
and obtain an income of \$ 7268.83, as explained in the chart and the subsequent graphs.

**Table 67** Balance Point

Basic Parameters		
Detail	Wool Macana	Silk Macana
<b>Common Fixed Costs</b>	3218,24	3218,24
Common Variable Costs	5,00	5,00
Variable Costs	7,5	10
<b>Total Variable Costs</b>	12,50	15,00
<b>Price</b>	110	130
<b>Amount of Balance</b>	33,01	27,98
<b>Balance income</b>	3630,83	3638,00
<b>Total Amount of Balance</b>	60,99	
<b>Total Balance Income</b>	7268,83	

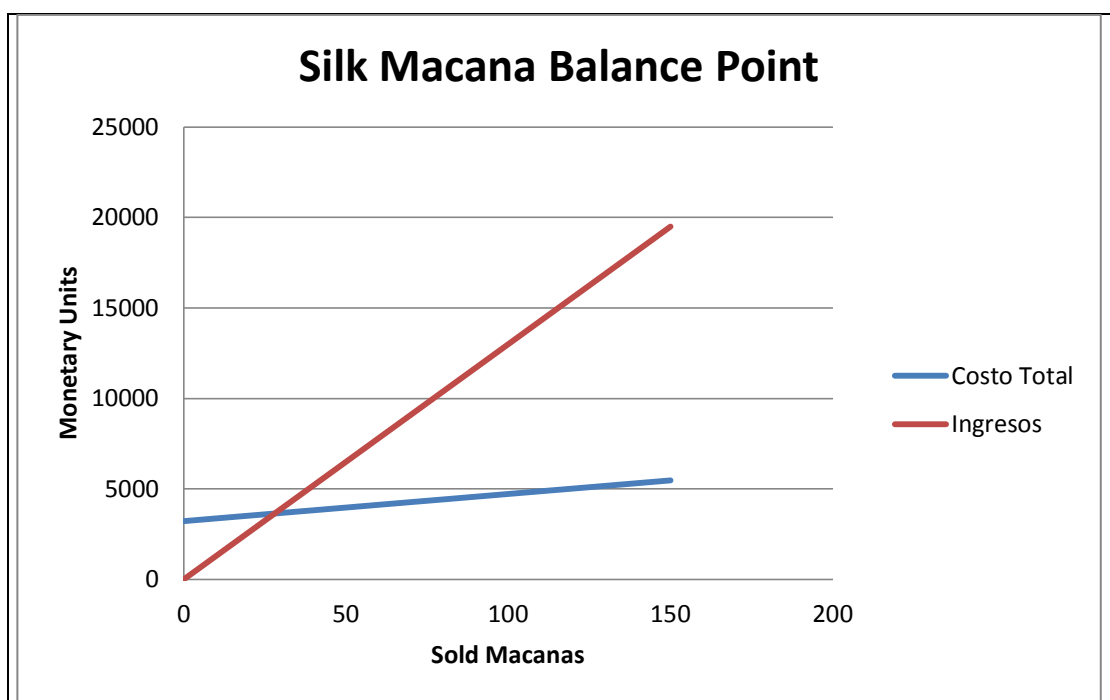
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**Illustration 32** Wool Macana Balance Point



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**Illustration 33** Silk Macana Balance Point



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## 4.6. Financial Indexes

The financial indexes point out the weaknesses and strengths of the business proposal, in addition to indicating trends and financial behaviors for correct decision making in the short, medium and long term. These indices constitute relationships between the checking balance and income and expense accounts.

### 4.6.1. Profitability Indexes

These indexes reveal the effectiveness of the correct administration of the company in the congruence of the four administrative functions. They allow appreciate the correct handling of the expenses, the income, the costs and the results reflected in utilities.

#### 4.6.1.1. Return on Investment

$$ROI = \frac{Net\ Utility}{Total\ Assets} * 100$$

**Table 68 ROI**

	Year 1	Year 2	Year 3	Year 4	Year 5
Net Utility	-146,76	20,30	608,02	1195,65	1783,18
Total Assets	2664,69	2664,69	2664,69	2664,69	2664,69
ROI	-5,51%	0,76%	22,82%	44,87%	66,92%

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The profitability on the investment allows knowing the efficiency with which the assets of this business proposal are being used in relation to the operations of this artisan sector of the macanas. In this way, after presenting a negative return in the first year, the following ones recover successfully. It should be noted that, due to the absence of a correct projection of the Total Assets, it was decided to determine the amount of total assets constant for the first 5 years of exercise, in relation to the strategic planning described. However, the results achieved guarantee investment profitability remarkably.

#### 4.6.1.2. Profitability on Patrimony

$$RSP = \frac{Net\ Utility}{Patrimony} * 100$$

**Table 69 RSP**

	Year 1	Year 2	Year 3	Year 4	Year 5
Net Utility	-146,76	20,30	608,02	1195,65	1783,18
Patrimony	500	500	500	500	500
RSP	-29,35%	4,06%	121,60%	239,13%	356,64%

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This efficiency ratio demonstrates the ability to obtain net benefits by making use of the resources of artisans or artisan associations. Therefore, from year 2 the growth of the benefits that the manufacturers receive increases. Like the previous ratio, for the calculation of this it was decided to determine the amount of equity as a stable item for the first 5 years of exercise, because the decisions to be modified will be based on the results obtained at the end of this planning proposal strategic.

#### 4.6.1.3. Profitability on Sales

$$RSV = \frac{\text{Net Utility}}{\text{Total Sales}}$$

**Table 70 RSV**

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10	YEAR 11	YEAR 12	YEAR 13	YEAR 14	YEAR 15
<b>Utilidad Neta</b>	-146,76	20,30	608,02	1195,65	1783,18	2676,93	3614,57	4172,80	4730,93	5288,97	6094,79	6653,20	7211,52	7769,74	8327,86
<b>Ventas Totales</b>	8730,00	9453,80	10177,60	10901,41	11625,23	12728,39	13453,11	14177,83	14902,56	15627,31	16659,03	17384,50	18109,99	18835,48	19560,99
<b>RSV</b>	<b>-1,68%</b>	<b>0,21%</b>	<b>5,97%</b>	<b>10,97%</b>	<b>15,34%</b>	<b>21,03%</b>	<b>26,87%</b>	<b>29,43%</b>	<b>31,75%</b>	<b>33,84%</b>	<b>36,59%</b>	<b>38,27%</b>	<b>39,82%</b>	<b>41,25%</b>	<b>42,57%</b>

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The net profit margin is a ratio that shows the profitability that a business has for each unit of sale, in this case, for each club, whether silk or wool that an artisan manages to sell. The previous table shows that the production and sales of macanas provide a progressive profitability as the years pass to this business model.

#### 4.6.2. Index of Indebtedness

Analyze the debt capabilities of the company. They show the ways in which the asset can be financed for the exercise of the company.

##### 4.6.2.1. Coefficient of Indebtedness

$$\text{Coefficient of Indebtedness} = \frac{\text{Total Debt with third parties}}{\text{total Assets}}$$

**Table 71 CE**

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<b>Total Debt</b>	184,00	616,94	580,14	543,34	506,54	469,74
<b>Total Assets</b>	2664,69	2664,69	2664,69	2664,69	2664,69	2664,69
<b>RSV</b>	<b>6,91%</b>	<b>23,15%</b>	<b>21,77%</b>	<b>20,39%</b>	<b>19,01%</b>	<b>17,63%</b>

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This debt ratio demonstrates that artisans in managing this business plan are dependent on income from third parties in relatively low percentages, which increases profitability and decreases the risk in this activity. In the same way, it is decided to assume the amount of constant total assets for the first 5 years of exercise, due to the principles of strategic planning and the absence of a projection of the state of balance of verification.

## **5. CONCLUSIONS AND RECOMMENDATIONS**

### **5.1. Conclusions**

The hamlets of Bullcay and Bullzhún, located in Gualaceo in the Province of Azuay, guard one of the oldest arts of humanity. The technique of the Ikat or knotted, as they also know it, has become the philosophy of life of most of its artisans. Nowadays, with this technique, different garments are made with unique and unrepeatable styles.

These can be seen from the simplest elaborations such as ties and handkerchiefs, to incredible artistic creations whose designs are reflected in shawls and macanas. The latter is the most representative work of this technique.

During the last four years, in Ecuador, the textile artisanal sector has significantly increased its national economic participation and representation in comparison to the other industries. This sector has all the optimal economic characteristics to maximize its commercialization and therefore the exploitation of a productive sector undervalued for a long time.

The market study determined impressive strengths compared to others. Although, there are threats and weaknesses that could stop the incentivising and commercial flow of these artisans; it does not mean that they cannot be overcome through this management proposal.

An administrative system that focuses on the internationalization of the Ikat macanas as the main objective requires the homogenization of the four administrative functions in the basic production processes, while the added value and details continue to belong to the creativity and dedication of the artisans.

The productive chain is, without a doubt, the strategy of the economic development of the sector, without altering that important cultural artisan nature that so differentiates it. The determination of a correct chain of value of the Ikat macana and the schematization of its manufacturing process will allow greater possibilities of response to the international market.

The use of productive techniques such as long-term supply, the philosophy of lean manufacturing, Japanese 5'S, among others mark the beginning and ensure the best results for this management proposal. The application of the OTISM model proposed the administration of Ikat craft workshops increase the participation of these artisans in the international market. In this management proposal, to the traditional "4ps", were added 3 key factors to manage an adequate marketing in production and marketing.

Obtaining a worldwide recognition of craftsmanship excellence is the maximum declaration of quality and perfection in each of the details that are worked and, of course, it is synonymous with sustainability with the environment.

Germany is the second largest consumer after the United States to import knitwear; However, in 2017, Ecuador did not export any items to the chosen market, giving an advantage for the start of the export of the Ikat macana without prejudice of the fact that the artisan can use the analysis carried out for the other countries of the European Union.

This project is focused on the initial export of 60 Ikat macanas per year by artisan, without counting the national production and commercialization at a price that recognizes their craft talent with a projection of stable growth of 0.05%, that is to say, 3 annual macanas, due to the nature of commercialization as a high-end good.

For the benefit of the producers, the chosen Incoterm is Carrier paid to, due to the lower risk involved in processing the export process for the seller. The macanas will be sold through the courier service offered by the government program Exporta Fácil. Adapting this business proposal to contemporary technological trends would mean greater capacity to participate in the international market, such as the website.

The macanas, to be an artisan and personalized garment, should receive in exchange a value that symbolizes a practice of fair trade, valuing the skills of an artisan who every day invests his time so that his culture and tradition transcend for generations and that the world recognizes the meaning of perpetuating an ancestral technique.



In this management proposal, it is evident that the project is technically feasible and economically profitable. Thus, the investment will produce profits above the opportunity cost determined at 14.58%.

The total investment of the project is 2664.69 dollars, of which the artisan will be able to respond to 19% of the investment; while the missing amount will be managed through Banco del Pacífico with its program to boost MIPYMEs.

Without the need for the company's objectives to be modified during the year as a fundamental principle of strategic planning, the Financial Evaluation Indicators demonstrate the feasibility of the project and present the projection of the Financial Statements to be obtained for the first 15 years of exercise with cash flows, and positive utilities that reflect reliability and guarantee for this management proposal.

The Net Present Value (NPV) is significantly greater than zero with 16873.12; the Internal Rate of Return (IRR) is 101%, a value that is representative of the opportunity cost; With reference to the B / C of the project, this company for each dollar of investment in this management proposal, will receive 0.38 additional cents. This means that it is aimed at a sufficient payment capacity, profitability in relation to sales, assets and equity will be satisfactory. Its level of indebtedness is acceptable and its composition of assets is representative.

Together with the results of Financial Indicators, this management model is an economic reality, not only for the Austro of Ecuador, but for the Azuay, as well as a new hope for the artisans who with eagerness and perseverance have aspired to contribute in the history of the country.

This management model is undoubtedly the first step for the internationalization of Ecuadorian culture. Adaptable to any other craft, the development of artisanal information is feasible, and its export as a luxury good could mean an economic advance for the Country and Latin America.

## **5.2. Recommendations**

The artisan can execute the management proposal, according to the Market, Administrative, Productive, Logistic and Financial studies, based on their results.

However, as determined in the introductory part, this does not mean that it can be modified and adapted to any situation.

To generate international impact and contribute to the progress of the country, through the transmission of this ancient art by developing the different tools and activities suggested in this research, in order to consolidate strategic alliances with the different actors in the value chain.

To never forget the importance of total quality to the final product, so that the Ikat macanas can be highly competitive, and gain confidence and customer satisfaction anywhere in the world.

To review and control the results of this management proposal in all its stages, from strategic planning to the level of organizational management with which it will be possible to manage the different actors within the value chain of the Ikat macana.

To commit to learning and continuous improvement, so that the development of information can be adapted to the new needs of the client with a study of the marketing mix, as well as an approach to establish long-term business relationships, based on the results of short-term daily operations.

To respect the projections and the suggested schedule throughout this investigation in order to guarantee stable volumes for both national and international commercialization; as well as annual net profits that respond to the needs of the artisans.

Artisans must receive technical advice regarding the types of negotiation of new clients, so that the selected Incoterm can respond to the needs of Ikat machinists.

To establish business relationships with customers to ensure the market and expansion the strategies proposed, which have to be promoted.

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## Annexes

**Table 72** Selection of Suppliers

Selection of Suppliers				
Supply 1				
Qualification Patterns	Weighing	Supplier 1	Supplier 2	Supplier 3
Total				

**Author:** Vélez, Carlos; Yungasaca, Belén

**Table 73** Stocktaking

Stocktaking		
Date		
Materials and Supplies	Stock	Order
Total		

**Author:** Vélez, Carlos; Yungasaca, Belén

**Table 74** Order Request

Order Request		
Costumer Name		
Business Form or Money		
Date of Order		
Date of Delivery		
Design		
Quantity		
Final Price		


**Author:** Vélez, Carlos; Yungasaca, Belén



## Illustration 34 Invoice

# Invoice

No.  
 Artisan RUC  
 Artisan Address  
 Authorization numbers of the SRI  
 Authorization date of the SRISRI  
 Consumer RUC



<b>IMPORTING COMPANY</b>		CONTACT NAME	
		REFERENCE:	
ADDRESS:		CONSUMER:	
RESPONSIBLE:		ORDER:	
THE MERCHANDISE HAS BEEN SENT IN:			
PACKAGING:		DATE:	
GROSS WEIGHT:			
NET WEIGHT:			
ORIGIN:			
DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
INCOTERM		CPT:	
		TAX BASE 0%	
		TAX BASE 12%	
		COMERCIAL DISCOUNTS	
		SUBTOTAL	
		IVA	
		ICE	
		TOTAL	

---

Artisan

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Consumer

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Source: Propia

Author: Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

### Illustration 35 Packing List

# PACKING LIST

CONSUMER				
ADDRESS:				
PHONE:				
E.MAIL:				
PACKING DETAIL				
CHARGE	DESCRIPTION	QUANTITY	NET WEIGHT	GROSS WEIGHT
TOTAL:				
PACKAGING:				
INVOICE:				

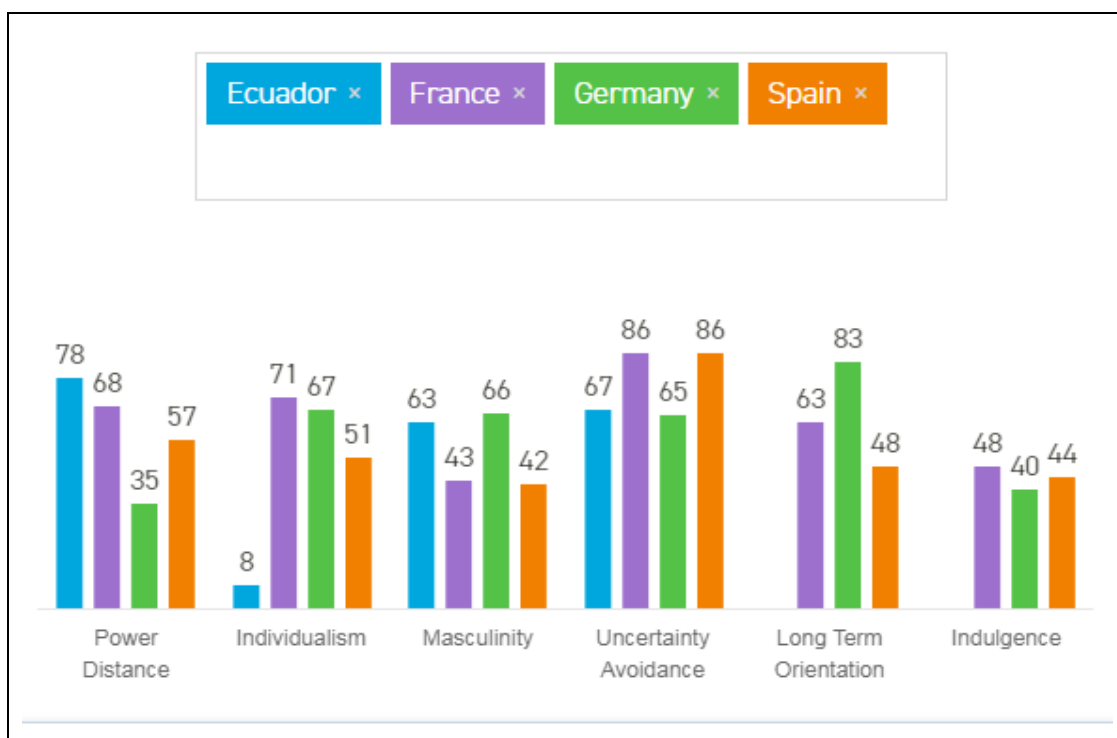
\_\_\_\_\_  
Artisan

\_\_\_\_\_  
Consumer

**Source:** Propia

**Author:** Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

### Ilustración 36 Hofstede



Fuente: Hofstede

**Tabla 75** Hofstede

Dimension	Ecuador	Spain	France	Germany
Power Distance	78	57	68	35
Individualism	8	51	71	67
Masculinity	63	86	43	66
Evasion of Uncertainty	67	86	86	65
Long Term Orientation	-	48	63	83
Indulgence	-	44	48	40
Average	54	62	63, 16	59,33

Fuente: Hofstede

Realizado por: Arteaga, Isabel; Vélez, Carlos; Yungasaca, Belén

The distance of power in Germany is relatively low. This benefits a promising development space, having the freedom to express oneself and share ideas within the scope of work. However, in Ecuador, freedom of expression is violated in the face of the great distance of power between an employee and the boss who predominates. On the other hand, the level of individualism between the two countries is totally

opposite, this is due to the traditions and cultural customs that have accompanied the citizens throughout their lives.

With respect to the level of masculinity, both values are almost equal. This means that men have been raised with more determining values, unlike women. Therefore, gender inequality is a problem that persists in both countries. Therefore, with regard to the level of evasion of uncertainty, both countries ignore the concern of what will happen in the future. The Hofstede does not analyze the factor of long-term orientation for Ecuador, only for Germany. The score of Germany shows that this country supports entrepreneurship and invests in the business impulse.