

**CREATING AN ECOLOGICAL AND RESPONSIBLE  
MANUFACTURING SURFBOARD COMPANY:  
MARSHALL HANDPLANES**

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**COMPANY: MARSHALL HANDPLANES**

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-Spine-

## ACKNOWLEDGMENT

In my personal opinion, writing a business plan should be something that every business-related student should try to do once in his life. I think is the perfect way to apply what you learn in a business career, and also develop your imagination and perseverance. Being able to write and see more clearly what building from scratch a company is, and all the work it is needed, has really helped me understanding the effort you have to put in everything if you want to succeed in life.

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## GLOSSARY

**CNC:** In Spanish means “Control Numerico por Computadora” we could translate it by Numerical control by computer. It is the machinery we subcontract to make the bold design from the wood.

**DFB/BFA:** Diputacion Foral de Bizcaia / Bizcaia Foru Aldundia (Basque translation). It is the government institution in the Basque Country.

**Guipuzcoan:** inhabitant for Guipuzcoa, a region in Spain.

**Guns:** In the surf industry, we refer as “guns” the first big boards used by the pioneer surfers.

**Handplane:** Miniature surfboard used with one or two hands while bodysurfing a wave.

**Point break/peak:** where the waves start breaking.

**Shore break:** When waves start breaking close to the beach.

**Sopelana, Bakio, Mundaka:** Surfspots in the Basque Country.

**UPV/EHU:** Universidad del Pais Vasco/ Euskal Herria Unibersitatea (Basque translation) meaning the University of the Basque Country.

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## SUMMARY

This master thesis presents an entrepreneurial project based on combining the intelligence of the human being with the wisdom of nature, focused on the search for natural and sustainable solutions applied to the world of surfing and skateboarding.

The importance of this project lies in the consumer's awareness of the origin and process involved in the products acquired and the coherence of these concepts with the intrinsic values of a brand or company. Thanks to a ground study, we can see that today, especially in the world of surfing, there is a big paradox: for most of the people, surfing is closely linked to nature and its preservation, when in fact it is the opposite and every day is going to get worse, evolving in a throwaway industry.

For this reason, it is necessary a change, innovations and radical actions are necessary to demonstrate that there are ways and alternative solutions for what we know today to be able to develop a sustainable future for this sport.

The main reasons for the existence of this project is my particular interest in setting up and developing a project in the form of a company and my passion for innovation and surfing. I'm also friend with a good connoisseur of the surf industry, Alejandro Padro, who has professional experience in him and helped me through all the process. Therefore, I saw the need for the creation of a company that pursues ideals of respect, sustainability and logical development, using the greatest human capacity, intelligence, together with the wisdom of nature, which offers unsuspected alternatives, waiting for be discovered.

### ***Keywords:***

Business plan

Handplane

Surf industry

Corporate Social and Ecological Responsibility

**JEL Codes:** New Firms M13, Marketing M30

# SUMÁRIO

Esta tese de mestrado apresenta um projeto empreendedor baseado na combinação da inteligência do ser humano com a sabedoria da natureza, focada na busca de soluções naturais e sustentáveis aplicadas ao mundo do surf e do skate.

A importância deste projeto está na consciência do consumidor sobre a origem e o processo envolvido nos produtos adquiridos e a coerência desses conceitos com os valores intrínsecos de uma marca ou empresa. Graças a um estudo de campo, podemos ver que hoje, especialmente no mundo do surf, existe um grande paradoxo: para a maioria das pessoas, o surf está intimamente ligado à natureza e à sua preservação, quando na verdade é o oposto e tende a piorar, evoluindo para uma indústria descartável.

Por esta razão, é necessário uma mudança, profunda para demonstrar que existem soluções alternativas para um futuro sustentável para este desporto

As principais razões para a existência deste projeto são o meu interesse particular em montar e desenvolver um projeto na forma de uma empresa e a minha paixão por inovação e surf. Também sou amigo de um bom conhecedor da indústria do surf, Alejandro Padro, que tem experiência profissional no sector e contribuiu em todo o processo. Por isso, vi a necessidade da criação de uma empresa que busca ideais de respeito, sustentabilidade e desenvolvimento lógico, utilizando a maior capacidade humana, a inteligência, junto com a sabedoria da natureza, que oferece alternativas insuspeitas, aguardando serem descobertas.

## ***Palavra-chave:***

Business Plan

Handplane

Indústria do surf

Responsabilidade Social e Ecológica Corporativa

**JEL Codes:** New Firms M13, Marketing M30

## EXECUTIVE SUMMARY

We are at the beginning of the green revolution, a process by which sustainability and respect for the environment are going to be a matter of discussion in all organizations, both for legal imperatives and for ethical reasons. In this context, there are industries and sectors that are already working in this field, such as the automotive industry.

However, there are other sectors that are reluctant to change, focusing on the urgent and not the important. This is the case of the industry dedicated to surfing and derivatives, which experienced a monumental bump as a result of the past economic crisis with internationally prestigious brands such as Billabong 97% devaluation in the stock market (El Pais, 2010). While the world of surfing is in full recovery and boom, the sector has changed radically. If before it was dominated by giants such as Quiksilver, Billabong or Ripcurl, nowadays brand loyalty is testimonial and the consumer looks for differentiating and innovative elements, as well as a greater coherence between values and actions.

Looking to the near future, the brands that can adapt to the needs of the consumer with greater speed and flexibility will be the ones that will be able to establish themselves, offering an ad hoc added value based on personalization, innovation and sustainability.

The surf sector is, in theory, very aware of the environment. Respect and enjoyment of nature are part of this sport since its inception. However, in practice it is not like that. With the expansion of the sector, the industrial trend is inclined towards a throwaway model, competing at low prices, to the detriment of the quality of products and materials. The important companies both nationally and internationally are focused on a bloody struggle to gain a larger market share, forgetting that they are part of an industry based on petroleum products that has not been implemented for a more sustainable activity for decades. While it is true that sustainable initiatives are emerging, especially in the US and Australia, they always come from small entrepreneurs and little by little some brands are paying attention to these initiatives and establish synergies between them, but at the moment they have a very small scale.

This is due to an asymmetry of information between producers and consumers. Consumers don't know how and what the surfboards or bodyboards are made of and every year companies play with that advantage, using their powerful marketing tools to simulate that surfing is respect for nature. Polyurethane foam, polyester resin, fiberglass, styrene, acetone and catalyst are the

fundamental ingredients of a surfboard and they all have disadvantages for the environment. A part of the toxic substances that emanate from chemical liquids such as resin, acetone etc, sanding a blank of foam to shape the board or sanding the fiberglass (which has a brutal carbon footprint) involves the sedimentation of particles and micro-fibers in the lungs of the worker, with the health problems that can lead to that situation.

Surfing is a sport on the rise, every year thousands of boards are made and many more are thrown away, turned into a waste destined to last decades in landfills without the option of a second life. This situation is due to two main factors; the first is the need created to have several boards to replace quickly and the second has to do with the product itself. They are designed to last less, they spoil quickly and use poor quality materials, with which they have poor old age. Therefore, we find ourselves with a hypocritical sector, selling an image that does not correspond with what it does, with a group of uninformed consumers who buy that fraudulent message and without wanting it and knowing it, contribute to the deterioration of what they enjoy; nature.

And for that reason, the MARSHALL initiative is born, those of us who love nature the most must be the first to defend and conserve it, uniting our most important human capacity; intelligence, with the wisdom of nature, which offers us endless alternatives waiting to be taken into actions.

## INNOVATIVE PROPOSAL

The innovative point of this project is that it seeks to fill the great gaps between Californian and Australian brands and local artisans. The most consolidated brands use manufacturing techniques which are highly polluting and craftsmen, despite using (some) sustainable materials, do not exploit this advantage as they should. Therefore, from MARSHALL HANDPLANES we want to manufacture competitively, using the most advanced techniques, using natural solutions provided by nature in the form of sustainable materials, under a professional structure and committed to ideals.

The purpose of this work is to present a project that meets the requirements described above, developing an important work in R & D to find and use new materials and production systems and present them as valid, competitive and sustainable alternatives in order to promote a necessary change in the surf industry and its derivatives, emphasizing in front of the consumer the importance of knowing what we consume and its impact both for nature and for us.

As a first step, taking into account the complexity and the necessary infrastructure to manufacture surfboards and the novelty and experimental nature of what we do, the project has focused on the oldest surf modality; the bodysurf, which consists of surfing the waves with the body, helped by some fins and a small board. Precisely the project is translated into the development of these boards, called handplanes or handboards, which are like miniature surfboards that are used in one hand. The choice of this sport as a vehicle line of the project represents many advantages and some challenges. Below, you can see a table representing the gap between industrial and artisanal brands, regarding their professional structure and their Corporate Social Responsibility. The colour green represent they fulfil the characteristic and the red means they don't.

**Table1:** Gap between industrial and artisanal brands fulfil by Marshall Handplanes.

	PROFESSIONAL STRUCTURE	RSC
INDUSTRIAL BRANDS		
ARTISANAL BRANDS		
MARSHALL HANDPLANES		

Source: The author, 2019

# LITERATURE REVIEW

## Brand Image

First of all, we can start this part of the Literature Review by defining the concept of Corporate Branding or also called brand image:

The brand image is composed of a set of tangible and intangible elements that represent the values that the company wants to transmit to consumers. These elements can be the name, the logo, the corporate colour, the design or the contents that the company generates to transmit the values that characterize them (T. Pintado Blanco, J. Sanchez Herrera, 2009). Nowadays, the quality of the products and services offered by a company is important, but what makes a firm differentiate itself from the competition are the emotions, feelings and values that it transmits through the brand image and the strategy of branding (R. Curras Perez, 2010). At the end of the day, it is not only a product or services that we sell, but sensations, experiences and solutions.

Before going further into the subject, it is important to illuminate a common misunderstanding: It is convenient to differentiate between identity and brand image, since they are concepts that are sometimes confused but are not the same. The brand image is the perception that the public or consumers have of what the firm projects while identity is the element that characterizes and builds the brand and that can be managed through branding (A. Bühler, G. Nufer, 2009). In other words, the brand image is the feelings and emotions that the company provokes in consumers and is built with activation strategies based on marketing actions, consumer experiences and advertising (J. Balmer, 2006). In short, it is the value that consumers perceive of the firm and the result of all the messages received by the public and accumulate in their minds to form a negative or positive opinion. Brand identity is composed by the elements that are part of the brand, which differentiate it from the competition and help consumers to identify it (S. A. Greyser, 2006).

Once that said, we can start asking our self why is corporate branding so important?

The brand image is the key to reach potential consumers. Keep in mind, that the brand image is one more asset of the company that has great value in the medium and long term. In short, the corporate branding is the visible face of the company, it is the first impression that we awaken in the consumers and that forms the opinion that it has on it, for example, if it is modern, traditional or reliable (J. Felt, 2003). We cannot enter the mind of the consumer and tell him

what to think, but there are strategies of branding, advertising, marketing, employee training or customer service to control the image that the public perceives of the company (P. Dacin, 2006). All the actions that are carried out and that reach the consumers will be accumulated in their mind, to get to form an opinion or the image they have in the company, which will help them to make the decision of if they trust in their products and services (R. Gillis, 2005). To carry out these strategies, it is necessary to set objectives and make a thorough examination of the weaknesses and strengths of the company and its competence. Because a false step can destroy a good image of the company in an irreversible way and make disappear the trust that customers have in it. It is important that decisions regarding brand image are always taken taking into account the consequences and the line we want to follow (J. Costa, 2018).

Here are some of the advantages of having a good brand image (A. I. Jimenez Zarco, I. Rodriguez Ardura, 2011):

- Differentiation: The brand image makes the company recognizable and helps us to differentiate ourselves from the competition and not go unnoticed. If consumers trust the firm, they will decide to buy the products and services without hesitation.
- Investment in marketing: In the beginning, the costs of marketing campaigns to obtain a good brand image can be high. Once it is well positioned in the market and is recognizable to consumers, expenses are reduced, and it is easier to introduce new products.
- Ease to reach the public and distributors: If the company badge is not known it costs more than trusting it. If distributors and consumers have a good brand image, they will trust to have it in their stores and buy it, without doubting its quality.
- Prices higher than the competition: Having a good brand image will make us differentiate ourselves from the competition and we will give the products an added value based on the trust that the consumers place in the firm, without caring that they are a bit more expensive than the products of the competition.

The most important thing comes when users trust the brand and its products because they know and believe in it. Therefore, the users become “Marketing tools” as they recommend, defend and give positive information about your company, which represent free-long lasting positive revenues.

## Sports marketing strategies

Three principles are relevant for the assessment and understanding of today's sports marketing industry (Appendixes - figure 2 - Nature of Sport marketing strategies - D. Gray, C. McEvoy, 2005). They are the nature of the sports marketing focus, which is marketing of sports or marketing through sports; The nature of the product being marketed sports or nonsports; and the level of integration of sports within the marketing strategy, traditional or sponsorshipbased (S. Fullerton and G. R. Merz, 2008). In this literature review, we are going to focus on the last principle in the mean of understanding what are the different level of integration in the marketing sports strategies (Appendixes - figure 3 - Levels of integration in sport marketing strategies - D. Gray, C. McEvoy, 2005) as for our business plan we already know the nature of sport marketing focus (Marketing of sports) and what kind of product we are going to sell (sport product).

### Traditional Marketing Approach

The traditional approach is well known today, so we are not going to dig into details as we have been studying this way of doing marketing for decades.

The traditional marketing approach includes the basic components of a marketing strategy: a target market and a corresponding marketing mix. Also, in this case, the use of sport is part of the marketing program (B. J. Mullin, S. Hardy, W. A. Sutton, 2014). As such, these strategies involve no official relationship with a sports entity such as a league, team, or player. In order to use a traditional marketing strategy, the marketer identifies target markets and develops corresponding product, distribution, pricing, and promotion strategies that are designed to appeal to those target markets (McCarthy, 1960). A traditional strategy using a sports overlay may simply involve an advertisement that features actors or models playing a sport, it may involve the placement of an ad in a sports publication that reaches the same target market, or it may utilize graphics on the packaging that feature a sports setting. Each component of the marketing strategy can be integrated within the marketer's effort to incorporate a sports theme (S. Fullerton & G. R Merz, 2008).

### Sponsorship

Now that we enter a more recent framework, it is necessary to define what is the concept of sponsorship. The sponsorship has clearly evolved between its appearance and today. But now we could define sponsorship as a very powerful communication tool.



The Sponsorship is part of the communication variable in the marketing mix. In Spain the definition of sponsorship is defined in General Law of Advertising, in article 22 on the "sponsorship contract": "The contract of advertising sponsorship is that for which the sponsor, in exchange for an aid economic for the realization of its sports, charitable, cultural, scientific or other nature, is committed to collaborate in the publicity of the sponsor ". It is understood in the sponsor term, a way to financially support an entity or a person during certain activities. It is an agreement in which both involved parties receive a benefit.

Many people have tried to define the concept as precisely as possible. For example, as "an association of a brand or company with a certain person or activity seeking the profitable notoriety of the sponsor " (M. Serret, 1999). Another definition proposed was "Sponsoring is a way of communication that allows you to directly link a brand or a company with an attractive event for a specific audience" (Sahnoun, 1990). Professional associations also propose their own definitions. According to the AEPEME (Association of Spanish Professional Companies of Patronage and Sponsorship) sponsorship is "a communication strategy, a profitable investment in image. It is an investment on the part of a company [...] aimed at materializing a supposed benefit for predefined target audiences. " Then we have seen different definitions appear since the 90s, each one putting the accent on something specific, but they keep the same main idea.

Sponsorship is characterized by indirect action. That is, the sponsor does not communicate directly. Consumers do not perceive this as a classic technique of advertising, is always something indirect linked to an activity or event. What results very beneficial for companies (T. B. Cornwell, 1995). The consumer has an interest in the event, participates in this because it attracts him, is part of his leisure, then this generates a great acceptance of the message on the part of the spectator. And that's why sponsorship is so exciting. Because we have reached a time of rejection of conventional communication techniques. We are in a time of crisis of advertising conventional. Consumers are subject to many exposures to advertising every day, whether on the street, in magazines, newspapers, on the internet or on social networks. And they reject it, they're boring, they consider that as indoctrination. They can hardly differentiate the products presented, know which is better. It's what we call saturation in front of conventional advertising messages (P. R. Smith, C. Berry, A. Pulford, 1999). So many people believe in the future of sponsorship. Sponsorship is a new form of communication, more emotional, that touches the sensitivity of each one (S. Piquet, 1985). Still, companies continue to associate the term of sponsorship with the word recognition, which It can cause a mistake in

the strategy. Indeed, recognition does not equal the belief. Consumers can simply observe and reject (Pitts and Stotlar, 1996). In this way, companies that develop sponsorships must look for this belief. That's why the key is to associate your brand with a specific activity, which is related to the interest, the leisure of your target audience. This will create a relationship of trust, increasing the credibility of the sponsoring brand, and the receptivity of the message (T. Hennig-Thurau, K. P. Gwinner, D. D. Gremler 2002). Then the consumer, associate the success of the event, with the sponsoring entity, consider that the brand contributes something to the event, to the sport, contributes to its development, and people will perceive it as an effort more than a pure commercial activity. It is the best technique to promote your brand, transmit its values without "attacking" your clients, and without putting advertising pressure (C. W. Hart, M. D. Johnson, 1999). Also, always in this desire not to enter the advertising saturation, sponsorship avoids associating advertising with a comparison of products. Instead of comparing, simply associate, a brand, a name to an event, a vehicle, a championship. It does not aim to buy them (C. Grönroos, 2004). It is what we must retain on the concept of sponsorship, you try to associate your company, brand something that is not unknown to your target audience, but to something associated with your interest. It is clearly a technique that allows us to segment and reach the "target" that interests us.

### Sustainable and green marketing

Any organization that carries out an activity in society is also responsible to it. If the products you sell or the services you provide per-judge people or the environment, damage caused must be eliminated or minimized. The organization, therefore, considering the social responsibility it must assume, must make a balance between the needs of its customers and the interest and well-being of society in general in the present and in the future (M. Dalmoro, J. C. Venturini, B. A. Diniz Pereira, 2009). The consideration of ecology as a basic component of the philosophy or way of thinking of the company gives rise to ecological marketing (J Santesmases, V. Calomarde, 2000). This way of conceiving marketing is not only assuming a minimum social responsibility but also helping to improve and protect the natural system within which the business system is located. For instance, the traditional marketing mix started to add in its 4Ps "green" components. In other words, what is the ecological impact of the product, pricing, promotion and distribution of your business activity (Bradley, 2007). The first rule of traditional marketing and of green marketing is to focus on presenting the benefits to the clients (Ottman, 2006). We can bring together five rules for the practice of green marketing:

1. To ensure that consumers are attentive and concerned about the environmental issues related to the products that they acquire.
2. Getting consumers to understand that using a product respectful of the environment makes a difference.
3. Getting consumers to believe in the values of the company.
4. Getting your consumers to believe that the product should be acquired preferably over a "non-green" competitor product.
5. Getting consumers to understand the correct value of the green products

Environmental marketing arises as a result of a need: companies are obliged to adapt to the ecological demands of their markets and of the organisms that regulate their polluting activities (Calomarde, 2006). Attending to the evolution of the marketing concept, from a focus on the distribution of the products to its current concern to determine what are the needs in the market, it can be affirmed that the environmental aspects have a place in its scope of application for being one of the great concerns of a market sector (F. M. Belz, K. Peattie, 2013). In addition, these concerns are gradually transforming into an effective demand for "clean" products, which denotes that the environment has acquired exchange value for the clientele (M. Lorenzo Diaz, 2002). Therefore, if we take as a reference the "generic concept of marketing" (Kotler, 1972) and redefined by the AMA (American Marketing Association) in 1985, it is not necessary to expand the marketing concept to accommodate the ecological aspects, because the philosophy underlying both concepts, understood in a broad sense, forces the company to satisfy the needs of the new consumer, not only on the individual level but also as a member of the society of which it is a part (C. Moorman, 1985). In short, ecological marketing can be defined as a new philosophy in the way of conceiving the relationship of exchange, which starts from the consumer's needs to satisfy them in the most beneficial way for the consumer and the seller but subordinated to the respect of the environment (J. M. Gali, 2013).

Moreover, it is important to understand what the meaning is of "sustainable marketing" as it has different approaches (Rajeshkumar, 2012).

We are going to focus on the approach of integrating environmental responsibilities in business operations. For instance, tools of environmental management, audit systems and systems of international standards of environmental and social management (ISO certifications for example) are recurrently used (Kontic, 2010). An interesting concept of sustainability for a

business is also related to its stakeholders (Appendixes - figure 4 - Main stakeholders of a company - R. E. Freeman, 1984). Nowadays, it is primordial to consider every person or group of people that has an internal or external impact on your business activity as responsible factors of your success in the market. Therefore, we can see here that, sustainability doesn't only mean considering environmental factors or developing green products. Social responsibility, where a company acknowledges and answer its stakeholders needs, is also a main factor of a sustainable and successful business activity.

## WORK METHODOLOGY

We are going to realize an external analysis first, where we are going to analyse the surfing market in Spain. Then we will proceed to do an internal analysis of Marshall Handplanes, so that the reader understands and picture himself correctly the handplane and bodysurfing. As Marshall handplanes delivers an innovative product, new to the Spanish surf market and industry, it is primordial that potential customers understand what the product looks like and how it is used. After the internal and external analysis, we will summarize the information with a SWOT matrix, and we will finish with the economical and environmental viability of the project.

## EXTERNAL ANALYSIS

### PESTEL analysis:

**Political factors:** In Spain, surfing is a known sport and the government allows the commerce of goods and services in schools, camps and training facilities. With the inclusion of surfing in the Olympic Games 2020, political factors should be prone to help the development and commercialization of this sport as it helps the development of the regions that use surfing as an economical activity, creating jobs and attracting tourism (J. Ponting, 2017). Therefore, we have a positive political forecast.

**Economical factors:** Surfing is a sport on the rise worldwide and Spain is no exception. The surf industry is developing new markets with the apparition of new national and international competitors (N. Lanzarow, 2008). There are new deals between surf brands happening since the revelation of the participation in the Olympic games 2020. In addition, ecological materials are becoming more accessible as the concern of responsible activity is growing in the sector. This increases also the importation and exportation of goods and services of the surf market as a whole; therefore, we have a positive economical forecast. Also, Spain is having an economical rise as a whole, with the inflation decreasing and its GDP/Capita increasing. We can have a look of the Spanish GDP/Capita and inflation in Appendixes – Chart 4 – GDP/Capital actual – National Statistic Institute, 2019 and Appendixes – Chart 6 – Spanish Inflation Rate – National Institute, 2019.

**Social factors:** Socially speaking, consumers are becoming extremely aware of the way business realize their activity (T. Rossi, 2012). For us, this is our competitive advantage. Marshall handplanes relies on the social impact of its activity to deliver its products, showing how conscious we are about the social impact of our activity. Therefore, we have a very positive social forecast.

**Technological factors:** In this aspect we have some issues. Technological tools for the manufacturing of ecological surfboard in Spain are rare and/or in test mode (G. Borne, 2017). This has a positive and negative repercussion on our business: It is positive in a way that we are part of the early adopters of this kind of manufacturing in Spain in the surf industry, but, as mentioned before, these tools are not perfect or totally reliable. Therefore, we can say that the technological forecast is unknown.

**Ecological factors:** same as the social factors, we have a very positive ecological forecast regarding our activity in Spain as consumer are becoming extremely aware of the ecological impact of the company's activity. As J. Ponting (2017) says in its book, "Sustainable surfing", The practice of this sport is link to the respect of nature.

**Legal factors:** New laws regarding carbon footprint are appearing in Spain, for example: *Real Decreto 163/2014, de 14 de marzo*, (Agencia Estatal Boletín Oficial del Estado, 2014) that says: "In the distribution of the efforts made by Member State, Spain must reduce its emissions by 10 percent compared to 2005. This new objective represents a challenge before which new measures must be established to allow compliance, among which are the collected in a good number of national standards, among which Law 2/2011, of March 4, of Sustainable Economy stands out. Thus, within the aforementioned context of emission reduction, this royal decree will contribute to encouraging actions to improve removals by carbon sinks, so that the reductions and removals that take place in these areas are reflected in the National Inventory of Greenhouse Gases in Spain, facilitating compliance with international and community commitments assumed by Spain in the area of climate change." Therefore, we can say that we have a positive legal forecast for our activity.

## Market Data

Surfing in Spain is booming, in 2014 there were 14,000 federated surfers and 4 years later the figure is around 30,000. In addition, the total number of surfers has evolved from 230,000 in 2012 to about half a million in 2018. Similarly, the number of schools in that period has also doubled, from 200 to more than 450 (España Global, 2017). This taking into account only Spain, if we join data referring to our French and Portuguese neighbours, we find ourselves with a very broad and expanding market area. We can see the main surf zone in Spain in Appendixes - figure 17 – Google images, 2019.

Therefore, a careful territorial expansion process must be followed. After a year of tests during 2018, in the first year of activity, 2019, the project will focus on the Cantabrian, Mediterranean and Cádiz coast to promote and publicize the sport and the material. Once a solid base has been established, the project will be internationalized, directing its sights towards Portugal, the United Kingdom and, in particular, France, where its proximity and the affinity of the Basque Country will provide an ideal launching platform.

## Consumer analysis

### Segmentation variables

Needs that this product or service covers, the deficiencies that it solves and in what market segment it does. Define its comparative advantages with what exists in the market. The bodysurf, represented by the handplane, opens a new world of possibilities in water sports. It is a mistake to think that this product and this sport are only aimed at consolidated surfers, who see in bodysurf another way to enjoy their passion.

- **Versatility**: With the handplane you can take waves that with a normal surfboard you could not, especially in shorebreaks, where to take board shallow waves on the sand represents a danger both for the physical integrity of the surfer and for the structural integrity of the board. Therefore, including a handplane in your quiver is a good idea if you like to enjoy the sea and the waves.

- **Comfort**: One of the great disadvantages of the surfer is transporting the surfboard, especially if one does not have his own vehicle or roof racks. However, the bodysurfer can carry in a school backpack all the necessary material to get into the water; the handplane (even several), the fins, the neoprene, the towel, a sandwich etc. It is perfectly compatible with any plan, and if there are no waves or you just do not want to get into the water, having carried the material will not have been a headache.

- **Learning**: When one is a novel, is in a hostile environment; a sea full of waves, handling a table bigger than yourself, which makes you more aware of avoiding disastrous situations than learning the necessary things to catch waves, basically you try to "survive". When entering with a handplane, however, the experience is much quieter; You are swimming, helped by fins and with a board that you can handle without problems. This situation allows the person to check more in their environment, without being clouded by their fears. In the art of catching waves, as important as knowing how to stand is to know how to be on the peak and read the waves, that is; know how the breaker behaves to be able to wait for the waves in the most appropriate place and not to cause situations of danger for others, to know if a wave is going to open or is going to be a closeout, to know where to trace, to see how they work the currents etc. And above all, it makes these first steps in the water, a much more rewarding and useful experience than entering with a board. The good thing is that surfing and bodysurfing are not supplementary activities, but complementary, and everything you learn with a handplane in your hand, can be



applied to surfing. Therefore, if a person combines both, he can evolve much faster and in a much safer way, both for himself and for others.

- **Short learning curve**: Unfortunately, there are many people who do not have enough time to learn how to surf, since they only go to the beach in summer or in an irregular way. To do bodysurf, the only requirement that exists is to know how to swim, from there it is going for waves. In the first session, the newly initiated bodysurfer may accomplish a tube, the star manoeuvre and more difficult to surf, since he needs a much smaller wave when going over his body and the necessary technique is much simpler. Therefore, it is the ideal tool for those who wish to enjoy the waves whenever they feel like it, without months or years of suffering.

- **Injuries**: Another important point to take into account is the group of surfers who have had to stop practicing their passion for problems or physical impediments such as injuries, musculoskeletal problems, joint problems and who find in bodysurf a form of return to enjoy what they like most; the sea and the waves.

- **Minimalism**: From our project, we also want to make a call to minimalism, that with something as "small" as a handplane you can have an incredible experience, give importance to the attitude with which you enter the water, return to philosophy of the first surfers, where catching waves was based on enjoying the little things, sharing the waves, enjoying watching others surfing and not being competitive and aggressive.

- **New sensations**: Taking waves with a handplane is neither better nor worse than doing it with a conventional surfboard, they are totally different sensations. While in conventional surfing the board is what acquires the most importance, in the bodysurf every part of your body fulfils a function when sliding through the wave, as if it were a dynamic board, constantly adapting. The differential point between the two modalities is the closeness and intensity with which each wave is lived. In surfing you always keep a distance with the wave, by the fact of going on feet, but in bodysurf you are within a hand's reach, feeling it intensely, forming part of it.

- **Decoration**: The aesthetics of surfing has always had a large number of followers, it is something they like, especially if it is worked in natural materials, as is the case. Therefore, many people will see in a handplane a decoration element for their house

- **Accessories**: Related to the previous section, the handplane gives a lot of play when it comes to creating accessories such as cutting boards food, open-plates, pendants, watches ... there is a wide variety of utilities applicable to design, further opening the range of potential customers.

## Potential consumers

In the section of the value proposal, where the needs covered by the product are explained, you can see what kind of people can be potential customers:

- **Surfers and lovers of water sports**: people who are already addicted to salty water and that having a handplane will give them more versatility and new sensations.
- **People learning to surf**: thanks to practicing bodysurf, they can learn to position themselves, behave and read the sea without worrying about having bad times.
- **Casual surfers**: The typical seasonal surfers who only enter the water when all the conditions are favourable find in the handplane the ideal companion for their beach plans, without the logistical inconvenience of carrying a surfboard.
- **Surfers with physical problems**: surfing requires full physical capacity, if this is not the case, bodysurfing is a perfect opportunity to return to the peak.
- **People with sensitivity to the image of surfing**: many people love the aesthetics of surfing, but do not practice it or having boards of adornment means too much space occupied and a useless expenditure. Therefore, having a reduced version of a surfboard, with natural and beautiful finishes, is the perfect excuse to introduce a bit of this world into a home, in addition to all the possible complementary products mentioned.
- **People who have always wanted to experience what it is to catch a wave and do not have the time or enough motivation to learn to surf**: learning to surf with a handplane is easy, fast and cheap; If you know how to swim, you have more than half of the work done, it is only time to start paddling the waves. Once we know what our target customers are, it is time to design a marketing and communication strategy to access them and convince them.

The Basque country has gone from receiving 41,000 tourists to 52,000 attracted to surfing. That gives us an estimate number of potential foreign customers, adding the estimated 300 000 Spanish surfers (World Surf League, 2016), gives us a total of 352 000 potential customers.

## Competitors analysis

At the moment, there are two main types of competitors; consolidated brands and small craftsmen. There are several consolidated brands worldwide, especially in California and Australia; SLYDE HANDPLANES, WAW HANDPLANES, GARAGE HANDPLANES ... This represents a great opportunity as they are brands that are opening the way and paving the way for others. In addition to this, at European level there is no consolidated brand, yes there are craftsmen who do very well worked and professional things, but nothing on a large scale, for example COLIBRÍ HANDBOARDS of Madrid and ARMADA HANDPLANES in San Sebastián. We are going to analyse two main competitors so that we understand what the difference between them and Marshall is:

### **Slyde Handplanes:**

*History:* Born in South Africa, the concept of riding a wave with a Handplane came from trying to surf with a tray!

*Mission and vision:* to create an entirely new, innovative and design driven brand exclusively centered on the sport of handboarding.

*Products portfolio:* 4 models: The Grom (60\$), the Phish (169 to 200\$), the Wedge (169 to 200\$) and the Bula (130\$)

This company is a clear example of an industrial brand: They use competitive materials to manufacture their products, like carbon fiber (non-ecological), strong international communication strategy in their social medias and website with shops in United States, Australia, New Zealand and South Africa. You can even order it to Europe by a local distributor. They are present in every social media and have their own sponsored athletes. They are the leader in the sector.

### **Armada Handplanes:**

*History:* Created in France in 2017

*Mision and vision:* To deliver Handmade & Upcycled handplanes for bodysurfing.

Product portfolio: Armada manufacture new and unique handplanes models. They don't have a fixed product portfolio.

This company is a clear example of artisanal brand: They don't have a website, only present in Facebook and Instagram. Their values lie in their love for the ocean and its preservation. They realize strong communication on the fact that their products are 100% ecological and handmade. They have a total lack of competitive structure for the market. You can buy their products in few shops between San Sebastian (Spain) and Bayonne (France). They are local competitors.

Our project will take advantage of this existing gap in the market between established brands and artisans. Basically, large brands focus more on production and cost than on the business philosophy, while artisans tend to be more aware and rarely do these things at the same time. Therefore, focusing on a scalable and competitive production from a sustainable point of view is unexplored. The fact of abandoning the materials used in the surf industry and looking for ecological alternatives is already an advantage over the big brands and having a mass production, abandoning the tediousness and the costs of manual labour represents a plus in front of the artisans. Basically, what is sought is to professionalize and make profitable the production and marketing of the handplanes in the first instance and the products that come later.

In addition, many of the competitors are people of a certain age, so the fact that it is a project carried by such young people gives it another advantage apart from the youthful freshness; the knowledge of everything related to social networks and habits on the internet, key aspects for an internet business, especially if what is sought is to create a market.

Possibly, one of the less obvious but more important advantages has to do with the philosophy of the project, which naturally leads to creating community, so that people who feel identified with those values, follow the brand not for what they sell but for what they do. What it is. Influencing that aspect will strengthen a loyal customer base and prescribers, creating an open platform to receive the different products that are taken out and expanding the message to strangers.

On the other hand, the advantages that the competition has are mainly related to the fact that they have been active for a longer time, their structures are functioning, and their strategies are more developed.

## SWOT Analysis

After analysing the internal and external factors of the company, we can summarize the strengths, weaknesses (internal analysis), opportunities and threats (external analysis) in a SWOT table:

<p><b>STRENGTHS:</b></p> <ul style="list-style-type: none"> <li>• Brand image: our ecological and responsible for the environment products make consumer have a positive first point of view about our company and show interest.</li> <li>• Accessibility to raw materials and production: everything we use except of the Paulownia wood is from Spain and close to our home, the Basque country. Also, we manufacture our product at home. We have very little fixed and operative costs due to this.</li> <li>• Location in the Spanish surfer zone: where most of the surfing cluster and consumers are.</li> </ul>	<p><b>WEAKNESSES:</b></p> <ul style="list-style-type: none"> <li>• Lack of experience and professionalism from the participants (my friend and I) and lack of professional business structure: we don't have office or professional address.</li> <li>• Low logistic power: for the moment we only have our own cars to bring our materials and deliver products.</li> <li>• My friend and I are still young, not familiarized with competitive market mentality.</li> <li>• Really innovative project: still no established market.</li> </ul>
<p><b>OPPORTUNITIES:</b></p> <ul style="list-style-type: none"> <li>• Surf sector is booming</li> <li>• Spanish economy is booming</li> <li>• Ecological and responsible ways of running businesses is becoming more important for the consumers and the businesses itself</li> <li>• Scalability of our resources and product diversification.</li> </ul>	<p><b>THREATS:</b></p> <ul style="list-style-type: none"> <li>• Consolidated brands and competitors of the area.</li> <li>• The possible non viability of our Paulownia plantation in the Basque country</li> <li>• Physical problems with our products.</li> <li>• Manufacture system easy to copy.</li> </ul>

## INTERNAL ANALYSIS

### Company's values and limitations

The idea of this project is based on a way of seeing things and understanding the world, showing that there are alternatives to those offered by the market today, combining the intelligence of the human being with the wisdom of nature:

WHY? With everything we do, we want to question the status quo. We want to change the world for the better, in a responsible and sustainable way.

HOW? By showing the people that ecological and responsible business are profitable.

WHAT? Ecological and responsible manufactured slide products. Our products are friends of nature, beautiful and easy to use.

This initial scope of action represents very well the ideals of the project; returning to the essence, innovation, knowing new sensations, material minimalism, direct contact with nature and, above all, respect for it.

That said, the next problem is compound; We start from the basis that this sport, bodysurfing, is a great unknown in the world of surfing in Spain, which still has very residual users and little or no presence in stores and shops. Coupled with that, there is the fact that mostly (and this case has not been the exception) the handplanes are manufactured in an artisanal way, one by one, with its consequent price to the public. This combination of ignorance and prices, a priori "high", translates into a certain reluctance on the part of the consumer to pay for the product. However, through technologies such as numerical control manufacturing (CNC) (Appendixes -figure 9 - CNC robot – The Author, 2019), aided by specific design software, the problem of the asymmetry between the value perceived by the customer and the value offered by the craftsman is eliminated, enabling production in series and giving the project greater scalability.

The biggest challenge that remains to be addressed is to create a market for this new type of product, which we insist will not be the only one, but it will give the company a signal of identity for its initial positioning.

## Objectives

The short-term objectives are clear;

- Adjustment of the designs of the handplanes to the requirements of the CNC machines and to the cost per unit produced.
- Start with production.
- Design an adequate logistics structure.
- Establish fixed and variable financial needs in the short term.
- Perfect commercial policy with distributors.
- Finalize the details of the communication strategy; investment in marketing, influencers, search for early adopters etc.
- Define the different areas of the company and their functions.
- Improve usability and user experience in E-Commerce.
- Design SEO and SEM web positioning strategies and establish a periodic follow-up of these.
- Define the target clients and the geographical area of action.
- Generation of contents.
- Pilot tests of new materials.
- Focus business actions on a clear and concise positioning of the brand and its philosophy.
- Inclusion in programs that support and help initiatives of this nature.

The medium and long-term objectives will be conditioned to a greater extent by the evolution of the first objectives

- Continue working on all the objectives
- Start business alliances with complementary products companies
- Search for strategic alliances to carry out projects of a technical, social and environmental nature.
- Collaborative projects with influencers and content creators.
- Search and development of other products once the production and distribution system of handplanes is established.
- Develop the tested materials in the pilot tests to achieve their commercial scalability both in their internal use and for the possibility of selling it to third parties.

## Product analysis

As we have advanced before, the star product is the handplane, which will be the star product of the project, being a clear symbol of the company's values and reason for being. The product itself is novel, as it is something totally unknown in Spain, but also includes and combines other new aspects, both in product design and materials.

### Handplanes

As we have advanced in previous sections, the handplane is the fundamental tool of the bodysurfer, apart from the fins. Thanks to this board, you can surf the wave much better, since it allows you to reach greater speed, greater grip and control.

In the sea, as in our day to day, situations are changing, and we must ensure the right equipment for every occasion. Therefore, we have developed 4 different handplane models, each designed for a specific situation. Each model has pictures in the Appendixes – figure 10- Pictures of Marshall handplanes models by 3D Model – The author, 2019.

### **PINTAIL**

Our largest model, with 45 cm in length. Inspired by the traditional guns that conquered mythical waves like Waimea Bay, it is designed to surf the largest and longest waves, pointbreak style. His pintail combined with wingers in the last quarter of the table and four channels from the first third of the bottom gives this board the speed and drive necessary to stay in the vortex of the wave.

### **DAFISH**

The table all around, meets in any situation, designed so that you do not have to worry about what waves you will find wherever you go. Its 35 cm long make it very comfortable to carry in any bag or backpack. Inspired by the most charismatic table designs, created by Steve Lis in the 70s.

### **THE BULLET**

The most extreme table, the queen of the shorebreak. In powerful shorebreaks, this board provides you with the lift and the right and necessary grip to be able to get out of the most difficult situations safely. Its small size (22cm) makes this handplane a very easy to handle, especially in situations where the bodysurfer is exposed to washing machines or rollers, very common in wave breakers.



## **LATXA**

As its name suggests, this range is made from paulownia wood and latxa sheep wool. For the moment and for reasons of simplification of production, we have decided to manufacture only a table model that combines 3 qualities in equilibrium; easy to manufacture, beautiful and functional. Finally, we have opted for the fish form, a traditional form very recognizable and appreciated by users.

## **Longboards**

A line of business that was thought to develop a while ago was that of longboards or longskates, giving greater versatility to the project by creating a product that did not depend on the sea or the waves, but that kept the spirit. At the time it was not developed as no competitive advantage was found with respect to other established manufacturers. However, as a result of the Youth Entrepreneurship Program 17-18, a great opportunity for innovation in this field has been discovered.

First of all, you have to understand how a longboard is built; basically, they are very thin wooden plates that stick to each other giving them shape to get concave tables. Depending on the manufacturer, wood is used exclusively or combined with layers of fiberglass, which gives it very positive properties in terms of flexibility and strength and saves wood. We can see examples of Marshall Longboard in Appendixes - Figure 7 - Marshall Handplanes Longboard models - Source: The author, 2019.

## **Packaging**

As important as the product itself is the presentation, for this reason the design of the packaging has been very careful, both in its aesthetic and functional aspect, without neglecting the philosophy of the project. The packaging, in any of its versions, will consist of two parts; the product container and the label.

**Figure 1:** Marshall Handplanes ecological packaging.



Source: The author, 2019

In the image above we can see an example of the style of packaging that all products will have, although it will differ in small details depending on the needs of each case, then we will explain it in different parts:

- **Jute:** the body of the bags will always be made of jute, a natural and ecological fiber that is very resistant and that allows a perfect transpiration, which is an idea so that the things inside it do not get macerated and similar. It is totally biodegradable. Depending on the product, the fabric of the jute bag will be in different formats; either a thick fabric or a grid that allows you to see the product inside.

Label of paper with seeds: the label will be a triptych that will be placed in the jute bag as in the example image. The background image will depend on the product in question; marine motifs, plants, etc. It consists of 3 faces and in each one the following information comes in appendixes – figure 8 – sides of Brand logo on packaging - Source: the author, 2019

The fact that the label has embedded seeds makes the packaging an experience for the client since he will be able to grow a tomato, flowers, peppers, etc. In this way the brand image is reinforced, the consumer is made aware of the work and effort involved in cultivating things

that we take for granted today and, of course, a circular cycle is ensured for our packaging, which will be used to grow new plants.

In the upper part you can see an outline of the germination process of the seeds on the labels, giving rise to different types of plants, both decoration and plants that bear fruit.

## Sales and Marketing strategies

### Sales strategy

The sales strategy will be based on two distribution channels: the e-commerce (Appendixes – figure 11 – Marshall website and e-commerce – The author, 2019) itself and presence in retail stores, to achieve greater visibility of the products. In addition, in stores, the presence of MARSHALL will focus on providing experiences to customers. For this, we will use 3D reality designing a stand with the products in which the client can experience first-hand what it would be like to take a wave with a handplane (Appendixes – figure 12 - VR box and view from a bodysurfer through the VR box – Google Images, 2019). This will undoubtedly be decisive, since the perspective of the bodysurfer is incredible and makes the wave feel very intense and close, highlighting the differentiating aspects of this sport.

In addition, this system is exportable to fairs, events, exhibitions, etc. serving on the one hand, of claiming for people to approach and on the other, as an ideal means for the client to experience in the closest possible way what it would be to catch waves with a handplane.

### Marketing strategy

#### Collaborations and sponsorship

As we have mentioned before, in order to attract customers to both stores and e-commerce, we must do a very strong prior communication work. In our case we have a series of candidates, both nationally and internationally to become our influencers. In a first stage, we will go to people of more local character, to be able to establish a base of followers with which to choose higher spheres, especially in the face of collaborations (Appendixes – list of potential influencers – The author, 2019).

## Business collaborations

Apart from the work done with the influencers, a strategy of collaborations with different entities and companies can be carried out in order to promote sport and emphasize the philosophy of MARSHALL HANDPLANES.

### ○ **OCEANTECH**

We had the chance to be part of a Bootcamp, also called Start up boost Camp organized by the OceanTech, part of the French Tech, which is the organization in charge of the economical and innovation development of French companies. OceanTech is a global start-up ecosystem in the field of digital design of new products and services related to the sea, sliding sports and water sports.

The Ocean Tech is made up of 130 brands, 6 of which are European leaders and 2 are worldwide. With 2.8 billion turnover, it serves 100,000 users and generates 5,000 jobs. This ecosystem is backed by the French Tech, which allocates a 220 million game to accelerate the development of startups.

It also has an international network of Ocean Work Centers with headquarters in Bilbao, La Reunion, Mauritius, established throughout this year in Natal, Sydney and Melbourne and projected in New Caledonia, Tokyo, San Diego, Cape Town and Tahiti.

### ○ **Non-Governmental Organizations collaborations**

Currently there are a lot of organizations that share the same values as the project and with which many synergies could be generated. One of the campaigns that we have designed in this sense, involves collaborating with the so-called "ecological pirates" of SEA SHEPHERD, an organization founded in 1977 and dedicated to protecting the marine ecosystem, where they base their strategy on direct action which has made them world famous Today, they actively collaborate with governments to monitor and enforce national and international laws.

One of the most recognizable symbols of SEA SHEPHERD are its ships, with which it patrols the oceans, and which has been put at risk many times, with some sinking, like the own crew, in order to stop illegal fishing boats, especially illegal whale hunters.

In fact, they have become protagonists of a documentary series called WHALE WARS, which shows their work and their day to day on the high seas.

To raise funds, SEA SHEPHERD has an e-commerce website offering different objects; bags, caps, sweatshirts etc. And from MARSHALL HANDPLANES we think that the elaboration of a line of handplanes carrying the distinctive colour scheme of SEA SHEPHERD boats can be a good product so that people can have their own fleet boat and to raise more funds for the organization, at the same time that the image of MARSHALL HANDPLANES is reinforced and a powerful client is gained.

In this line, collaborations can be made with other organizations of the style such as those mentioned above; OCEANA and KIND SURF.

At the same time, there is an own project focused on giving visibility and helping in contemporary social struggles; MARSHALL HOPEPLANES. The project consists in auctioning a monthly, quarterly handplane, decorated by an artist, with the motives of a social / environmental cause, donating the full amount to said cause.

In this way people are made aware of real problems that need support, the brand image is reinforced, it generates traffic either in social networks or on the web and also gives visibility to small artists who do an incredible job that still goes unnoticed.

- **Sport related business collaboration**

However, in order to promote the sport itself, strategies have also been developed, this time with the Guipuzcoan company WAVEGARDEN, a pioneer in the design of mobile wave pools. WAVEGARDEN is creating sensation and already has 3 active pools; at its headquarters in Aizarnazabal, in Scotland and in Florida, two others under construction in Wales and Australia and 17 projects under development on the 5 continents. The idea would be to make a video proving the wave is surfable with the handplanes, showing the versatility of the wave, showing that someone who has no idea of surfing can catch a tube and at the same time promote the sport. We could even design a line of boards with the WAVEGARDEN logo so that the people who surf us can enjoy the wave.

#### Communication and promotion

Thanks to our website, we are going to promote our products but also create a fellow community for our brand. The objective is to create bonds between our users and readers using community management. We post regularly stories, events and news in our website (and promote it via Social Media) so that users can comment, ask and advice other users. In that way, a sense of community arises as the consumers feel part of the company's faith, which drives consumers

to be loyal to the brand and even be unconsciously promoters thanks to the “mouth-to-ear” promotional technique.

The presence in social networks will undoubtedly be one of the greatest marketing tools. In principle, each social network will be used to show a distinctive aspect of the brand:

**YOUTUBE**: The content of YouTube will be based on three legs; the first will be videos focused on the use of the brand's own products. The second will have a component of the manufacturing process, showing how the tables are made, allowing the customer to see first-hand what is consuming and the third and last will consist of content to raise awareness of the importance of producing and consuming sustainable way.

**INSTAGRAM**: The social network of the day to day, with constant content (Appendixes – Figure 13 – Marshall Handplane Instagram front page – The author, 2019). It will serve as much as to tell the day to day of the project as a link and link to publications from other social networks. It will also be very useful when it comes to attracting new potential customers.

**PINTEREST**: Ideal to bring to light the most artistic side of the project, putting a lot of emphasis on the quality of the content to be able to show everything we represent in an image.

**FACEBOOK**: Like Instagram, Facebook will also help attract new customers, using their advertising tools. It will also serve as a springboard for content created for YouTube.

### Pricing strategy

Our pricing strategy will be penetration, which means we will be below the average price of competition for similar products. The price range is quite open, since each brand makes their own handplanes and there is no type or basic model, but currently it ranges between € 50 to € 120, depending on brand and model. It should be noted that all firms make quality tables and the price is justified by the hours of work and dedication behind the manufacture of each table, another thing is that the consumer is willing to pay the hours of a craftsman or not (Appendixes – Chart 1 - Pricing strategy from Marshall Handplanes and its direct competitors – The author, 2019).

Our product prices are designed to attract consumers that know the average price of surf gears and traditional surf boards, as our is way lower. But we also want to represent the quality of manufacturing work by not reducing too much the prices, as they could evoke a low-quality product and materials.

## Resources and technical aspects of the business

### Raw materials

#### PAULOWNIA

Wood unknown in Spain, of Asian origin; It is nicknamed as the phoenix tree, since once cut, another tree can grow from its own stump. It is also called the aluminium of the woods due to its low density (like balsa wood, 250-290 kg / m<sup>3</sup>) and its high resistance. This wood is of great importance for the philosophy of the company for the following reasons:

- It is a tree of rapid growth, reaching 4-6 meters the 1st year.
- Suitable in many climates and soils.
- Deciduous leaves, which nourish the soil due to its high nitrogen absorption capacity.
- It is not invasive or exclusive.
- Drying time of the short wood; 20-40 days outdoors.
- Valid for soil recovery and stabilization, in addition to controlling soil erosion.
- Decontaminates soils of nitrites, nitrates or heavy metals among others.
- Supports cold (-17°C) and heat (45°C).
- Its exploitation does not require removing the stump, which prevents the shift of nutrients and soil produced in the usual logging operations. It can regenerate up to 7 times.
- Low density, which translates into lightness while being very resistant.
- It is waterproof and can't rot, making it ideal for contact with water.
- It has a very high ignition point (250°C), giving it a high level of survival against forest fires.
- Its leaves and bark are used as fodder for livestock.
- Produces other assets such as honey.
- Very resistant and little prone to diseases.
- Accepts intercropped crops.

In MARSHALL HANDPLANES, paulownia wood is the fundamental ingredient of our tables for various reasons. At first, it meets our sustainability requirements, it is a beneficial tree for the environment given its characteristics. Furthermore, in order to use it in the manufacture and marketing of handplanes, it has two advantages; It is a soft wood, which allows to work easily and reduce working hours and therefore the unit cost of production and is naturally protected against seawater, avoiding the use of toxic chemicals such as varnishes and resins.

In order to prevent paulownia wood from absorbing water, flaxseed oil is used to cover the pores of the wood, ensuring its waterproof quality, although it is true that even if the sea water penetrated, nothing would happen. The oil, obtained from the flax seeds, is mixed with turpentine, coming from the distillation of the resin of different species of conifers, obtaining a mixture of 100% natural origin.

- Advantages with respect to existing manufacturing techniques.

The use of this wood compared to traditional manufacturing techniques based on fiberglass and foam presents an essential advantage both in the number of steps to be taken and in the amount of material required. These advantages will be explained in depth in the section of technical resources, since it is the conjunction of this material with manufacturing techniques that gives the significant advantages.

Basically, manufacturing paulownia wood handplanes represents an ecological, logistical and productive advantage, being able to make them faster and with less variety and quantity of materials. In addition to this, for the user there is a fundamental plus; the boards made in the traditional way, using foam and fiberglass are very delicate and each blow causes important damages in the structure that have to be repaired before putting the board back in the water since there is a risk of it rot the inside of the board. However, this is not the case with paulownia handplanes, since being made entirely in a material resistant to the action of seawater a blow will mean a small aesthetic flaw in the shape of a notch or even go unnoticed.

#### LATXA SHEEP WOOL

As a result of our commitment to the environment and responsible values, MARSHALL HANDPLANES seeks to find a way to replace fiberglass with a more sustainable material, since glass fiber, in addition to having a large carbon footprint for its production, is harmful to the people who work with it, which can cause long-term respiratory problems.



Researchers of the UPV / EHU, belonging to the Department of Chemical Engineering and Environment of the Polytechnic School of Donostia-San Sebastián, have been investigating potential applications of this material of animal origin since they also belong to the research group Materials + Technologies and have found that the wool presents mechanical qualities similar to fiberglass. We have established synergies and our contribution is the practical application of the work of researchers, using ARDITEK technology in our products.

Due to the format in which this type of wool is sold, its use presents great challenges and difficulties and its scalability to surfboards using it as a coating material is not efficient or effective, since today the format is a kind of fat felt and short fibers. However, we have adapted to the situation and we have already designed a line of handplanes that use this innovative material.

Instead of using wool as a fabric with resin that is placed on top of another material covering it, we have designed a range of boards that combine this material with paulownia wood in a sandwich construction, consisting of 3 pieces or floors; the upper and lower are paulownia and the middle is a layer of wool fiber, soaked in bioresin. This sandwich is introduced in a press that gives shape to the whole and after a few hours of drying, a solid, flexible and resistant board with the right concave is obtained to work correctly in the waves.

The use of a material of these mechanical characteristics, whether glass fiber or latxa sheep wool, in a sandwich construction presents several advantages; allows to use less wood to achieve an adequate structural strength, with the consequent saving of material and weight and also gives the board flexibility and structural stability in all directions, essential characteristics in sliding sports.

The challenge from here is to open the path to a more applied research of this material, making it in a finer format, long and ordered fibers, suitable for use in conventional surfboards. But until that moment arrives, it will be shown to the industry and the consumer that latxa sheep wool has more applications and that it is used effectively in products destined to catch waves. Therefore, we can say that the use of sheep wool in our handplanes is the launching point from which we must continue researching and testing new formats in order to find the most suitable one.

- Advantages with respect to existing manufacturing techniques.

As mentioned before, sheep wool is intended to replace fiberglass and since on paper, its properties are very similar we will focus on two aspects; its production and its ecological impact on the environment and on people.

Latxa sheep wool is now a waste because its traditional applications have been displaced by new synthetic and more suitable materials. Therefore, shearing sheep is an expense for farmers. This presents a great opportunity already that the availability of the material is high, and it is also a strategic resource, since this sheep breed is located in a very specific geographic region. In contrast, fiberglass is a material formed by polymeric filaments that not only have to be woven, but also the fibers have a previous casting process in which the carbon footprint is enormous. Apart from that, during its manipulation, especially when it is time to sand it, filaments appear that stick in the lungs of those who breathe it, causing respiratory problems and cancer, something that does not happen in the case of wool.

Therefore, we have a material, fiberglass, harmful to health, that has a large carbon footprint and that must be produced from scratch against another, latxa sheep wool, which its fibers are natural; you just have to weave it in the right format, it is a waste, it is a strategic resource and it is safe for health, not to mention the advantages that local wool would have for a new application in a sector as strong as It's surfing.

Mainly, the advantages of introducing a material such as sheep's wool used as a substitute for fiberglass are the following; reduces the use of wood, that is, when including these fibers, the object requires less wood to achieve the same structural strength. It facilitates sandwich construction techniques via pressing, which are the techniques we will use. It gives greater lightness and flexibility to the tables, two fundamental qualities when it comes to catching waves or skating. And apart, on the commercial level, this material helps a lot when it comes to positioning a brand through its products.

## BIORESINS

Some of our production processes require the use of resins and, far from being satisfied with the majority trend in the sector, we look for alternatives that take care of us both during the manufacturing process and the environment.

That is why we chose bioresins, obtained through chemical processes that reduce greenhouse gas emissions by 33%. The ingredients that make these resins are focused on plant sources and waste produced in other industries.

The resins are fundamental ingredients of our range of handplanes manufactured with latxa sheep wool, soaking the resin and joining the different layers that make up each board. We also work with bioresins in our experimental longboards, combining them with grass to make our boards.

- Advantages with respect to existing manufacturing techniques.

Normally, the resins used for use at sea are polyester resin and epoxy, petroleum products. Like many other chemical products are toxic, so for its handling special measures are required, mainly masks for the toxic gases emanated. This is not the case with bioresin, which can be handled without protection, which is why it is compatible with many more production sites because it is non-toxic.

## BAMBOO

It's not wood, it's grass! Bamboo is an old acquaintance; however, many people do not know its environmental value. Nicknamed as vegetable steel, its mechanical properties for construction are undeniable but it is also easy to grow, does not require fertilizers or pesticides and requires little water, it can even grow where other species can not.

In addition, being a grass, it absorbs much more carbon dioxide than pine or other tree species, which makes it an ideal ally of the environment.

The application of this material in the project focuses on the construction of longboards or longskates in conjunction with latxa sheep wool using the pressing technique described above. In this way, we will offer the market longskates made of grass and sheep wool, an absolutely innovative fact that perfectly defines our philosophy.

- Advantages with respect to existing manufacturing techniques.

Currently, most longboards or longskates are made of conventional tree woods, such as Baltic birch or Canadian maple, from the northern hemisphere of the planet. Although these are fast-growing trees, their wood has neither the mechanical qualities of bamboo nor the ease with which it grows, not to mention that bamboo is one of the fastest growing plants in the world, with some varieties growing up to one meter per day.

In addition, from the point of view of the consumer, it is a much more colourful and beautiful material, creating some curious shapes and drawings, saving a lot of time of painting and decoration of each table so that it is colourful.

## Technical aspects

For Marshall Handplanes there are two technologies that support its production. To explain them, we will distinguish two productive processes; the processes carried out in raw materials and the processes using composite materials.

### Processes in raw materials

The raw materials will be worked using CNC technology aided by a specific design software. Firstly, the models of handplanes will be designed with a computer program, once they are designed, they are exported and sent to a machining centre where a machine controlled by a computer will replicate the designs in the desired material. In order to make this an effective and efficient process, both the requirements of the product and the properties and limitations of the machine in question have been taken into account, obtaining the most appropriate design for this purpose.

The main reason for the use of this process is the scalability of the project; normally these handplanes, are produced by hand, which increases their cost brutally, which has an excessive price in the eyes of many customers. However, when produced in chain and with sustainable materials, the added value changes from crafts to ecology, giving the product another more accessible and more thriving commercial approach.

For this, we will use paulownia wood blocks that will be what the CNC machine will work on. The combination of this material with this technology has many advantages over the traditional manufacturing techniques in boards designed to catch waves:

**Chart 2:** Difference of number of steps for the manufacturing of traditional handplane and Paulownia made handplane.

MODE	STEP1	STEP2	STEP3	STEP4	STEP5	STEP6
TRADITIONAL	Initial sanding	Fiber layer 1	Fiber layer 2	Hotcoat 1	Hotcoat 2	Final sanding
PAULOWNIA	Initial sanding	Oiling	Let soak and dry			

Source: The Author, 2019

Furthermore, there is also a big difference in terms of the amount of materials needed, see in appendixes - Chart 3 - Amount of material needed for manufacturing of traditional and Paulownia made Handplane. Source: The Author, 2019.

Another really important aspect is the manufacturing time of each table and once again, our choice makes the difference. If being positive and getting everything perfect, a handplane manufactured in a traditional way with fiberglass, as we have explained, can take about a day of work, taking into account both working and drying hours and after that process it is advisable to wait about 20 days before using it, to let it cure the resin well and reach all its structural strength. In contrast, at MARSHALL HANDPLANES we can manufacture a handplane in about 8 minutes, plus 1 minute of an oil bath. The drying time is between 12 and 24 hours, but the packaging is designed so that the table can be transported and dried at the same time.

Finally, note that CNC production will be carried out by third parties; a company specialized in this field, so that human resources can be allocated to the tasks of communication, marketing and content creation, essential to create the necessary market.

#### Process of composed materials

In these processes, both bioresin and latxa sheep wool will be common denominators. Varying paulownia wood to bamboo depending on the applications you want to give it; paulownia for handplanes and bamboo for longboards or longskates. In this case, a press (Appendixes – figure 16 – Wood press – The author, 2019) is needed that can transmit enough pressure to the different pieces to form the necessary sandwich structure.

This construction technique is not new for longboards, since they do not have many alternatives for their construction. However, there is a compelling reason to develop a line of handplanes using this process; Firstly, it is the best way to introduce latxa sheep wool into a board designed to catch waves. Secondly, it is a fast, simple and cheap process to produce a range of boards with an affordable price, in order to introduce bodysurf to the market on a large scale.

Therefore, this technique allows to produce handplanes manufactured with latxa sheep wool, an unprecedented innovation, at a low cost, being an ideal tool for a first contact with customers.

## FINANCIAL VIABILITY

In this section it is worth mentioning that the participation of the project in the Youth Entrepreneurship Program (scholarship of 6000 euros) has involved obtaining a large amount of resources, which are crucial to begin this project. Also, it is important to remember that we have been lucky enough to not have to purchase or rent an office for work or manufacturing. For now, and until we get into the whole Spanish market (not before 5 years) we are able to work in my colleague's family farm. Therefore, we don't have typical fixed assets as a loan from the bank, as example. We don't pay water, electricity bills and don't need professional cell phone number. In short, our fixed cost (see in the income statement) are only the fees for free-lance status.

For the moment, the scholarship has been divided into 3 fundamental legs; The first of these has been obtaining the necessary materials to finish developing the Minimum Viable Product with the requirements and specifications that were wanted. As a second item to be taken into account, the audiovisual material has been an investment that is more than necessary and beneficial, giving MARSHALL HANDPLANES the necessary tools to create a minimum content for day-to-day, both in terms of communication and marketing strategies and preparation of reports explaining the present and future situation of the project. Finally, the financial resources have made it possible to advance a lot in the prototyping process of different ideas and products, helping MARSHALL HANDPLANES to manage its resources in the points that have been viable.

The first execution of the amount of the scholarship was 29.64% for materials, 14.57% for audiovisual material and 5.6% for software licenses, adding 49.8% of execution.

In the short term there are many tasks in which the rest of the scholarship will be executed. The largest will go to the subcontracting of production, a cost yet to be determined, but could represent 38% of the resources obtained, although it would be an investment with a direct profitable return, since we are talking about the final product. But undoubtedly, once you have the productive structure in place, the investment in communication and marketing will be very powerful, since the biggest challenge of this project is to create market and attract customers.

However, we have made a small financial forecast taking into account only the handplanes. It should be noted that the activity of the company will not be limited to these, but will have other

complementary products, making it possible to attract customers who like the brand but will not catch waves. In this way, a varied portfolio of products will be developed and capable of ensuring a constant cashflow throughout the year, especially in the months that do not coincide with early summer and Christmas, which will be the sales peaks of handplanes.

The forecast refers to 3 years; During 2019, the sales of artisanal tables will be contemplated as a result of experimentation with materials and designs, which undoubtedly have helped the continuation of the R & D process. Next, the consequences of this research process will be presented, with the emergence of new more competitive models and, above all, the incorporation of the final materials thanks also to the sub contraction of production by a carpentry. For 2020, a forecast of sales backed by strong communication and product commercialization at strategic points is exposed. The forecast for 2021 includes a reduction in operating costs as a result of the improvement in the efficiency of the most expensive resources and an increase in sales at the rate of growth of the sector, a trend that will stabilize for the year 2021, year for which derivative products of Marshall's R & D work should be available for industrial use by third parties thanks to the lease of 4 electric trucks.

**Table 2:** Projected Income Statement over 5 years.**PROFIT AND LOSS PROJECTION**

MARSHALL HANDPLANES					
<b>PROFIT AND LOSS ASSUMPTION</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
Annual cumulative price (revenue) increase	0,00%	2,00%	4,00%	6,00%	8,00%
Annual cumulative inflation (expense) increa	0,00%	2,00%	4,00%	6,00%	8,00%
<b>INCOME</b>					
	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Revenue</b>					
LATXA	11 300,00	12 858,00	19 451,00	35 915,00	58 741,00
DAFISH	8 814,00	9 880,00	16 324,00	24 290,00	42 099,00
PINTAIL	6 107,00	7 755,00	14 093,00	20 995,00	37 122,00
BULLET	1 872,00	2 671,00	8 754,00	15 092,00	28 906,00
<b>Total revenue</b>	<b>28 093,00</b>	<b>33 164,00</b>	<b>58 622,00</b>	<b>96 292,00</b>	<b>166 868,00</b>
<b>Cost of Sales</b>					
LATXA	300,73	306,74	319,01	338,16	365,21
DAFISH	231,73	236,36	245,81	260,56	281,41
PINTAIL	231,73	236,36	245,81	260,56	281,41
BULLET	162,73	165,98	172,62	182,98	197,62
<b>Cost of goods sold</b>	<b>926,91</b>	<b>945,45</b>	<b>983,27</b>	<b>1 042,26</b>	<b>1 125,64</b>
<b>Gross Profit</b>	<b>27 166,09</b>	<b>32 218,55</b>	<b>57 638,73</b>	<b>95 249,74</b>	<b>165 742,36</b>
<b>TOTAL INCOME</b>	<b>27 166,09</b>	<b>32 218,55</b>	<b>58 638,73</b>	<b>95 249,74</b>	<b>165 742,36</b>
<b>EXPENSES</b>					
<b>Operating expenses</b>					
Advertising & Promotion	200,00	536,00	100,00	106,00	114,48
Depreciation	750,00	750,00	750,00	750,00	750,00
Logistic	80,30	100,50	4 803,00	5 091,18	5 498,47
Supplies	1 500,00	1 004,50	1 044,68	1 107,36	25 590,00
Free-lance fee	3 399,60	3 399,60	3 399,60	3 399,60	3 399,60
<b>Total operating expenses</b>	<b>5 929,90</b>	<b>5 790,60</b>	<b>10 097,28</b>	<b>10 454,14</b>	<b>35 352,55</b>
<b>TOTAL EXPENSES</b>	<b>5 929,90</b>	<b>5 790,60</b>	<b>10 097,28</b>	<b>10 454,14</b>	<b>35 352,55</b>
<b>TAXES</b>					
Income Tax (21%)	4 459,80	5 643,41	10 950,24	25 438,68	39 116,94
Other Tax (specify)	-	-	-	-	-
<b>TOTAL TAXES</b>	<b>4 459,80</b>	<b>5 643,41</b>	<b>10 950,24</b>	<b>25 438,68</b>	<b>39 116,94</b>
<b>NET PROFIT</b>	<b>16 776,39</b>	<b>20 784,54</b>	<b>37 591,21</b>	<b>59 356,92</b>	<b>91 272,86</b>

Source: The author, 2019

***Notes from the projected Income Statement:***

Until 2021 my friend and I are in charge of the logistic of our products, therefore we only pay for public transport fees or fuel for our own cars. From 2021(year 3) the number represent the wages for the 4 truck drivers.



During the first 2 years (2019, 2020) we decided to invest strongly in SEO and SEM strategies on our social media: 15 euros/month = 180 euros/year only in SEM. The rest of the advertising and promotion costs rely on the SEO. By 2021 we estimate that we will not need those aggressive strategies and allocate resources in the geographical expansion of Marshall Handplanes. A positive net income is a good sign of financial health. This money can be used to pay dividend, which is not our case as we don't need it yet, so we use it for next year's investments in assets and manufacturing tools. We can see that our gross profit increases almost 7 times from year 1 to year 5, meaning our cost of production are really competitive and allow us to increase our prices and obviously our quantity of production. Nevertheless, an increase in gross income brings an increase of the income tax, therefore our net profit doesn't increase as strongly as our gross profit.

In appendixes – Table 6 – Sales expectation for the year 2019 per month – The author, 2019, we can see a sales forecast for the year 2019/month. Each model of handplane has its costs and sales represented by unit and by sale price. We estimated the sales forecast regarding the number of surfers in the Basque country first (around 65 000) and estimating that little less than half of them would be interested of buying Marshall Handplanes.

In order to understand the projected Income Statement over 5 years, we have realized a projected Income Statement by Month of the first year of activity:

**Table 3:** P&L per month of the year 2019

<b>MARSHALL HANDPLANES</b>													
Profit and Loss (P&L) Statement													
[EUR €]													
	2019												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Full Year
Sales on Handplanes	3 840,0	2 737,0	1 293,0	1 191,0	2 202,0	3 774,0	2 309,0	1 051,0	2 017,0	1 599,0	2 293,0	3 787,0	28 093,0
<b>Total Net Revenue</b>	<b>3 840,0</b>	<b>2 737,0</b>	<b>1 293,0</b>	<b>1 191,0</b>	<b>2 202,0</b>	<b>3 774,0</b>	<b>2 309,0</b>	<b>1 051,0</b>	<b>2 017,0</b>	<b>1 599,0</b>	<b>2 293,0</b>	<b>3 787,0</b>	<b>28 093,0</b>
Cost of Goods Sold	126,7	90,3	42,7	39,3	72,6	124,5	76,2	34,7	66,5	52,8	75,7	124,9	926,9
<b>Gross Profit</b>	<b>3 713,3</b>	<b>2 646,7</b>	<b>1 250,3</b>	<b>1 151,7</b>	<b>2 129,4</b>	<b>3 649,5</b>	<b>2 232,8</b>	<b>1 016,3</b>	<b>1 950,5</b>	<b>1 546,2</b>	<b>2 217,3</b>	<b>3 662,1</b>	<b>27 166,1</b>
<b>Expenses</b>													
Advertising & Promotion	16,6	16,6	16,6	16,6	16,6	16,6	16,6	16,6	16,6	16,6	16,6	16,6	199,2
Depreciation & Amortization	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	62,5	750,0
Logistic	6,7	6,7	6,7	6,7	6,7	6,7	6,7	6,7	6,7	6,7	6,7	6,7	80,3
Supplies (materials)	125,0	125,0	125,0	125,0	125,0	125,0	125,0	125,0	125,0	125,0	125,0	125,0	1 500,0
Free-lance fee	283,3	283,3	283,3	283,3	283,3	283,3	283,3	283,3	283,3	283,3	283,3	283,3	3 399,6
Total Expenses	494,1	494,1	494,1	494,1	494,1	494,1	494,1	494,1	494,1	494,1	494,1	494,1	5 929,1
<b>Earnings Before Interest &amp; Taxes</b>	<b>3 219,2</b>	<b>2 152,6</b>	<b>756,2</b>	<b>657,6</b>	<b>1 635,3</b>	<b>3 155,4</b>	<b>1 738,7</b>	<b>522,2</b>	<b>1 456,4</b>	<b>1 052,1</b>	<b>1 723,2</b>	<b>3 168,0</b>	<b>21 237,0</b>
Interest Expense	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Earnings Before Taxes</b>	<b>3 219,2</b>	<b>2 152,6</b>	<b>756,2</b>	<b>657,6</b>	<b>1 635,3</b>	<b>3 155,4</b>	<b>1 738,7</b>	<b>522,2</b>	<b>1 456,4</b>	<b>1 052,1</b>	<b>1 723,2</b>	<b>3 168,0</b>	<b>21 237,0</b>
Income Taxes	676,0	452,0	158,8	138,1	343,4	662,6	365,1	109,7	305,8	221,0	361,9	665,3	4 459,8
<b>Net Earnings</b>	<b>2 543,2</b>	<b>1 700,6</b>	<b>597,4</b>	<b>519,5</b>	<b>1 291,8</b>	<b>2 492,8</b>	<b>1 373,6</b>	<b>412,6</b>	<b>1 150,5</b>	<b>831,2</b>	<b>1 361,4</b>	<b>2 502,7</b>	<b>16 777,3</b>

Source: The author, 2019

- The Gross profit is the difference between the net revenue and the Cost of Goods Sold, meaning the sales minus the cost of those sales. We can refer to the Table 6 – Sales expectations of the year 2019 – The author, 2019 to check the sales and cost forecast for the year. This gives us the margin our sales produces for each month.
- In our expenses we have each month a regular fee of 16,6 euros for SEM and SEO for our promotion strategy on social medias. A regular fee for SEM is 15e/month and SEO activity doesn't represent any expense of money.
- Also, our depreciation on our tools is equally spread over the year as we are going to use them every month.
- For our supplies, we estimated that we are going to refill each month equally over the year also.
- In order to have the free-lance status in Spain, you have to pay a fee of 283,3 euros/month
- We don't have interest expenses as we don't borrow any services from another company during our first year of activity.
- The income tax over goods in Spain is 21%. Therefore, we have to deduce this amount to our earnings before tax so we have a real picture of our net earnings.

**Table 4:** Projected balance sheet for 3 years.

ASSETS		2019	2020	2021
<b>Intangible assets</b>				
UPV research	360.00 €	-	-	-
Subcontract of production	-	2150 €	2150 €	2150 €
Free-lance pattern (3)	3399.6 €	3399.6 €	3399.6 €	3399.6 €
<b>Total intangible</b>	<b>3759.6 €</b>	<b>5549.6 €</b>	<b>5549.6 €</b>	<b>5549.6 €</b>
<b>Fixed assets</b>				
Tools	1500.00 €	985.00 €	395.00 €	395.00 €
Audiovisual equipment	874.00 €	445.00 €	408.00 €	408.00 €
4 Electric trucks (4)	-	-	19719.36 €	19719.36 €
<b>Total fixed</b>	<b>2374.00 €</b>	<b>1430.00 €</b>	<b>26071.96 €</b>	<b>26071.96 €</b>
Available funds (5)	3626.00 €	28093.00 €	33537.64 €	33537.64 €
<b>Total assets</b>	<b>9759.6 €</b>	<b>35072.6 €</b>	<b>59609.6 €</b>	<b>59609.6 €</b>
<b>LIABILITIES</b>				
Equity	6000€ (scholarship)	25057.49€	45276.75 €	45276.75 €
Current liabilities	3759.6 €	6415.11 €	14332.85 €	14332.85 €
<b>Total liabilities</b>	<b>9759.6 €</b>	<b>35072.6 €</b>	<b>59609.6 €</b>	<b>59609.6 €</b>

Source: The author, 2019

***Notes from the projected balance sheet:***

(3) Freelance pattern: The Spanish free-lance fee for entrepreneurs is 283,3/month. On an annual rate:  $283,3 \times 12 = 3399.6$ /year. We allocate it in intangible assets as it allows us to realize our activity protecting our technology with a pattern.

(4) For 2021 we estimate that we will be able to lease 4 electric trucks to deliver our products in the North Spanish region (Basque Country to Galicia). The 4 electric trucks would be acquired using the available funds from year N-1:

- Model: Renault Kangoo ZE
- Leasing: each truck worth 410.82 euros/month

(5) Available funds are calculated with the sales of N-1 +/- expenses on fixed assets

**Table 5:** Projected Cash-Flow statement.

INCOME	2019	2020	2021
Sales	<b>28093 €</b>	<b>33164 €</b>	<b>58622 €</b>
Equity	6000 €	25057.49€	45276.75 €
<b>TOTAL INCOME</b>	<b>34093 €</b>	<b>54221.49 €</b>	<b>75898.75</b>
<b>OUTCOME</b>			
Assets			
Trucks	-	-	19719.36 €
Fees and subcontract	3759.6 €	5549.6 €	5549.6 €
<b>Total Assets</b>	<b>3759.6 €</b>	<b>5549.6 €</b>	<b>24563.96 €</b>
<b>Purchase</b>			
Raw Material	1800 €	1800 €	2800 €
Tools	1500.00 €	985.00 €	395.00 €
<b>Total purchase</b>	<b>3300 €</b>	<b>2785 €</b>	<b>3195 €</b>
<b>Staff costs (6)</b>			
Wages	-	-	4003 €
Social security employee	-	-	1287.2 €
<b>Total Staff</b>	<b>-</b>	<b>-</b>	<b>6090.2 €</b>
<b>Fiscal charges</b>			
Income tax (7)	5169,6 €	4803,62 €	5070.24 €
<b>Total Fiscal charges</b>	<b>4083.45 €</b>	<b>4803,62 €</b>	<b>5070.24 €</b>
<b>Other operating charges</b>			
Utilities	100 €	200 €	200 €
Advertising	200 €	500 €	225 €
<b>Total other operating charges</b>	<b>300 €</b>	<b>700 €</b>	<b>425 €</b>
<b>Financial charges</b>			
Depreciation	750 €	750 €	750 €
<b>Total financial</b>	<b>750 €</b>	<b>750 €</b>	<b>750 €</b>
<b>TOTAL OUTCOME</b>	<b>14645.3 €</b>	<b>14588.22 €</b>	<b>39294.4 €</b>
Profit or loss	19447,7 €	39633.27 €	43804.35 €
Income from the last exercise	-	16777.3 €	21230.99€
<b>PROFIT OR LOSS</b>	<b>19447,7 €</b>	<b>56574.82 €</b>	<b>65035.34 €</b>

Source: The author, 2019

### *Notes from the projected Cash-Flow Statement:*

(6) Staff costs are only related with the wages and social security of the 4 truck drivers.

(7) Income tax is calculated on the gross income (Income before tax). The Spanish income tax on goods is 21%.

We can see that net cash-flows (profit or loss) for 2021 is bigger than in 2020 but still there is high increase in cash outflows for the new lease of 4 electric trucks and the corresponding

wages to the drivers. Our Inflows are higher than the outflows each year, which means we are solvent, and we can pay our current liabilities.

***Other data for the current year 2019:***

Average production cost/handplane: 9,31 euros

Average sale price of handplane: 60,69 euros

Average raw margin/handplane:  $60,69 - 9,31 = 51,38$  euros

## ECOLOGICAL VIABILITY

Although economic viability is fundamental for any business project, at MARSHALL HANDPLANES we also place emphasis on environmental viability; designing a project that is sustainable from start to finish, that meets our ethical requirements and that corresponds with the values we want to transmit to our customers. Everything we do has as origin and destination, our planet, since our raw materials are of natural origin and sustainable. In addition, our production processes do not generate harmful waste, on the contrary, these residues can be returned to the land contributing to the generation of more raw materials. Once produced, they are transported through a logistics network in the design phase that prioritizes green transport above all, relying on both pedal vehicles and electric vehicles for distribution.

When the customer receives his product, he does not receive only the object he has purchased, but he is immersed in a new experience; The packaging is designed with natural materials, but they keep a little surprise. We define our packaging as an "active" packaging, since it does not only serve to contain the product, but it is a tool for creating life. If the client wishes, he will have the opportunity to plant the label of his product and grow tomatoes, peppers or some decorative flower. In this way, we also show our consumers the fascinating nature and, above all, the value of things grown and / or manufactured in a sustainable manner.

We believe that we must preach by example, so for our part, we have started a plantation of the trees we use, the paulownia, to ensure firsthand that we return to the planet what we borrow from it. Thanks to this plantation, in addition to learning much more about our main raw material and being able to show the process to our followers, we can encourage the implantation of this type of tree so beneficial replacing species like the eucalyptus that do so much damage to the earth. In the appendixes - figure 18, we observe a part of our test-plantation with paulownias of 2 months of life – The author, 2019.

## CONCLUSION

From the first moment MARSHALL HANDPLANES wanted to offer something innovative, different, according to our ethics and the truth is that it has taken years of research, trial and error and investment to find it, but finally we do something that nobody does , using materials unthinkable for the surf sector.

A priori it may seem that the handplanes are little thing, enclosed in a sector such as surfing, but the goal of this project does not only remain in the handplanes. We want to use what we learnt to other applications. What matters of MARSHALL HANDPLANES is not so much the WHAT but the HOW and above all the WHY.

The future looks hopeful, what has been done so far, has attracted the attention of very important organizations that will undoubtedly inject some amount of motivation and resources into the project. The UPV / EHU has had a lot to do with the existence of this project, thanks to the support and dedication received from the professors of the specialty of Innovation and Creation of Companies it has been possible that this initiative has taken the current level.

Therefore, in the near future we will focus on taking advantage of all the great opportunities that have emerged and squeezing them to the maximum, researching and developing these new materials and showing the market that there are sustainable alternatives. The final message we want to deliver is that it is very important to know the real value of things, ask ourselves what is behind any label and the impact that have our consumption decisions on the economy and the planet.

# BIBLIOGRAPHY

## **BOOKS**

Adi, A., Grigore, G., & Crowther, D. (2015). *Corporate social responsibility in the digital age*. Balmer, J. (2007). *Identity based views of the corporation*. Bradford: Bradford University School of Management.

Belz, F., Peattie, K., Belz, F., & Belz, F. (2013). *Sustainability marketing*. Chichester: Wiley.

Chadwick, S., Arthur, D. and Beech, J. (2011). *International cases in the business of sport*.

Costa, J., & Silva, M. (2006). *Studies on Business agreement*. Amsterdam: J. Benjamins.

Cruz-Cunha, M., & Varajao, J. (2011). *E-business issues, challenges and opportunities for SMEs*. Hershey, Pa.: IGI Global (701 E. Chocolate Avenue, Hershey, Pennsylvania, 17033, USA).

Currás Pérez, R. (2007). *Comunicación de la responsabilidad social corporativa*.

Dahlstrom, R., & Crosno, J. (2018). *Sustainable marketing*. Chicago: Chicago Business Press.

Ellen, P. S., Webb, D. J., & Mohr, L. A. (2006). *Building Corporate Associations: Consumer Attributions for Corporate Socially Responsible Programs*. Journal of the Academy of Marketing Science, 34(2), 147–157.

Kontic, L. (2012). *Corporate Recovery Strategies*. Saarbrücken: LAP LAMBERT Academic Publishing.

Kotler, P., & Keller, K. (1972) *A framework for marketing management*.

Kotler, P. and Lee, N. (2005). *Corporate social responsibility*. Hoboken, N.J.: Wiley.

Melitz, M. (2002). *The Impact of Trade on Intra-Industry Reallocations and Aggregate Industry Productivity*. Cambridge, Mass: National Bureau of Economic Research.

Pérez Ruiz, A. (2011). *Estudio de la imagen de responsabilidad social corporativa*. Santander : Universidad de Cantabria.

Pintado Blanco, T. and Sánchez Herrera, J. (2013). *Imagen corporativa*. Pozuelo de Alarcón: (Madrid).



Santesmases Mestre, M. (2012). *Marketing*. Madrid, España: Ediciones Pirámide.

### **JOURNALS**

Blinov, A. (2015). *ECOLOGICAL DEVELOPMENT OF SMALL BUSINESS*. Business Strategies, (3), 1. doi: 10.17747/2311-7184-2015-3-1

BYLIANA IVANOVA, P., Yancheva, S., & Bojinov, B. (2012). *differentiation of paulownia species and hybrids*. Journal Of Central European Agriculture, 13(1), 73-84. doi: 10.5513/jcea01/13.1.1016

Hritz, N., & Franzidis, A. (2018). Exploring the economic significance of the surf tourism market by experience level. *Journal Of Destination Marketing & Management*, 7, 164-169. doi: 10.1016/j.jdmm.2016.09.009

Marí Farinós, J. (2015). Enviromental responsability and corporate social responsability. *VITRUVIO - International Journal Of Architectural Technology And Sustainability*, (1), 87. doi: 10.4995/vitruvio-ijats.2015.4477

Sotomayor, S., & Barbieri, C. (2015). An Exploratory Examination of Serious Surfers: Implications for the Surf Tourism Industry. *International Journal Of Tourism Research*, 18(1), 62-73. doi: 10.1002/jtr.2033

Uddin, S., & Khan, M. (2018). Young Consumer's Green Purchasing Behavior: Opportunities for Green Marketing. *Journal Of Global Marketing*, 31(4), 270-281. doi: 10.1080/08911762.2017.1407982

### **REPORTS**

Gasovic, M. (2011). Integrated marketing communications in sport organizations. *Marketing*, 42(3), 171-179. doi: 10.5937/markt1103171g

Haywood, R., & Haywood, R. (2005). *Corporate reputation, the brand & the bottom line*. London: Kogan Page.

Jedel, J. (2018). Research on strategies of sport event sponsorship. *Współczesna Gospodarka*, 9(4 (31), 51-62. doi: 10.26881/wg.2018.4.05

Landrum, N., & Edwards, S. (2009). *Sustainable business*. New York [N.Y.]: Business Expert Press.

Roche, L., & Sadowsky, J. (2002). *L'esprit « start-up »*. *Market Management*, 2(1), 13. doi: 10.3917/mama.004.0013

Such, M., & Zamora, M. (2006). *Spanish productivity*. *Annals Of Tourism Research*, 33(3), 666-683. doi: 10.1016/j.annals.2006.03.011

Patil, N., Rahman, M., & Netravali, A. (2017). “Green” composites using bioresins from agro-wastes and modified sisal fibers. *Polymer Composites*, 40(1), 99-108. doi: 10.1002/pc.24607

### **ELECTRONIC DOCUMENTS**

Bathelot, B. (2017). *Sponsoring sportif*. [online] Définitions marketing. Available at: <http://www.definitions-marketing.com/definition/sponsoring-sportif/>

De la Torre Sanz, M. (2016). *LeBron y su contrato vitalicio con Nike: ¡1.000 millones de dólares! / NBA / AS.com*. [online] AS.com. Available at: [http://baloncesto.as.com/baloncesto/2016/05/17/nba/1463512346\\_015710.html](http://baloncesto.as.com/baloncesto/2016/05/17/nba/1463512346_015710.html).

Desbord, M. (2004). *Stratégie des entreprises dans le sport*. 1st ed. Paris: Economica.  
Eurosim.com (2014). *Le marché de la glisse dans le vert*. [online] SudOuest.fr. Available at: <http://www.sudouest.fr/2014/11/25/le-marche-de-la-glisse-dans-le-vert-1747671-4945.php>.

Fiches-pratiques.chefdentreprise.com (2015). *Comment identifier les objectifs assignés au sponsoring sportif*. [online] Chef d'Entreprise. Available at: <http://fichespratiques.chefdentreprise.com/Thematique/marketing-vente-1052/FichePratique/Comment-identifier-objectifs-assignes-sponsoring-sportif-300406.htm#sOiLfOKu2F7cAbfq.97>

Fiches-pratiques.chefdentreprise.com (2015). *Comment mesurer la rentabilité du sponsoring sportif*. [online] Chef d'Entreprise. Available at: <http://fichespratiques.chefdentreprise.com/Thematique/marketing-vente-1052/FichePratique/Comment-mesurer-rentabilite-sponsoring-sportif-300407.htm#QAoO1fyST8bT2lhf.97>

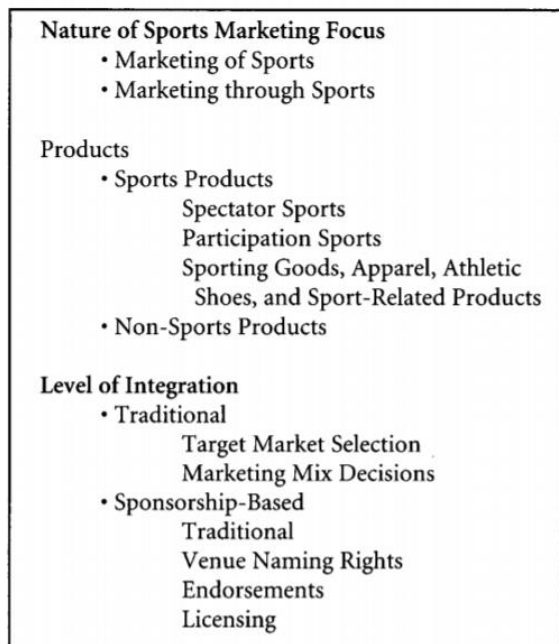
Leparisien.fr (2016). *Barcelone signe avec Nike un contrat record de 150 millions d'euros par an*. [online] leparisien.fr. Available at: <http://www.leparisien.fr/sports/barcelone-signe-avec-nike-un-contrat-record-de-150-millions-d-euros-par-an-29-10-2016-6266943.php>.

López, F. (2011). *Deportes Extremos, qué son* / *Guioteca.com*. [online] Guioteca.com | Deportes Extremos. Available at: <https://www.guioteca.com/deportesextremos/deportes-extremos-que-son/>

-M.Ossorio, V. and S.Mazo, E. (2017). *La mitad de las firmas elevará la inversión en patrocinio deportivo*. [online] Expansion.com. Available at: <http://www.expansion.com/directivos/deportenegocio/2017/01/31/588f3acee5fdea222d8b4608.html>

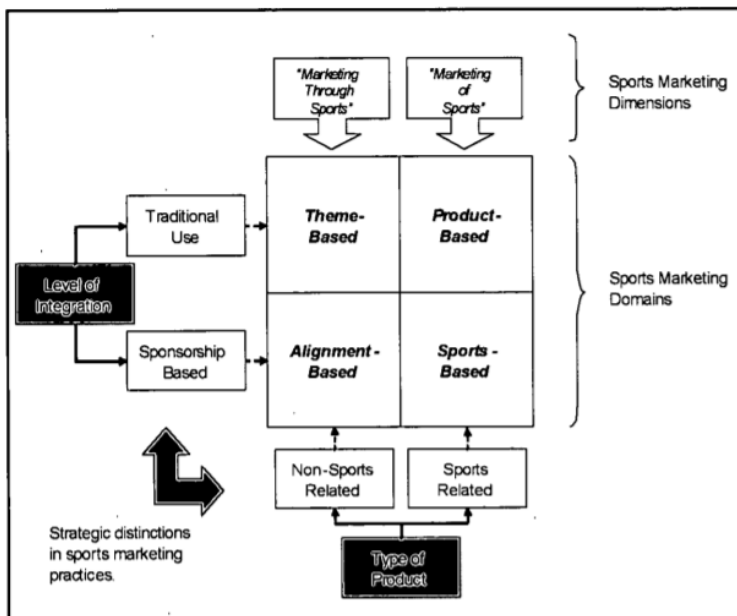
## APPENDIXES

**Figure 2:** Nature of Sports marketing strategies.



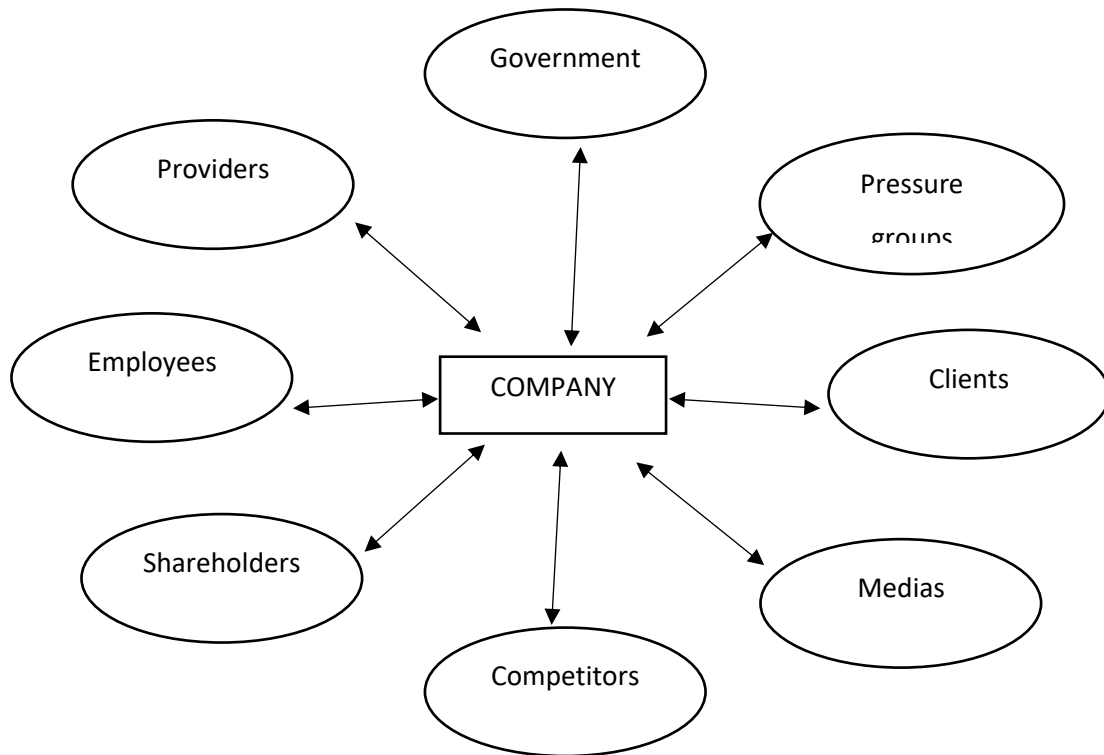
Source: D. Gray, C. McEvoy, 2005

**Figure 3:** Level of integration in sport marketing strategies.



Source: D. Gray, C. McEvoy, 2005

**Figure 4:** Main stakeholders of a company.



Source: R. E. Freeman, 1984

**Figure 5:** Photography of a Marshall Handplane prototype.



Source: The author, 2019

**Figure 6:** photography of a bodysurfer using a handplane.



Source: Gregpanas

**Figure 7:** Marshall Handplanes Longboard models.



Source: The author, 2019

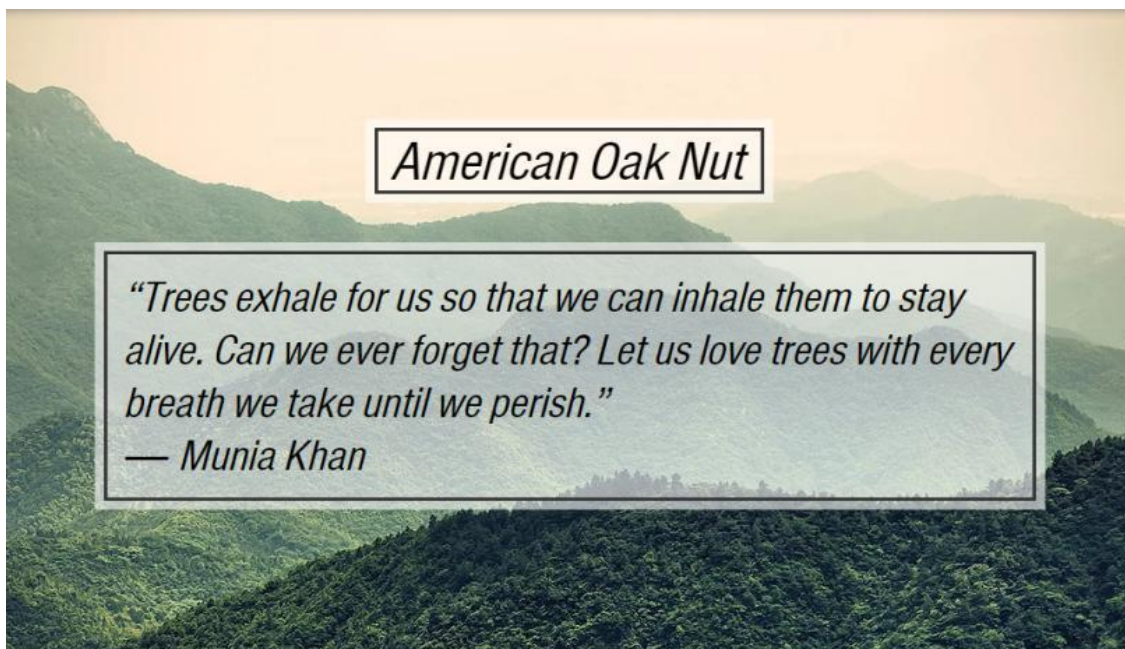
**Figure 8:** Brand logo on packaging.

**Face 1:** brand logo.



Source: The author, 2019

**Face 2:** the name of the product is indicated, and a related quote to it is added.



Source: The author, 2019

**Face 3:** on the upper side, the icons of the social networks in which the project is present will appear.



Source: The author, 2019

Influencers sponsorship list. Source: The author, 2019

MANU LAMELA a.k.a QMV "quemalavida"

Amateur and youtuber surfer with more than 4000 followers in his YouTube Vlog and with great repercussion at a local level, especially among people of learning level. His vision of surfing fits a lot in the project; always with a smile in the water.

TXABER TROJAOLA

The jewel of Bakio and an expert in Mundaka. Txaber is intimately related to Jon Aspuru, the Spielberg of the waves in the Bay of Biscay. Now he is immersed in his school, in Bakio, transmitting his passion to the little ones.

JATYR BERASALUCE

Born in Brazil, of Basque descent, he returned to his maternal origins and fell in love with Euskadi. Habitual of Sopelana beach, he gets up every day thinking about surfing and being able to continue living doing what he likes most.

LETICIA CANALES

This girl from Sopelana is a reference in the world of women's surfing, noted for its professionalism and perseverance, getting into the top 3 European and the top 25 worldwide. It also has more than 12,300 followers on Instagram, which makes it a very media and beloved surfer.

NATXO GONZALEZ



One of the biggest promises of Basque surfing, Natxo has devoted himself to big waves, having qualified in the dreaded wave of Nazaré for the BWT "Big Wave Tour" 2018-2019. To see him in the water is a spectacle, he exudes passion for all four sides.

#### KEPA ACERO

Brother of the mythical Eneko Acero, Kepa is the most influential freesurfer in the country. He has a unique way of seeing life, enjoying the small details and with an unprecedented adventurous spirit, reflected in the surftrips he has made in recent years.

#### BORJA LUZURIAGA "LUZU"

Luzu is a consolidated content creator resident in Los Angeles, but a native of Las Arenas. Its most famous channel, LuzuVlogs, has two and a half million followers and it shows your passion for surfing and for things with meaning.

#### ARITZ ARANBURU

Aritz, a native of Zarauz, is the most important Spanish surfer of all time, has inspired an entire generation competing in the first division of world surfing, defeating legends such as Kelly Slater. In addition, he is a socially conscious surfer, collaborating with the KIND SURF association, as well as environmental matters, since his girlfriend, the model Almudena is the ambassador of OCEANA, the largest international organization focused exclusively on the conservation of the oceans.

**Chart 2:** Amount of material needed for manufacturing of traditional and Paulownia made Handplane.

TRADITIONAL	PAULOWNIA
Foam blank	Paulownia blank
Sands, spatulas and brushes	Sandpaper Cloth
Fiberglass	Flaxseed oil
Polyurethane resin	
Catalyst	
Acetone	
Styrene	

Source: The Author, 2019.

**Figure 9:** Example of CNC robot.



Source: The author, 2019

**Figure 10:** Pictures of Marshall handplanes models by 3D Model.

**PINTAIL**



## DA FISH





## THE BULLET

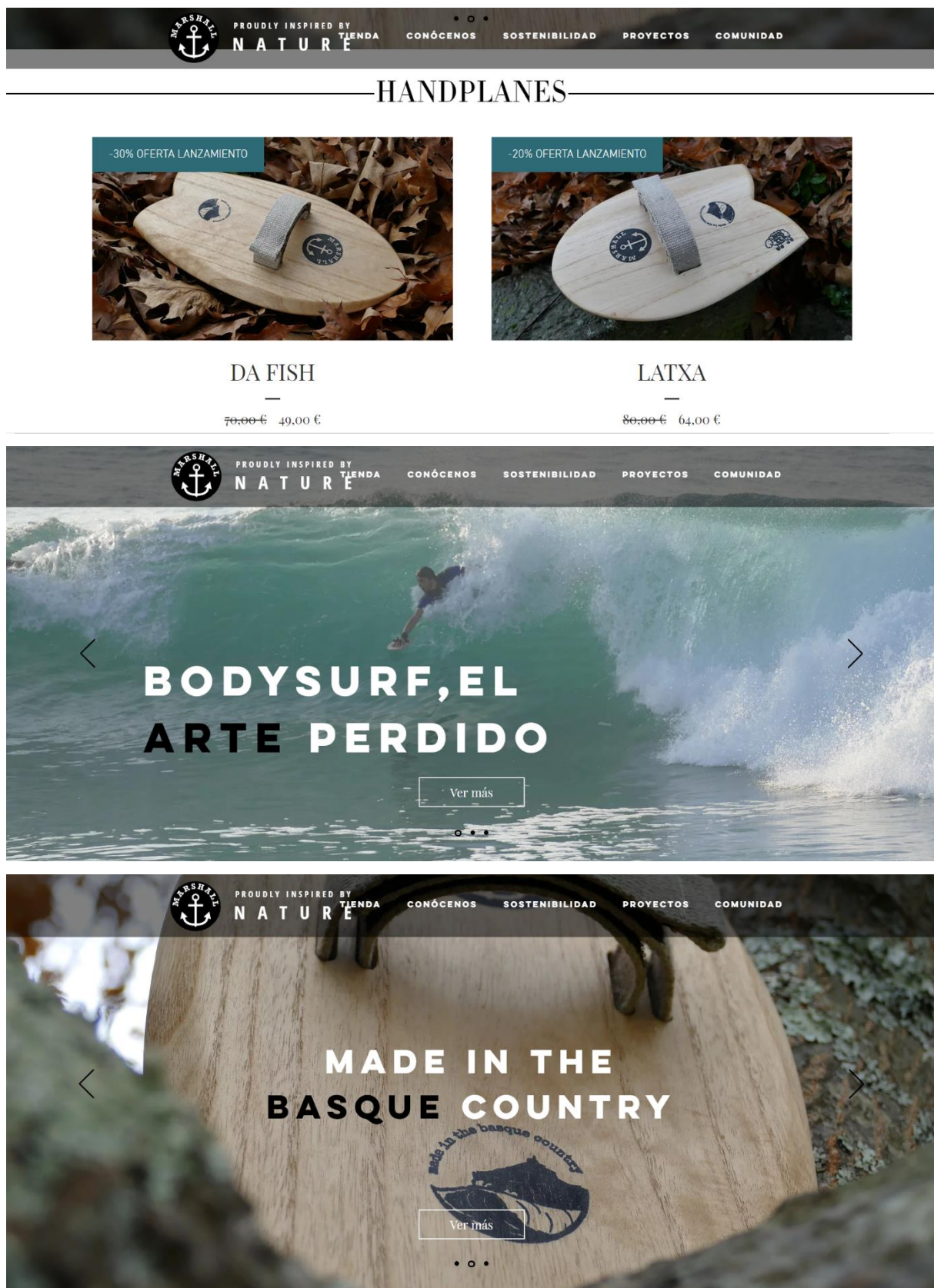


## LATXA



Source: The author, 2019

**Figure 11:** Screenshots of Marshall Handplanes website/e-commerce.



Source: The author, 2019



**Figure 12:** VR box and view from a bodysurfer through the VR box.



Source: Google Images, 2019

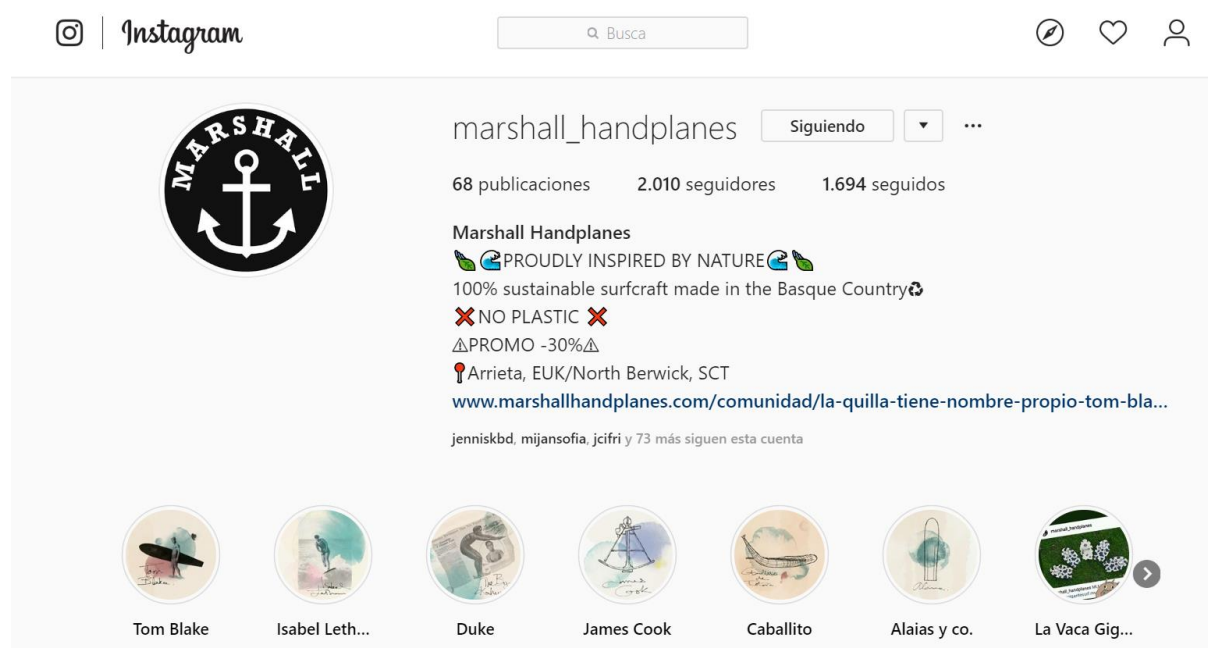


**Chart 1:** Pricing strategy from Marshall Handplanes and its direct competitors.

MARSHALL PRODUCTS AND PRICES	HANDPLANES  Dafish handplane: 49 euros Bullet handplane: 55 euros Latxa handplane: 64 euros Pintail handplane: 89 euros	LONGBOARDS  Ice cream and Bolt longboards: 119 euros
COMPETITORS PRODUCTS AND PRICES	HANDPLANES  SLYDE handplane: 50 to 180 euros WAW handplane: 90 to 150 euros GARAGE handplane: 100 to 260 euros COLIBRI handplane: 70 to 150 euros	

Source: The Author, 2019

**Figure 13:** Screenshot of Marshall Instagram front page.



Source: The Author, 2019

**Figure 14:** Example of Paulownia forest.



Source: Google Images, 2019

**Figure 15:** Typical Latxa sheep.



Source: The author, 2019



**Figure 16:** Example of wood press.



Source: The author, 2019

**Figure 17:** Location of main surf spots in Spain.



Source: Google Images, 2019

**Chart 3:** Amount of material needed for manufacturing of traditional and Paulownia made Handplane.

TRADITIONAL	PAULOWNIA
Foam blank	Paulownia blank
Sands, spatulas and brushes	Sandpaper Cloth
Fiberglass	Flaxseed oil
Polyurethane resin	
Catalyst	
Acetone	
Styrene	

Source: Google Images, 2019

**Figure 18:** photo of our own test plantation of Paulownia, 2 months old.



Source: Google Images, 2019

Below, **table 6:** Sales expectations per month for the year 2019.

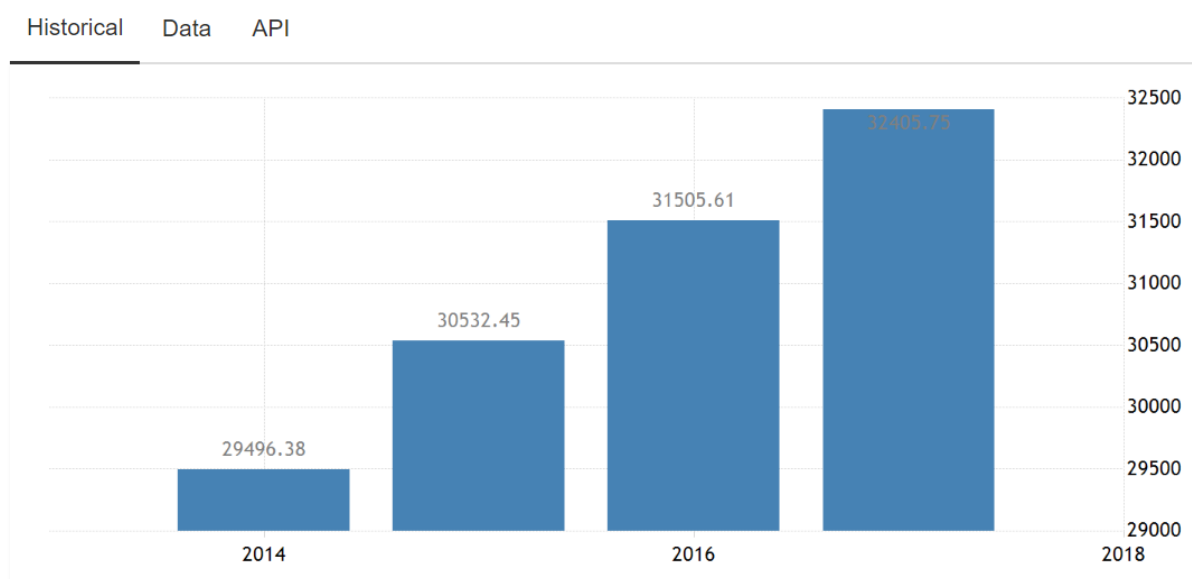
# SALES FORECAST FOR THE YEAR 2019

SALES FORECAST				SALES PER UNIT															
Product	CODE	Unit cost	Sale price	597	60	33	17	19	18	46	21	19	33	31	37	63			
PINTAIL	1000	11,56	89,00	63	16%	10	5	2	3	5	7	3	5	4	6	10			
FISH	1001	10,09	69,00	156	27%	15	16	14	15	6	12	15	10	11	12	15			
BULLET	1002	8,49	49,00	147	7%	25	12	11	13	10	12	13	10	9	12	15			
LATXA	1003	8,31	49,00	200	50%	30	20	10	8	7	25	10	11	14	17	33			

SALES FORECAST										SALES PER SALE PRICE													
Product	Code	Cost	Raw Margin	28.093	3.840	2.737	1.293	1.191	2.202	3.774	2.309	1.051	2.017	1.599	2.293	3.787							
PINTAIL	1000	728,28	4.879	6.107	890	445	178	267	445	623	267	267	445	356	534	890							
FISH	1001	1.069,54	6.244	8.814	1.035	414	276	345	414	828	345	345	690	759	828	1.035							
BULLET	1002	237,72	1.134	1.872	245	98	49	147	0	98	147	0	147	98	98	245							
LATXA	1003	1.662,00	8.138	11.300	1.470	980	490	392	343	1.225	490	539	735	686	833	1.617							

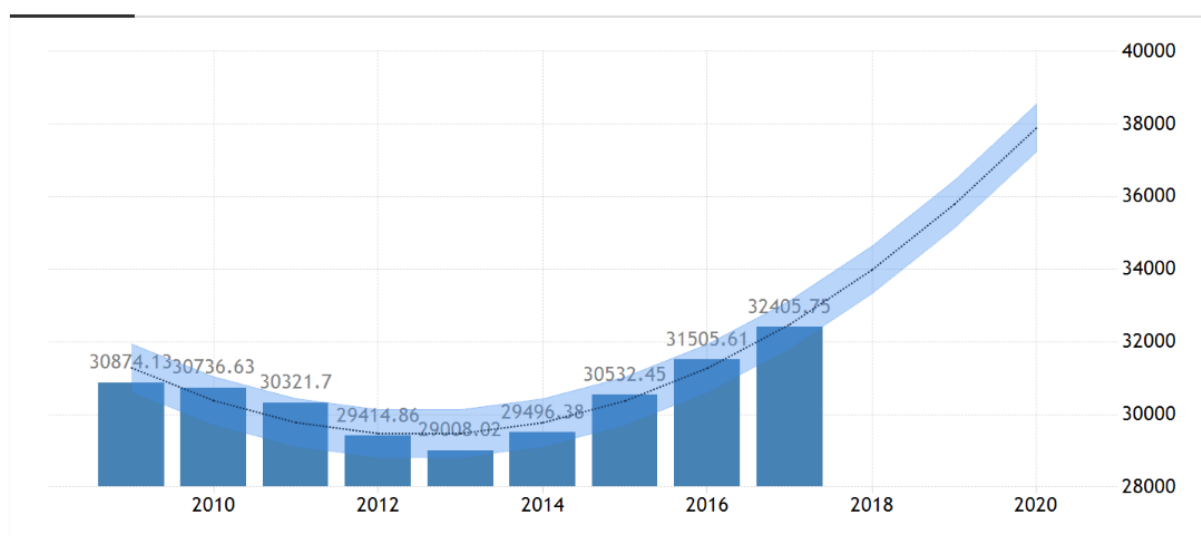
Source: The author, 2019

**Chart 4:** Spanish GDP/Capita ACTUAL



Source: National Statistic Institute, 2019

**Chart 5:** Spanish GDP/Capita FORECAST



Source: National Statistic Institute, 2019

**Chart 6:** Spanish Inflation Rate



Source: National Statistic Institute, 2019