

Business models for the cascading of wood in Chile

The case of Rubrum Reutilization & Skateboards

Master's Thesis

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Abstract

This master thesis analyses how Rubrum Reutilización & Skateboards, a circular born company from Chile that is reutilizing wood from skateboards to create jewelry and other handcraft made objects, can improve its circularity for better contributing to the cascade use of wood in Chile, an application of the circular economy. The main research question has been divided into three sub-research questions, the first one focusing on the main barriers and drivers for circularity, both internal and external that a company like Rubrum faces, the second one in Rubrum's environmental value proposition, this is, the benefits that the brand beliefs that brings to the environment and how it can be improved, and the third one analyzing the most suitable partnerships as well as the value that its current and potential partnerships could bring to the network and to Rubrum. This piece of research is a explanatory single case study and has used in qualitative methods such as in-depth interviews with the founders of the company and with four of their clients as well secondary information from reports and relevant websites. The main findings of this research have been that there exists a main barrier for the development of the business model of Rubrum which are the lack of key resources, such as financial and material resources. This main barrier has been compensated from the beginning of the project with a suitable brand culture and motivation. Additionally, it was found that social media can be a driver or a barrier for the development of their circularity, and therefore, the brand needs to make an intelligent use of it. Moreover, Rubrum's environmental value proposition can be enhanced by increasing the control the brand has over their used products and by increasing the brand's value creation capacity, but since the brand suffers from lack of financial resources, sustainable investing could be an option for Rubrum since they have problems accessing public funding. Lastly, it was found that it would be highly valuable for Rubrum to proactively seek to increase their distributors' portfolio. This master thesis contributes to research of the cascading of wood in Latin America, within the field of circular economy and it is innovative since no other studies have been made on the functioning of this type of business models in the region.

Key words: *circular jewelry, cascading of wood, circular economy, circular business models, sustainable business models, Chile, Latin America*

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1. Introduction

1.1 Problem statement

Our current production and consumption system of “take-make-dispose” based on extracting materials, producing items that in most of the cases are not designed to last, and discarding them either in landfills or using incineration processes, is pushing the Earth’s ecosystems to their boundaries. This system underestimates the value of the natural resources and it does not consider their limited nature or the time the Earth needs to regenerate (Webster, 2017).

The indiscriminate use of natural resources caused by this system of mass production not only leads to resource depletion, but it also generates enormous amounts of CO₂ that the Earth does not have the capacity to absorb. In fact, the extraction of resources makes up to fifty per cent of the total annual CO₂ emissions (United Nations Environment Programme, 2020). This leads to the sustained increase in the global average temperatures, commonly referred to as global warming, among other disastrous consequences. Global average temperatures are estimated to have increased one degree Celsius from pre-industrial levels (Hawkins et al., 2017) and numerous scientific studies have predicted that an increase over 1.5 degrees Celsius could be devastating for the world ecosystems (Kraaijenbrink, Bierkens, Lutz, & Immerzeel , 2017; Huang, Yu, Dai, Wei, & Kang, 2017; United Nations, 2012).

Moreover, countries in the global South are the ones that will suffer more the effects of climate change due to their location in low latitudes with already high temperatures (Mendelsohn, Dinar , & Williams , 2006). Chile, a country located in the South hemisphere that counts with a rich climate diversity, is forecasted to be severely affected by climate change. This is due to its glaciers, a low coastline, abundant forests and its dependence on the fishing industry, which is a climate-sensitive sector (Government of Chile, 2015).

Nonetheless, in Chile only nine percent of the total generated waste is reused, while the remaining is accumulated in legal and illegal landfills generating sanitary problems for the communities living close by, as well as expenditure on unproductive tasks such as waste transportation and landfill’s maintenance. Furthermore, the resources that are sent to landfills or incineration processes are wasted and new resources need to be extracted generating more pressure on the ecosystems (Vásquez, 2005).

All kinds of resources are thrown away every year Santiago's metropolitan landfills such as plastics, paper, glass, or organic matter. Wood represents an important percentage out of the total organic matter discarded. Thus, approximately 26.281 tons of wood are thrown away every year only in the metropolitan region of Santiago (Grupo de residuos sólidos, Universidad Pontificia Católica Valparaíso, 2006). Out of this 26.281 tons, approximately 26 tons correspond to a single item: skateboards. These figures consider an estimated amount of 12.000 skateboards ¹discarded every year in the region (González Farfán, 2019). Generally, a skateboard deck tends to last between six and twelve months (SkateboardersHQ, 2020). This depends on the use the skater gives to the product. Thus, skateboards are categorized in between of short-lived products and medium-lived products, being cream lotions examples of short-lived products and mobile phones examples or medium-lived products (Ellen MacArthur Foundation, 2013). Moreover, according to Forbes (2019) approximately 100.000 of skates are produced per month and therefore, the production of skateboards becomes an important reason for maple² deforestation. Therefore, they are an important resource to look at, not because of their volume but because of the frequency this waste is generated.

Circular economy business models are presented as a solution to this problem of timber resources being discarded and wasted in the metropolitan region of Santiago. Circular economy business models represent an alternative to the present production and consumption system and thus, it is tacking the sustainable development goal number 12 “Sustainable consumption and production”. The purpose of this thesis will be to understand the business operations of a company that has been born as a circular economy company in the region of Latin America, more precisely, in Chile. Additionally, this thesis will aim to provide managerial advice for the improvement of the circular business model. To begin with, the concept of circular economy and the seven schools of thought need to be introduced.

¹ This calculation was made with data collected by some skateboard shops of the Santiago metropolitan area (Dania Salazar, Rubrum co-founder, 2020).

² The definition of this term can be found in the glossary of terms (Appendix II)

1.2 Meta Framework -The circular economy

This section aims to introduce the reader to the field of circular economy, its origin as well as the schools of thought that have more relevance for the present master's thesis.

1.2.1 Introducing the circular economy

The circular economy is a conception of an economic system that conceives all waste as a resource. Therefore, the first principle of this conception of economy, is that the concept of waste does not exist, and instead, everything that we consider waste today is “food” that fuels the production system. Thus, materials are aimed to be kept flowing within the economy at their highest value at all times. There are two types of materials distinguished within the circular economy, renewable materials, and non-renewable materials. These materials are differentiated in two groups because they flow differently within the circular economy due to their physical conditions. This aspect will be further explained in the following section 1.3 “Circular economy in practice”. In addition, there are three other principles of the circular economy. These are promoting the diversity to be able to count with a different range of resources and strengths within companies and economic systems, using renewable energy throughout the whole system and learning to think in systems to be able to benefit for the people, the planet and the profit, also referred to as Triple Bottom Line (Weetman, 2016; University of Wisconsin, Sustainable Management, 2017). This conception of economy contrasts with our current take-make- dispose economy where resources are not given sufficient value (Webster, 2017).

Furthermore, the circular economy is a restorative system by design due to the fact that biological materials such as cotton or wood, are used several times for different applications before being returned safely to the biosphere. This process of reutilization of renewable materials is known as cascading or cascade use of resources. This practice allows the earth to keep its natural balance because it provides the earth with the time it needs to regenerate its natural capital. Natural capital is the set of renewable and non-renewable assets that after being processed can bring value to people (Helm, 2015). Natural capital has value in itself under the ecocentric view of resources (Borland & Lindgreen, 2013).

Moreover, the circular economy is a regenerative system by design because non-renewable materials such as minerals and metals are recovered and reutilized. Thereby,

materials are kept flowing within the economy endlessly. This is done following processes of maintenance, reuse, remanufacturing, and recycling. Here it is convenient to make a distinction between these four terms since they tend to be confused. The difference between reusing and recycling is especially key for case study of this master's thesis, Rubrum Reutilización & Skateboards³.

The term reuse or reutilization is defined in the Chilean Extended Producer Responsibility law as “*The action by which products or components of discarded items are used again, without involving a production process*” pp.3 (Ministerio del Medio Ambiente de Chile, 2016). In turn, recycling is defined as follows: “*Employment of a residue as a raw material in a production process including co-processing ⁴and composting but excluding energy recovery*” pp.3 (*ibid*). Nevertheless, there are two categories of recycling, the direct recycling that consist in reusing the product or the material without undergoing major alterations in its physical and chemical conditions, and the indirect recycling that involves a physical and chemical transformation of the product (Gascón Cervantes, 2007).

Likewise, the concept of maintenance refers to the set of actions both administrative, technical, and managerial to keep a product functioning in its optimal state and thus, allowing the extension of the life cycle of the product (den Hollander, Bakker, & Jan Hultink, 2017). Further, remanufacturing alludes to the process of reassembling used products to make them functional again and with a new warranty period start (MatsumotoDr. & IjomahDr., 2013).

1.2.2 The seven schools of thought

The concept of circular economy cannot be attributed to any specific author. Instead, it has been developed through time as a result of the work of a range of authors and academic scholars whose focus has been in highlighting the fact that there exists limits to growth in our current production and consumption systems, and these are the planetary boundaries. They have also focused on offering alternatives to the current approach to doing business (Webster, 2017).

³ For the ease of mentioning Rubrum Reutilización & Skateboards will be referred to as Rubrum in the rest of the document.

⁴ The definition of this term can be found in the glossary of terms (Appendix II)

These ideas and concepts are summarized in seven main schools of thought that together shape the circular economic thinking of today. These are Regenerative design; by Tillman Lyle,(1994), Performance economy; developed by Stahel, (2006), Cradle to cradle; by Braungart & McDonough, (2002), industrial ecology; by (Frosch & Gallopolous, 1992), biomimicry; on Benyus, (1997), Blue Economy; by Pauli, (2010), Permaculture; on Mollison & Holmgren, (1979) and Natural capitalism by (Hawken, Lovins, & Lovins, 2010). This master thesis will elaborate on three specific schools of thought that shape the understanding of circular economy for this specific case. These are blue economy, natural capitalism, and cradle to cradle.

1.2.2.1 Blue Economy

Blue economy aims at creating an economy of abundance by cascading nutrients and energy in the economy. An economy of abundance refers to an economy where the waste of one product becomes the input for another product and so, the waste stops being waste and turns to be a raw material. In the case of the products are made of organic matter, the process of recuperating those materials is called cascading or cascade-use of materials. This concept has been presented earlier and it will be further elaborated on the following section called “Circular economy in practice”. This use of the resources, contrasts to the current economy where resources are thought to be scarce. Hence, the blue economy strives to see value on items that tend to be discarded by using what it is available at the local level, imitating natural systems models and using entrepreneurship as a source of innovation (Pauli, 2010).

Gunter Pauli, the main promoter of this school of thought, gives a set of solutions that local entrepreneurs can utilize to build “national capital” and solve people’s needs. Thus, blue economy business models are focused on creating social capital, employment in a cost-efficient way without harming the environment (*ibid*) and thus, attending the three pillars of sustainability: the social, economic, and environmental pillars (Purvis et al, 2019). The main challenge for the implementation of business models based on blue economy principles is the change in mindset needed to start seeing the same materials with different eyes (Webster, 2017). Blue economy is sustained on 21 founding principles the most prominent being gravity is the primary source of energy of a blue economy, the solutions in a blue economy are based on physical principles, in the natural environment problems turn to be opportunities, the benefits of one innovative element will tend to benefit more members, nature works within

a mechanism of “economies of scope” (The Blue Economy.org, 2020). The blue economy makes emphasis on designing out waste. This school of thought proposes to design out our systems of production and consumption to work in a way that it is possible to delete the word waste of the dictionary. This is, working similarly to the natural systems (The Blue Economy.org, 2020).

The term of Blue economy has also been used to refer to the sustainable use of the resources found in seas and coastal areas. However, that perspective is not applicable to this project since the economic activity undertaken by the company is not sea related.

1.2.2.2 Natural capitalism

Natural capitalism principles, for their part, are based on valuing earth’s resources and finding approaches to use them effectively and productively. This can involve implementing solution-based business models. Thus, natural capitalism gives value to the largest category of capital: natural capital, and states that businesses must work to restore and expand capital ecosystems. The main barriers for the implementation of natural capitalism are the corporate practices and the government policies and taxation systems Hawken et al. (2010). Natural capitalism is settled in four principles that are also called “the four reinforcing shifts”. They need to be combined since they are reinforcing shifts. The implementation of one of them fuels the implementation of the rest. These are, in the first place, the need to implement resource efficiency in our economy. Resource efficiency refers to making a smart use of the resources designing them for flowing within the economy for the longest period and thus, designing them to close the loop. The second principle is using nature as an example for the economy’s production decisions. The third principle refers to the requirement for the economy to move to a product-service system economy where services are sold instead of the ownership of the products. Lastly, the need to increase the natural capital creating additional flows of materials.

1.2.2.3 Cradle to cradle

The term cradle to cradle, developed by Braungart & McDonough (2002), is founded on the principles of recognizing all waste as a resource or nutrient for the circular economy. This means that “waste equals food”. Nutrients are differentiated by their biological or technical

nature and thus, by their renewable or non-renewable nature. These two cycles will be further explained in the section of “circular economy in practice” when the butterfly framework of the circular economy will be presented. Cradle to cradle school of thought makes an emphasis on the design of products as a key tool for making possible the utilization of resources in subsequent cycles and thus, a functioning circular economy. For this purpose, cradle to cradle proposes the creation of material banks that own the materials and rent them to the producers for the purpose of manufacturing their products. This is referred to as intelligent material pooling and it is aimed at creating material flow metabolisms that work as living systems including processes such as synthesis and the breaking down of materials. The fact that the ownership of the materials is kept by the bank creates an incentive for the material banks to strive to keep the materials at the highest quality possible. They do that through the collection of data. Cradle to cradle considers other strategies to achieve eco-efficiency. For instance, positive lists that aim to inform of the more sustainable products to use in production and (Braungart, McDonough, & Bollinger, 2006).

Cradle to cradle also introduces the concept of eco-effectiveness approach to production and design. The products designed following eco-effectiveness principles are meant to have a positive impact on the environment, society and the economy maintaining or upgrading the resources quality through many cycles of use and not just zero impact or less negative impact. This is achieved through the design of waste. All resources turn to be productive resources (Braungart, McDonough, & Bollinger, 2006). This approach contrasts the eco-efficiency concept that is based on the adequate use of the resources reducing the negative impact of the production or consumption of some products. For instance, the reduction of the amount of material or energy needed to manufacture a product. Thus, eco- efficiency is a minimization approach. The eco-efficiency approach reacts to the damage once it is already done and follows an approach of cradle to grave. Hence, it is a reactionary approach and it can be harmful instead of being any good in the case of a “rebound effect” happens. The rebound effect is described as the increase in the consumption of a product because of an increase in its efficiency (Nahler, 2009).This can generate a problem if the intention when innovating is achieving the reduction on the consumption of that product. These two approaches can be rather complementary but eco efficiency is of any good if eco-effectiveness is not first in place (Braungart, McDonough, & Bollinger, 2006).

Green economy has been praised in recent years as the solution to the present environmental problems (Loiseau et al,2016). There is no clear definition of green economy. However, under the definition of Loiseau et al. (2016), the green economy encompasses both weak and strong sustainability, but it is more often linked to weak sustainability theories. Weak sustainability refers to the theories that advocate that no fundamental changes in the production's systems shall be made in order to achieve sustainability and reconcile economic and environmental objectives. Additionally, weak sustainability considers that a loss in natural capital is justified by a gain in human capital since they are substitutable. On the contrary, strong sustainability theories support the idea that there is a need for modifying the current production systems to operate within the planetary boundaries and not damaging the environment. This will be done closing the loop of materials. Hence, circular economy is part of strong sustainability theories (Loiseau et al, 2016).

Green economy the way is mostly understood, as weak sustainability measures. For instance, the UNEP and the OECD definitions are aligned with weak sustainability measures. UNEP understands green growth which is the process of achieving a green economy as the development as improving human's well-being and social equity while significantly reducing environmental risks. The OECD, in turn, defines it as promoting economic growth while preserving the natural resources that make possible human well-being. This vision of green growth might not be enough to reach planetary boundaries and to live, produce and consume according to the available earth resources. This is, according to (Parrique, et al., 2019) due to seven reasons: The rising energy expenditures, rebound effects, a phenomenon that has already been explained above, the pressure on other materials that provokes shifting from one massively used material to another, the footprint of the service sector must not be underestimated, the high amount of resources that requires the process of recycling materials and the too optimistic former figures on the decoupling of economic growth and environmental care using international trade for getting rid of production waste for instance.

1.3 Circular economy in practice

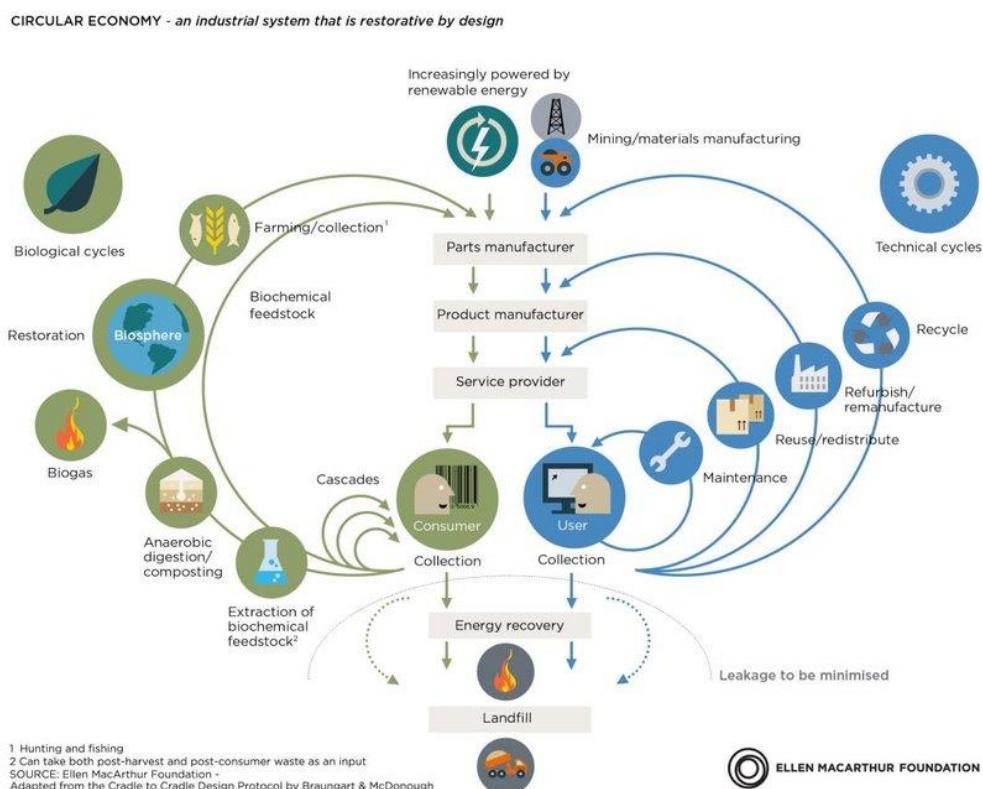
1.3.1 The butterfly model of the circular economy

This system conceptualization has gained momentum thanks to Ellen Macarthur foundation that has worked to promote the circular economy principles among businesses and

institutions. This foundation has presented a framework that summarizes the way a circular economy may function following a restorative and regenerative design. This framework is the butterfly diagram that can be visualized in figure 1.

Figure 1

The butterfly's diagram.



This framework makes a distinction between biological and technical materials, called nutrients in the circular economy theoretical framework. Technical materials are those non-renewable materials that cannot be returned to the biosphere after their use because the environment will not be able to include them in the natural systems. Examples of this kind of nutrients are consumer electronics and vehicles. Biological materials, in turn, are renewable materials that can be safely returned to the environment after they have been used several times for different applications. These materials biodegrade in time and that allows its embedded nutrients to return to the environment (Ellen MacArthur Foundation, 2013). Examples of this type of material are cotton or wood. The framework shows how each

of the different types of nutrients can close the loop in the circular economy. Closing the loop alludes to the situation in a circular economy in which a circular flow of resources is achieved and the used materials get to be recovered and reutilized. Additionally, the framework highlights which processes must be minimized to close the loop in the circular economy. These are for both types of materials the processes of burning the materials, named in the figure as energy recovery, and throwing the materials into landfills. If doing so, the materials and nutrients are gone, generating losses for the economy. For the purpose of using the least amount of resources such as labor or energy, the technical nutrients will in order of preference be maintained at their highest quality, then reused or redistributed, then be remanufactured and lastly, at last resort, recycled. This is referred to as the value of the inner circle. This is one of the four ways of value creation in a circular economy the Ellen Macarthur foundation identifies along with the power of keeping components and materials as pure as possible, the power of circling longer and the power of cascading use. The biological nutrients, on their part, can generate greater value to the economy through cascading use which in fact is the biological equivalent of power of the inner circle. Through the cascading use of materials, the value of the resources is maintained as long as possible before the materials are returned to the biosphere and that saves materials, energy, and resources as the power of the inner circle does. Even though the terms are referring to the same concept but different circles, the technical and the biological, the cascading use of materials and the power of the inner circle present marked differences. The main differences are in the processes by which materials are reutilized, the number of uses that a material can be used, keeping its quality and the possibility or not of being returned to the biosphere after no more uses are allowed. This thesis will have as focus the term of cascading use of resources. Therefore, the next section is intended to explain this concept in detail.

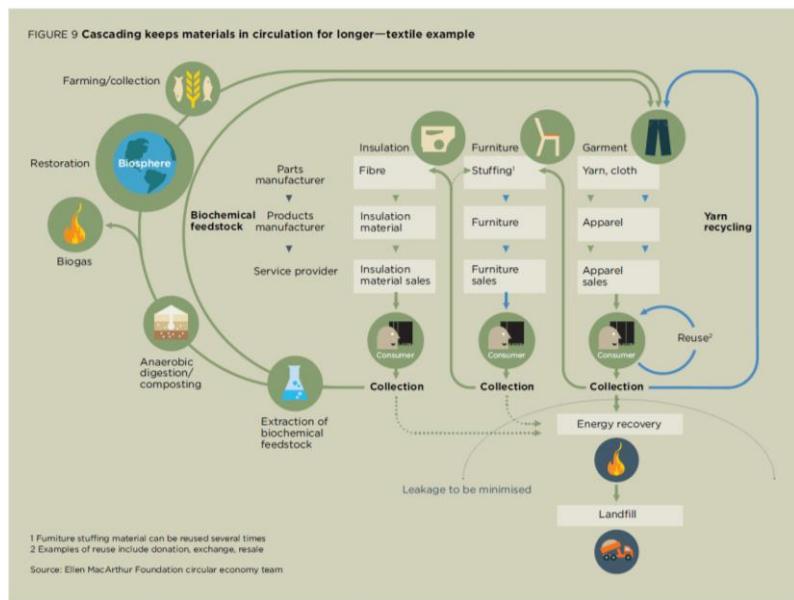
1.3.2 The cascading use of resources

Cascading use of resources is one of the ways of value creation in a circular economy. It is based on reutilizing biological nutrients to produce different types of products or applications and the use of this product at least once again for the creation of another product or the generation of energy before they are harmlessly returned to the biosphere. This is done in

processes where the stored energy in the material is recovered such as composting or extraction of biochemical feedstock. This process of cascading saves the energy and the resources that would have been consumed with conventional inputs and avoids the extraction of additional virgin materials (Ellen MacArthur Foundation, 2013). An illustrative example is the cascading of cotton. Figure 2 shows a model of a path the material of cotton could follow before recovering its energy and returning its nutrients to the biosphere. In this model, cotton is first used to manufacture a pair of jeans. Then, after its first use as clothing, the cotton is reused for stuffing furniture. Lastly, the cotton fibers are isolated, and the energy and nutrients of cotton are extracted in a process of anaerobic digestion. In this model the biological material is used three times before proceeding to the nutrient recovery process.

Figure 2

Cascade use of cotton



A framework that is useful to visualize the different types of business operations that exist within a circular economy is the ReSOLVE framework.

1.3.3 ReSOLVE framework

The ReSOLVE framework developed by McKinsey Center for Business and Environment, (2016) and the Ellen Macarthur foundation offers a set of strategies for companies to implement the circular economy. The acronym stands for regenerate, share, optimize, loop, virtualize and exchange. Regenerate, referring to business models whose activity is based on returning essential biological nutrients needed for the equilibrium of the ecosystems to the biosphere and the use of renewable resources. A suitable example the company P-Rex which is specialized in phosphorus recovery, an essential mineral for the growth of food, that cannot be synthetically produced and whose existence has been reduced enormously on the last decades ; share, relating to those business models that aim to increase the number of users of a product reselling it or making it of common use such as Blabacar, a platform that allows drivers and passengers to get together to share trips; Optimize, concerning those business models whose target is to reduce the amount of resources used in the production and the total waste generated. This is the example of Toyota with its principle of “ kaizen” which aims to eliminate waste in the manufacturing line (Kato & Smalley , 2011); loop, referring to those companies that help to close the loop, remanufacturing, recycling products or managing processes of anaerobic digestion such as Paqués, current leader in wastewater and gas treatment; virtualize, is an strategy consisting in dematerializing the products and making them available in online platforms. Examples of this category of circular business models are Spotify or the use of online newspapers and exchange, alluding to the business models that apply the newest technologies to their production like 3D printing or change materials to more efficient materials for its use. Example of a company that is actively using 3D printing in its production line is Nike (Rossé, Stuchey, & Vanthournout, 2016).

This meta framework about circular economy and the operational possibilities of circular of the circular economy encompassed on the ReSOLVE framework besides from providing a general understanding of the subject that will be needed on the following parts of the thesis it will assist us on elucidating the company’s value proposition since it is based on the type of circular business model undertook.

1.4 Research question

Circular economy thinking has profound effects on the way business models should be operated and designed. It has already shaped the behavior of some entrepreneurs willing to lead the way to triple bottom line innovation. This phenomenon has also been seen in Latin America where a brand called Rubrum is doing cascade-use of wood. Latin America is a region full of potential for the circular economy since it has a dynamic entrepreneurship environment (Ellen Macarthur Foundation, 2018). Thus, many barriers and improvements are expected for a company that is a pioneer on the field. This leads to the following research question:

How can Rubrum improve its circularity and its contribution to the circular economy of wood in the Chilean context?

To answer the main research question the following sub-research questions will be used:

1. What are the internal and external barriers and drivers for Rubrum to adopt and develop their circular business model to better align to the circular economy principles?

For the purpose of answering this question, the version of the business model canvas by Lewandowski will be employed. This is the designing business models for the circular economy framework. Looking into that model, we will have the opportunity to analyze the traditional building blocks of business model canvas with their circular modifications as well as the elements added by Lewandowski such as internal and external adoption factors and take-back systems. The internal and external adoption factors will be categorized as enablers in the case internal or external circumstances to the brand are aligned with the principles of circular economy or barriers, in the case the circumstances contrast the vision of the circular economy. By recognizing the barriers and identifying the drivers, the company will be able to improve its contribution to the circular economy of wood in Chile.

2.What is the Rubrum environmental value proposition and how can it be improved?

This sub-research question will aim to assist in the understanding of the company's environmental value proposition. The relevance of this matter lies down in the fact that identifying the mechanisms of creation of the environmental value proposition will ultimately

provide a tool for the company to enhance its contribution to the circular economy. The applied theoretical framework brings light to the interaction of environmental proposition with other elements of the business such as customer value proposition, value creation capacity, value captured and ecological capital, which refers to the stock of renewable, non-renewable resources and pollution in the environment.

3. What are the most suitable partnerships for Rubrum to enhance its contribution to the circular economy of wood in Chile?

The circular economy is a collaborative economy that needs to work as a system in order to function (Aminoff et al, 2016). Therefore, the development of a circular economy sparks the need for different and new partnerships. Thus, in order for Rubrum to enhance its contribution to the circular economy system, it will need to count with the appropriate partnerships. These partnerships will, for instance, provide them with resources and capabilities which the company did not possess before and that are fundamental in order to construct a more circular business model.

Hence, having answered these three sub-research questions it will be possible to elaborate an answer on how Rubrum can improve its circularity.

2. Case of study, Rubrum

2.1 Research settings

Chile is a country whose economic growth and subsequent development has traditionally been based on the extraction of natural non-renewable resources such as minerals and metals. In fact, mineral exports represented eighty percent of the total exports from the late nineteenth century until the middle of the twentieth century. This figure shows the historically lack of diversification of the Chilean economy and its dependency on the extraction of minerals. Nowadays, the Chilean economy has rather managed to diversify its exports and the forestry and fishery sectors have gained crucial importance. Nevertheless, the exports of copper ore and derivatives still account for fifty percent of the total exports of resources of the country (Badia-Miro & Ducoing , 2014). Thus, the fact that Chile is still specialized in the export of some few commodities makes exchange rates and asset prices highly dependent on the fluctuations of the global market and sets it in an extremely vulnerable position in the global markets (United Nations Development Programme, 2011). In addition, the dependency on

the exports of mineral resources generates environmental issues and can lead to non-renewable resources depletion.

Hence, the further diversification of Chilean economy and the cessation of the dependence on the extraction of natural resources is essential if Chile desires to gain a stronger position in the global markets and work towards sustainable development.

The Chilean government has only started to have a focus on environmental policies since the year 2010 since it was a requirement to become a member of the OECD. As a result, the Ministry of Environment was created back then (Turcott Cervantes & Rondón Toro, 2017). More recently, a special department that is working in the development of a plan of action towards the implementation of the circular economy within the ministry of environment has been created. Additionally, an innovation center for the circular economy called “Technological Center for the Circular Economy” was opened in Tarapacá. This places Chile in the lead of the circular economy implementation in the region of Latin America (CIEC, 2018).

Regarding the existing regulation on sustainable development, the most recent law in Chile is the Extended Producer Responsibility. This concept refers to the duties the producer has after the end of use of the products. Thus, this law makes the producers of some specific priority products responsible for their collection and treatment after their end of use. For that, producers need to register themselves in a public list. Therefore, the producers are held responsible for the products they produce even after having exchanged its ownership with the customers (Ministerio del Medio Ambiente de Chile, 2016) .The law includes some initiatives for promoting the change in the product's design and the creation of certifications and to some extent the promotion of the idea of “ eco-effectiveness” by Braungart & McDonough, (2002).However, this law takes some non-renewable resources such as consumer electronics as priority and neglects the cascading of renewable resources even though the amount of production coming from organic waste is immense (Páez, 2018).

Skateboarding is an important trend in the Chilean scene. This trend has been reinforced by the fact that skateboarding has become an official Olympic sport. Thus, a Chilean skate national team has formed, and the practice has gained importance (González, 2018).

2.2 Introduction to Rubrum, a circular born brand

This is the context where Rubrum operates. Rubrum is a sustainable art studio from Santiago de Chile, Chile that uses old and cracked skateboards as their main source of raw materials. The purpose of its two founders when creating the brand was being able to make a living from a green and sustainable business that could be a reflection of their values (Artesanos en línea, 2020). They use the colorful native wood recovered from discarded skateboards to create three different lines of products, most of them with symmetrical motifs, jewelry collections that includes earrings, rings, bracelets and necklaces; decoration products such as flower pots; and interior muralism (Rubrum, 2020).

The company has been running since 2013 and consists of two co-founders, Dania, and Juan Carlos. Dania is a professional designer and Juan Carlos learned the profession of carpentry travelling around multiple countries in South America and learning from master's craftsmen and women. Therefore, Dania is mainly in charge of the design of the products and Juan Carlos in charge of the manufacturing process (González Farfán, 2019).

The idea emerged when a friend asked Juan Carlos to assemble for him a pair of glasses made with skateboard wood. This was an awakening for Juan Carlos as he started to see with different eyes this familiar object to him, a senior skater, and realized of the potential it had for the creation of new gadgets and art pieces. Thus, this project was born with the mission of recovering urban waste materials to create art and decoration elements.

Rubrum obtains the skateboards that are used as raw materials from garbage dumpsters placed in skateboard shops and schools. However, they only get to recover a small fraction of all skateboards discarded per year in the region and therefore, thousands of kilos of wood are still being wasted out the estimation of 26 tons that are thrown every year in the landfills of the metropolitan region of Santiago.

3. Methodology

This section will be focused on presenting the research strategy, epistemology, and choice methods for this piece of research.

3.1 Research strategy

The following thesis is a single case study of Rubrum, an entrepreneurship project that gives a second use to discarded skateboards. According to Teegavarapu, Summers, & Mocko, (2008) case studies are used to validate a method and analyze a phenomenon among other purposes. In this master thesis, the use of case study will precisely do that, investigating a phenomenon such as the functioning of a business model working in the circular economy of wood in Chile. This case study will also aim to test some models such as the business models for sustainability one and mapping multidimensional value(s) for co-creation ⁵networks in a circular economy.

The election of this research strategy is based on the type of research question, my control over the behavioral events and my focus on contemporary events (Yin, Robert K., Case Study Research.pdf, n.d.). The research question of this master thesis is categorized as a “how” question. These types of questions are suitable for a case study research strategy because they are explanatory questions. Hence, this is an explanatory case study (Yin, Robert K., Case Study Research.pdf, n.d.). The mentioned research question points out to analyze some ways in which the circularity of mentioned company may improve with respect to its actual state. Thus, the object to be observed is the company itself as well as the context by which it is surrounded. This context may include the country of Chile with its government, industry, and economy as well as the collaborations or partnerships of the company. Case studies are a good research strategy to purposely take a contemporary context into account(ibid) and for projects in which there is no control over the events of the research. Additionally, case studies are suitable for studies focused on analyzing contemporary situations. This study investigates just how the company can be more circular at the present time. Thus, observations are done at the present time.

Furthermore, in the past, it has been argued in social sciences literature that case studies are a weaker research strategy than other research methods because they were said to lack precision, rigor, and generalizability. The last problem has been tried to be solved using multiple case studies (Burton, 2012). However, I will argue that single case study is the most suitable research strategy for this master thesis because the case of Rubrum is unusual in Chile, not existing many other circular projects reutilizing the wood of skateboards to create accessories and therefore not existing other cases to be compared with if the purpose is to

⁵ The definition of this term can be found in the glossary of terms (Appendix II)

study the business models that are creating accessories in the circular economy of wood in Chile.

3.2 Choice of methods

The methodological choice of this master thesis has been “multi-method qualitative”. Thus, several methods have been used to carry out this research project such as interviews and secondary information analysis.

3.2.1 Description of the methods. In depth interviews with the founders

The information gathered in interviews with the brand founders as well as other additional information provided by them by e-mail or other type of online messaging system will be utilized as well as the information gathered in their social media and website.

Two in depths interviews were conducted on Skype, one for each founder. Both interviews lasted around 40 minutes each. The interview was carried out in Spanish language since it is the mother tongue of both Rubrum’s founders and the interviewer. This brings advantages such as the better flow of ideas and the ease for the interviewer to be able to understand every nuance of what the interviewee is trying to communicate with their answers. However, it must be noticed that the interviewees and the interviewer come from a different country, Chile, and Spain respectively and therefore, different dialects are spoken. However, this potential shortcoming was tried to be solved by stopping the interview in the case of either the interviewee or the interviewer did not understand something and proceeding to solve the doubts. The mere fact of being aware that different dialects use the same words with different connotations notably decreases the probability of a misunderstanding. This potential issue affects as well as the interviews with the customers. Anyhow, the analysis is inevitably affected by my language epistemologies and in a more general sense, my own construction of reality in harmony with my stance of philosophy of sciences, constructionism.

3.2.2 Short interviews with the consumers

Additionally, in the case of a selected number of consumers of Rubrum, a short interview of 10 minutes was carried out via Instagram video chat. The consumers were selected looking systematically in the comment section of every post in Rubrum’s Instagram in which they

were advertising their products. The target of the search was looking for comments that proved that the person had consumed one of their products. The followers that showed in the comments section how much they liked their purchased product or clients asking for prices were contacted by Instagram direct message and asked if they would like to participate in a short video call interview in the case of they had purchased a product of Rubrum. The followers that replied no to have purchased a Rubrum item did not qualify for the interview, even though some were very fans of the brand and actively followed their work. However, there were some problems accessing some customers through this method since most of them had private accounts which does not allow to send a private unless you follow that account.

3.3 Approach to theory development

This master thesis has followed mostly a deductive approach to theory development. Thus, the theory development process went as follows: First, the topic of circular economy in Latin America was chosen. The reason for this was that my master's degree has had a concentration in business strategy in Latin America. Later, as I did research on business for the circular economy in Latin America, I organically ended up focusing on Chile since most of the entrepreneurship projects that I found were born there. After some weeks of google and social media research, I found the project of Juan Carlos and Dania, Rubrum together with Algramo, a company that sells basic need products at bulk prices in reusable containers that was later discarded since they were not willing to collaborate. Before selecting Rubrum as the company subject to this thesis, some research was conducted to determine whether the problem that lied within that business model was relevant enough for its investigation. Within that research it was found out the big problem that represented the enormous amount of wood that ended up in landfills in the metropolitan region of Santiago de Chile where skateboarding is a popular sport and the loss that that meant in terms of raw material. Therefore, Rubrum was selected and a set of theories were selected with the purpose of investigating their business model, emphasizing the special components of circular business models, as well as their motivations for the creation of a sustainable business model and the special network of partnerships needed to develop a circular business model. Hence, a deductive approach was followed predominantly since that approach is followed when the theory is developed, or chosen an existing one and the data is collected afterwards to test those theories (Saunders et al., 2019)

3.4 Philosophy of sciences

Philosophy of sciences are crucial in the process of undertaking a research work in order to have a clear understanding of the assumptions that are taken and that can have an impact on the study's results, called domain assumptions as well as other limitations that the study may have. According to Saunders et al,(2019), there exist three main types of research assumptions. These are ontological, referring to our assumptions about the reality we are researching and the nature of existence of the knowledge, epistemological, concerning our assumptions to knowledge and the knowledge that is interpreted as valid for our research, and finally, axiological assumptions that concern the role of our own ethics and values on the research (Crotty, 1998).

The philosophy of science approach employed in this master thesis is social constructivism. Social constructivism believes that reality is shaped by social interaction. This approach follows a subjectivist epistemology by which no reality certainly exists without social actors attributing a meaning to that reality. Subjectivism bases its epistemology in opinions and interpretations instead of facts unlike the objectivism, his contrary approach inherited from natural sciences. Thus, in this study I am concerned with the perception of sustainability and circular economy of the owners of the company and the customer and the findings of this master's thesis are influenced by my own interpretation on the interviews and the rest of the materials analyzed.

3.5 Constraints related to research design

There exist some aspects that affected the development of this research. These are the current pandemic scenario since the interviews with the founders were not able to be carried out within the expected dates. Furthermore, the results of this master's thesis are bounded to the translations that I personally have done of the interviews and thus, the results are additionally affected in this sense.

4. Literature Review

The field of research of cascade use of organic materials and more precisely the cascade-use of wood, has been further explored in the countries within the European Union. In contrast,

it appears to be an underdeveloped field in the region of Latin America, even in Chile, the country that appears to be leading the way to the transition to a the fourth industrial revolution, the shift to a circular economy having plans for installing the first technological center for circular economy in Latin America (Making It magazine, Industry for Development, 2019). Propose using the cascading use of biomass as the key tool for the reduction of materials and energy that is considered by them to be the core aspect when moving towards sustainable development. Most of the studies in the European Union have looked at the potential benefits of the cascade use of wood. Höglmeier et al,(2014) found that the use of cascading wood in contrast to the use of primary wood provided a benefit for the environment exclusively taking into account the direct positive effects and even more positive effects when considering indirect effects from substituting fossil-based materials. In addition, they proved that the evaluation of a cascading system is highly influenced by the efficiency of incineration systems used at the end of the life of the products and the source of energy used. Höglmeier et al, (2017), on a later study analyzed the available wood for cascading use in the building sector in the South German region of Bavaria. This study revealed that 44 per cent of the waste wood in the sector was suitable for its reuse for particle boards production and 25 per cent the wood suitable for its reuse in the current state of the material. Nonetheless, buildings need to be deconstructed instead of demolished in order to recover the materials that those buildings contain. Additionally, the study found out that the cascading use of wood is hindered by the current legislation that impedes the reutilization of wood blocks for the construction of new buildings.

A similar study that focused on the potential benefits of cascading wood for the forest sector in Finland determined that aspects such as the costs of primary wood, the energy being utilized and the sustainable forest management highly influence the extent to which cascading use of wood is beneficial Husgafvel et al, (2018).

Mehr, Vadenbo, Steubing, & Hellweg, (2018) in turn, presented a list of recommendations for the cascading of wood in Switzerland. They found out that waste wood represents a better option than the other alternatives such as non-wooden options or primary use wood. However, the efficient use of wood is an import aspect to consider. In addition, extended use of the products increase their positive environmental impact. Another study by Mair & Stern, (2017)analyzed to what extent the concepts of circular economy and cascading use of wood have been linked. It was concluded that a low number of publications mentioned

both terms in the same publication. This comes as a surprise since cascading use of materials is a part of the circular economy.

Sathre & Gustavsson, (2006) study of the effect of cascading use of wood to the energy and carbon balance. They conclude that cascading use of wood can provide material and energy substitution benefits by direct effect of the cascading, by substitution effects because of the decrease in the demand of primary wood and lastly by the possibility of using the land that was previously forest for other purposes such as biofuel production. The authors highlight the last benefit as the most significant one.

Mantau, (2015) presents a method for quantifying cascading systems, the “wood flow analysis” since it allows to calculate cascade factors. Examples of cascade factors are residues in wood products, recycling in products or wood resources from trees.

Regarding the studies within the region of Latin America, a recent study by Caisa Yucailla, Padilla Martínez, & Ríos Lara (2020) has analyzed the importance of the cascading of wood sector in Ecuador. This study concludes as highly important the reutilization of wood for the purpose of reducing the number of forests being deforested and highlights this activity as a source of employment creation and prosperity. Specially, the use of durable and affordable wood coming from trees such as pine trees. In the context of Chile a report on the circular economy possibilities for the agricultural sector was elaborated by the Environmental issues ministry of Chile and identifies the circular economy as a tool for reducing the pressure on the utilization of resources (Oficina de Estudios y Políticas Agrarias del Ministerio de Agricultura, Gobierno de Chile, 2019). However, there exist no reports focused on the circular economy of wood in Chile.

Other studies have focused on the interaction among institutions and businesses when implementing circular business models. This is the case of the comparative study between Finland and Chile on the interplay of institutions and circular economy business models in the battery recycling sector (Levänen, Lyytinen, & Gatica, 2018).

Thus, the field of business models doing cascading of organic resources in Latin America can be considered as unexplored by academia since no studies have been found that analyze the business model of companies doing cascading of resources in Latin America. Therefore, the purpose of this paper is to expand the knowledge on the way businesses that do cascading

of resources operate in Chile. In order to do so, this thesis will make use of the following theoretical framework.

5. Theoretical framework

In this part of the thesis, the theoretical perspectives chosen, circular business model canvas by Lewandowski with a focus in external and internal adoption factors, the theoretical framework of Business Models for Sustainability and the framework for the creation of partnerships and analysis of partnership within a circular economy called mapping of multidimensional value for co-creation networks in the circular economy will be presented in detail.

5.1 Business model for circularity: circular business model canvas by Lewandowski

According to Lewandowski (2016), the transition to a circular economy requires to take action in product and materials design, modifying the existing business models, creating networks for global or local reverse logistics and setting the enabling conditions both internal to the companies and external for the shift from a linear economy to a circular economy to happen. He presents a framework in which these aspects are considered, for the creation of circular business models which is applicable to any sector. His contribution consists in adding two elements to the traditional business model Canvas (BMC) that according to his research are needed for the purpose of developing circular business models. These are the adoption factors which are classified in both internal that comprise organizational aspects such as team motivation and external adoption that comprise political, economic, social, and technological factors. and take-back systems. External adoption factors are key for the business model of Rubrum since the extent to which institutions ease or allow the implementation of the circular economy affects the degree to which circular economy can be applied. The importance of institutions in the implementation of the circular economy was proven by the study of Levänen et al., (2018) previously mentioned in the literature review. Moreover, internal adoption factors will highly impact the predisposition of Rubrum employees to create new partnerships or strengthen the existing ones and further develop their business model born as circular. Additionally, the use of take-back systems becomes highly relevant for Rubrum since their main source of raw material, the old and cracked skateboards, are obtained through

a take-back system. Through this section, in the first place, the traditional components will be exposed followed by the two added components: take-back systems and adoption factors.

5.1.1 Traditional Business Model Canvas building blocks

Business Model Canvas has largely been used by scholars and practitioners with the purpose of designing and comprehending the mode in which businesses operate (Joyce & Paquin, 2016). The framework considers nine building blocks that are essential to grasp the way in which a company functions, generates value, delivers this value to its customers, and captures the value back(*ibid*). These nine components are value proposition, customer segments, channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure (Osterwalder & Pigneur, 2010). It is not by chance the fact that the value proposition building block is stated in the first place. Value proposition is a core element of the framework and of business, what is more, value proposition is the reason for the existence of the business since the customers need to see value in the product or service in order to buy it (Camlek, 2010).

5.1.1.1 *Circular value proposition*

Value proposition can be described as the significance that the products or services offered by the company provide to the customers. In a regular business model, the value proposition can be attached to many concepts: newness, performance, customization, or the simple fact of getting the job done, brand status cost reduction, risk reduction, accessibility, or convenience. However, within the context of circular economy the value proposition can be based on some of the previous aspects, but it is specially based on extending the life of the products with the processes of maintenance,

Moreover, the value proposition might be quantitative in the case it is attached to the aspect of price or reduced consumption of CO₂ or increased efficiency that are elements of performance, or qualitative in the cases value relates to brand status or customer service (Osterwalder & Pigneur, 2010).

5.1.1.2 Customer segments

This element of the framework intends to elucidate the distinct groups of customers which distinct characteristics the company is aiming to target to. These groups of customers are considered a distinct customer segment in the case of needing different channels of distribution, having their needs satisfied by a different offer or product, having different disposable incomes, requiring a different type of relationship from the company and being willing to pay different amounts of money for the same product.

5.1.1.3 Circular channels

It entails the communication and the methods used for the distribution of the product or service. It is the way in which the company delivers its value proposition to its clients and the means the customers gather information about the company's value proposition. One characteristic of circular business models is their virtualization. Thus, they tend to communicate their value proposition online. The company can choose among direct and indirect and owned or partner channels. These channel types are typically combined to create the most cost-effective mix that maximizes customer satisfaction. Examples of direct and own channels are direct sales and website sales, indirect and own channels owned stores and indirect partner channels wholesalers and partner shops.

5.1.1.4 Customer relationships

This element involves the contact that the company has with the consumer. It draws into aspects such as customer acquisition, customer retention and increasing sales. The means of communication with the customers must be adapted to each customer segment. The communication with the customer can range from transactional where no real communication exists between the company and the client to the creation of communities where there exists a constant flow of communication among the company and the consumer. Customer relationships should aim for a viral loop. This is when the customer is satisfied with the product, it is likely that he/ she will share it with more people. This allows the company to acquire new customers in a cost-effective manner.

5.1.1.5 Revenue streams

There might be more than one revenue stream per customer segment. That will depend on the amount of money customers are willing to pay in exchange for the provided value and the way they are willing to do it. The revenue streams influence the pricing mechanism that can be fixed or dynamic. The revenue streams are characterized in transaction revenues, one single time income and recurring revenues, that are regular ongoing payments from the customer to the company. An example of transaction revenue streams are the sales of assets. This revenue stream is obtained by deriving the ownership of a product from the company to the customer. More examples are found in the categorization of recurring revenues. These are usage fees, subscription fees, contracts such as renting and leasing, licensing, brokerage fees and advertising fees.

5.1.1.6 Key resources

The most important resources and capabilities needed to run the business activity and bring the value proposition to the customers can be capital, personnel, knowledge, or physical resources such as machinery or transportation means. A circular business will source its products from circular sourcing⁶, utilize more durable materials or with a higher efficiency or virtualize the materials.

The company's value proposition highly depends on its available resources and therefore, it is important to look at the resources needed to provide a certain value proposition. In addition, the company's resources are key for carrying out the key activities.

5.1.1.7 Key activities

These are the list of activities needed to be executed for the purpose of delivering the value proposition to the customer. These can be classified as production activities; related to activities from the design of the product, manufacture and delivery, problem solving activities; these sources of activities are necessary in the case new solutions to customer's problems are constantly provided. Another group in which the core activities of the company might fall are the platform related activities. These are related to the actions of design,

⁶ The definition of this term can be found in the glossary of terms (Appendix II)

maintenance, and administration of the digital platform. The specific key activities of circular business models are manufacturing, recycling, product design or recycling.

5.1.1.8 Key partnerships

Generally, partnerships are created to gain access to new resources, improve the efficiency of their business model through for example, economies of scale or reducing operational risks. The partnerships can be strategic alliances; an alliance of non-competitor businesses, coopetition; an alliance between competitor firms, joint ventures; an alliance for gaining the resources and capabilities of the partner company that could not have been obtained in a different way or at least in a time efficient manner or relationships between buyer and suppliers; whose target is to obtain a stable flow of supplies. This building block affects key resources and key activities since a company's partners provide new resources and perform key activities on behalf of the company (Osterwalder & Pigneur, 2010).

This building block is especially important in a circular economy context where cross-sector collaboration is needed Aminoff et al. (2016) Additionally, having the right partnerships can allow the company to access the innovation needed to overcome challenges related to circular economy practice. This is the case of partnerships among corporations and startups such as Unilever and Algramo in Chile. Algramo, a startup that sells basic need products in reusable packaging at bulk prices partnered up with Unilever to make the multinational's detergent products available for the citizens of Santiago de Chile, Chile in a smart reusable package (Find & beak, 2020).

5.1.1.9 Cost structure

This element of the framework outlines the necessary costs to carrying out the key activities of the business model. Even though all companies should strive to decrease their costs, there are three types of companies according to their cost structures: cost-driven firms and value driven firms and companies that fall in a mix of these two.

Reusing, remanufacturing, recycling, or cascading and it can offer some additional social gains associated with the collaborative economies that some circular business models such as Blablacar promotes. Also, an important channel for the circular economy is the virtualization of the products such as music sold or streamed online. Additionally, revenue

streams are also different with models such as input based PSS; in which the customer pays for the product or service, subscription-based rental; by which the consumers pay for the product as long as they keep it with them, pay per use formula is a single payment for the time of use of a product and performance based, where the customer only pays when the consumer expectations are fulfilled. Regarding key resources, the materials are carefully chosen to either regenerate the natural capital or keep the technical materials in circulation. Respecting the key activities within a circular business model they will be more oriented to efforts to increase the product performance and product design or to activities like remanufacturing. The key partnerships are highly important for implementing all these changes that require innovation and adaptation of all business models (Lewandowski, 2016).

5.1.2 Lewandowski's added elements to the Business Model Canvas

After having gained knowledge on the basic components of the Business Canvas Model, it is time to elaborate on the two added elements by Lewandowski.

5.1.2.1 *Take-back systems*

Take-back systems, as it has been outlined above, are fundamental mechanisms for circular business models and for Rubrum as well. Nonetheless, a special focus will be delivered in this section to the adoption factors since these are the aspects both internal and external that ensure the shift to a circular economy to occur. In addition, analyzing these elements provides knowledge on the barriers and drivers for Rubrum in its journey towards the implementation of a more circular business model. They refer to the reverse logistics mechanisms that need to be in place in order to be possible to return the consumed products to the companies that have produced them or the companies that will be in charge of the remanufacturing, recycling, or cascade-use use activities and so on and so forth. Thus, this activity is vital for closing the loop of biological and technological products in a circular economy. The reason why reverse logistics mechanisms are challenging is because they demand special partnerships, channels, and customer relations to convince or incentivize the customer to give back the consumed product (Lewandowski, 2016).

5.1.2.2 Adoption factors

Adoption factors, also called adaptation factors, refer to the conditions that need to be in place in order to bring about the circular economy. Both internal and external factors are considered in this building block. The internal adoption factors refer for the most part to intangible resources such as the company's culture ,the employees' motivation regarding the implementation of a more circular business mode or the employee's knowledge and capabilities related to circular economy, and tangible resources such as available material and financial resources. Internal aspects necessary for the implementation of a circular business model are adequate training and change management tools (Lewandowski, 2016).Therefore, analyzing the internal adoption factors of Rubrum will be utilized in order to check if they were in place when creating a company running with a circular business model and therefore, trying to elucidate how much influence had the internal aspects on the creation of a circular business model.

The external adoption factors, for their part, are encompassed on the PEST framework. The acronym states for the political, economic, social, and technological conditions of the analyzed environment (Lewandowski, 2016). This framework has been typically used as a risk analysis tool in order to advise investors and other stakeholders on the country's risk. However, in this thesis it will be utilized for analyzing the external drivers and barriers to the implementation of the circular business model of Rubrum. The political aspects refer to the laws and regulations related to the promotion or a disincentive on circular economy business models or policies. The economic aspects of the framework, in turn, encompass the macroeconomic indicators such as GDP, unemployment rates, or exchange rates (Kim-Keung Ho, 2014). The sociocultural factors, for their part, include demographic aspects such as average population age, lifestyle trends, cultural attitudes, or even social revolutions. Lastly, the technological aspects refer to the technology in place that can help on the achievement of the circular economy in the analyzed context. An important technological aspect to consider within the circular economy because it can hinder its implementation is a phenomenon called contamination of materials. This is defined by Baxter, Aurisicchio, & Childs (2017) as the circumstances by which the materials are not kept at the pure state within the system which generates a problem for its recirculation. Contamination is a phenomenon that needs to be avoided for the circular economy to run smoothly. They differentiate three

different types of contamination within the framework of a circular economy: technical, systemic and interaction. Technical contamination covers the aspects of the product or material being ready for its use or its reuse. Systemic contamination refers to the phenomenon by which a material flows inefficiently within the circular economy due to the presence of other material that alters its physical condition Baxter et al. (2017) Lastly, contaminated interaction contaminated interaction refers to the phenomenon by which a material is perceived by the customer as contaminated by the consumer due to real or imaginary contaminated material (*ibid*). In the context of Rubrum, all three types of contaminations would be interesting to analyze, but it is of special relevance to look at systemic and contaminated interaction. The technical interaction will be included in the analysis as one of the internal adoption factors because the fact that it is a long process to transform the skate into the new raw material is probably due to lack of tools and material resources. In turn, the phenomenon of contaminated interaction will be analyzed as a sociocultural factor in the PEST analysis since it is more an attitudinal barrier rather than a technical barrier.

Since all the elements of the framework are related to each other, these two added elements as well. For instance, the process of coordinating take-back systems will affect the purchase of raw material and the production and design of products. It will also affect the cost structure for instance reducing the cost of the raw materials and representing an expense the transportation of the materials themselves. In turn, adoption factors can impact the rest of the elements. For example, the incentives or disincentives by the government in adopting the circular economy could influence the price of raw materials reducing the associated costs or promote partnerships among circular businesses for instance.

5.2 Business models for sustainability under a system dynamic approach

Business models for sustainability are those business models that strive for the fulfillment of the Triple Bottom Line. This is, business models for sustainability do not only exist for the traditional Bottom line, referring to the income figure. Instead, they seek to create value for the society and the environment (Norman & MacDonald, 2004). Thus, their value proposition provides economic, social, and environmental value (Schaltegger, Hansen, & Lüdeke-Freund, 2016). They are able to do so while generating profit as conventional business (Rotondo, Corsi, & Giovanelli, 2019).

There is a need of complementing the circular business model of Lewandowski framework with the business models for sustainability framework. This need emerges from the static nature of the circular business model canvas and the faculty of the business models for sustainability framework to display the dynamic interaction of the elements that intervene on the creation of environmental value and its relationship with the environment or ecological capital, customer value proposition, value creation and value captured.

Environmental value refers to the benefit the company perceives that creates for the environment with its activity. However, this term does not reflect the actual impact that the company has on the environment. Environmental value proposition is directly related to the reputation and the value of the brand, the reduction of costs associated with the efficient use of the resources, the reduction of the risk as a result as an improved and more stable brand image, and an enhancement of the employer brand or employer attractiveness (Abdelkafi & Täuscher, 2016).

The creation of the environmental value proposition is direct and positively related to risk and cost reduction, enhancement of the brand value and employer attractiveness. Furthermore, the creation of the environmental value proposition is modeled in this framework as a reinforcing mechanism that works as follows: First, the perception that companies and consumers have on environmental issues affects their buying and managerial decisions. Thereafter, once they have taken sustainable decisions such as using a discarded material as the main source of raw materials, as it is the case of Rubrum; or buying a Rubrum product that is manufactured out of reutilized wood in the case of the consumers; Lastly, after having acted in accordance with their actions, the brand manager's interpretation of their actions will tend to reinforce their beliefs according to the theory of environmental cognition that states that individuals tend to interpret events of their action in a way that their actions support the beliefs they already had (Abdelkafi & Täuscher, 2016).

Therefore, the future sustainability decisions are affected and fed by the previous experiences with sustainability decisions.

Furthermore, the relationship among the elements of the framework is possible because Abdelkafi & Täuscher (2016) use a system dynamic approach to analyze the business models for sustainability (BMfS). Hence, the framework includes the business model logic, ecological capital dynamics and a model of the behavior of customers and entrepreneurs/managers in relation to sustainability aspects .The business model logics and

ecological capital dynamics are explained with stock and flows diagrams since these are quantitative variables and the behavior of customers and entrepreneurs in taking sustainability decisions with a causal-loop since it is a variable of qualitative nature. This master thesis will have its focus on the qualitative analysis of the causal-loop diagram and a qualitative analysis of the stock variables will be made. Thus, the focus will be on understanding the interrelation or the reinforcing mechanism among the sustainable decisions of Rubrum managers/entrepreneurs towards creating value and offering an environmental and customer value proposition and the sustainable decisions taken by customers about buying Rubrum products.

The business model logic for Business models for sustainability includes as stock variables customer value proposition; which are the benefits that the company believes and differentiate characteristics that its products or services offer to the customers, environmental value proposition; previously defined above, are the benefits that the company believes that its activity provides to the environment, value creation capacity; that refers to the ability of the company of creating products and services with the available resources and value captured; the ability to receive the created value back generally in monetary terms. The model explains the reinforcing mechanisms that exist among the stock variables. Furthermore, the model includes the Values, Beliefs and Norms (VBN) theory to comprehend the behavior of customers and managers/entrepreneurs beyond economic motives in sustainability related challenges.

The relationship among the variables of the model is as follows: The company increases its value creation capacity by consuming resources that come from the ecological capital variable. Thus, increasing its value creation capacity generally means decreasing the ecological capital. Nonetheless, this will depend on the pollution the company generates when producing its products and the use of renewable and non-renewable resources. A circular business model reuses renewable or non-renewable resources allowing the company to increase its value creation capacity without decreasing ecological capital.

The state of the ecological capital, for example levels of environmental pollution affects the beliefs of entrepreneurs and managers that will act in consequence. According to the values, beliefs, and norms theory the values are the matters that we consider important in our life. Beliefs in turn, are opinions on matters that we consider are true. Lastly, norms are systematic ways of behaving according to our beliefs. The perceived risk of environmental

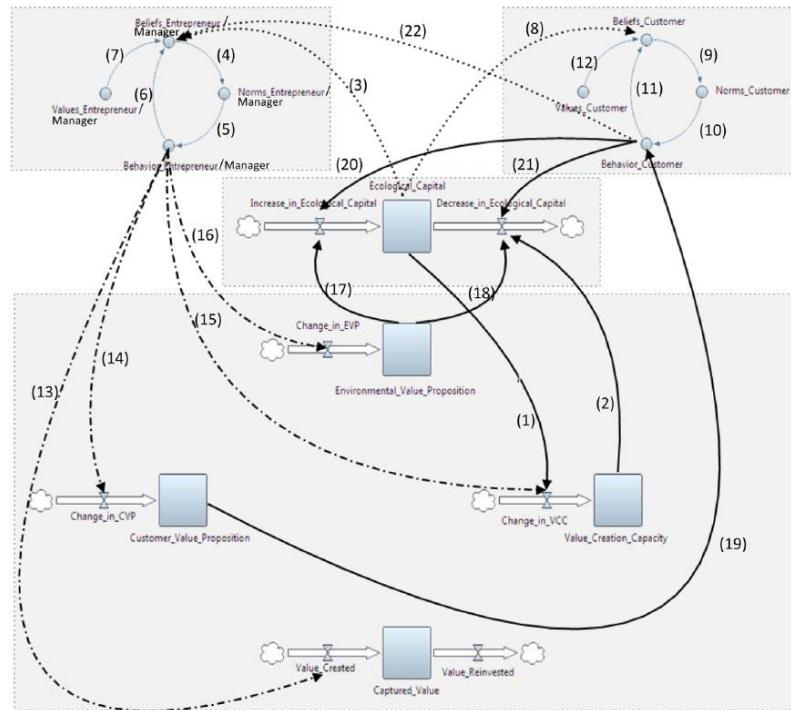
pollution activates a system of creation of norms related to the beliefs. These norms will directly guide the behavior of entrepreneurs and managers on their decisions of sustainability (Stern, Dietz, Abel, Guagnano, & Kalof, 1999). The sustainable behavior by the firm management will reinforce their beliefs that environmental action must be taken according to environmental cognition theory that our behaviors tend to be used to reaffirm our beliefs. The values are assumed to be stable and directly affect the entrepreneur's and managers beliefs.

Likewise, ecological capital or the state of the environment also affect the customer beliefs that will translate them into norms according to the perceived risk of not acting to solve the problem. Their norms will directly impact their behavior as consumers and their buying decisions. However, customer's decisions are impacted by other aspects such as price. In the case of the consumers their behavior also reinforces their beliefs related to sustainability and beliefs are also shaped by their stable values. The customer behavior has the power of affecting ecological dynamics. This is, increases or decreases the stock of ecological capital. In turn, the managers influence the ecological capital with the value created, the change in customer value proposition and the change in the environmental value proposition. The increase or decrease of ecological capital by the company will depend on its environmental value proposition. It can either increase or decrease. The behavior of the customers will depend on the customer value proposition and this behavior can directly affect the ecological capital (Abdelkafi & Täuscher, 2016).

Thereby, this framework will be of help to understand how the environmental value proposition is created in sustainable business models or in other words, what is the system by which sustainable decisions, or at least what the company perceives as sustainable decisions are taken and how this impacts the environment, the customer value proposition and the value the company is able to capture back to the business. Furthermore, should we assume that improving their environmental value proposition equals improving the company's circularity then the analysis of business models for sustainability under a system theory approach is useful to understand ways in which the company can improve its circularity.

Figure 3

System dynamics-based graphic of business models for sustainability



The model explains how entrepreneurs and managers are affected by their values, beliefs, norms, summarized on the values, beliefs and norms theory, and the positive experiences implementing environmental policies, which is referred to as environmental cognition. The environmental value proposition is indirectly affected by the customer value proposition as well. Thus, what is offered to the customer to the environment.

5.3 Mapping multidimensional value(s) for co-creation networks in a circular economy

Partnerships are crucial for sustainable business models as the ambitious goals are not to be achieved without collaboration among different stakeholders (Aminoff, Valkokari, & Kettune, 2016). The reason for this is that the circular economy needs of innovation and the design of the products must follow the eco-effectiveness principles of Cradle to Cradle by

which the design of the products need to take into account the following use of the materials (Braungart, McDonough, & Bollinger, 2006; European Comission, 2017)

Therefore, the framework of mapping multidimensional value for co-creation networks in circular economy by Aminoff, Valkokari, & Kettune (2016) becomes certainly relevant. This framework helps us to assess which partnerships could have the potential to add value to Rubrum business model and contribute to enhance the circular economy of wood in the region of Santiago de Chile.

The framework distinguishes several actors within a circular value co-creation network. There are actors that actively intervene in the business value network; such as producers, distributors, “end” users, end of life service provider, material suppliers, innovators and R&D partners, core external actors; such as investors and regulators, and actors who play a role outside the core of the business activities; such as the rest of the stakeholders as the government, institutions, local communities or investors.

The framework divides the process of creating the circular value co-creation network in three steps. First, the value proposition of the co-creation value network is identified. Then, the main actors playing a role in the network are recognized and the value that they bring to the network is analyzed since each of them create a different value for the network. Thus, they can recycle, refurbish, reuse among other processes. The most important aspect is that the various actors need to complement each other in order to co-create value for the network. Lastly, the last step, called value hunting, consists of assessing what value is created for the customer and which value is missed or destroyed. However, this framework will be adapted to the needs of this research and the third point will assess the value that the partnerships bring to Rubrum.

The first step consists in defining the value proposition of the network. Therefore, this theoretical framework complements the framework of the systemic approach of business models for sustainability because that frameworks allows to assess the environmental value proposition of Rubrum and the framework for the creation of partnerships the value proposition of the whole network.

The second aspect that must be followed for the practical application of the framework is the identification of the actors that play a role on the network, both core business actors and the rest of the stakeholders. In addition to the original framework, in this part, potential

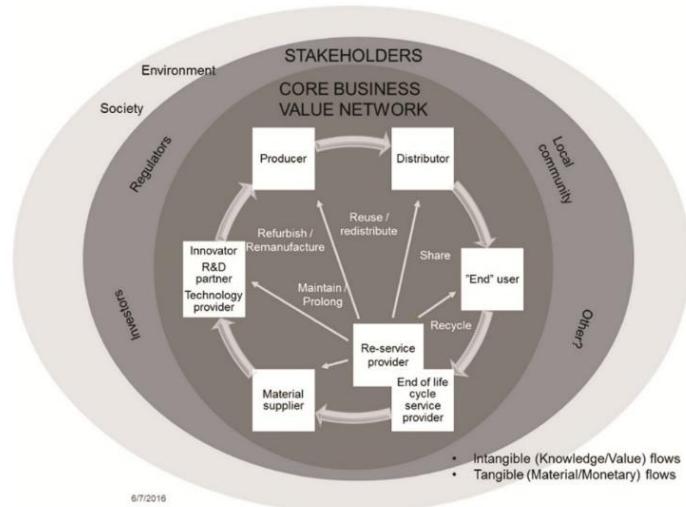
new partnerships will be presented. Lastly, the last step of the framework refers to the name of value hunting. In this part of the processes, the aspects that enhance the value proposition of the company and that hinders it are analyzed together with the potential sources of value for the core actors of the network as well as the possible destroyed value. The process of value hunting is done for all the actors of the network, core business players, stakeholders external to business activity and both existing and potential novel partnerships.

In such a way, this framework is a tool for analyzing the value that the existing partners provide to the network and well as for elucidating if there are companies that can be suitable partners for Rubrum in order to enhance its contribution to the cascade-use of wood in Chile.

The picture below is an example of exchange of multidimensional value among actors in a circular co-creation network. However, every circular co-creation network will be different.

Figure 4

Example of a circular economy co-creation network



6. Analysis

This section will aim to present the relevant findings of the interviews conducted with the founders of Rubrum and four of the customers that agreed to be interviewed as well as the

findings from reports mainly from the Chilean government and Chilean and international institutions and associations. This section will be divided in three parts. The first part will reveal the findings on the circular business model with a special focus on adoption factors that refer to the drivers and barriers for the circular economy and take-back systems. The second part will present the findings on the reinforcing mechanism of environmental and customer value proposition and the last section will have its focus on the existing and the suitable partnerships for the enhancement of the contribution of Rubrum to the cascading of wood in Chile.

6.1 Business model for circularity: circular business model canvas by Lewandowski

The first part of this section will comprise the analysis of traditional Business Model Canvas building blocks with the circular economy characteristics that explains Lewandowski, (2016) in his business models for circular economy framework. This is an important part of the analysis because even though it will not help us to answer directly the first sub-research question, it will provide the basis for this part of the analysis and it will allow to better understand the circular business model of Rubrum.

6.1.1 Analysis of the traditional Business Model Canvas building blocks

6.1.1.1 Value proposition

The traditional business model Canvas by Osterwalder & Pigneur, (2010) does not differentiate among different types of value propositions. However, combining two of the theories in the theoretical framework, we can enrich our analysis making a distinction among environmental value proposition and customer value proposition. These are the values that the company believes that bring to the environment and the customer, respectively.

Rubrum bases its environmental value proposition on the fact that they reutilize the wood of the skateboards that otherwise will be discarded and this way they prevent that amount of waste from ending up in landfills. *“I think that if a product is compostable and it comes back into nature without damaging it, that is a value for the earth” pp.6* (Juan Carlos Barrera, Rubrum co-founder, 2020) *“I think that our products environmental value has to do with our products being able to finish their cycle by being composted, it is basically that” pp.31 appendix I* (Dania Salazar, Rubrum co-founder, 2020).

The customer value proposition, in turn, has to be with offering durable products, with beautiful designs that are made of reused wood from discarded skateboards and that additionally include a breakage guarantee. This is, in case parts of the products are broken, Rubrum offers free reparations. Moreover, they make sure that the added raw materials used in production that are not wood from the skateboards, like silver, do not affect their ability to be composted after use (Dania Salazar, Rubrum co-founder, 2020). This customer value proposition is partially aligned with the principles of a circular economy by the Ellen McArthur Foundation presented at the beginning of this master thesis. According to these principles the first targets when producing must be design products that avoid to be turned into waste and generate pollution, keeping the products and materials into circulation for as long as possible, regenerating natural ecosystems and keep the products and materials in use for the longest time possible. Thus, Rubrum designs its products to contain the least amount of additional materials and this way being able to be reused and composted. That avoids the pollution on the environment and keeps the materials in use for longer. However, Rubrum does not make sure that their products serve as biomass for composting after their use, so there is no evidence if they actually do regenerate natural ecosystems. This customer value proposition is qualitative, and it is related with customer values and beliefs. Thus, the consumer will perceive its value only in the case where their values are aligned with the environmental value proposition of Rubrum.

6.1.1.2 Customer segments

Rubrum targets a customer whose first priority when buying is to make a sustainable purchase. Thus, they target people that are environmentally conscious as well as clients that are conscious about the need to promote local crafts and therefore the local economy. The potential customer may also value handmade work since all their products are done manually in a handcraft process. Moreover, the average age of their potential clients is thirty- five years and they are mainly professionals and students. Thus, they are pointing out mainly to millennials and Generation Z (Juan Carlos Barrera, Rubrum co-founder, 2020) (Rubrum, personal communication by e-mail, August 20th, 2020).

Additionally, the segment of clients they are targeting is mainly from middle class and upwards. The social class groups C1a, C1b, C2 and C3. These four groups represent 49 per

cent of the Chilean population. They also sell very occasionally to the sector D which represents a 37 percent of Chilean population and it is the middle low class. This is because the fact that the products are handmade increases their price, and they turn to be a luxury for the middle low class and low class. This is aggravated in the context of covid 19 crisis where the unemployment rate has increased four percent (Herrera, 2020). Furthermore, the covid 19 crisis comes to worsen the already existing socioeconomic crisis “Estallido social” (social outbreak) that paralyzed the country (BBC News Mundo, 2019).

6.1.1.3 Channels

Rubrum meets its potential clients in a physical store called Mulato located inside the Visual arts museum (MAVI) in Santiago, in fairs and events they are invited to and mainly, in social media. However, in the current pandemic scenario, their biggest channel is Instagram where they have their largest number of followers. Additionally, the brand also works with indirect channels such as online emerging platforms, some related to the emergency crisis of covid 19 like justas.cl and vloggie. Thus, the current pandemic situation has promoted the virtualization of their business model, being this the first channel by which they communicate their customer and environmental value proposition. These platforms have a sustainable or local crafts focus. In fact, both of the founders affirmed that it would not be coherent if they sold their products in a more generalist platform where their customer value proposition is not well understood (Juan Carlos Barrera, Rubrum co-founder, 2020) (Dania Salazar, Rubrum co-founder, 2020).

6.1.1.4 Customer relationship

Rubrum has two main forms of relating to its customers. These are Instagram and other secondary social media such as Facebook and their website, and the fairs and the in-person events they attend to.

-*Instagram:* Instagram has been from the beginning a key social media platform for the project of Rubrum. At the beginning, before having the storage containers, they started an online campaign to collect skates through the Instagram account salva_skateboards(“ save

skateboards) where they tried to raise awareness among skaters of the need to reuse the wood on the old and scratched skateboards (González Farfán, 2019). Nowadays, they still use that Instagram account to keep on raising awareness specially on those skaters that skate on the skateparks and cannot find out about the project with the help of their mentors. Furthermore, they aim at creating a skater's community using this platform.

They have another Instagram account to show their products to their customers called "Rubrum Reutilización & Skateboards". Through this Instagram account they aim to create content related to sustainability and circular economy because as Dania affirms, their clients and the followers of Rubrum in general are eager to know more about the topic since their most shared posts are the ones that challenge the sustainability knowledge of their followers (Dania Salazar, Rubrum co-founder, 2020). Moreover, this Instagram account is used to keep in touch with the customer once they have got to know the project as well as the after sells channel. Thus, this channel plays a role in customer retention and the increase of sales since many customers get to know the products and ask for their prices through this channel. It might play an important role in customer acquisition through the algorithm that suggests the user similar accounts they interact with (Leighton, 2019). In fact, one of the four customers interviewed got to know the brand this way. This platform has less intention of creating a community and it is more focused on Rubrum to customer communication.

-Fairs and other in-person events: These are a more direct communication channel where Juan Carlos and Dania can articulate their discourse to their clients. They have the chance to individually convince the customers that the product they are seeing is worth its price due to its special characteristics. Two out of the four interviewed customers have highlighted the discourse of Juan Carlos when buying it as a decisive factor when buying the product (Prieto, Rubrum's customer, 2020), (Araneda, Rubrum's customer , 2020). Thus, it is an important channel for the increment of sales and two out of four interviewed customers got to know the brand through a fair event (Ceci, Rubrum's customer, 2020), (Araneda, Rubrum's customer , 2020) which means it is also important for customer acquisition.

Furthermore, the customers were asked if they have recommended the brand after they have gotten to know it and four out of four recommend it to more than three people (Ceci, Rubrum's customer, 2020) (Prieto, Rubrum's customer, 2020), (Araneda, Rubrum's customer

, 2020) (Herrera, Rubrum's customer, 2020). This shows that Rubrum is utilizing a cost-effective way of acquiring customers such as the viral loop.

6.1.1.5 Revenue streams

There is one single type of revenue stream and it is single time revenues. This is when the customers acquire the products. The revenue can come directly from the customer to them through a transfer or via justas.cl and vloggie. In the case of the online platforms they keep a 30 percent of commission.

Their pricing mechanism is fixed, and generally they do not negotiate prices with their clients. They just eventually negotiate large-volume promotions. “*We just make promotions when the good customer service requires it*” (Dania, personal communication by e-mail, August 24th, 2020).

6.1.1.6 Key resources

Rubrum started its activity with a very basic workshop to develop traditional carpentry and they have worked in the same workshop since then (Juan Carlos Barrera, Rubrum co-founder, 2020). Dania’s profession is interior designer, so she designs the products and Juan Carlos has the knowledge of carpentry that he learned travelling around Latin America and getting to know traditional craftsmanship. Moreover, Dania is also in charge of the social media where they are very active, and they try to make their followers aware of sustainability aspects. The value creation capacity of the brand is closely related to the key resources they possess. Some of the activities they want to carry out such as reducing completely waste of their production process require different types of tools and knowledge with which they do not count with at the moment (Juan Carlos Barrera, Rubrum co-founder, 2020).

Juan Carlos, in turn, has knowledge on the crafts profession and how to transform wood in something useful and beautiful. However, he became professional in the process of

creating this brand and by self-learning, so the internet was a key resource when developing this project.

6.1.1.7 Key activities

Rubrum's production key activities are the design of the products, the transformation of wood from the skateboards to wooden blocks of the desired size for the creation of the different products and the manufacturing of the products that follows several steps. The delivery is done by a freelance carrier. Moreover, another group of key activities are the platform related activities. These are the maintenance of the website and social media and the communication with partnerships and other external parties such as newspapers and other media that want to talk about their project.

6.1.1.8 Key partnerships

The main Rubrum partnerships are the relationships between buyer and suppliers. These are the entities that provide them with the materials they need in the manufacturing process such as the wood from the discarded skateboards, silver wire, or the adhesives among other products. Rubrum supplies itself with the old and scratched skateboards from skateboard shops, schools, and parks, where Rubrum installs containers where the broken and scratched skateboards can be deposited. These partnerships assure the brand a stable flow of wood pieces. The most important partnership from the discarded skateboards are the schools. The reason for this, is that the brand prefers these partnerships over the rest because the teachers have the chance to raise awareness on the topic on their trainees and that makes skaters more dedicated to the cause (Juan Carlos Barrera, Rubrum co-founder, 2020). The suppliers that provide them with silver wire and adhesives have changed since the beginning of the covid-19 pandemic crisis and they have turned to be more expensive

The brand also counts with distribution partnerships like the new online platforms justas.cl and vloggie as partners and the stores where they sell their products and delivery partners, that distribute their products through the closest parts of Santiago by bike. The unreachable parts of Santiago by bike are delivered by a traditional post carrier such as Chile express or Correos de Chile (Juan Carlos Barrera, Rubrum co-founder, 2020).

Moreover, the municipality of Santiago frequently helps them on the promotion of their business since it counts with the brand to invite them to fairs and events related to circular economy and sustainability. Therefore, the municipalities can be considered an institutional partnership.

6.1.1.9 Cost structure

The main costs the company bears have to be with the rent of the workshop, electricity and internet, additional raw materials, and tools. However, it has been considered not relevant to provide a detailed list of costs for the purpose of this study. Nevertheless, it must be said that the founders care more about the value created for the environment than the costs of their additional raw materials. “*We are focused on minimizing waste in our production line since it does not make sense to us to create waste if what we are trying to do is minimize waste reutilizing wood from the skateboards*”. Pp. 4” *We use a small fraction of silver, but we still try to buy it from friends instead of buying it already done. We try to buy local* (Juan Carlos Barrera, Rubrum co-founder, 2020). “*It has always been a concern of ours that this waste did not generate more waste*” pp. 31 (Dania Salazar, Rubrum co-founder, 2020).

6.1.2 Analysis of Lewandowski’s added elements to the Business Model Canvas

6.1.2.1 Take-back systems

Rubrum needs reverse logistics systems to obtain its main raw materials to produce its products and to follow the process of cascading. They collect the materials placed on the different containers once every two months. They do this using their partnerships with skateboard stores, schools, and parks. The first prototype was made in collaboration with students from Universidad del Desarrollo and it included a sensor that notified Rubrum when they were full and ready to collect (Dania Salazar, Rubrum co-founder, 2020). However, the prototype that was built was a simpler one.

Figure 5

Rubrum's containers in a skatepark (left)and in a skate shop (right)



They have decided to have a stronger focus on the skateboard schools since they are able to educate the users for the right utilization of the skateboard containers. In the past, there have been problems with the flow of materials coming from the containers located in skateparks. Skatepark users partially destroyed the container. Therefore, Rubrum is thinking of designing a different type of container that can be integrated in the skateboard as any other item in the park and be used at the same time as container (Juan Carlos Barrera, Rubrum co-founder, 2020).

Another problem that they have when recuperating the old and cracked skateboards is the attachment to the object that according to Juan Carlos (Rubrum co-founder) some of the skaters have with their skates. For this reason, they only get to recuperate approximately ten percent of the discarded skateboards (González Farfán, 2019).

6.1.2.2 The adoption factors

There are both internal and external adoption factors that have an impact on the way Rubrum circular business model was implemented and the way it will develop through time.

Internal adoption factors

The most relevant internal adoption factors have been the company's culture, the motivation, and the human, material, and financial resources they counted with when starting the entrepreneurship project.

Brand's culture and internal motivation

The environment is at the center of their core values. This can be appreciated in following answers of Rubrum's founders to the question of what values is Rubrum based on: “*First and foremost are the impacts to the environment*” pp. 4 Appendix I (Juan Carlos Barrera, Rubrum co-founder, 2020). “*For me is the ethics of doing what we think. If we are saying that we are doing a sustainable product, let it really be so*” pp. 22 of Appendix I (Dania Salazar, Rubrum co-founder, 2020).

Moreover, Dania has had environmental awareness since she was very young. “*The environmental consciousness was always with me. Since I was very young my family and I went on trips to the countryside very often. That has had a great impact on me and my desire to keep on exploring everything. When I decided to become a vegetarian, this decision affected every other sphere of my life, I started to question what I was consuming in every other aspect*” pp. 29 Appendix I (Dania Salazar, Rubrum co-founder, 2020).

Thus, when in 2013 they started when the project they wanted to make sure that they were not like many other companies that did not practice what they preach and did greenwashing⁷ (Dania Salazar, Rubrum co-founder, 2020). In the case of Juan Carlos, he cultivated his environmental consciousness and the motivation to create an entrepreneurship project like this in his long travels through the region of Latin America. In these travels, he mainly went to visit indigenous peoples. There, he learned the way those people live, using what they had available at the local level. He observed that indigenous people lived in harmony with nature, contrary to the way of living of the Europeans that colonized their country many years ago. Since he liked what he experienced and saw when he immersed himself in the indigenous culture, he tried to imitate those communities utilizing what he had available on his surroundings to create his line of products (Juan Carlos Barrera, Rubrum co-founder, 2020).

Hence, the caring for the environment is a very important element of Rubrum's brand culture.

Material resources

As regards to the resources available when starting their circular business, Rubrum counted with a basic workshop with the essential tools as material resources, being their raw materials,

⁷ The definition of this term can be found in the glossary of terms (Appendix II)

the wood collected from old and scratched skateboards, one of their most important material resources. The flow of this material is constant and for free.

The fact that they counted only with the most essential tools in the workshop has limited their capacity to process the skates in a most efficient way. Moreover, it has additionally hindered their capacity to reduce the waste they create, or better said, the amount of materials that they are not able to recover within the skateboard, since they affirm that they could use the wooden chips that are the result of the manufacturing process to create something else. However, they do not have sufficient financial resources to buy the machine that could make it a reality (Dania Salazar, Rubrum co-founder, 2020).

Human resources and knowledge

As to human resources and knowledge, Dania had studies in design, but not product design, and Juan Carlos had some carpentry knowledge. Nonetheless, mainly they had to teach themselves how to develop a circular collection of products. Thus, self-learning was crucial for their creating and developing their circular business model.

Later on, they have had the support of one association called “ADC Circular”(circular association of consumers). This association provided them with courses with several days length where the founders could better learn the meaning of multiple sustainability concepts and how to apply them to their business. *“We found this course very helpful because we lacked information regarding many concepts regarding sustainability and circular economy... These concepts are not heard in Chile and not much is known” pp. 26 Appendix I* (Dania Salazar, Rubrum co-founder, 2020). Juan Carlos has attended courses of Digital Marketing as well (ibid).

Financial resources

When they first started the project, they did not count with many financial resources and the entrepreneurs did not receive any special financial aid from the government. There were not even special tax reductions for this type of business. Nowadays, there are some funds but mainly funds directed to entrepreneurship in general and not sustainable entrepreneurship.

Furthermore, sometimes there exist many requirements to fulfill to access those subventions like being registered as a business. At the present, the founders of Rubrum are freelancers and Rubrum is not constituted as a business (Juan Carlos Barrera, Rubrum co-founder, 2020) (Dania Salazar, Rubrum co-founder, 2020). The lack of sufficient financial resources affects the ability of Rubrum to acquire new and specialized machinery (Dania Salazar, Rubrum co-founder, 2020).

[External adoption factors](#)

In order to analyze the external drivers and barriers that Rubrum suffered and is suffering, a PEST framework will be utilized.

PEST framework (Political, economic, social, and technological aspects)

Political

Government stability and current conflicts

Chile is a republic that functions with a representative democracy that has been ranked as full democracy by the Economist in its Democracy Index 2019. This index considers aspects such as the level of participation of the population in politics, the way in which elections are carried out, the variety of political parties, among others (The Economist, 2019).

The president of the republic of Chile is Sebastián Piñera, elected in 2018 with 54 percent of the votes in the second electoral round. He is a member of the conservative right wing party and according to some political scientists, one of the reasons Chileans voted for him was because they still recall his last mandate between 2010 and 2014 where the economic progress was substantial (Pardo, 2018). During this period there was a reduction in the unemployment rate from an 8,4 percent in 2010 to a 6,6 per cent in 2014 and a 5,3 GDP growth per year on average (World Bank, 2020). However, during his mandate, he has been accused of being an authoritarian president by some sectors of the population (Uribe Andrade, 2018). In fact, the social outbreak called “Estallido social” that has happened during his current mandate shows the discontent of the population with the neoliberal system in place based on the constitution of 1980, still during Pinochet’s dictatorship (Bartlett, 2019).

These protests have led to a plebiscite that will be celebrated at the end of the year to ask the Chilean population if they would like a new constitution (Urrejola, 2019).

Furthermore, some of the decisions that he has taken during his mandate have been highly questioned. As an example, he has chosen some ministers and political charges that are linked to Pinochet dictatorship. This is the case of the minister of gender equality, Macarena Santelices Cañas, the great niece of the dictator Pinochet. Furthermore, it is publicly known her paradoxical anti-feminist mindset or Rodrigo Ubilla, a politician that is being investigating for his performance when dealing with the indigenous communities Mapuches (Delgado Fuentealba, 2020). Mapuches are an indigenous community that claims their territory that is currently being used mainly for plantations of pine trees and eucalyptus trees. This is a long-lasting conflict dating from the pre-Hispanic era.

It is highly controversial the way the government is dealing with the mentioned conflict; having existed violence against these indigenous communities and even murder. This is happening despite having a plan designed to deal with the problem: “Impulso Araucanía”. This plan provides funds to this area for the support of entrepreneurship projects and even the cession of some of the lands to this indigenous nation (Alberti, Luna, & Toro, 2018).

Regulation of crafts sector and biomass sector

The sector in which the activity of Rubrum can be framed is in the handicrafts sector. There is a special national policy concerning this sector called “Política Nacional de Artesanía 2017-2022” (National handicrafts policy 2017-2022). Nonetheless, there is not a specific law that protects or regulates this expertise, since laws are directed towards culture and arts in general. The national policy, that updates the national policy of 2010-2015, is directed towards the support of this industry and it was elaborated considering the different voices of the sector. The policy includes financing and support for internationalization. However, many craftsmen, especially the ones that live in indigenous communities do not have proper access to the internet and it becomes difficult for them to apply for this financing line (Derechos digitales, 2018). Moreover, the policy also promotes the creation of commercialization spaces (Consejo Nacional de la Cultura y las Artes, 2017).

There exist no regulation related to the cascade-use of wood in Chile. However, there exist laws regarding the use of biomass for heating (Ministerio del Medio Ambiente, 2018) and there also exist laws that protect the forests (CONAF; Ministerio de Agricultura de Chile, 2008).

Existing environmental laws

The ministry of environment was born in 2010. Within this ministry, there is a specialized department that works towards the circular economy. This department has as main purposes the implementation of the circular economy. For that reason, they work on a route guide for the implementation of the circular economy in Chile in collaboration with “Circular change”, the consultancy agency whose founder is the president of the coordination group of the European Circular Economy Stakeholder Platform (ECESP), Ladeja Godina (Godina:, 2020). This route guide is said to be done for the reduction of waste in the country as well as preserving the environment. (Ministerio del Medioambiente de Chile, 2020). This guide will be presented for its approval in November 2020 (Construye 2025, 2020).

The closest step that the government of Chile has taken so far towards the circularity of the country has been the approval of the law number 20.920, that establishes the framework for waste management, the Extended Producer Responsibility, and the promotion of recycling.

In this law, as its name states, the responsibility of taking care of the product once it has been discarded is on the producer, nor on the consumer, municipalities, or any other party. However, that does not mean that the “waste” is treated necessarily by those parties if they do not count with the knowledge. The waste is treated by waste managers. According to the law, producers of priority products must be registered in an official list of all producers. There are some subcategories of priority products that do not have the obligation of treating their products but however, need to provide information about the amount of units and other aspects when required by the government (Gobierno de Chile, 2016).

The producer is considered the party that manufactures the product except for containers and packaging. In these cases, the producer is considered to be the company that introduces the product in the market. For example, if Unilever sells shampoo Dove in Chile, Unilever

has the responsibility over this product after it has been discarded, even though they have maybe not produced the plastic containers.

An important point of the mentioned law is that the law ERP only affects what are categorized as priority products and thus, it does not include biowaste. These products are categorized as priority because of their large volume, danger, or value of the wasted material. These priority products are lubricating oils, containers and packaging, electrical and electronic appliances, batteries, and tires. However, this list is open for the incorporation of more priority products that fulfill the conditions of volume, danger or value (Gobierno de Chile, 2016).

Furthermore, there is a political will to implement the circular economy as one statement of the president during the visit of the expert in circular economy, William McDonough, shows: “*We are committed to what you call Circular Economy and we are going to take advantage of your wisdom and knowledge, so your visit will be important to us*” (Prensa Presidencia(Presidencial Press), 2018). Nevertheless, till the date there are not laws that incentivize the practice of the circular economy like the increase in the price of the garbage collection service.

Promotion of the circular economy

The most relevant initiative of Chile for a circular economy is the creation of the Center for the Circular Economy Macrozona Norte in the region of Tarapacá in 2019 managed by the center that fosters the economic development of Chile (CORFO) together with the Ministry of Economy. There are other initiatives that have emerged from the joint effort of CORFO and the Ministry of Environment such as “Iniciativa Huella (1 y 2) sought to support triple impact entrepreneurship projects in a similar way Start up chile project supports innovative entrepreneurship. This is giving support and training in the different phases of creation of the entrepreneurship project or “Súmate a la economía circular” (join the circular economy), the first public circular economy initiative in 2018 that aimed at increasing the number of this type of businesses providing financing. Additionally, investigation regarding circular economy has been financed (Martínez Cerna, Henríquez Aravena, Freire Castello, & Rodríguez Urrutia, 2019).

Multi-stakeholder platform working for the circular economy

United Nations Industrial Development Organization (UNIDO), United Nations Environment Program (UNEP) and the Konrad Adenauer Foundation form a coalition that is joining efforts to introduce the topic of circular economy on the agendas of Latin American countries (Albaladejo, 2020).

Furthermore, Chile is since 2019 one of the countries of the Ellen Macarthur Global Plastic Pact Network. Chile is the first Latin American country in doing so (Ellen Macarthur Foundation, 2019).

Economical

General facts about the Chilean economy

The economy of Chile is an open market economy with market neoliberal public policy (Richards, 1997). The country has signed several free trade agreements such as “Alianza del Pacífico”; formed by Chile, Colombia, México and Perú, the free trade agreement with Canada, the US, and the EFTA; that includes Norway, Iceland, Liechtenstein, and Switzerland among other free trade agreements (Wehner, 2011). Moreover, Chile has been a member of the OECD since the year 2010. Therefore, the country has not enjoyed a welfare state since its decline at the beginning of Pinochet dictatorship in 1973 and vital needs of Chileans such as health care, education and retirement pensions are given privately in the case citizens can afford it (Memoria chilena, 2009). Nevertheless, Chile’s GDP per capita doubles the average of Latin America and the Caribbean with 14.896 US dollars per capita and it is the highest of the region (Data World Bank, 2020).

Chilean labor market economic activity by sectors

The economy of Chile has traditionally been based on the exportation of natural resources. It stands out the exportation of mining products such as copper, mineral of which the economy of Chile highly depends, lithium and iodine and agricultural products like oat, wheat and apples (Ministerio de Relaciones Exteriores de Chile, 2019).

The unemployment rate in Chile was in 2019 approximately 7 percent (Plecher, 2020). However, this rate has increased due to the current Coronavirus crisis to 12,2 percent and that reduction in the working people in the country has meant a reduction of more than seven

points in the GDP (Infobae, 2020). The distribution of employment by sector before the coronavirus crisis was as follows: The Agricultural and the mining sectors concentrated a 9,1 percent of the employment, the industrial sector, a 22,8 percent, and the service sector a 68,2 percent of the total employment.

This data shows again the dependency on agriculture and mining. The percentage of employment on agricultural activities is substantially higher than in other developed regions such as the group of the 28 countries of the European Union (Stats OECD, 2019). Nevertheless, Chile is trying to diversify its productive activities to more intensive knowledge activities. For this reason, a business accelerator for recently born innovative companies has been created under the “Start- Up Chile” program (Start-up Chile, 2018).

Public funding and ease of doing business indicator

The government and the different regions are financing entrepreneurship projects in general and sustainable entrepreneurship projects. As an example, Corfo, the agency for development of Chile, and the ministry of environment have created a financial fund for circular business models. The fund is 100.000 US dollars for all the entrepreneurs (Ostojic, Chile's journey to a circular economy, 2018).

Furthermore, there exist associations such as Eurochile, created in 1993 to promote trade and business collaboration between the European Union and Chile, especially among small and medium enterprises (Eurochile, 2020a). This association has as one of their present missions, the promotion of the circular economy among the Chilean businesses. They do so by organizing events where businesses can come together and create partnerships and share knowledge about their circular business experiences (Eurochile, 2020b).

One important indicator that makes possible the transition to the circular economy is the ease of doing business. Chile ranks 59th in the world in this aspect. This indicator considers how fast you can start a business in the country or the laws that the business managers need to consider when operating in the country (World Bank, 2020).

Economic benefits of having a circular economy

There are not available calculations on the economic benefits that the circular economy will bring to the economy of Chile specifically. However, there are some general benefits that do

not apply to any country specifically. These are mainly resource savings, economic growth and the increase of the amount and the quality of employment. The aspect of resource savings aspect is particularly interesting in the context of Chile because adopting the circular economy Chile could increase the functionality of resources creating more employment for specialized labor force in the treatment of materials and reduce the economy dependency on copper and other minerals. Thus, qualified employment is more demanded than materials, that are abundant in the economy (Het Groene Brein, n.d.).

Social

Creation of a skaters' community that collaborates with Rubrum

Even though many decks are not able to be recovered according to Juan Carlos Barrera, Rubrum co-founder (2020) because of the skaters' emotional attachment to them, every skateboard that is processed by Rubrum comes from individual skaters that give away their deck, either in schools, shops or skateparks (Juan Carlos Barrera, Rubrum co-founder, 2020). Thus, it is clear that Rubrum has managed to create a community.

Contamination by interaction

There can exist certain contaminated interaction since the products Rubrum is selling, mostly jewelry, are made out of a material that once was on someone's feet. For this reason, there could exist a certain aversion to utilizing a product that is in contact with sensitive skin such as the neck or ears, made of something that was continuously touching the ground before.

Awareness on the need of sustainability and circular economy within Chilean population and businesses

The Chilean ministry of environment carries out a survey regularly on the sustainable habits of the population. Last available survey is the one from 2017-2018 (DESUC, 2018). In this survey, 90 per cent of the respondents thought that taking care of the environment is a moral obligation and doing so makes the economy grow. Furthermore, 93 per cent of the

interviewed people that affirmed to know what climate change is, believes that this matter is very important. On another survey, regarding sustainability consuming habits, it was found out that 53 per cent the Chilean consumers interviewed would be willing to pay an extra 10 per cent for sustainable products. (Acción de empresas and Ipsos, 2019).

These two interviews do not include the word circular economy nor sustainability. In fact, there are not available statistics on the awareness of the Chilean population about those terms. However, there exist surveys that summarize the point of view of businesses on circular economy. An example is the study carried out by Pipartner group to more than two hundred businesses of different sizes and sectors. The purpose was to get insights on the knowledge of the companies regarding the topic and actions taken by them related to circular economy and sustainability. The survey found out that more than half of the companies interviewed did not know what circular economy is (Pipartner group, 2019).

Technological

Use of renewable energy

The circular economy must be powered by renewable energy. Therefore, the development of clean energy infrastructure is a key enabler for the circular economy (Webster, 2017). So far Chile has installed 2654 MW for solar energy(an 11 per cent of the total), 1620 MW of wind energy(a 6,7 percent of the total), 1064 GW hydroelectric energy(a 28 per cent of the total), 502 MW of bioenergy(a 2 percent of the total) and 48 MW of geothermal energy(less than 1 per cent of the total) (Generadoras de Chile, 2020).Therefore, today renewable energies in Chile represent approximately 48 per cent of the total electricity system. Furthermore, if we just look to the non-conventional renewable energies, these represent roughly 20 percent of the total energy produced. The plan of the government is to run 70 per cent on renewable energies by 2050 to be able to fulfill the increasing demand for electricity with sustainable alternatives (Ministerio de Energía, Gobierno de Chile, 2015a), (ACERA(Chilean Association for Renewable Energies and Storage), 2019).

Digitalization and its importance for the cascading of resources in Chile

Another key enabler for the circular economy that is made possible thanks to technological advances is the digitalization. The reason for being so important is that the implementation of the circular economy needs new processes such as the traceability of the materials for the

monitoring of its availability, condition, and location. These processes are crucial to assure the dynamic flow of materials within the economy because otherwise their exchange would be difficult. The data systems that enable these features are radio frequency identification(RFID) and Relational Database Management Systems(RDBMS) (Sillanpaa & Ncibi, 2019). Digitalization in fact, makes possible some business models that would not exist without it. This is the case of the sharing business models such as Car2go or business models that work with the virtualization of products such as Netflix or Spotify (McKinsey Center for Business and Environment, 2016). In fact, Rubrum's business model is very much supported on social media as it has been appreciated on the analysis of the different sections of the business model canvas. It is crucial for their take-back systems, especially in the case of the skateparks, since the account salva_skateboards Instagram is the only means to raise awareness among skaters on the need to donate their old and scratched skateboards. Social media, especially Instagram, is central to customer relationships. In fact, it is the most used communication channel by them and a key distribution channel.

Contamination of the materials

Contamination is one of the biggest implementation barriers for the circular economy because the fact that materials are not kept in their pure state means that they cannot freely circulate with the circular economy (Baxter, Aurisicchio, & Childs, 2017).The skateboards that Rubrum process suffer, among other types from a technical contamination. The reason for this is that it is not a simple process to separate the different elements of the skate. This is because they are manufactured with different adhesives and glues. Thus, most of the skateboards are not designed according to circular economy principles, so they become more difficult to be recovered (Juan Carlos Barrera, Rubrum co-founder, 2020)

6.2 Modelling of environmental value proposition of Rubrum

The process of creating a brand's environmental value proposition follows, according to Abdelkafi & Täuscher, (2016), several steps. First, the perception that the brand managers have on the environmental affairs and the related political actions is created by acquiring related knowledge and later transformed into beliefs and beliefs into norms. Afterwards, those established norms will guide the behavior of the managers that will take their decisions related to sustainability as a consequence. Lastly, after having acted in accordance with their

actions, the brand manager's interpretations of their actions will tend to reinforce their prior beliefs and the cycle will start again.

6.2.1 Creation of the founders' perception on the environmental issues

The two in-depth interviews with both of the founders were extremely insightful regarding the way in which they gathered knowledge about the environmental issues that shaped their beliefs and norms. Both of them explained where they believed their environmental consciousness came from. In the case of Juan Carlos, he believes that he started to care about the environment on a higher degree during his trip around South America where he got to know the way of life of indigenous communities. For him, being environmentally conscious means to reconnect with his roots from the past, and the relationship communities had with natural resources in the precolonial times. He sustains the idea that the concept of waste emerged in Chile from the new forms of civilization that the Spanish brought. That feeling is reflected in the following statement: “*During my trip around South America, where I learned about all those ancient civilizations and native peoples and all this legacy that somehow was stolen from us after the colonization and the new ways of building civilizations in which we live. Much of that ancient knowledge had to be with nature. Everything was made in the function of nature because they understood that we could not possibly live without it. So I immerse myself in the culture, I learned as much as I could and I became environmentally conscious. When I arrived here(referring to Santiago)that became the inspiration for everything I do*” pp. 5 appendix I (Juan Carlos Barrera, Rubrum co-founder, 2020). In turn, Dania remembers to have become environmentally conscious during the frequent visits to the countryside that she and her family did when she was a child. “*The environmental consciousness was always with me. Since I was very young my family and I went on trips to the countryside very often. That has had a great impact on me and my desire to keep on exploring everything. When I decided to become a vegetarian, this decision affected every other sphere of my life, I started to question what I was consuming in every other aspect*” pp.29 appendix I (Dania Salazar, Rubrum co-founder, 2020).

6.2.2 Rubrum's environmental value proposition and measuring of their environmental concern

Furthermore, since the fact that the founders are aware of the environmental issues and how they became environmentally aware does not indicate their level of commitment to the topic, there was a specific question in both interviews intended to find out what is their first concern when designing their products and managing their business, the customer value proposition or the environmental value proposition. They were told what these terms mean, and they were asked if they had ever considered the environmental value proposition of their brand, obtaining the following answers:

“I think that if a product is compostable and it comes back into nature without damaging it, that is a value for the earth” That is what I understand as the value proposition of our product” pp 6 in appendix I. (Juan Carlos Barrera, Rubrum co-founder, 2020).

“I believe that it has to be with our products being able to be composted and finish their cycle, something like this. Ultimately, it has always been a concern of ours that waste is not turned into any more waste”. Pp. 31 in appendix I (Dania Salazar, Rubrum co-founder, 2020).

Afterwards, they were asked to imagine a scenario where they needed to prioritize one value proposition over the other. Both Juan Carlos and Dania answered that they would prioritize the environmental value proposition. However, Juan Carlos clarified his answer, emphasizing that he cares about both, but stating that there is no point on creating value for the consumer and earning some money out of it, thus, capturing value, if in that process of value creation the natural environment is harmed. *“Both of them are important to me but I can not ignore it (referring to the environmental value proposition) for making a little extra money” pp.19 in appendix I* (Juan Carlos Barrera, Rubrum co-founder, 2020). He added that he thinks both of them must be aligned and there need to be a balance between them *“I believe that there has to be a balance between both things. The more transparent I am with my processes and the more I can give you a product that is going to be of use to you and the more you and you can understand how it was done, the better the clients can decide if they want to support you or not” pp.19 appendix I* (ibid).

Dania, in this respect, considers that the environmental value proposition needs to be prioritized over customer value proposition because the customer benefits if the environment is benefited. Both interests are aligned and fit *“I believe that I would prioritize the second*

“because if I provide nature with a benefit I am also providing it to the customer” pp. 36 in appendix I (Dania Salazar, Rubrum co-founder, 2020).

6.2.3 Transformation of knowledge on environmental issues into beliefs

Thus, both of the founders share their vision of the need of preserving the environment first and putting ahead nature. In both cases, the knowledge of the environmental issues such as knowing that waste is something that has been created by our modern societies or realizing the way animals are abused, led to certain beliefs and in turn, those beliefs led to particular behaviors. In the case of Juan Carlos, the awareness of the smart use of the resources by the ancient indigenous communities led to the belief that those communities were an example of a smart use of the resources and there is a need to take action and learn from them. This led to the creation of Rubrum. In the case of Dania, the knowledge of the animals being abused in their upbringing and slaughter led to the belief that she can use stop eating meat as a way of protesting against that treatment and a way of making an impact as a consumer. That in turn, led Dania to the behavior of stop eating meat as its first step towards her set of actions towards caring for the environment such as collaborating on the creation of Rubrum.

6.2.4 Reinforcing mechanism between Rubrum’s owners beliefs-behaviors-beliefs

Lastly, the reinforcing mechanism explained in the framework of business models for sustainability is accurately illustrated in the case of Dania. She explains that to stop eating meat was just the first step that led her to change a whole range of habits in her life. She started to care about the ingredients of the products she consumed and the harm they did to her and the environment. She cared about everything that could generate contamination or waste (Dania Salazar, Rubrum co-founder, 2020). Thus, her first sustainable action of stopping eating meat led to the reaffirmation of his prior beliefs regarding other environmental issues.

Additionally, their personal life experiences had an impact on their professional sustainable decisions. Thus, the journey of Dania of becoming a more sustainable consumer every day and the eagerness of Juan Carlos to have a positive impact in society following

indigenous communities teachings led them to choose a discarded material as their working material. That decision, in turn, spurred them to want to do more and more because of the tendency of evaluating as positive events of actions that support previous beliefs (Abdelkafi & Täuscher, 2016). That led them to desire to avoid any waste in the process of manufacturing their product and keeping on improving their circularity. “*We are working with discarded materials and it does not make sense to discard part of the material I am retrieving(...) the idea is not to discard any material, to not discard anything*” (Juan Carlos Barrera, Rubrum co-founder, 2020). Pp.4 appendix I. “*It had always been a concern of ours that waste is not turned into any more waste*” pp. 31 appendix I (Dania Salazar, Rubrum co-founder, 2020).

Moreover, the experience they have had with their entrepreneurship project has not only led them to desire to become more circular, but also to become a more sustainable business. “*Our idea is to create partnerships with prisons to build workshops there and this way being able to outsource the production, the processes. This way the project is rounded up, and it becomes a fully sustainable project because we are gaining the attribute of social inclusion*” (Juan Carlos Barrera, Rubrum co-founder, 2020) pp. 10 appendix I.

6.2.5 Analysis of the rest of the elements of the framework

Moreover, the analysis of the relationship among the rest of the elements of the model, ecological capital, customer value proposition, value creation capacity and value captured, provides us with insights on the impact the brand’s environmental value proposition has on the environment, referred to as ecological capital in the model, how the brand’s customer value proposition affects the behavior of the customers and how the behavior of the customers affect the beliefs of the managers.

Ecological capital

Ecological capital stock is increased when renewable resources are composted and returned safely to the environment. In other words, ecological capital is increased when renewable resources are regenerated. Additionally, it is increased when pollution is reduced.

Rubrum reutilizes wood from a discarded product in the manufacturing of its products and this way, they make the material flow in the economy in a process of cascading of renewable resources. Moreover, they aim at reducing the number of materials used in production and to avoid chemicals (Dania Salazar, Rubrum co-founder, 2020). This increases ecological capital because it avoids functional material to end up unused in landfills and thus, contributing to the pollution that landfills generate (International Solid Waste Association, 2017). It also potentially avoids some other materials to be extracted from the earth to be used for manufacturing jewelry and it contributes to decrease the pollution that the extraction of these materials would cause as well as to preserve those materials in the environment.

The reason for this is that some Rubrum customers are buying products made out of other less sustainable materials when they are not buying from the brand. This is the case of Catherine, one of the interviewed customers. This is her answer when she was asked about her last five accessory purchases. *“My last accessories purchases have been mainly sustainable ones, in the case of Rubrum because they are reusing materials and in the case of the rest of the purchases, I have bought from artisans that work with traditions and products that are from here(...)The things that I bought were made out of “noble materials”; more precisely cooper or alpaca⁸”* pp. 44 of appendix I (Herrera, Rubrum's customer, 2020).

Even though Alpaca is not silver, but it is an alloy, one of its main components is cooper the most abundant mineral in Chile (Servicio Nacional de Geología y Minería, 2020). The extraction of copper, even though is protected by environmental laws and the industry has been modernized through the years, still suffers environmental accidents continuously (Folchi, 2009).

Moreover, three out of the four customers interviewed affirmed that they try to buy as much as sustainable accessory products as possible but still the approximately half of their last five purchases were not sustainable (Araneda, Rubrum's customer , 2020) (Ceci, Rubrum's customer, 2020) (Herrera, Rubrum's customer, 2020). Therefore, some other materials are consumed in these not sustainable purchases. Only one of the interviewees declared that she does not buy absolutely any product that she perceives as not sustainable

⁸ The definition of this term can be found in the glossary of terms (Appendix II)

“It is sustainable, or it is not, it is being a while since I do not wear makeup” pp 51 appendix I (Prieto, Rubrum's customer, 2020).

However, even though Rubrum makes sure to not use toxic materials such as chemicals in its production so that their products can potentially be composted. They are not directly in charge of making sure that this is happening. In addition, Dania does not know of any facility in Chile that composts biomaterials and she believes it needs to be done as an individual initiative at home (Dania Salazar, Rubrum co-founder, 2020). Therefore, there is not evidence of Rubrum increasing the ecological capital stock in this way.

Customer value proposition

The customer value proposition affects the behavior of the consumers (Abdelkafi & Täuscher, 2016). The different customer value propositions of the accessory brands in Chile make up the options that consumers have. Thus, consumers may buy sustainable options if those sustainable options exist. If not, they can only affect the environmental value proposition with their purchasing decisions. For instance, stopping consuming a product. This was done by Paty, who stopped consuming makeup products because she did not find sustainable affordable options *“It is sustainable, or it is not, it has been a while since I do not wear makeup”* (Prieto, Rubrum's customer, 2020) *pp 51 appendix I*.

Thus, these customers may have affected the business models of Rubrum as well as other sustainable brands in Chile with their demand for sustainable products. In turn, taking the sustainable decision of buying a product from Rubrum, like in the case of the sustainable decisions taken by the Rubrum owners, it has an impact on their future sustainable purchasing decisions (Abdelkafi & Täuscher, 2016). Thus, the experience of buying in Rubrum may inspire Rubrum customers to get to know more sustainable brands or not. To get insights on this matter the interviewed customers were asked if getting to know Rubrum had inspired them to meet other sustainable and circular brands. *“Yes, this is the first Brand of sustainable accessories that I know but I always try to buy sustainable products”* pp. 41 appendix I (Ceci, Rubrum's customer, 2020), *“Yes, what happens is that I have been working with the topic of sustainability and recycling for almost four years(...) so I am already interested in knowing more projects because that way we have more purchasing alternatives”* pp. 46 appendix I (Herrera, Rubrum's customer, 2020), *“Yes, I know other brands of textile jewelry and there is*

also Runtu, in Valparaíso that makes jewelry with eggshells” pp. 51 appendix I (Prieto, Rubrum's customer, 2020), “No, after Rubrum I have the same desire to meet new brands. Not because I got to know Rubrum, I want to know other brands” pp.57 appendix I (Araneda, Rubrum's customer , 2020).

Therefore, three out of the four interviewees answered “yes” to have felt inspired by Rubrum to meet other sustainable brands, understood as being the same as feeling the desire to buy sustainable again, and one of the interviewees affirmed to feel the same as before. However, it can be deduced out of the answers of two of the customers that answered yes that they are already interested in sustainable brands since they constantly seek for new brands and it is not the precise experience with Rubrum that has driven them to keep on consuming sustainable.

Value creation capacity

An increase in this variable generally means a decrease in the ecological capital because company's use resources to generate value for their clients (Abdelkafi & Täuscher, 2016). However, in the case of Rubrum, they use discarded resources as their main raw materials, so they are able to increase their value creation capacity and their customer value proposition without decreasing the stock of ecological capital. However, there is material that has a higher environmental impact than the wood of the decks. These are the trucks that are the metal components that give support to the wheels (Gaasbeek, 2015) and there are some other components of the skate that Rubrum does not know how to utilize.

Value captured

Rubrum is able to bring back the value they create with their customer value proposition offer, through the sell of their products. In fact, their value captured is mainly based on the fact that they are a circular brand. Nevertheless, there are other important factors that customers value when buying the brand, such as the beauty of the products and the fact that it is handmade. The following is a reflection of the value that the interviewed Rubrum see on Rubrum products:

“I liked the design, but when they told me that their products were made out of recycled materials, then I loved it” pp.40 appendix I (Ceci, Rubrum's customer, 2020)

“Obviously, when buying from Rubrum, the perception that we have of handmade work since we know all work that is behind it, is an important point. But above all, the designs are also very beautiful, so it is a combination of both” pp. 43 appendix I (Herrera, Rubrum's customer, 2020).

“When buying a product from Rubrum I cared first about the design, what they show and ultimately their speech. For me, the discourse they have is a great support (...) they have a purpose that goes beyond simple design” pp. 48 appendix I (Prieto, Rubrum's customer, 2020).

“One of the things that I liked was the design, I find it very beautiful and innovative. They also treat wood very well. They have very good finishes. Also, I liked the project itself about the reutilization of wood” pp. 52 appendix I (Araneda, Rubrum's customer , 2020).

Thus, the relationship of the different elements of the framework follows a reinforcing loop mechanism. Thus, all the elements of the framework are closely connected (Abdelkafi & Täuscher, 2016). First, the information of the environmental issues flows from the ecological capital stock to the Rubrum owners and Rubrum customers. This information affects their beliefs and therefore their behavior. Rubrum owners make changes then on their environmental value proposition, their customer value proposition and their value created. This customer value proposition will have a direct impact on the behavior of the customers, that will have more circular options to choose from and in turn, the behavior of Rubrum customers will feed the behavior of Juan Carlos and Dania that will make changes on their customer and environmental value proposition. Like so, their created value. Moreover, the environmental value proposition that the Rubrum owners design alters the stock of ecological capital and thus, it has a direct influence on the environment. However, customers do not directly make changes on the ecological capital, but through their influence of the beliefs of the brand owners.

Furthermore, the value created for the customers and the environment is captured back by the company through the sale of their products to clients that mostly appreciate the environmental value proposition as part of the customer value proposition. Most of the customers interviewed appreciated the fact that the products were made with reused materials and understood the reason for a higher price of Rubrum products. *“Both (the beauty of the product and the materials) were important to me, but it had not been made from recycled*

materials, I would not have been interested in paying what I paid for that product” pp. appendix I (Herrera, Rubrum's customer, 2020).

6.3. Mapping the most suitable partnerships for Rubrum

The main purpose of this framework is to create a “win-win-win” situation where the businesses of the network, the environment, and other stakeholders are benefited by the circular co-creation network (Aminoff et al.,2016).

As it has been disclosed in the analysis of the circular business model, Rubrum has three existing groups of partnerships. These are their suppliers of materials, mainly of their main discarded skateboards that are skateboard shops, schools, and parks, and also the suppliers of the few additional materials that are needed in the production of Rubrum products such as silver wire and adhesives. Furthermore, their distributors, both online platforms such as vloggie or justas.cl, and a physical store called Mulato, and last, the government as their punctual institutional partnership since they open doors for them inviting them to fairs and events so that they can increase their visibility (Juan Carlos Barrera, Rubrum co-founder, 2020; Dania Salazar, co-founder Rubrum , 2020).

However, it is already apparent that the network is still incomplete if the purpose is to close the loop on the wood from the discarded skateboards. Thus, the framework by Aminoff et al. (2016) will be applied step by step to analyze the value that the current partnerships provide and the value that potential partnerships could bring.

6.3.1 Applying the framework for the creation of circular value co-creation networks

6.3.1.1 Defining the value proposition of the network

The motive and need of this network is the effective cascade use of the wooden components. Providing the used wood pieces a new functional use and ultimately be composted or processed through anaerobic digestion in order for its nutrients to be returned to the natural ecosystem. This is, ending the cycle of wood in a circular economy (Ellen MacArthur Foundation, 2013).

6.3.1.2 Identifying the main actors and the value they bring to the network

The four types of actors that should play a role in the network are core business actors inside the network, core business actors outside the network, the society and the environment and the rest of the stakeholders. The main actors will be identified and then, the value they bring to the network will be investigated.

Core business actors inside the network:

Producers: These are the actors that take the pieces of wood and transform them to create a product that solves the needs of consumers. Thus, Rubrum is one of the producers of the “prospected” network. The network is referred to as prospected because it is a work in design project and the full network and the actors that will be necessary to provide the value creation either do not exist yet or they are not collaborating. The producers can also be the first importers of the product (Ministerio del Medio Ambiente de Chile, 2016). An example of other producers that are working with the circular economy of wood is Ikea (Petar Ostojic, 2018). The value proposition of producers is that they provide the network with the products that will be used by the consumers and they design with products with the eco-effectiveness principles and thus, they are designed to be kept in their pure state.

Distributors: These are the actors specialized in the sale of the finished products made out of wood such as the physical store called “Mulato” inside the museum of visual arts (MAVI) where they sell their products or the online platforms. In addition, Rubrum is a distributor of its own products so they could be considered distributors inside the network. The value proposition of these actors that bring the products from the circular producers to the customers.

End-user: The last user of the network is the consumer of the last product that is produced with those pieces of wood. At present, this is the consumer of Rubrum since Rubrum does not collaborate with any entity that uses Rubrum products at the end of their life cycle for other purposes (Dania Salazar, co-founder Rubrum , 2020; Juan Carlos Barrera, Rubrum co-founder, 2020). However, the objective of this prospective network is that the last user is the buyers of the fertilizers or the biogas coming out of anaerobic digestion. The value they offer

to the network making use of the take-back systems so that the used wood pieces can end up in the end of life cycle service providers hands.

End of life cycle service provider: These actors are understood as the last party that treats the wooden pieces, it can be at the end of one cascading applications and in that case these actors will prepare the wood pieces for the following use, or after a cascading use of wood, in which case these companies will either compost or expose the wooden pieces to anaerobic digestion. For the moment Rubrum does this work when they receive the skateboards. Some prospective actors of this type could be the composting plant located in La Pintana, a pioneering neighborhood in composting located in south Santiago (Ramos, 2019). The Chilean office for the circular economy, dependent of the ministry of environment is managing 20 composting projects along the country (Yáñez, 2019). Furthermore, there are some private companies that compost organic waste such as Vuelta verde, Ecoser that do the composting process for the customer (Vuelta verde, 2016;Ecoser, 2018) and some other companies that sell composting machines for individual customers (Geociclos, 2018).

The value they bring to the network is processing the materials to eliminate any other materials that can alter their pure state or returning the nutrients to the biosphere so that the cycle can be started again.

Material supplier: In this category are included the actors that provide producers with the wood pieces, both the first use maple wood and the suppliers of used wood such as the skate parks, schools, and shops. They supply the pieces of wood to the producers such as Rubrum. The value they bring to the network is being specialized in buying from the end of life cycle service providers and selling to the producers of the network.

Innovator partner: Universities, such as the University of Desarrollo in the city of Concepción, that helped Rubrum to develop the containers where the skateboards are deposited but also development centers such as the circular economy hub in Tarapacá (CIEC, 2018). The value that these parties bring to the network is providing design and technical solutions to facilitate the circular economy implementation.

Core business actors outside the network:

Skaters community and the owners of other wooden objects: The community of skaters certainly plays an important role in the business model of Rubrum. This is because their main

raw materials come from them, and their decision of giving away their decks after its end-of-life. In fact, one of the barriers that Rubrum faces in the collection of broken and scratched skateboards is the fact that many skateboarders decide not to give away their deck even when it is broken (Juan Carlos Barrera, Rubrum co-founder, 2020) The value they bring to the network is crucial and is as simple as giving their skateboard or wooden object to the end of life service providers.

Investors: The two Rubrum founders mentioned in their interviews that they had not received financial help from the government (Juan Carlos Barrera, Rubrum co-founder, 2020;Dania Salazar, Rubrum co-founder, 2020). Additionally, at the moment Rubrum does not consider private investors because of high interest rates they require (Rubrum, personal communication by e-mail, September 10th, 2020). The main value that investors both public and private bring to the network is providing liquidity to its members.

Regulators: They set the rules of the game that must be followed by the rest of the players. These are mainly the different municipalities of the metropolitan region of Santiago and the Government of Chile. The value they provide to the network is to set the rules under which the actors must play and enforce the law. Nevertheless, there exist no rules on the cascading use of wood in Chile.

The society and the environment

The foundation that helped them to get in contact with the students, “Fundación Desafío Levantemos Chile” can be categorized as part of the actors from the society and environment since they are part of the business network. Other foundations that work towards the promotion of the circular economy in Chile are “Fundación Chile” or “Fundación circular” (Fundación Chile, 2019;Fundación circular, 2018) The value they provide supporting the cause of the circular economy either providing training or organizing all types of events.

The rest of the stakeholders

Other circular networks could fall in the category of the rest of the stakeholders. Different circular networks could benefit from mutual collaboration. The value they bring to the network is circular economy knowledge and good practices.

6.3.1.3 Value that the existing network and the prospective network bring to Rubrum

Value that bring the existing partnerships to Rubrum

Distributors: The current distributors, specially the new online sustainable platforms bring them the possibility to expand their network and reaching the customers segments they want to target (Dania Salazar, Rubrum co-founder, 2020)

Material suppliers: Their material suppliers provide them with the material needed for their products and they contribute to the creation of the sense of community (Juan Carlos Barrera, Rubrum co-founder, 2020)

Innovator partner: They help them in designing things such as their containers to collect the skateboards and in improving their circularity in the case of this piece of research.

Skaters community: They are the ones that are able to convince other skaters to give away their deck.

Regulators: Institutions like the municipalities of Santiago bring them value in the form of invitation to events where they can get new contacts and partnerships.

The society: The value brought by the foundation that worked with them was being the intermediary between them and students.

Value that potential partnerships bring to Rubrum

Distributors: According to Juan Carlos, Rubrum has not been looking proactively for partnerships, but the parties have approached them with proposals (Juan Carlos Barrera, Rubrum co-founder, 2020).

End of life cycle service providers: These actors could be companies that compost organic materials or companies that utilize their products in cascade after they have been used by the customers. The value that those parties would bring to the brand is that they could make sure that their environmental value proposition has a real positive impact on nature. Furthermore, trucks that are the metal parts that support the wheels have a greater environmental impact than the wood (Gaasbeek, 2015). Thus, companies that process that kind of materials would be of high value to improve Rubrum's environmental impact.

Investors: The investors could provide Rubrum with liquidity so that they can expand what Rubrum calls a basic workshop.

7. Discussion

This section will focus on reflecting upon the findings of the previous points. Thus, this part of the thesis will aim to answer the question on how Rubrum's business model can become more circular than they are at the moment. This will be done reflecting on the drivers and barriers found in the business models for circular economy of Lewandowski, the system dynamics for environmental value proposition creation and its interrelation to other elements, and lastly, the value of the current Rubrum's partnerships and the potential value that other . At the end of the section, the limitations of the research and a reflection on the need of further research are presented.

7.1 Discussing business models for circular economy Lewandowski

7.1.1 Communication of their environmental value proposition not based on facts

Juan Carlos and Dania affirm that Rubrum's environmental value proposition is based on the fact that their products can be composted after they have been used by their consumers. Nevertheless, they do not make sure that this happens. Therefore, what Rubrum's founders mention as Rubrum's environmental value proposition probably does not really happen. This is a problem because they can be having less positive environmental impact than what they believe they have. However, since the environmental value proposition of a brand is based on the perception the brand believes that it has for the environment, then that keeps on being their environmental value proposition.

Moreover, when Juan Carlos mentions that giving some part of the wood from the skateboards to impoverished neighborhoods to be used as firewood, this statement reflects that he is not aware of the possibility of the cascading use of their products to be used for

other purposes before these are composted to extract their nutrients and returning them to land as fertilizers. Moreover, he seems to not know the difference between a process of anaerobic digestion where nutrients are recovered, and biogas is produced on the process and using wood as firewood (United States Environmental Protection Agency, s.f.). In fact, there is an environmental decontamination plan that wants to forbid the use of firewood in most of the municipalities of Santiago from the year 2020 (Ministerio del Medioambiente, Gobierno de Chile, 2020).

7.1.2 Alignment of environmental value proposition and customer value proposition

Findings have shown that Rubrum's environmental value proposition rests on recovering wood that will otherwise pollute the environment. Moreover, the customer value proposition is summarized in offering durable and beautiful products made from recovered materials.

The environmental value proposition makes possible the customer value proposition. Or in other words, the environmental value proposition is part of the customer value proposition. Thus, the environmental and customer value propositions are aligned. These findings match with the fact that the care for the environment is the central core value of Rubrum.

7.1.3 Channels for promoting their sustainable brand and customer relationship

According to several customer interviewees, Rubrum's discourse and what they communicate when they are able to meet with their customers in fair or other environments plays an important role on their purchasing decision because they are to understand the motivations behind the project (Paty Prieto Candia, Rubrum's customer, 2020; Pilar Araneda Maiz, Rubrum's customer, 2020). However, most of Rubrum's new customers and sales come from the internet and more precisely social media, where the founders cannot personalize their discourse to every person that gets to know their brand. Therefore, Rubrum should find a way to express their values and oral discourse online in the same way they do in person to person meetings if they want to enhance their circular brand.

Nevertheless, the fact that Rubrum has chosen to be exclusively in platforms that are aligned with their values is beneficial for their brand image and makes the relationship with

the customers easier since they understand better the type of brand they are and what they stand for.

Therefore, social media is a driver for the development of their circular business model, but it can also turn to be a barrier for the understanding by the customers of their business model.

7.1.4 Basic workshop and loads of self-learning

Rubrum started their operations with a small workshop that counted with only basic tools. This is, according to the theory of circular business model framework by Lewandowski (2016), an internal barrier to the adoption of circular business models related to the lack of material resources. However, this lack of material resources was compensated with the high levels of motivation that the founders had and with loads of self-learning inspiring themselves in the traditional carpentry. This motivational factor is related to a high extent with Rubrum's brand culture. Rubrum founders were eager to create an entrepreneurship project that could be an extension of their values and beliefs and that contribute positively to the environment. Thus, the barriers were offset by the drivers.

7.1.5 Main barriers and drivers for the implementation of a circular business model working with the cascading of wood

The following will serve as a summary for the first part of the discussion. Hence, it is aimed to summarize the main barriers and drivers, both internal and external that Rubrum faced in the implementation of their circular business model and that, in some cases, they still face. This will help us to answer the first sub-research question.

It has been concluded that communicating their value proposition in social media can represent either a barrier or a driver. This is because their ability to communicate their discourse, one of the most valued aspects by the customers (Paty Prieto Candia, Rubrum's customer, 2020; Pilar Araneda Maiz, Rubrum's customer, 2020) becomes more difficult through social media because is rarely personalized. Nevertheless, social media is a driver because it is their main channel for customer acquisition and sales (Dania Salazar, Rubrum co-founder, 2020) (Juan Carlos Barrera, Rubrum co-founder, 2020).

Furthermore, they had a barrier in their access to material and financial resources. However, they compensated it with loads of online self-learning and motivation to have a positive environmental impact.

7.2 Second part of the discussion. Reinforcing mechanism of Business models for sustainability

7.2.1 Effects of an increase of the value creation capacity

An increase in value creation capacity of Rubrum through acquiring a new machine for processing sawdust for example, together with acquiring the necessary knowledge to manage that machine and to design functional products out of that extra material, could also increase the value captured and the value captured in turn, then can be designated to better increase the value creation capacity or the customer value proposition. In turn, this changes the environmental value proposition indirectly. Therefore, this is a via through which the environmental value proposition can be enhanced. Furthermore, the trucks, the metal parts that support the wheels have a greater environmental impact than the wood (Gaasbeek, 2015). Thus, if Rubrum could find partners that could help them using these metal parts, they could improve their environmental value proposition.

7.2.2 Beliefs based in wrong facts that affect the environmental value proposition

In the interview carried out with Juan Carlos, he mentioned that he had thought of another possible environmental value proposition based on providing some wood proceeding from the skates to people of the most economically vulnerable neighborhoods of Santiago. This shows that Juan Carlos does not have in mind the cascading of wood as a necessary step after the use of their products. Nevertheless, Rubrum does reflect on what to do with the waste they generate when recovering the wood such as sawdust (Juan Carlos Barrera, Rubrum co-founder, 2020).

7.2.3 Consequences of the reinforcing mechanism beliefs-behavior-beliefs for the development of the circular business model

The fact that the environmental value proposition of the brand is affected by the previous experiences with sustainability means that the process is becoming more circular everyday and needs time. One decision needs to be built up on other previous decisions and not big improvements can be made in a matter of short time. As an example, to eliminate waste from their production line they need to acquire a machine that they do not have the financial resources to acquire yet. Thus, one way of going forward is growing their sales before becoming fully zero-waste. Therefore, another important aspect is the necessary experience of the company to move one step at a time towards a more circular business model.

Therefore, Rubrum's environmental value proposition can be enhanced by increasing their value creation capacity and being able to process the rest of the materials that are not wood from the skate. Furthermore, the brand would benefit from learning about the cascade use of wood concept to be able to think about their environmental value proposition in this way. Lastly, another factor that could improve this aspect is the necessary experience to learn from their previous sustainable decisions.

7.3 Most suitable partnerships for the enhancement of the contribution of Rubrum to the cascading of wood in Chile

Findings have shown that there is a need for Rubrum to complement the existing partnerships with new partnerships. This does not come as a surprise due to the relevance of collaborations within the framework of the circular economy (Het Groene Brein, n.d.). It has been found that there is a need of being more proactive searching for sustainable online platforms where to sell their products due to the high value that those can bring them, such as better communicating their value proposition to their clients. Furthermore, there is a need for creating new partnerships that are able to reutilize Rubrum products in a cascading process. Furthermore, the value of other potential partnerships such as investors could give Rubrum a boost to increase their circularity. The owners affirm that having investors could turn to be highly expensive for them. However, they do not consider that the investments can come from sustainable investments with better conditions or crowdfunding (Gleasure & Feller, 2016).

7.4 Managerial implications

In order to solve the problem of communicating a partnerships that is not hold in facts, Rubrum would need to calculate the average life cycle of their products and set in place take-back mechanisms not only from bringing the skateboards from the skater to them, but also, to bring back their back their products after use.

Furthermore, there is a need of being proactive in the search of new sustainable online platforms where to sell their products, due to the importance of that to communicate their customer value proposition as well as strategically utilizing social media for this purpose. In addition, Rubrum needs to reconsider the possibility of searching for sustainable investors that could invest in their project or starting a crowdfunding campaign so that they can buy the tools they need become more circular and make a better use of all materials within the skateboard.

7.5 Contributions and further research

7.5.1 Contributions

The type of circular business model of Rubrum, a loop circular business model that aims to contribute to closing the cycle of wood in Chile has never been analyzed before. The most relevant contribution of this master's thesis to the field of research of circular economy in Chile is presenting a functioning business model and the improvements that an entrepreneurship project such as them can do to enhance its circularity.

7.5.2 Further research

If Chile desires to take advantage of the circular economy revolution and keep on being a frontrunner in the region of Latin America, it is necessary to do research on other types of circular business models such as non-renewable circular business that can serve as an example for the upcoming entrepreneurship projects.

Some of the aspects that need further research regarding the take-back systems are the reasons why some skaters do not give away their decks such as emotional attachment. This is important for Rubrum because the wood from the skates is their main raw material and they need to increase the amount of this material they recuperate if they want to expand their business model. Besides, it would be helpful for the circular network of the cascading of wood in general, to further investigate the reasons of the general population for giving away their wooden furniture. That research would be extremely relevant because nowadays most of the wood recovered in the network is coming from the forest industry (Ministerio de energía, s.f.).

Moreover, it could have been interesting to analyze the full process that Rubrum follows when recovering the wooden material from the skateboards to observe where the process can be improved and what can be done to improve circularity, if some adoption factors such as material and financial resources are covered. That information would be helpful if the brand decides to search for investors. Even though they have not decided to do this yet, they might do it in the future. However, that aspect was beyond the scope of this research.

Additionally, there is a need for exploring the options of the different partnerships that Rubrum needs to make such as the companies that could reutilize their products after their use.

8. Conclusion

The research strategy of this case study based in the qualitative analysis of in-depth interviews both with Rubrum's founders and four of their customers, has allowed us to answer the main research question of "How can Rubrum improve its circularity and its contribution to the circular economy of wood in the Chilean context?". This has been done making use of three sub-research questions. The first one focusing on analyzing the business model for circularity and the drivers and barriers for the development of a circular business model in the Chilean context with business models for circular economy framework by Lewandowski (2016), the second analyzing the aspects that can improve the brand's environmental value proposition making use the business models for sustainability system dynamic approach authored by Abdelkafi & Täuscher (2016) and the third one, focusing on researching on the most suitable partnerships for Rubrum utilizing the mapping the value of

circular co-creation networks' framework elaborated by Aminoff, et al. (2016). The findings of this research have been in the first place, that some barriers such as the lack of financial and materials resources have been compensated by their brand culture and the motivation for creating the project. Furthermore, that social media, specially Instagram, can become a driver for circularity but also a barrier because communication cannot be personalized. Moreover, it was found that Rubrum can enhance its environmental value proposition by basing it in facts a creating the mechanisms that allow them to have the control of their products after they have been used. Furthermore, they can enhance their environmental value proposition by increasing their value creation capacity. Since they do not count with enough financial resources to do that, it is required that they search for sustainable investors. Those are one of the more advantageous potential partners for Rubrum together with the need of being more proactive searching for sustainable online platforms where to sell their products.

Moreover, it was found that Rubrum can enhance its environmental value proposition by basing it in facts a creating the mechanisms that allow them to have the control of their products after they have been used. Furthermore, they can enhance their environmental value proposition by increasing their value creation capacity. Since they do not count with enough financial resources to do that, it is required that they search for sustainable investors. Those are one of the more advantageous potential partners for Rubrum together with the need of being more proactive searching for sustainable online platforms where to sell their products.

9. References

- Benyus, J. (1997). *Biomimicry: Innovation Inspired by Nature*. New York, United States of America: William Morrow.
- Braungart, M., McDonough, W., & Bollinger, A. (2006). Cradle-to-cradle design: creating healthy emissions e a strategy for eco-effective product and system design. *Journal of cleaner production*, 1-12. doi:10.1016/j.jclepro.2006.08.003
- Delgado Fuentealba, H. (2020, May 11). *El Clarín*. Retrieved June 20, 2020, from <https://www.elclarin.cl/2020/05/11/sebastian-pinera-entre-monarca-y-dictador/>
- Rossé, M., Stuchey, M., & Vanthournout, H. (2016). *Finding growth within: A new framework for Europe. How the circular economy could promote green growth*. McKinsey& Company.
- Abdelkafi, N., & Täuscher, K. (2016). Business Models for Sustainability from a Systems Dynamic Perspective. *Organization & Environment*, 29(1), 74–96. doi:10.1177/1086026615592930
- Acción de empresas and Ipsos. (2019). *Conscientes: Una mirada al nuevo consumo actual [Conscious: a look at the new current consumption]*. Retrieved Jun 30, 2020, from <https://accionempresas.cl/herramientas/conscientes-una-mirada-al-consumo-actual/>
- ACERA(Chilean Association for Renewable Energies and Storage). (2019). *ACERA(Chilean Association for Renewable Energies and Storage)*. Retrieved July 10, 2020, from <https://acera.cl/el-salto-de-las-energias-renovables-en-chile-bate-todos-los-records-proyectados/#:~:text=Chile%20exportador%20de%20energ%C3%A1A&text=En%202018%2C%20la%20energ%C3%A1A%20que,los%20desaf%C3%ADos%20siguen%20siendo%20muchos.>
- Albaladejo, M. (2020, March 9). Manuel Albaladejo: “La economía circular es donde se encuentran la agenda productiva y la ambiental; hoy no se entiende una sin la otra” [Manuel Albaladejo: The circular economy is where the productive and environmental agenda meet (..)]. *Pais circular*. (G. Guerra, Interviewer) Retrieved June 15, 2020,

from <https://www.paiscircular.cl/industria/manuel-albaladejo-la-economia-circular-es-el-punto-de-encuentro-entre-la-agenda-productiva-y-la-ambiental-hoy-es-imposible-entender-una-sin-la-otra/>

Alberti, C., Luna, J., & Toro, M. S. (2018, Nov 26). *Plan Araucanía: los errores de la política pública en el conflicto mapuche* [Araucanía Plan: the public policy errors in the mapuche conflict]. Retrieved June 12, 2020, from Ciper Chile: <https://ciperchile.cl/2018/11/26/plan-araucania-los-errores-de-la-politica-publica-en-el-conflicto-mapuche/>

Aminoff, A., Valkokari, K., & Kettune, O. (2016). Mapping Multidimensional Value(s) for Co-creation Networks in Circular Economy. *IFIP Advances in Information and Communication Technology*, 629–638. doi:10.1007/978-3-319-45390-3_54

Araneda, Rubrum's customer , P. (2020, Jul 10). Pilar Interview. (D. Ortega Martin Rubio, Interviewer) Retrieved from Appendix I

Artesanos en línea. (2020). *Rubrum Reutilización & Skateboards*. Retrieved July 23, 2020, from Artesanos en línea: <https://www.artesanosenlinea.cl/rubrum-reutilizacion-skateboards/>

Badia-Miro, M., & Ducoing , C. (2014, December 19). The Long Run Development of Chile and the Natural Resources Curse. *Linkages, Policy and Growth, 1850-1950. UB Economics Working Papers E14/318*, 1-21. doi:10.2139/ssrn.2539023

Bartlett, J. (2019, Nov 15). *The Guardian*. Retrieved June 14, 2020, from <https://www.theguardian.com/world/2019/nov/15/chile-referendum-new-constitution-protests>

Baxter, W., Aurisicchio, M., & Childs, P. (2017). Contaminated interaction: another barrier to circular material flows. *Journal of Industrial Ecology*, 21(3), 507-516. doi:10.1111/jiec.12612

BBC News Mundo. (2019, November 26). Protestas en Chile: las graves consecuencias del estallido social para la economía del país [Protest in Chile: The serious consequences of the social outbreak for the country's economy]. *BBC News Mundo*. Retrieved

August 10, 2020, from <https://www.bbc.com/mundo/noticias-america-latina-50460555>

Borland, H., & Lindgreen, A. (2013). Sustainability, Epistemology, Ecocentric Business, and Marketing Strategy: Ideology, Reality, and Vision. *Journal of Business Ethics*, 117, 173-187. doi:10.1007/s10551-012-1519-8

Burton, D. (2012). The Use of Case Studies in Social Science Research. *Research Training for Social Scientists*, 215-225. doi:10.4135/9780857028051.d24

Caisa Yucailla, E., Padilla Martínez, M., & Ríos Lara, G. (2020, January-April). El reciclaje de madera una herramienta para emprender y cuidar el planeta(Wood recycling a tool to undertake and care for the planet). *INNOVA Research Journal*, 5(1), 150-165. doi:<https://doi.org/10.33890/innova.v5.n1.2020.1038>

Camlek, V. (2010). How to spot a real value proposition. *Information Services and Use*, 30(3-4), 119-123. doi:10.3233/ISU-2010-0615

Ceci, Rubrum's customer, V. (2020, Jul 10). Vanessas Interview. (D. Ortega Martin Rubio, Interviewer) Retrieved from Appendix I

CIEC. (2018, November 3). *Accelerating the transition to a circular economy in Latin America*. Retrieved September 10, 2020, from Centro de Innovación y Economía Circular CIEC: <https://ciecircular.com/en/>

CONAF; Ministerio de Agricultura de Chile. (2008). *Ley sobre recuperación del bosque nativo y fomento forestal y reglamentos. [Law on recovery of the native forest and forest development and regulations]*. Law, CONAF and Ministry of Agriculture. Retrieved August 20, 2020, from https://www.conaf.cl/wp-content/files_mf/1368741650LibroLey_Bosque_NativoReglamentos.pdf

Consejo Nacional de la Cultura y las Artes. (2017). *Política Nacional de Artesanía 2017-2022 [National Handicraft Policy]*. Ministerio de las Culturas, las Artes y el Patrimonio, Gobierno de Chile, Santiago. Retrieved from <https://www.cultura.gob.cl/politicas-culturales/artesanias/>

Construye 2025. (2020, Jul 27). *Economía circular [Circular economy]*. Retrieved August 14, 2020, from Construye 2025: <https://construye2025.cl/tag/economia-circular/>

Crotty, M. (1998). Introduction: The research process. In M. Crotty, *The Foundations of Social Research, Meaning and perspective in the research process* (pp. 1-17). St Leonards(Australia): SAGE Publications.

Dania Salazar, Rubrum co-founder. (2020, July 22). Interview by Diana Ortega Martín-Rubio. (D. Ortega Martín- Rubio, Interviewer) Retrieved from Appendix I

Data World Bank. (2020). Retrieved from
<https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=CL-ZJ>

de Queiroz Lamas, W., Fortes Palau, J., & Rubens de Camargo, J. (2013, March). Waste materials co-processing in cement industry: Ecological efficiency of waste reuse. *Renewable and Sustainable Energy Reviews*, 19, 200-207. doi:<https://doi.org/10.1016/j.rser.2012.11.015>

den Hollander, M., Bakker, C., & Jan Hultink, E. (2017). Product Design in a Circular Economy.Development of a Typology of Key Concepts and Terms. *Methods, Tools and Software*, 21(3), 517-525. doi:[10.1111/jiec.12610](https://doi.org/10.1111/jiec.12610)

Derechos digitales. (2018, July 15). *Human rights in the digital context*. Retrieved September 6, 2020, from Derechos digitales: <https://derechosdigitales.org/upr32/index.en.html>

DESUC. (2018). *Encuesta nacional de medio ambiente 2018 [National Environment Survey 2018]*. Instituto de Sociología, Pontificia Universidad Católica de Chile, Facultad de Ciencias Sociales, Santiago de Chile. Retrieved June 17, 2020, from <https://mma.gob.cl/encuestas-nacionales-del-medio-ambiente/>

Ecoser. (2018, May 23). *Compostaje, ecoser [Composting Ecoser]*. Retrieved September 6, 2020, from Ecoser: <https://ecoser.cl/servicios/compostaje/>

Electricidad. La revista energética de Chile. (2019, Nov 29). El salto de las energías renovable en Chile bate todos los récords proyectados. *Electricidad. La revista energética de Chile*(236), 2. Retrieved from <https://www.revistaei.cl/2019/11/29/el-salto-de-las-energias-renovables-en-chile-bate-todos-los-records-proyectados/>

Ellen MacArthur Foundation. (2013). *Towards the Circular Economy. Economic and business rationale for an acceleratede transition Vol I.* Retrieved from

<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

Ellen MacArthur Foundation. (2018, September 26). *Latin America: Rich in natural resources, biodiversity and social innovation, the region has an important role to play.* Retrieved September 3, 2020, from Ellen MacArthur Foundation: <https://www.ellenmacarthurfoundation.org/our-work/regions/latin-america>

Ellen MacArthur Foundation. (2019, April 15). *Ellen MacArthur Foundation.* Retrieved from <https://www.ellenmacarthurfoundation.org/news/chile-joins-plastics-pact-network>

Eurochile. (2020a). *Quiénes somos: Eurochile fundación empresarial [About us: Eurochile business foundation].* Retrieved September 5, 2020, from <https://www.eurochile.cl/es/>

Eurochile. (2020b). *Economía circular: Eurochile [Circular economy : Eurochile].* Retrieved September 5, 2020, from Eurochile fundación empresarial: <https://www.eurochile.cl/es/transferencia-tecnologica/economia-circular/>

European Comission. (2017). *Circular economy research and innovation. Connecting economic & environmental gains.* European Comission. Dictorate- General for Research and Innovation, Brussels. Retrieved July 24, 2020, from https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/ce_booklet.pdf

Expo biomasa. (2019). Retrieved 2020, from <https://expobiomasa.com/en/content/the-union-strengthens-the-biomass-sector-in-chile>

Find & beak. (2020, July 10). *Algramo develops refill business with Unilever.* Retrieved September 7, 2020, from Find & beak: <https://www.finchandlebeak.com/1578/algramo-develops-refill-business-with.htm>

Folchi, M. (2009). Política, ambiente y la insustentabilidad de la minería en Chile [Politics, environment and the unsustainability of mining in Chile]. In J. Schuldt, A. Acosta, A. Barandiarán, A. Bebbington, M. Folchi, CEDLA-Bolivia, . . . E. Guadynas, Centro Andino de Acción Popular-CAAP-, & Centro Latinoamericano de Ecología Social-

CLAES- (Eds.), *Extractivismo, política y sociedad [Extractivism, politics and society]* (pp. 79-106). Quito, Ecuador: AlbaZul Offset. doi:78-9978-51-024-7

Forbes. (2019, September 13). *Skateboarding for sustainability*. Retrieved September 13, 2020, from Forbes: <https://www.forbes.com/sites/sap/2019/09/13/skateboarding-for-sustainability/#13611d7373a6>

Frosch, R., & Gallopolous, N. (1992). Towards an Industrial Ecology. In A. Bradshaw, & Bradshaw,et al. (Ed.), *The Treatment and Handling of Wastes* (pp. 269-292). London: Chapman and Hall. Retrieved from https://books.google.dk/books/about/Treatment_and_Handling_of_Wastes.html?id=dkDBbGT6b74C&redir_esc=y

Fundación Chile. (2019, September 19). *Conoce más sobre Fundación Chile [Learn more about Fundación Chile]*. Retrieved September 6, 2020, from Fundación Chile: <https://fch.cl/sobre-fch/>

Fundación circular. (2018, September 28). *Quienes somos: Fundación circular [About us: Fundación circular]*. Retrieved September 6, 2020, from Fundación circular: <https://fundacioncircular.org/contacto/>

Gaasbeek, A. (2015, July 30). *The Impact of a skateboard: Oath UK*. Retrieved August 25, 2020, from Pre-sustainability: <https://pre-sustainability.com/articles/the-impact-of-a-skateboard-oath-uk/>

Gascón Cervantes, M. (2007). *Condicionantes medioambientales, sociales y económicos de la reutilización y reciclado de residuos [Environmental, social and economic determinants of the reuse and recycling of waste]*. doctoral thesis, Universidad Politécnica de Madrid, Departamento de ordenación del territorio, urbanismo y medio ambiente, Madrid. Retrieved from http://oa.upm.es/886/1/MANUEL_GASCON_CERVANTES.pdf

Generadoras de Chile. (2020, March 10). *Conoce los tipos de energía [Get to know the different ways of generating electricity]*. Retrieved June 22, 2020, from Generadoras de Chile: <http://generadoras.cl/tipos-energia/energia-geotermica>

Geociclos. (2018, June 2). *Geociclos [Geocycles]*. Retrieved September 6, 2020, from Inicio: Geociclos: <https://www.geociclos.cl/>

Gleasure, R., & Feller, J. (2016). Emerging technologies and the democratisation of financial services: A metatriangulation of crowdfunding research. *Information and Organization*, 26, 101-115. doi:<https://doi.org/10.1016/j.infoandorg.2016.09.001>

Gobierno de Chile. (2016, June 1). Ley 20.920, ley REP [Extended Producer Responsibility Law]. Chile. Retrieved July 8, 2020, from <https://mma.gob.cl/economia-circular/ley-de-fomento-al-reciclaje/>

Gobierno de Chile. (2018, March 17). *Sebastián Piñera Echenique, Presidente de la República de Chile [Sebastián Piñera Echenique, President of the Republic of Chile]*. Retrieved July 26, 2020, from Gobierno Chile: <https://www.gob.cl/instituciones/presidencia/>

Godina:, L. (2020, July 29). "La transición a la economía circular no puede ser acelerada solo por las empresas; necesita una fuerte colaboración entre la industria, gobierno y sociedad civil"["The transition to the circular economy cannot be accelerated only by companies(..)]. (P. circular, Interviewer) Retrieved July 3, 2020, from Pais circular: <https://www.paiscircular.cl/consumo-y-produccion/entrevista-ladejagodina-hoja-de-ruta-economia-circular/>

González Farfán, C. (2019, December 17). *Arte, activismo y reciclaje: Rubrum convierte las tablas de skate en joyería sustentable [Art, activism and recycling: Rubrum turns skateboards into sustainable jewelry]*. Retrieved May 22, 2020, from Pais Circular: <https://www.paiscircular.cl/consumo-y-produccion/arte-activismo-y-reciclaje-rubrum-convierte-las-tablas-de-skate-en-joyeria-sustentable/>

González, J. (2018, January 5). Team Chile de skateboarding es presentado en el Comité Olímpico [The Chilean team of skateboarding is presented at the Olympic Committee]. *La Tercera*, p. 2. Retrieved September 4, 2020, from <https://www.latercera.com/el-deportivo/noticia/team-chile-skateboarding-es-presentado-comite-olimpico/38277/>

Government of Chile. (2015). *Intended Nationally Determined Contribution of Chile towards the Climate Agreement of Paris 2015*. Government of Chile, Santiago de Chile.

Retrieved March 20, 2020, from
<https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Chile/1/INDC%20Chile%20english%20version.pdf>

Grupo de residuos sólidos, Universidad Pontificia Católica Valparaíso. (2006). *Estudio caracterización de recursos sólidos domiciliarios en la región metropolitana-Informe final-Conama RM.* Valparaíso. Retrieved from http://metadatos.mma.gob.cl/sinia/articles-39508_pdf_res_ej.pdf

Hawken, P., Lovins, A., & Lovins, L. (2010). *Natural Capitalism. The fourth industrial revolution.* Earthscan.

Hawkins, E., Ortega, P., Suckling, E., Schurer, A., Hegerl, G., Jones, P., . . . Jan van Oldenborgh, G. (2017, September). Estimating Changes in Global Temperature since the Preindustrial Period. *Bull. Amer. Meteor. Soc.*, 98(9), 1841–1856. Retrieved from <https://doi.org/10.1175/BAMS-D-16-0007.1>

Helm, D. (2015). *Natural Capital: Valuing the Planet.* Padstow, Cornwall, United Kingdom: Yale University Press.

Herrera, C. (2020, June 30). Desempleo en Chile llega histórico 11,2%, registro más alto en 16 años [Unemployment in Chile reaches historic 11.2%, highest record in 16 years]. *Diario Concepcion*, p. 1. Retrieved August 4, 2020, from <https://www.diarioconcepcion.cl/economia/2020/06/30/desempleo-en-chile-llega-historico-112-registro-mas-alto-en-16-anos.html>

Herrera, Rubrum's customer, C. (2020, Jul 23). Cathos Interview. (D. Ortega Martin Rubio, Interviewer) Retrieved from Appendix I

Het Groene Brein. (n.d.). Retrieved September 2, 2020, from Kenniskaarten: <https://kenniskaarten.hetgroenebrein.nl/en/knowledge-map-circular-economy/ce-economic-advantages/>

Het Groene Brein. (n.d.). *What is collaboration in the value chain?* Retrieved September 1, 2020, from Kenniskaarten: <https://kenniskaarten.hetgroenebrein.nl/en/knowledge-map-circular-economy/ce-collaboration-value-chain/>

Höglmeier, K., Weber-Blaschke, G., & Richter, K. (2014). Utilization of recovered wood in cascades versus utilization of primary wood—a comparison with life cycle assessment using system expansion. *The International Journal of Life Cycle Assessment*, 19, 1755–1766. doi:10.1007/s11367-014-0774-6

Höglmeier, K., Weber-Blaschke,, G., & Richter, K. (2017). Potentials for cascading of recovered wood from building deconstruction,A case study for south- east Germany. *Resources, Conservation and Recycling*, 117, 304-314. doi:<http://dx.doi.org/10.1016/j.resconrec.2015.10.030>

Huang, J., Yu, H., Dai, A., Wei, Y., & Kang, L. (2017, June). Drylands face potential threat under 2 °C global warming target. *Nature Climate Change*, 417–422. doi:<https://doi.org/10.1038/nclimate3275>

Husgafvel, R., Linkosalmi, L., Hughes, M., Kanerva, J., & Dahl, O. (2018). Forest sector circular economy in Finland: A regional study on sustainability driven competitive advantage and an assessment of the potential for cascading recovered solid wood. *Journal of Cleaner Production*, 181, 483-497.

Infobae. (2020, July 31). Crisis del coronavirus: el desempleo en Chile trepó al 12,2 %, la cifra más alta desde 1987 [Coronavirus crisis: unemployment in Chile climbed to 12.2%, the highest figure since 1987]. *Infobae*, p. 2. Retrieved August 2, 2020, from <https://www.infobae.com/america/america-latina/2020/07/31/crisis-del-coronavirus-el-desempleo-en-chile-trepa-al-122-la-cifra-mas-alta-desde-1987/>

International Solid Waste Association. (2017). *Working together towards a cleaner, healthier planet*. International Soclid Waste Association, Vienna. Retrieved from https://www.iswa.org/fileadmin/galleries/Publications/ISWA_Reports/2017_ISWA_Annual_Review.pdf

Joyce, A., & Paquin, R. (2016). The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*, 135, 1474-1486. doi:10.1016/j.jclepro.2016.06.067

Juan Carlos Barrera, Rubrum co-founder. (2020, July 22). Interview by Diana Ortega Martín-Rubio. (D. Ortega Martín-Rubio, Interviewer) Retrieved from Appendix I

- Kato, I., & Smalley , A. (2011). *Toyota Kaizen methods. Six Steps to Improvement*. New York: Productivity Press. Retrieved from <https://books.google.es/books?hl=es&lr=&id=RS4nsJGsgmEC&oi=fnd&pg=PP1&dq=kaizen+method+toyota&ots=RDbbRyJz-a&sig=GDaLbTP5NYLQNZ95xrHYFI6w2Zo#v=onepage&q=kaizen+method+toyota&f=false>
- Kim-Keung Ho, J. (2014, August). Formulation of a Systemic PEST Analysis for Strategic Analysis. *European Academic Research*, 2(5), 6478-6492. Retrieved from <http://euacademic.org/UploadArticle/831.pdf>
- Kraaijenbrink, P., Bierkens, M., Lutz, A., & Immerzeel , W. (2017, September 14). Impact of a global temperature rise of 1.5 degrees Celsius on Asia's glaciers. *Nature*, 549, 257–260. doi:<https://doi.org/10.1038/nature23878>
- Laufer, W. S. (2003). Social Accountability and Corporate Greenwashing. *Journal of Business Ethics*, 253–261.
- Leighton, H. (2019, Nov 27). *This Is Why You See What You See In Your Instagram Explore Tab*. Retrieved September 1, 2020, from <https://www.forbes.com/sites/heatherleighton/2019/11/27/this-is-why-you-see-what-you-see-in-your-instagram-explore-tab/>
- Levänen, J., Lyytinen, T., & Gatica, S. (2018). Modelling the Interplay Between Institutions and Circular Economy Business Models: A Case Study of Battery Recycling in Finland and Chile. *Ecological Economics*, 154, 373-382. doi:[10.1016/j.ecolecon.2018.08.018](https://doi.org/10.1016/j.ecolecon.2018.08.018)
- Lewandowski, M. (2016, January 18). Designing the Business Models for Circular Economy, Towards the Conceptual Framework. (A. Jabłonski, Ed.) *Sustainability*, 8(43), 1-28. doi:[10.3390/su8010043](https://doi.org/10.3390/su8010043)
- Loiseau, E., Saikku, L., Antikainen, R., Droste, N., Hansjürgen, B., Pitkänen, K., . . . Thomsen, M. (2016, August 15). Green Economy and related concepts: an overview. *Journal of Cleaner Production*, 139, 361-371. doi:[0959-6526](https://doi.org/10.1016/j.jclepro.2016.06.040)

Mair, C., & Stern, T. (2017). Cascading Utilization of Wood: A Matter of Circular Economy? *Forest Policy, Economics and Social Research*, 3, 281–295. doi:10.1007/s40725-017-0067-y

Making It magazine, Industry for Development. (2019, May 27). *Making it magazine, Industry for Development*. Retrieved April 6, 2020, from <https://www.makingitmagazine.net/?p=10694>

Mantau, U. (2015). Wood flow analysis: Quantification of resource potentials, cascades and carbon effects. *Biomass and Bioenergy*, 79, 28-38. doi:10.1016/j.biombioe.2014.08.013

Martínez Cerna, L., Henríquez Aravena, A., Freire Castello, N., & Rodríguez Urrutia, R. (2019). *Economía circular y políticas públicas. Estado del arte y desafíos para la construcción de un marco político de promoción de economía circular en América Latina*[Circular economy and public policies. State of the art and challenges (...)]. Konrad-Adenauer-Stiftung e.V.(KAS), Lima. Retrieved from <https://www.kas.de/de/web/energie-klima-lateinamerika/home>

MatsumotoDr., M., & IjomahDr., W. (2013). Remanufacturing. In J. Kauffman, & K. Lee (Eds.), *Handbook of Sustainable Engineering* (pp. 389-408). Dordrecht: Springer. doi:https://doi.org/10.1007/978-1-4020-8939-8_93

McKinsey Center for Business and Environment. (2016). *The circular economy: Moving from theory to practice*. McKinsey & Company Practice Publications. Retrieved from <https://www.mckinsey.com/~/media/McKinsey/Business%20Functions/Sustainability/Our%20Insights/The%20circular%20economy%20Moving%20from%20theory%20to%20practice/The%20circular%20economy%20Moving%20from%20theory%20to%20practice.ashx>

Mehr, J., Vadenbo, C., Steubing, B., & Hellweg, S. (2018). Environmentally optimal wood use in Switzerland-Investigating the relevance of material cascades. *Resources, Conservation & Recycling*, 131, 181-191. doi:10.1016/j.resconrec.2017.12.026

Memoria chilena. (2009, Feb 20). *El estado del bienestar social (1924-1973) [The social welfare state (1924-1973)]*. Retrieved April 28, 2020, from Memoria Chilena: <http://www.memoriachilena.gob.cl/602/w3-article-3411.html#documentos>

Mendelsohn, R., Dinar , A., & Williams , L. (2006). The distributional impact of climate change on rich and poor countries. Environment and Development Economics. *Environment and Development Economics*, 11(02), 159-178. doi:10.1017/S1355770X05002755

Ministerio de energía. (n.d.). *Bioenergía, la energía de la biomasa: Aprende con energía*[*Bioenergy, the energy of biomass: Learn with energy*]. Retrieved September 7, 2020, from Aprende con energía: <https://www.aprendeconenergia.cl/energia-de-biomasa/#:~:text=De%20biomasa%20a%20electricidad%3A%20En,vender%20sus%20excedentes%20de%20energ%C3%ADA>

Ministerio de Energía, Gobierno de Chile. (2015a). *Energía 2050. Política energética de Chile*[*Energy 2050. Energy policy of Chile*]. Ministerio de Energía, Gobierno de Chile. Retrieved August 14, 2020, from https://www.energia.gob.cl/sites/default/files/energia_2050_-politica_energetica_de_chile.pdf

Ministerio de Relaciones Exteriores de Chile. (2019, July 5). *Economía de Chile- Chile en el exterior*[*Economy of Chile- Chile abroad*]. Retrieved August 13, 2020, from <https://chile.gob.cl/teheran/sobre-chile/economia-de-chile>

Ministerio del Medio Ambiente. (2018, October 17). *Inicio: Planes de prevención y/o descontaminación atmosférica(PPDA) [Home: Prevention and / or atmospheric decontamination plans (PPDA)]*. Retrieved September 2, 2020, from PPDA: <https://ppda.mma.gob.cl/>

Ministerio del Medio Ambiente de Chile. (2016). *Ley para la gestión de residuos, la responsabilidad extendida del productor y fomento al reciclaje* [*Law for waste management, extended producer responsibility and promotion of recycling*]. Act, Ministerio del Medio Ambiente de Chile, Santiago. Retrieved May 10, 2020, from <https://mma.gob.cl/wp-content/uploads/2015/06/do-20160601-web.pdf>

Ministerio del Medioambiente de Chile. (2020, July). *Ministerio del Medioambiente de Chile*. Retrieved from <https://mma.gob.cl/economia-circular/>

- Ministerio del Medioambiente, Gobierno de Chile. (2020). *Planes de Prevención y/o decontaminación atmosférica (PPDA)*. Retrieved from <https://ppda.mma.gob.cl/region-metropolitana/ppda-region-metropolitana/>
- Mollison, B., & Holmgren, D. (1979). *Permaculture One: A Perennial Agriculture for Human Settlements*. Sisters Creek, Tasmania, Australia: Tagari.
- Nahler, G. (2009). Rebound Effect. *Dictionary of Pharmaceutical Medicine*, 156-156. doi:https://doi.org/10.1007/978-3-211-89836-9_1191
- Norman, W., & MacDonald, C. (2004, April 2). Getting to the Bottom of "Triple Bottom Line". *Business Ethics Quarterly*, 14(2), 243-262. doi:10.2307/3857909
- Oficina de Estudios y Políticas Agrarias del Ministerio de Agricultura, Gobierno de Chile. (2019). *Informe final: Estudio de Economía Circular en el Sector Agroalimentario Chileno* [Final report: Circular Economy Study in the Chilean Agrifood Sector]. Santiago de Chile. Retrieved June 04, 2020, from <https://www.odepa.gob.cl/publicaciones/estudios/estudio-de-economia-circular-en-el-sector-agroalimentario-chileno>
- Okdiario. (2018, July 01). Qué es la alpaca en joyería. *Okdiario*, p. 2. Retrieved from <https://okdiario.com/curiosidades/que-alpaca-joyeria-2486739>
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers and Challengers*. Hoboken NJ: John Wiley and Sons.
- Ostojic, P. (2018, Sep 11). *Chile's journey to a circular economy*. Retrieved from medium: <https://medium.com/@petarostojic/chiles-journey-to-a-circular-economy-8ea601c829ec>
- Pardo, D. (2018, March 11). *Sebastián Piñera asume el poder en Chile: ¿en qué se diferencia su segunda llegada a la presidencia de la primera?* [Sebastián Piñera assumes power in Chile: how is his second arrival to the presidency different from the first?]. Retrieved June 10, 2020, from BBC Mundo: <https://www.bbc.com/mundo/noticias-america-latina-42388538>
- Parrique, T., Barth, J., Briens, F., Kerschner, C., Kraus-Polk, A., Kuokkanen, A., & Spangenberg, J. H. (2019). *Decoupling Debunked. Evidence and arguments against*

green growth as a sole strategy for sustainability. European Environmental Bureau, Amberes. Retrieved from <https://mk0eeborgicuyptuf7e.kinstacdn.com/wp-content/uploads/2019/07/Decoupling-Debunked.pdf>

Pauli, G. (2010). *10 years, 100 innovations, 100 million jobs.* Paradigm publications.

Peru treasure. (2016, July 11). *Peru treasure.* Retrieved from What is Alpaca silver?: <http://perutreasure.com/blog/what-is-alpaca-silver/>

Petar Ostojic. (2018, March 10). *Chile Circular [Circular Chile].* Retrieved August 10, 2020, from Petar Ostojic: <https://www.petarostojic.cl/chile-circular/>

Pipartner group. (2019). *Resultados Encuesta de Circularidad y Sustentabilidad en la empresa Chilena[Results of the Circularity and Sustainability Survey in Chilean companies].* Santiago de Chile. Retrieved July 30, 2020

Plecher, H. (2020, June 10). *Chile: Unemployment rate from 1999 to 2019.* Retrieved August 4, 2020, from Statista: <https://www.statista.com/statistics/370338/unemployment-rate-in-chile/>

Prensa Presidencia(Presidencial Press). (2018, April 24). *Presidente Piñera recibe a un representante de Economía Circular.* Retrieved August 3, 2020, from Prensa Presidencia, Gobierno de Chile: <https://prensa.presidencia.cl/discurso.aspx?id=73515>

Prieto, Rubrum's customer, P. (2020, June 13). Paty Prieto Candia Interview, Rubrum's customer. (D. Ortega Martin Rubio, Interviewer) Retrieved from Appendix I

Ramos, N. (2019, June 20). Impoverished Chilean neighbourhood's pioneering waste recycling scheme unites community. *Independent*, p. 1. Retrieved September 8, 2020, from Independent: <https://www.independent.co.uk/news/world/americas/recycling-chile-santiago-environment-waste-la-pintana-a8967656.html>

Richards, D. G. (1997). The political economy of the Chilean miracle. *Latin American Research Review*, 31(1), 139-159. Retrieved from <http://www.jstor.com/stable/2504050>

- Rotondo, F., Corsi, K., & Giovanelli, L. (2019). The social side of sustainable business models: An explorative analysis of the low-cost airline industry. *Journal of Cleaner Production*, 225, 806-819. doi:10.1016/j.jclepro.2019.03.345
- Rubrum. (2020). *Rubrum Recuperación and Skateboards*. Retrieved from <https://rubrum.cl/>
- Sathre, R., & Gustavsson, L. (2006). Energy and carbon balances of wood cascade chains. *Resources, Conservation and Recycling*, 47, 332–355. doi:<https://doi.org/10.1016/j.resconrec.2005.12.008>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). Chapter 4: Understanding research philosophy and approaches to theory development. In M. Saunders, P. Lewis, & A. Thornhill, *Research Methods for Business Students* (pp. 128-171). Pearson Education Limited.
- Schaltegger, S., Hansen, E. G., & Lüdeke-Freund, F. (2016). Business Models for Sustainability: Origins, Present Research, and Future Avenues. *Organization & Environment*, 29(1), 3-10. doi:10.1177/1086026615599806
- Servicio Nacional de Geología y Minería. (2020). *Recursos minerales[Mineral resources]*. Retrieved July 18, 2020, from Servicio Nacional de Geología y Minería: [https://www.sernageomin.cl/recursos-minerales/#:~:text=Los%20Recursos%20Minerales%20Met%C3%A1licos%20\(RM%20M,productores%20de%20cobre%20del%20mundo.](https://www.sernageomin.cl/recursos-minerales/#:~:text=Los%20Recursos%20Minerales%20Met%C3%A1licos%20(RM%20M,productores%20de%20cobre%20del%20mundo.)
- Sillanpaa, M., & Ncibi, C. (2019). *The Circular Economy. Case Studies about the Transition from the Linear Economy*. London, United Kingdom: Elsevier.
- SkateboardersHQ. (2020). Skateboarders HQ. *When should I replace my skateboard deck?* Retrieved September 8, 2020, from <https://www.skateboardershq.com/>
- Stahel, W. (2006). *The Performace Economy* (1st edition ed.). Basingstock, Hampshire, United Kingdom: Palgrave Macmillan.
- Start-up Chile. (2018, August 1). *Our offer: Start-up Chile*. Retrieved August 20, 2020, from Start-up Chile: <https://www.startupchile.org/>

- Stats OECD. (2019). *Employment by activities and status(ALFS)*. Retrieved August 23, 2020, from Stats OECD: https://stats.oecd.org/Index.aspx?DataSetCode=ALFS_EMP
- Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A Value-Belief-Norm Theory of Support for Social Movements: The Case of Environmentalism. *Human Ecology Review*, 6(2), 81-97. Retrieved from <https://www.jstor.org/stable/24707060>
- Teegavarapu, S., Summers, J., & Mocko, G. (2008). Case study method for design research: A justification. *Proceedings of the ASME Design Engineering Technical Conference*, 4, 495-503. doi:10.1115/DETC2008-49980
- The Blue Economy.org. (2020). *The Blue Economy*. Retrieved March 21, 2020, from <https://www.theblueeconomy.org/>
- The Economist. (2019). *The Economist Democracy Index 2019*. Retrieved August 4, 2020, from <https://www.eiu.com/topic/democracy-index>
- Tillman Lyle, J. (1994). *Regenerative Design for Sustainable Development*. New York: Wiley.
- United Nations. (2012). *La economía del cambio climático en Chile*. United Nations Santiago de Chile, Comisión Económica para América Latina y el Caribe(CEPAL). Santiago de Chile: United Nations.
- United Nations Development Programme. (2011). Chapter 1. Export dependence and export concentration. In United Nations Development Programme, *Towards Human Resilience: Sustaining MDG Progress in an Age of Economic Uncertainty* (pp. 20-55). New York, New York , USA.
- United Nations Environment Programme. (2020). *Global Resources Outlook 2019. Natural resources for the future we want*. Paris. Retrieved April 29, 2020, from <https://wedocs.unep.org/handle/20.500.11822/27517#:~:text=Global%20Resources%20Outlook%202019%3A%20Natural%20Resources%20for%20the%20Future%20We%20Want,->
United%20Nations%20Environment&text=This%20report%20is%20structured%20along,create%20pressures%20on%20

- United States Environmental Protection Agency. (n.d.). *How does anaerobic digestion work?* Retrieved September 6, 2020, from EPA: <https://www.epa.gov/agstar/how-does-anaerobic-digestion-work#:~:text=Anaerobic%20digestion%20is%20a%20process,work%2C%E2%80%9D%20they%20generate%20biogas.&text=Codigestion%20occurs%20when%20anaerobic%20digestion,waste%20in%20one%20anaerobic%20digester>.
- University of Wisconsin, Sustainable Management. (2017, July 21). *The Tripple Bottom Line*. Retrieved September 10, 2020, from University of Wisconsin, Sustainable Management: <https://sustain.wisconsin.edu/sustainability/triple-bottom-line/>
- Uribe Andrade, M. (2018, Nov 24). *A Sebastián Piñera, en su autoritarismo y arrogancia ante el asesinato de Camilo Catrillanca*[*To Sebastián Piñera, in his authoritarianism and arrogance in the face of the murder of Camilo Catrillanca*]. Retrieved from El desconcierto: <https://www.eldesconcierto.cl/2018/11/24/a-sebastian-pinera-en-su-autoritarismo-y-arrogancia-ante-el-asesinato-de-camilo-catrillanca/>
- Urrejola, J. (2019, Nov 25). *La cronología del estallido social de Chile*[*The chronology of Chile's social outbreak*]. Retrieved April 19, 2020, from Deutsche Welle: <https://www.dw.com/es/la-cronolog%C3%A1tica-del-estallido-social-de-chile/a-51407726>
- Vásquez, O. (2005, September). Modelo de simulación de gestión de residuos sólidos domiciliarios en la Región Metropolitana de Chile[Household solid waste management simulation model in the Metropolitan Region of Chile]. *Revista de Dinámica de Sistemas*, 1(1), 27-52. Retrieved May 15, 2020, from <https://dialnet.unirioja.es/servlet/articulo?codigo=2203298>
- Vuelta verde. (2016, February 7). *Inicio: Vuelta verde, retiro y reciclaje de desechos vegetales*. Retrieved September 6, 2020, from Vuelta verde, retiro y reciclaje de desechos vegetales: <https://www.vueltaverde.cl/>
- Wang, Y., Zhu, Y., Zhang , S., & Wang, Y. (2018, October 20). What could promote farmers to replace chemical fertilizers with organic fertilizers? *Journal of Cleaner Production*, 199, 882-890. doi:<https://doi.org/10.1016/j.jclepro.2018.07.222>

- Webster, K. (2017). *The Circular Economy: A Wealth of Flows* (Vol. 2nd edition). (J. Blériot, C. Johnson, R. Sheppard, & L. Gravis, Eds.) Isle of Wight, United Kingdom : Ellen MacArthur Foundation Publishing. doi:978-0-9927784-6-0
- Weetman, C. (2016). *A circular economy handbook for business and supply chains: repair, remake, redesign, rethink*. Croydon, United Kingdom: KoganPage.
- Wehner, L. (2011). Chile's rush to free trade agreements. *Revista de la ciencia política*, 31(2), 207-226. Retrieved from <https://www.ssoar.info/ssoar/handle/document/54330>
- World Bank. (2020). *Doing Business*. Retrieved from <https://www.doingbusiness.org/en/rankings>
- World Bank. (2020). *World Bank*. Retrieved from <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?locations=CL>
- Yáñez, C. (2019, May 13). Compost:El plan para que todo Chile separe su basura[Compost: The plan for all of Chile to separate its garbage]. *La Tercera*, p. 1. Retrieved September 6, 2020, from <https://www.latercera.com/que-pasa/noticia/compost-plan-chile-separe-basura/652783/>

Figure references

Figure 1. The Butterfly's diagram. Imaged retrieved from: Ellen MacArthur Foundation. (2013). *Towards the Circular Economy. Economic and business rationale for an accelerated transition* Vol. I. Retrieved from <https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

Figure 2. Cascade use of cotton Images retrieved from: Ellen MacArthur Foundation. (2013). *Towards the Circular Economy. Economic and business rationale for an accelerated*

transition Vol I. Retrieved from
<https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

Figure 3. System dynamics-based graphic of business models for sustainability. Imaged retrieved from: Abdelkafi, N., & Täuscher, K. (2016). Business Models for Sustainability from a Systems Dynamic Perspective. *Organization & Environment*, 29(1), 74–96. doi:10.1177/1086026615592930

Figure 4. Example of a circular economy value co-creation network. Imaged retrieved from Aminoff, A., Valkokari, K., & Kettune, O. (2016). Mapping Multidimensional Value(s) for Co-creation Networks in Circular Economy. *IFIP Advances in Information and Communication Technology*, 629–638. doi:10.1007/978-3-319-45390-3_54

Figure 5. Rubrum's containers in a skatepark (left) and in a skate shop (right)(personal communication with Rubrum by e-mail, July, 20th ,2020)

Appendix I Interviews

First Interview. Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

22/07/20, 20:30 pm CEST

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Lo primero que me gustaría saber es, ¿Cómo nace Rubrum?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Nace en 2013 este proyecto buscando como complementar un poco algunos conocimientos que se obtuvieron por medio de algunos viajes que yo realicé, viajes que tuvieron que ver mucho con el aprender un oficio o distintos oficios en este sentido. Era qué hacía yo estando en la ciudad si en algún momento se corta la luz, por ejemplo. Qué sabemos hacer la mayoría de las personas estando en esta zona de confort donde todo está a clic de alcance y qué pasaba con eso.

Entonces me aventuré, y me fui de viaje durante dos años mochila al hombro y estuve recorriendo distintos lugares de Latinoamérica; principalmente enfocándome en los pueblos originarios y en su forma de comprender ellos la naturaleza y este término de que algo fuera sustentable. Y entonces con ellos aprendí a cuidar el entorno porque ese entorno era el que te entregaba a ti las materias primas para seguir trabajando año tras año. Entonces cuando volví con todo este conocimiento a Santiago quise buscar algún elemento endémico de mi zona, así como ellos ocupaban lo que era endémico de su territorio; y me di cuenta de que no había nada porque Santiago ya es una capital donde se deforestó y se arrebató un montón de recursos naturales. Entonces cómo yo podía obtener un recurso que no tuviera tampoco un impacto asociado a él. Ya sea si yo compraba por ejemplo un alambre, ese alambre ya tenía un impacto porque era de una minera o un trabajo en la tierra etc. Entonces, por medio de la conversación que tuve con un amigo vi la potencialidad que tenía el skate. Yo practico skate hace mucho tiempo, pero nunca lo había visto como una materia prima, y me hizo mucho sentido el poder recuperarlo porque ya no había una cadena atrás que viniera como perjudicando el medio ambiente, sino que era un elemento en desuso, algo que ya no servía. Entonces, como ya el skate se empezó a masificar demasiado durante la década de los noventa

al año 2000, entonces ya era un residuo endémico de Santiago. No era como una materia prima endémica de la zona, pero sí era un residuo que siempre se iba generar. Entonces cómo nosotros podíamos transformarlo y de qué manera también podíamos como recuperarlo, fue como el gran desafío; y desde allí como tengo un círculo cercano de amigos que andan en skate y algunos tenían tienda, implementamos estos sistemas de acopio para poder tener un espacio habilitado para la gente que quisiera entregar su tabla y le hiciera sentido a la causa también. El hecho de no seguir generando la basura. Entonces esa fue nuestra primera como aproximación a lo que es la economía circular o un emprendimiento que tuviera como esta vista hacia “el bien común”.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que esos serían uno de vuestros colaboradores digamos, las tiendas de skate. ¿Son tiendas de skate o escuelas? O, ¿Las dos?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Hay tres, están las tiendas, las escuelas y los skateparks, donde se practica habitualmente el skate y donde se hacen las clases para las escuelas. Entonces yo me vinculo primeramente con las escuelas, les explico de cómo va a ser esto, e inserto un módulo de acopio en el espacio. Pero para los skateparks, uno que practico skate harto tiempo cuando ve un elemento que digamos no está incorporado al skatepark, que tú lo puedes utilizar, tiende como a destruirse siempre, no sé por qué. Tiende a llenarse de basura a rayarlo, a destruir.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿El propio contenedor?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, entonces, cómo nosotros podríamos crear un contenedor que fuera como utilizado por estas personas, es un proyecto que estoy todavía desarrollando; pero tengo los prototipos, que son como rampas o estructuras que se pueden andar pero que a su vez contienen un espacio para poder acopiar el material.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Entonces... lo cuidan porque les sirve, y a parte aporta al tema de la disminución del residuo que se va generando dentro del espacio. Por ahora solamente estoy con estos otros módulos que son como unos cajoncitos que se ponen ahí; pero a futuro, me gustaría implementarlo a lo largo de... digamos que por cada skatepark que te construyera, que se incorporara uno de estos módulos que resuelve el tema del residuo que se genera dentro del skatepark.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ajá. Osea que acaban rotos, ¿Esos contenedores acaban rotos de alguna manera o...?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Se prestan para eso. Se prestan para que los saquen, los pongan en la misma pista y lo ocupen para andar, o lo ocupen de basurero... o lo rayen. Entonces como que por ese lado el skatepark es como más... Yo prefiero vincularme ahora con las escuelas de skate donde hay un compromiso, donde hay una enseñanza por medio de monitores a que los niños puedan utilizar esto de mejor forma; pero un skatepark queda abierto que no tuviera una escuela de skate, se presta para lo otro.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro porque a lo mejor no tienes como oportunidad de informarles, porque de qué manera les vas a informar de para qué se va a utilizar después... no sé. Solo se me ocurre a lo mejor carteles diciendo: "Mira somos tal, hacemos cuál..."

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Puede ser que se puedan enterar menos de a donde va a ir a parar el skate y a lo mejor tener menos motivación para hacerlo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, entonces, quería saber un poco en qué valores está fundamentada vuestra empresa. Osea, así surgió, pero en qué valores, qué valores digamos defiende Rubrum.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya... mira, Primero que todo es los impactos asociados al medio ambiente. “First and foremost are the impacts to the environment” pp. 50 in main document. Eso para nosotros es como el máximo valor que podemos defender. Osea dar a conocer un proyecto que no necesariamente tiene que abastecerse de materias primas que contribuyan a un impacto negativo en el medio ambiente; sino al contrario, que sea hecho de forma consciente y coherente con lo que queremos hacer, porque también nos enfocamos mucho en la minimización de los residuos dentro de la misma cadena de producción porque estamos trabajando con elementos que están en desuso y no tiene coherencia si estoy desecharo también parte del elemento que estoy recuperando. “*We are focused on minimizing waste in our production line since it does not make sense to us to create waste if what we are trying to do is minimize waste reutilizing wood from the skateboards*” pp. 48 and 64 in main document. Osea recupero un poco para poder generar un producto, pero el descarte o la merma, ¿Qué pasa con eso? Entonces, esos subproductos vuelven a entrar en la cadena productiva, utilizándose ya sea las lijas o los mismos polvos de los aserrines, o los adhesivos... tratamos de incorporarlos de alguna manera al ciclo productivo; y lo que ya no podemos, digamos integrar en el ciclo, estamos levantando otro proyecto, que es para ver si podemos como de alguna manera podemos utilizar moldes crear y prensar objetos con estos mismos residuos. Pero la idea es que nada se descarte, que nada se deseche.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, al final esa es la idea de la economía circular. Qué curioso que penséis hasta en el aserrín, ¿No? Que va dejando, me parece curioso. Sí, sí, sí.

Bueno y al final quería saber un poquito de donde viene vuestra conciencia medioambiental, porque me dices que vuestro valor más importante es, pues eso, no descartar ningún residuo, eh... digamos no dañar el medio ambiente, ¿No? Y de dónde surge está conciencia, siempre ha estado ahí, o surge un poco de los últimos acontecimientos y de las últimas catástrofes medioambientales...

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí, mira, en el año 2011 cuando yo viajé digamos y estuve afuera aprendiendo de todas estas civilizaciones antiguas o pueblos originarios y toda esta memoria que de alguna forma se nos arrebató con el tema de las colonizaciones y las nuevas formas de construir las civilizaciones, en las cuales vivimos. Mucho de ese conocimiento antiguo era en función de la naturaleza. Todo estaba en función de ella porque comprendían que sin ella nosotros no existíamos. Entonces yo me fui empapando de esas culturas y fui tomando conciencia ambiental por medio de este viaje y una vez cuando llegué acá, fue como la bandera y la causa. “*During my trip around South America, where I learned about all those ancient civilizations and native peoples and all this legacy that somehow was stolen from us after the colonization and the new ways of building civilizations in which we live. Much of that ancient knowledge had to be with nature. Everything was made in the function of nature because they understood that we could not possibly live without it. So I immerse myself in the culture, I learned as much as I could and I became environmentally conscious. When I arrived here(referring to Santiago)that became the inspiration for everything I do*” pp.61 in main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale...

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Después, cuando conocí a la Dani en el año 2012 o 2013 ella también tenía una filosofía muy parecida a la mía. Entonces, después claro, tuvimos la relación de pareja, ella quedó embarazada y decidimos conformar este proyecto con esa misma causa. Osea cómo nosotros podíamos crear conciencia en un mundo que está rodeado digamos de marcas de skate y donde las apariencias son muchas, uno lo ve. Y donde también mucha gente consume por moda, no solamente porque practica el deporte. Entonces, crear conciencia dentro de un lugar donde hay muy poca conciencia ha sido como un gran desafío, pero nos ha ido bien en ese sentido. Hemos logrado crear comunidad que era lo importante. Porque el skate igual se practica si bien es cierto en un lugar con mucha gente, pero tú andáis solo arriba del skate. No es como colaborativo en ese sentido.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

No, claro. Osea que al final todo se reduce al viaje que hiciste por Latinoamérica, ¿No? Es donde tomaste conciencia de todo esto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, luego también quería preguntarte, porque al final hay un término que se llama... bueno, esto lo he traducido del inglés, espero que se llame así en español. Propuesta de valor medioambiental.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Habéis pensado alguna vez cuál es vuestra propuesta de valor medioambiental, ¿Cuál es la propuesta de valor medioambiental de vuestros productos?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Cuando tratamos de hacer la cadena del producto, creo que un producto si es compostable en el ciclo digamos del mismo producto, tiene como ese valor, osea que se vuelve a integrar en la tierra y no está dañándola. Es lo que yo entiendo como la propuesta de valor que podría tener nuestro producto, *"I think that if a product is compostable and it comes back into nature without damaging it, that is a value for the earth"* pp 43 in main document. pero también sé que podemos no sé, por ejemplo por cada venta que se haga podemos plantar o reforestar bosques, que también podría ser como una propuesta de valor; o por cada skate que acopiamos estamos sacando de circulación, que vayan a relleno sanitario cierta cantidad de metros cúbicos de tablas de skate por ejemplo, que contribuyan a gases de efecto invernadero en caso de que estos se saquen y se preste para la gente que tiene menos recursos como calefacción. *"It could also be a value proposition to give a certain amount of wood from the skateboards we collect to impoverished neighborhoods to be use as firewood and this way also contributing to the reduction greenhouse gases"* pp. in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, entonces ahora mismo es evitar que acabe en la basura, ¿No? Todos esos skates. Pero sí que os planteais, eso es un poco lo que también quería saber, os planteais... Vamos que es algo sobre lo que habéis reflexionado mucho me imagino, claro. Vale.

Vale, porque te digo un poco cómo se define la propuesta... porque está la propuesta de valor para el consumidor y luego está la propuesta de valor medioambiental. Entonces la propuesta de valor para el consumidor es la diferencia que el producto consigue aportar al cliente con sus atributos y la medioambiental la significación que consigue aportar al medioambiente, sin más, al medio ambiente. Entonces, mi pregunta es, si tuvieseis que priorizar, la proposición de valor para el consumidor o la proposición de valor para el medio ambiente. Osea al final al diseñar vuestro producto si tuvieseis que priorizar dar algún atributo diferenciador al consumidor que a lo mejor perjudicase un poco al medio ambiente. Vamos, digamos que si tuvieseis que poner en una prioridad consumidor o medio ambiente. ¿Cuál sería vuestra elección? Bueno, tu elección, porque al final por eso os he entrevistado por separado, para tener dos opiniones.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, Yo creo que, mira... Pensando mucho en las futuras generaciones porque tenemos un hijo, y sin medioambiente no son nada, entonces yo prefiero inclinarme siempre hacia lo que es medioambiental por un tema de guardar el futuro de ellos, osea no comprometer a las futuras generaciones. Más que tener una venta o un cliente, sabiendo que eso va a la larga a producir algo negativo. ¿Entiendes? Osea no podemos juntar más cosas debajo de la alfombra porque ya... no se puede.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, osea que siempre estaría la proposición de valor medioambiental antes que la del consumidor.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, después quería preguntarte un poquito sobre las barreras. Entonces, en el transcurso, porque vosotros nacéis como empresa circular en Chile. ¿Qué sensación tenéis, bueno, tienes

con respecto al apoyo del gobierno? Osea, ¿Habéis sentido algún apoyo... sentís que está promoviendo este tipo de iniciativas, o todo lo contrario? O no sé, ¿Cuál es tu sensación?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Mira, nosotros desde el año 2013 que partimos con este proyecto, nosotros no teníamos idea de estos conceptos de economía circular, sostenibilidad, era como muy intuitivo y fue como algo que quisimos hacer por cuenta nuestra, por cuenta propia. Con el tiempo empezamos a vincularnos más con algunos términos, los cuales nos sentíamos identificados y... hubieron algunos, no sé si desde el mismo gobierno, desde las mismas políticas medioambientales, porque en algún momento yo fui al ministerio de medio ambiente para ver si podíamos conseguir algún atributo, de que sea un impuesto distinto al que se tiene que pagar aquí normalmente en Chile, por tener un proyecto con estas características; pero estábamos nosotros en el futuro en plantearles esto a las personas. Entonces, ahora en estos tiempos ha habido más auge y un enfoque un poquito más a proyectos como nosotros. Pero, aun así, es muy pobre toda la oferta que hay, porque estamos recién cambiando, creyendo un poco más en este otro tipo de economía, comprendiéndolo. Nosotros igual tuvimos que peregrinar un montón de tiempo con la misma gente, en las mismas ferias o mercados a las cuales asistíamos y exponíamos nuestros productos porque a veces las personas decían “qué caro si es esto solamente”. Y claro, ellos ven el objeto, pero no están viendo la cadena que hay detrás, el tiempo de trabajo...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Perdona, te he perdido. ¿Decían “Qué caro”?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, decían caro, “es costoso”.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ajá.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Entonces uno tenía ahí que empezar a educar a la gente diciéndole que esto venía de un elemento recuperado, de que hay que crear una materia prima nueva a base de esta otra

materia prima que está en desuso. Entonces en la creación de la materia prima ya hay un trabajo, y después en el diseño de la pieza hay otro trabajo. Entonces por eso tampoco podíamos competir en ese tiempo con cosas que valdrían muy muy baratas y que la gente prefería. Pero aun así después empezamos a ver más conciencia en la gente, se empezaron a inclinar más hacia este otro proyecto, y ahora ya los valores no se cuestionan tanto porque la gente comprende que esto tiene una cadena completa. Osea no hay una extracción de materia prima, pero si hay una conversión de materia a una materia prima, y son todo trabajos manuales y también está la opción de si nos compran a nosotros, también están... la minimización de recursos dentro de la cadena. Osea hay un montón de atributos que son positivos hacia el medio ambiente desde la economía en la que somos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Crees que la gente que consume vuestros productos está dejando de consumir a lo mejor plata, o a lo mejor otro tipo de, pues materiales que al final son escasos o....?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

A veces les parece bonito, simplemente les parece bonito. Le llamó la forma la atención, la forma que tenía... o los colores. Pero después cuando empiezan a comprender un poco más de lo que se trata esto. Claro, allí ellos ya pueden elegir y darse cuenta del poder que tienen también como consumidores. Osea a quién esto sustentando y si es lo que quiero yo sustentar porque me interesa que el planeta viva o no viva. Entonces, desde ahí se va como comprendiendo. Pero la mayoría de la gente, al menos al principio, lo compraban por bonito solamente, no porque tuvieran ellos los intereses. Pero ahora sí hay muchas más personas que si les interesa cambiar su forma de consumir. Estamos hablando de consumo más responsable.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro porque al final dejar de consumir, pues eso, plata, pues ayuda al medio ambiente porque al final la plata pues no se para de extraer etcétera y pues tal. Ahí vería yo otra propuesta medioambiental si el hecho de consumir Rubrum es dejar de consumir oro, dejar de consumir plata, pues sería muy positivo.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí, aunque igual nosotros ocupamos...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

O consumir menos, consumir menos...

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, eso, es una fracción muy mínima lo que nosotros ocupamos de plata, pero también tratamos de no sé de... quizás fundirla con amigos que se dedican a eso y no comprarla hecha.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ajá, claro.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

También tratamos de dar como impactar local, a eso voy.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

También, osea que si se compra sea local y no sea de a saber que sitios...claro, vale.

Luego también me gustaría saber, es algo que no he podido encontrar en la información que he encontrado por internet de vosotros. ¿Cómo os distribuís las tareas? Creo que tú eres el que manufactura. Osea no sé cómo os distribuís las tareas entre Dania y tú.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya, por ejemplo, lo dividimos en los. La Dania es de profesión diseñadora, ella es la que tiene que ver todo con la imagen, la fotografía y todo lo bonito que muestra del producto. Yo soy como más la parte del taller, pero también ella va al taller y avanza en procesos solo que porque justo cuando emprendimos fuimos papás así que hacernos cargo de nuestro hijo fue algo que ella quiso digamos dedicarse cien por ciento a la maternidad y dentro de todo eso lo que podía ella avanzar con todo lo del proyecto. Pero ahora que, ya que él está más grande, se ha involucrado más en procesos de taller. Pero nuestra idea es también por ejemplo vincularnos con algunos talleres para poder externalizar un poco el producto, digamos los procesos. En este caso los talleres de las cárceles para poder hacer inclusión social dentro de... *"Our idea is to create partnerships with prisons to build workshops there and this way"*

“being able to outsource the production, the processes. This way the project is rounded up, and it becomes a fully sustainable project because we are gaining the attribute of social inclusion” pp. 64 main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Qué interesante.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, es porque así se redondea más el proyecto también y estamos ganando más atributos sociales con el tema de la inclusión. *“Our idea is to create partnership with prisons to build workshops there and this way being able to outsource the production, the processes. This way the project is rounded, and it becomes more sustainable because we are gaining the attribute of social inclusion” pp in the main document*

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Conozco marcas, una marca danesa. Ay, cómo se llamaba... Es una marca que fabrica de hecho en Perú. También en cárceles de Perú. Creo que se llama “Cárcel” le han puesto cárcel, porque como es una marca de ropa aquí en Dinamarca la gente no sabe muy bien lo que significa. Se llama “Cárcel”. Así que sí, hay más marcas que están haciendo eso y le va muy bien a la chica, la verdad.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Si, entonces eso era lo que queríamos hacer ahora, porque nos queremos dedicar a aumentar los módulos de acopio, a poder avanzar más zonas, a poder desarrollar estos otros contenedores que te mencioné anteriormente. Entonces, ya uno no puede estar haciendo todo. Entonces tiene que empezar a delegar, a buscar socios clave también y en este caso, como se desarrolló un oficio que es autodidacta y yo con la Dani lo desarrollamos desde cero sin conocimientos de carpintería, ni de la madera ni de nada, fue muy... ¿Me escuchas perdón?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, sí, perfecto.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ahora sí me escuchas, ya.

Lo hicimos como a super baja escala de costo en herramientas. Con lo que teníamos, lo comenzamos. Entonces, creo que es un modelo que se puede como implementar en cualquier taller que tenga herramientas básicas. Entonces la idea de nosotros ahora es como poder capacitar, una vez que pase el tema de la pandemia en Santiago; poder entrevistarnos con gente vinculada a las cárceles, para poder darles la propuesta de educar a estas personas, enseñarles el oficio y gestionar el material de residuos desde los skateparks de los módulos a los talleres y que ellos hagan la producción y nosotros dedicarnos más como a la captura de clientes a la exportación en caso de que se pudiera “*Our idea is to reach prison directors or people linked to prisons once the issue of the pandemic is over in Santiago, and tell them the idea we have of creating a training plan to educate some people from the prisons. Teaching them the trade, what we do, and transporting the discarded material directly from the skateparks to the prisons so that they can do the production. In this way we can dedicate ourselves more to the capture of clients to the exports in the case that is possible*”. por ahí va.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Qué interesante, qué interesante, desde luego es una buena forma de pues hacerlo más sostenible. Me parece muy muy interesante.

Y bueno, sí. Me dijiste que ahora mismo los colaboradores que tenéis son las escuelas, los, como se dice, los parques y las tiendas. Entonces, ¿Hay algún colaborador más con el que participéis, claro me imagino las ferias? ¿Cómo conseguís las ferias donde vais? Quiero saber un poco como vuestros colaboradores.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Mira, por ejemplo, el proyecto este es igual dentro de todo nuevo e innovador, la gente llega a nosotros por distintas plataformas y nos propone.” Oye sabes que queremos tenerlos acá, me gustaría hacerle una entrevista acá, nos gustaría que aparezcan en un programa por acá.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Como yo

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí(ríe)

No es que nosotros estemos buscando colaboradores, sino que estamos en un tiempo donde lo colaborativo debe ser así. De otra forma es super difícil estar acarreando solamente uno todo el peso del proyecto. Entonces por ese lado ha sido como super orgánico eso de las colaboraciones. Nos enfocamos netamente en la comunidad, que es la que practica el skate; porque a ellos queremos llegar con temas de gestión ambiental y de que puedan gestionar sus residuos. Luego viene la parte de clientes que son las personas que van a comprar todo esto y también ellos están educándose por medio de nosotros, lo que les hablamos, les mencionamos dentro de las redes. De la diferencia entre si un producto es recicitable no quiere decir que sea sostenible. Entonces en tips así de información tratamos de educar a la comunidad y bueno la forma de cómo llega el producto a ellos es por bici logística, por bicicleta. Entonces también tenemos otro socio que vendría siendo el que nos acarrea todo este material a las distintas comunas para no tener emisiones de CO2 dentro de la cadena o la trazabilidad del producto.

La bicilogística solo llega algunas partes de Santiago. A regiones tenemos que optar por medios tradicionales como cargo etc. Añadimos el delivery al costo del producto. Los que reparten en bici son autónomos. Cobran por ruta o por pedidos. Entregan pedidos de diferentes empresas. Intentamos crear vínculos con la economía local.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que hacéis delivery por bicicleta. ¿A todas las partes de Santiago?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, ya sea regiones, ahí tenemos que optar por otra parte porque no, no se puede.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, porque es muy grande me imagino, Santiago para hacer delivery en bici o...

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

No, es que hay gente que se dedica a eso y le fascina. Entonces, tienen sus valores, ellos cobran y nosotros añadimos ese valor al precio del producto y también si es que esto va a regiones ya tenemos que utilizar los métodos tradicionales que es por encargo etc.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro. Y, ¿Utilizáis, no sé qué tipo de empresas de delivery hay... Aquí tenemos Gloovo y te pueden enviar lo que sea. Osea es un chico que contratáis vosotros y es una empresa que hace eso.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Mira, tratamos de generar los vínculos con la economía local. Son personas independientes que tienen su emprendimiento y entonces todo queda a una escala más baja.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah vale, entonces son autónomos ellos. Y ¿Cobran por pedidos que entregan?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí, cobran por pedido. Y a veces que salen tres pedidos en un día se hacen una ruta más otros pedidos de otras personas. Entonces van avanzando ellos con su negocio de esa forma.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah vale, pero no es una empresa. Porque aquí tenemos por ejemplo Wolt, Gloovo... No es una empresa de esas. Es una persona individual...con su empresa propia. Vale, vale.

Vale, entonces esos serían vuestros colaboradores ahora mismo, ¿No?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, esos serían como los colaboradores que tenemos. Igual, por ejemplo, los municipios que a veces nos invitan, la municipalidad de Santiago o de otras comunas, de Providencia o de las Condes donde hemos participado constantemente nos están invitando o haciendo llegar invitaciones. Entonces no sé si ellos se pueden considerar como socios a ellos porque no siempre están, pero sí que son como instancias donde se puede exponer el trabajo o participar en alguna plataforma.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, osea en principio no serían colaboradores por lo que tú dices porque no son constantes, pero si al final son. Bueno, colaboradores puntuales, digámoslo así.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Lo que sí ahora cómo fue fuerte el tema de la pandemia, han surgido muchas plataformas que tratan de enfocarse en productos que sean sustentables y en una comunidad de emprendimiento o de emprendedores que tengan estos productos. Entonces, quizás ellos vendrían siendo como un socio, ¿Verdad? ¿Vendrían siendo como un socio?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Mmm, ¿Qué tipo de plataformas? Son plataformas. No entiendo muy bien.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya, son como plataformas comerciales. Entonces nuestro producto está en tal plataforma y la gente que quiere ve esto puede adquirir el producto por medio de la plataforma.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, al final son colaboradores porque es digamos un distribuidos. O no, una plataforma para la distribución, sí.

Y, ¿Cómo se llama esa plataforma?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Una se llama justas.cl, por el tema del comercio justo y todos estos atributos que vienen y la otra se llama Vloggy con uve. Después te lo voy a mandar igual para que lo tengas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, sí, para tener un poco el mapa de vuestros colaboradores.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Tenemos otras plataformas por ejemplo de algunos bancos que nos han contactado para poder apoyar a las Pymes, qué desde el banco de Chile, banco estado...plataformas así.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Porque al final vosotros vendéis... por la página web vendéis, ¿Verdad?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

La página la tenemos un poco botada con el tema del carrito de compra. No vendemos por la página, pero sí por ejemplo está Instagram que es un medio que ocupamos bastante, donde gestionamos todo el tema de venta y producto. La gente puede ver, porque estamos actualizados.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, sobre todo por Instagram. Vale, porque me dijo también mi profesor que estaría bien entrevistar a algún consumidor para ver un poco sus motivaciones de compra, por qué compra Rubrum, sus valores etcétera. Entonces, igual de Instagram puedo sacar alguien que quiera, algún cliente vuestro, ¿Verdad? Para si me quiere contestar a alguna pregunta. Me imagino que por Instagram podré encontrar. ¿No?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Sí, igual hay harts seguidores, pero ahí tenéis que preguntar no más.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, claro. “¿Te importa contestar a unas preguntas?”

Eh, vale. También un poquito, quería preguntarte sobre el valor que percibes de las colaboraciones, osea, me has dicho que te parece fundamental colaborar; pero hay alguna propuesta que te hayan hecho que hayas dicho... Osea, cómo digamos filtras con quien colaborar y con quién no y qué valor percibes de colaborar.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya, eh, principalmente que todo ese ecosistema que están creando sea gente que esté en los mismos pasos nuestros. Ese es como el gran filtro, que no sea como solamente un negocio de que “Ah mira a ellos les resulta, tengámoslos acá y lo hacemos”, no. Es como tratar de enfocarnos en gente que realmente quiere hacer algo por el planeta también, tiene como esa ética medioambiental, quiere contribuir. Y que también le gustaría cambiar las cosas. Osea, estamos en un proceso de transición, entonces cuanta más gente quiera cambiar de este método tradicional de economía lineal a uno de economía circular comprendiendo todo esto, para nosotros siempre va a ser un buen aliado. Ha habido otras plataformas donde tienen de

todo un poco que yo prefiero no, porque no se entiende. No se entiende nuestra propuesta con otras personas que tienen otro tipo de producto; pasa a ser solamente un producto, no pasa a ser algo distinto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, en Amazon, yo sí conozco empresas sociales que han vendido en Amazon, pero sí que es verdad que es un poco más difícil diferenciarte. Conozco una empresa que vende copas menstruales, pero con... Compras una y la segunda se la dan a no sé qué sitio en África me parece. Y lo venden en Amazon, pero claro, empiezas a buscar y hay ocho mil páginas y es verdad que se difumina. Dices claro, y ¿Por qué debería comprar esta por cuarenta euros, si está esta por veinte? Pero bueno, sí que hay empresas sociales que lo hacen por Amazon, pero sí que es verdad que diferenciarse es más difícil, sí.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Igual nosotros como empresa nosotros no estamos constituidos aún. Estamos como emprendimiento y digamos acá en Chile hay dos formas de formalizarse: una que es como primera categoría ya con facturas y libro de empresa y todo; y la otra es una segunda categoría que trabajas con formas de boletas a un horario. No sé si has escuchado eso.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Boletas de?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Boletas de horarios.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah, pues no.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Es como cuando prestas un servicio, por ejemplo, no sé, si a mí me contratara un colegio para hacer clases de reciclaje, por ejemplo, me están pagando por algo puntual, por un conocimiento y por algo que yo sé; pero no porque yo le estoy vendiendo un producto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Es como ser autónomo? No, ¿“freelance”?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Lo que pasa es que al ser empresa es lo que te comentaba antes, no hay muchos atributos para una empresa que tenga esta formación más de conciencia medioambiental y que esté trabajando en pro de la naturaleza. Sino te puedes certificar como una empresa B después, donde pasas a ser como una empresa donde esta certificación, que lo otorga una persona, pero es una certificación, no es como nada más, no vas a rebajar tus impuestos, no vas a...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que no hay forma legal para las empresas sostenibles. Me parece que en España tampoco. Sé que en Estados Unidos sí. En España lo más cerca yo creo que sería una cooperativa. Es que no, no hay... para empresas sociales no.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Si yo en algún momento quisiera ser empresa sería considerando en alguna parte del proceso a los talleres de las cárceles. Ahí sí que consideraría tener una empresa porque ya tengo como un propósito, ¿Entiendes? Pero, ahora considerando los temas actuales de pandemia, la incertidumbre de la gente también que a veces no está priorizando como en cosas de última necesidad como es un accesorio o algo decorativo, sino que van más enfocados a cosas de primera necesidad que es la alimentación o vestimenta. Es difícil porque hay que pagar igual impuestos, tienes que tener un contador, tenéis que tener un montón de cosas. Entonces en este tiempo ahora justamente, en marzo íbamos a empezar con el trámite para iniciarnos como empresa porque íbamos a hablar con las cárceles, pero ocurrió esto, entonces lo dejamos como un poco pausado.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, claro, entiendo. No, pues la verdad es que se tienen que poner las pilas todos los gobiernos. Osea no solo Latinoamérica, sino España. No sé qué hace sin forma legal de empresa social. Pero bueno, poco a poco me imagino.

Que más, me parece que hemos cubierto todo.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Me gustaría hacer un paréntesis, en el tema de cuando yo hablé de que prefiero defender más a la naturaleza que al cliente, osea para mí son los dos importantes, pero no puedo obviar lo otro por unas lucas más, (“*Both of them are important to me but I can not ignore it(refering to environmental value proposition) for making a little extra money*”) a eso voy pp. 63 main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, sí,sí.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Creo que debe haber como un equilibrio entre ambas cosas. Mientras más transparente soy yo con mis procesos y puedo darte un producto que te vaya a servir a ti y que comprendas cómo se hizo creo, que el cliente al final es el que decide si te apoya o no te apoya. *I believe that there has to be a balance between both things.The more transparent I am with my processes and the more I can give you a product that is going to be of use to you and the more you and you can understand how it was done, the better the clients can decide if they want to support you or not”* pp. 63 main document. Osea si te convence o te convueve el relato que yo estoy tratando de darte.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, osea te entendí perfectamente tu punto. Quisiera además ver un poco, porque al final hay empresas sociales que les importa mucho el medio ambiente, pero a lo mejor no tanto. Y quería saber un poco a qué nivel digamos de valor le dabas.

Lo último, me has dicho que partisteis con muy poquitas herramientas, con un taller muy básico. Piensas que, si el gobierno por ejemplo te hubiese dado ayudas o con más recursos podrías ampliar, podrías hacer muchas más cosas con otras herramientas... ¿Piensas que con más recursos podrías hacer más cosas?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Ya, mira. Igual nosotros partimos de cero literalmente, sin nada, solo con la idea. Pero yo creo que si hubiese tenido un taller completo no hubiese sido lo mismo, porque fue un desarrollo autodidacta y de contención del material porque no es como una madera normal, es una madera super compleja de trabajar y uno tiene que aprender a ocuparla, a utilizar parte por parte. A parte de que cuando se rompe un skate sigue un patrón. Hay tres tipos de formas en las que se quiebre un skate, que es a la mitad, a una orilla o que es en la otra orilla. Entonces va surgiendo como ese patrón. Ahora que ya tenemos más trabajado toda la parte de taller obviamente que nos gustaría tener mejores herramientas, más automatizadas quizás, poder incorporar otro tipo de residuos dentro de nuestro proyecto para poder combinar materiales y poder abarcar más. Por ejemplo, estos módulos de acopio que te comentaba que son estas estructuras para los skateparks, a mí me encantaría poder recuperar la merma de las construcciones de los edificios donde hay madera y hay metales y con eso construir esto otro, por medio de alguien que pueda cómo gestionarlo. ¿Entiendes? Puede ser una fundación o una marca importante de las que se prestan para el skate que pueda ser Vans o descent en este caso y con ello poder hacer la construcción y la gestión del módulo, pero trabajar siempre con elementos en desuso, cosas que a la gente no le sirva, que yo tampoco esté comprando y contaminando más de lo que ya hay, si ya hay muchas cosas que se pueden utilizar, solamente hay COMO que empezar a armar y ver de qué forma. pero eso es principalmente.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y me acaba de surgir una pregunta, ¿Algún cliente ha tenido o ha sentido asco por los materiales? Porque al final el skate es un aparato que se toca con los pies, entonces, nunca alguien te ha dicho “Jope, y hacéis pendientes con un material que ha estado en contacto con pies”. ¿Tienen dudas sobre el tema de la higiene, o no es algo que les preocupe a los clientes?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Nosotros igual cuando trabajamos la parte de accesorios o elementos más decorativos, el skate sufre un cambio completamente. Osea por ejemplo la separación de residuos que es previa a la creación de la materia prima es donde nosotros sacamos la lija del skate y después se cepilla el skate y entonces todo este contacto que hubo con el exterior ya no está porque estamos tocando las capas interiores y después vamos prensando con otras capas y se va creando un material nuevo. Entonces ese material no tiene ningún contacto con lo anterior. Es algo nuevo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Pero ¿Esas dudas surgen? ¿A los clientes les surgen esas dudas?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

No, A veces dicen “Es reciclado. No me gusta, es reciclado”. ¿Sabes? Como que piensan que es basura. Pero me tocó solamente una persona, una persona en estos 7 años y era una mujer que estaba, así como llena de joyas de oro y cosas así. Entonces obviamente su foco estaba por otro lado, no era este. No se dio tampoco la oportunidad que yo le explicara, solamente hizo como un juicio, porque el marido se iba a acercar al stand y ella le dijo “No, son cosas recicladas”

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que sí que hay gente que tiene esta percepción de lo reciclado. Yo es que me puedo imaginar que la gente diga. “Ah, esto es reciclado, es sucio”.

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Claro, pero fue alguien puntual y una persona yo creo que mayor de 60 años. Entonces no es tampoco el público al cual nosotros apuntamos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, vale. Perfecto. Pues creo que ya he cubierto un poquito todo sobre lo que quería saber. Cuarenta y cinco minutos justo.

Pues muchísimas gracias, muchas gracias por tu tiempo y las respuestas ¿Está Dania por ahí?

Juan Carlos Barrera (Rubrum Reutilización& Skateboards co-founder)

Perfecto, muchas gracias. Llamo a la Dani.

Second Interview. Dania Salazar (Rubrum Reutilización & Skateboards co-founder)

22/07/20 21:15 pm CEST

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Hola Dania ¿Qué tal? Yo soy Diana. Vale, pues como le he comentado a Juan Carlos van a ser aproximadamente cuarenta y cinco minutos. Bueno, todo depende, pero sobre todo es preguntaros sobre tres aspectos fundamentales que son las barreras que os habéis encontrado en este proyecto, ¿No? Tanto internas como externas a vuestra empresa o bueno a vuestro proyecto. Las motivaciones detrás de vuestra empresa y también un poco sobre las colaboraciones que tiene Rubrum, con quién colaboráis.

Y necesitaba haceros dos entrevistas más que nada para tener vuestra opinión por separado, osea, aunque se repita mucho lo que me haya dicho él, no pasa nada, necesito ver... necesito entrevistarlos por separado básicamente.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Ya, sí sí. Lo entiendo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, entonces lo primero que te tenía que preguntar es en qué valores está fundamentado Rubrum. Osea, ¿Qué valores son más importantes para Rubrum según tu opinión?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Para mí en el fondo es la ética de hacer lo que nosotros pensamos. En el fondo si estamos diciendo que estamos haciendo un producto sustentable, que realmente sea así. “For me is the ethics of doing what think. If we are saying that we are doing a sustainable product, let it really be so” pp. 50 in main document Eso principalmente.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea, en autenticidad, ¿No?, en que sea real lo que estáis ofreciendo.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Perfecto

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí. Eso para mí es lo que encuentro más importante, y que encuentro que es no engañar a la gente en el fondo. Porque también el público al que nosotros llegamos es un público al que le interesa consumir un producto sustentable un producto ecológico.... Entonces, para mí es poder realmente hacerlo así.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, porque ¿Ves que hay empresas que hacen eso precisamente, que engañan a los consumidores? Que dicen una cosa y luego hacen otra.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro. Sí, se da, se da mucho, y se da también por falta de información, de utilizar tal vez conceptos que no conocemos bien. Me refiero a otras empresas o a otros proyectos que de repente hablan de sostenibilidad o de productos verdes y tal vez piensan que solamente hacer algo reciclado es como “ya, estoy haciendo algo sustentable”.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Y yo creo que es por eso por lo que es por falta de información, de cultura en el fondo, que falta. Pero de a poco yo creo que se va a ir como... la gente se va a empezar a interesar más y también las empresas van a tener que hacer su parte de investigar bien y de ser responsables en ese aspecto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ajá, y, ¿Crees que son más las pequeñas empresas o más en multinacionales las que hacen eso, que dicen que están siendo sustentables en realidad luego no son tanto?, ¿Qué opinas que son más pequeñas empresas o de todo?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Yo creo que, osea aquí por ejemplo se da que hay pequeños negocios o pequeñas PYMES que son pequeñas empresas que de repente nacen de ideas de poder reciclar o hacerse cargo de algún desecho o residuo, pero siento que se quedan ahí, como que siento que se quedan allí, que no hay una investigación más allá de poder hablar tal vez o de estudiar lo que es la sustentabilidad y utilizan esos términos que en realidad no tienen mucho que ver. Pero creo que se da de igual forma, quizás las empresas más grandes tienen un poco más de información, pero de repente igual siendo que engañan un poco a los usuarios. Esto del greenwashing se da harto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Greenwashing sí. Y, ¿Crees que por ejemplo las autoridades, el gobierno de Chile crees que tiene un poco más idea que en general las empresas o también piensas que en realidad le falta mucho por conocer o tiene poca información?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, yo creo que en general ha sido muy de a poco todo. El tema de la contaminación... ahora como que recién estamos, bueno, antes de la pandemia; estaban ya haciendo algunas leyes de por ejemplo las bolsas de plástico que ya no se podían usar, o los plásticos de un solo uso, pero es algo que recién está integrándose en nuestro sistema y siento que falta mucho. Siento que no, que también sería como un cambio demasiado radical que tal vez no están dispuestos a hacer de manera, así como “rápido ya”. Entonces, sí, siento que aún no hay como una cultura país entorno a esos temas. Hay mucha gente que sí, que está interesada y hace sus cambios como de forma personal e individual, pero no es algo así como que sea cultural, sino que son pequeños pasitos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale. Y, ¿Cómo percibes, osea, percibes apoyo por parte del gobierno a este tipo de empresas a vuestro emprendimiento en particular?, ¿Habéis recibido algún tipo de apoyo por parte del gobierno?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, igual hay muchos fondos para pequeños proyectos, para pequeñas empresas como para impulsar pequeñas empresas y ayudar a que se puedan realizar.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Pero me refiero pequeños proyectos sustentables.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

En ese enfoque sustentable no hay mucho la verdad. En realidad, no hemos recibido mucha ayuda porque igual es como complicado. Tienes que ser empresa formalizada o a veces es muy difícil postular a estos fondos, pero que no son específicamente para proyectos sustentables. Que yo, por lo que sé no conozco, no conozco muchos. Osea uno o dos, pero no hay mucho. Es como más apoyo para las pequeñas empresas en general, no con ese enfoque específico.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que hay poquito apoyo, que está empezando. Osea sientes que está todo que le falta mucho, mucho recorrido.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí, sí. Más que nada es como tal vez nosotros como personas queriendo desarrollar este proyecto somos los que buscamos las formas de poder hacerlo de una forma mejor, pero, así como ayuda, no. No. Sí hemos hecho algunos cursos. Juanca ha participado en cursos de Economía circular, de Marketing digital enfocado a lo sustentable, pero más que eso la verdad es que no. Hay asociaciones que se dedican a este tipo de ayuda a las empresas que tal vez no saben desarrollar su propia propuesta. Te ayudan a diferentes propósitos como observar bien lo que queremos hacer, cómo llegar a nuestro propósito de una manera honesta, ética. Y hay muy poco de eso, muy poca ayuda en ese sentido.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sé que existe una fundación. Fundación de la economía circular de Chile. ¿El curso estaba ligado a esa asociación o era un curso del gobierno de Chile o algo parecido?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Esto fue en una agrupación de mujeres que se dedican a enseñar estos temas, que su proyecto se llama ACC circular (asociación de consumidores circular) y entonces ellas daban estos cursos que duran algunos varios días donde se tratan todos estos temas y tratan también de

orientar a uno a desarrollar su proyecto de manera sustentable pero real. En el fondo te dan información, te orientan en los ejercicios, todo ese tipo de cosas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah, osea te van guiando.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, ese curso lo hizo Juanca, y la verdad es que nos sirvió bastante porque también como te contaba antes hay poca información sobre lo que es la sustentabilidad, lo que es la economía circular. Es como que no se escucha y no se sabe mucho de eso. Entonces en ese momento fue bastante bueno porque pudimos tener esa información de forma real y aplicada en nuestro proyecto. *"We found this course very helpful because we lacked information regarding many concepts regarding sustainability and circular economy... These concepts are not heard in Chile and not much is known"* pp.52 main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ajá, osea era un taller que es ese momento podías aplicarlo a tu propia empresa. Qué interesante. A lo mejor en esta fundación, porque les sigo en Instagram, a lo mejor también dan cursos, no lo sé. Pero se llaman asociación de economía circular de Chile o algo de así. No sé si sabíais, a lo mejor os interesa saber más de ellos.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Ah, sí. Los voy a buscar. Lo voy a anotar.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, osea tenía bastante buena pinta y el chico fundador parecía que tenía mucha idea, no sé.

Vale. Pues eso, ¿Sientes que os hacen falta más cursos de capacitación de economía circular? Pues eso, ¿Más cursos de ese tipo que os vendrían bien para desarrollarlos más como empresa circular?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí y también que existan ayudas en el sentido de que si uno tenga una idea que es para ir reduciendo más los desechos, que de repente uno pueda... Osea, tienes esas ideas, pero no

sabes cómo llevarlas a cabo. Porque yo soy diseñadora, pero no diseñadora de productos. Entonces, con el Juanca queremos y se nos ocurre hacer cosas con los mismos serrines o algunos desechos que tenemos acá que producimos aquí por la manufactura de los productos, pero no sabemos cómo llegar a eso. Entonces, por fundaciones hemos preguntado si nos pueden vincular a universidades donde tal vez algunos alumnos de ese tipo de carreras, como dicen, Industrial, nos puedan orientar un poco pero no es como tan simple. Entonces, eso yo encuentro que igual falta. Apoyo en ese sentido como de poder llevar a cabo ideas que también van a ser un aporte en el fondo. Pero en este momento no hay recursos y tampoco parece que hay intención de poder ayudar a estas iniciativas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea a lo mejor que la colaboración fuese más fácil, ¿No? Colaboración entre universidades, entre centros de investigación, que se hiciese más posible, ¿No?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, claro. De hecho, yo creo que sería más fácil si yo perteneciera a esa universidad como estudiante, pero una vez fuera ya es más difícil tener una relación con esas entidades. Es como si no estás pagando la mensualidad es como que no puedes ingresar.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ya, y no debería al final. Porque todas las universidades se publicitan como “al servicio de la sociedad”, así que debería de ser un poco más colaborativo todo.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí. A través de una fundación también creo que fue que una vez se logró con unos chicos de un taller de diseño que nos ayudaran a desarrollar el buzón de acopio donde van las tablas rotas, esos que tenemos instalados en tiendas de skate. No sé si te habló el Juanca de eso.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Me habló, me habló. Entonces, ¿Os ayudó un estudiante?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, nos ayudó un grupo de estudiantes, que fue para un ramo que ellos tenían que desarrollar. Entonces ellos nos ayudaron con este diseño y este modelo que ellos nos propusieron a nosotros. Entonces yo encontré que fue muy bueno su diseño y también le iban a incorporar una especie de sensor que nos avisara cuando ya estuviera completo. Nos iba a llegar como una especie de aviso en una aplicación en el celular diciéndonos que ya estaba “full” y que lo podíamos retirar. Pero al final eso no se logró. Entonces, quedó solamente el modelo de buzón para poder insertar las tablas. Entonces, eso sí lo desarrollamos con una universidad.

También en otra oportunidad, pero esto fueron personas X en Instagram nos preguntaban si podían trabajar con nuestro proyecto para mejorar ponte tú el logo, el logotipo, la imagen...pero al final esas cosas no llegan a buen término porque en una oportunidad una persona nos dijo que necesitaba objetos y después no nos devolvió las cosas, no hizo el logo y fue como más informal en ese sentido.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí que a lo mejor si no hay digamos dinero de por medio la gente a lo mejor no se lo toma tan en serio o algo así, ¿No? No sé.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, puede ser y también no sé al final porque eso era un ramo que ella tenía que aprobar, así que no sé si al final lo logró o no lo logró. Después nunca más nos hablaron. Entonces, bueno se ha dado también eso.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Informalidad digamos así.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, pero yo creo que cuando fue a través de la fundación fue más formal porque estaban con un respaldo atrás de esta fundación que yo creo que estaba preguntando constantemente. Y bueno, también la motivación de las personas que quisieron desarrollarlo y llevarlo a cabo completamente. Al igual no se pudo la parte como tecnológica pero que igual quedó funcional. Eso está instalado, quedó funcional.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Bueno, en un futuro, en un futuro, ¿Por qué no? Queda como pendiente

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, claro. ¿Por qué no?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, lo siguiente que te quería preguntar es un poco sobre vuestras motivaciones para crear un modelo sustentable. Entonces es sobre vuestra conciencia medioambiental. Me ha contado Juan Carlos que todo surgió a partir de un viaje por Latinoamérica. Pero quería saber en tu caso la conciencia medioambiental de donde surge. Osea siempre te has preocupado por el medio ambiente o fue en algún momento determinado que te surgió esta preocupación. ¿De dónde surge?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Yo creo que fue desde siempre porque yo cuando era chica y en mi adolescencia con mi familia siempre salíamos mucho. Siempre íbamos a lugares con la naturaleza, entonces eso siempre estuvo muy presente y esas ganas de estar como explorando y todo. Cuando tenía como 18 años más o menos ya empecé a tener un poco más de conciencia en algunos temas y ahí dejé de comer carne. Siempre tuve mucha sensibilidad y empatía con el tema animal. Desde ahí empezó de a poco a integrar eso y otros temas también “*The environmental consciousness was always with me. Since I was very young my family and I went on trips to the countryside very often. That has had a great impact on me and my desire to keep on exploring everything. When I decided to become a vegetarian, this decision affected every other sphere of my life, I started to question what I was consuming in every other aspect*” pp.50 and 62 main document.

En esos tiempos no se hablaba mucho de la basura ni de ningún de ese tipo de cosas. Era como que no existían. Nosotros desechábamos como automáticamente y no había un cuestionamiento más allá. Y bueno yo creo que ese tema en particular que te hablo de ser vegetariana, de ser vegana me llevó también a después considerar otras cosas en mi vida. Como empezar a considerar lo que estaba consumiendo en otros aspectos. Como por ejemplo el tema de la cosmética, de dónde provenían los ingredientes, que daño me estaban haciendo a mí, después qué daño estaban causando esos mismos productos en el ecosistema y ya después fue como todo ya. Después fue como una obsesión. Era todo lo que podía generar

algún tipo de contaminación, basura... De hecho, pasamos por algún momento con el Juanca que empezamos como a acumular, como que no botábamos las cosas. Era como que teníamos los desechos que no sabíamos qué hacer con ellos era como los acumulábamos en la casa. Y tampoco hasta día de hoy no hay muchos puntos limpios especializados en muchos materiales. Entonces, es el típico de la botella de plástico, papel, cartón, latas. Y todo lo demás es que como que no tiene como reciclarse. *"Thus far there are not many waste facilities specialized in the different materials. There are waste facilities for plastic bottles, paper, carboard, and cans. The are no means of recycling the rest of the things"* pp in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Y por ejemplo la lavadora?, ¿No existe un sitio donde llevar lavadoras en Chile?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Lo que pasa es que Santiago está muy dividido en 2. Está la clase media que sería donde estamos nosotros, el 1 por ciento que son como la gente que tiene más recursos, que son como cinco comunas más o menos que tienen comunas como más específicos y para otras cosas de los electrodomésticos, la ropa qué se yo. Pero acá donde estamos nosotros no. Son cosas como muy básicas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Lo tiran al campo, al vertedero las lavadoras, los electrodomésticos?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí y de hecho se ven electrodomésticos apilados en la calle a veces, se ven cosas porque no existe de momento. No sé si será una empresa que tiene que existir para que eso se recicle, pero no existe.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

En España se llaman puntos limpios. Luego vete tú a saber lo que hacen con la lavadora, que no sé lo que hacen, pero al menos lo puedes llevar allí. Que igual luego no hacen nada, no sé. No sé muy bien lo que hacen con ella.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, a lo mejor algunas partes las reciclan, no sé. Aquí igual se llaman puntos limpios, pero como te digo son de muy pocos elementos. Y ni hablar de las cosas orgánicas. Si no lo haces en tu casa, no existe como un lugar donde poder llevarlo. Osea sí o sí tienes que tener en tu casa una compostera. No hay opciones.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Yo vi por ahí que habíais calculado la cantidad de skates que acababan en los vertederos. ¿Cómo calculasteis esa cifra? ¿Cómo podéis llegar a calcular esa cifra de skates que acaban en el vertedero?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, lo que pasa es que el Juanca como conoce sus amigos que tienen tiendas de skate y saben más o menos cuantos se venden al año. Entonces por ahí hicieron el cálculo, pero yo creo que deben ser más porque lo calculamos aproximadamente con las cantidades de las personas que nosotros conocemos, pero hay muchas otras tiendas también.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vi que eran 12.000 tablas de skate. Y, ¿Es un cálculo a la baja encima?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, sí. Es mucho. Sí, es harto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, pues seguimos. Lo que te quería preguntar también es si tenéis conciencia o si has pensado en el valor que aportan vuestros productos al medio ambiente. Porque existe el valor que genera al consumidor el producto y el valor que genera al medio ambiente. Al final son dos tipos de valor. Entones, ¿Habéis reflexionado sobre esto, sobre el valor que aportan vuestros productos al medio ambiente?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, igual nos cuestionamos eso de repente y yo creo que tiene que ver con que nuestros productos puedan quizás terminar su ciclo siendo compostados, una cosa así. En el fondo es eso más que todo, porque siempre ha sido esa nuestra preocupación, de que este desecho no genere más desechos y que tampoco se transforme en otro desecho. “*I think that our products*

environmental value has to do with our products being able to finish their cycle by being composted, it is basically that” Ultimately, it had always been a concern of ours that waste is not turned into any more waste” pp 43 in main document. Entonces, esa es como quizás el... no sé, se me ocurre que es esa.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Entonces eso es lo que os gustaría, ¿No? Que vuestros productos al final fueran compostados, pero, hoy en día la propuesta de valor al medioambiente es no acaben en la basura a lo mejor los productos. Vale.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Igual claro, ahí está la posibilidad y nosotros siempre se lo hemos dicho a las personas que compran nuestros productos que si se te rompe lo vamos a arreglar y la idea es hacerlo durar lo más posible para que no se convierta en un desecho. Y ya cuando no haya más opción, o ya haya pasado mucho tiempo tal vez y quizás no se va a poder reparar, que termine siendo compostado. Por eso no utilizamos insumos tóxicos que vayan a interrumpir el proceso de descomposición de la madera.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Y existe alguna empresa por vuestra región que componga madera, que pueda hacer ese proceso?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

No, la verdad es que no lo sé, pero nosotros teníamos la idea de comprar una máquina que pudiera transformar todo esto como en aserrín pequeñito.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, ¿Y el serrín se puede luego utilizar para otra cosa?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, osea esa es otra de las ideas que tenemos, aprovechar ya si un trozo no sirve más, hacerlo aserrín y transformar esto en otro producto o sino el aserrín igual se puede compostar más fácil al ser pedacitos muy chiquititos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Pero la otra idea que te comentaba de los aserrines y eso es lo que no sabemos cómo realizar porque queremos hacerlo obviamente con productos orgánicos. Osea como aglomeración, pero a través de elementos naturales. No tendría sentido utilizar, no sé, adhesivos tóxicos, porque no...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea porque al final... yo no sé mucho de esto, ¿No? Pero la madera está hecha a veces de aglomerado, ¿No? de serrín

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y eso lo prensan con algún tipo de... osea, ¿Con pegamento se prensa?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Con adhesivos y no sé muy bien qué adhesivos serán, pero químicos obviamente y es lo que nosotros no queremos, porque se sale de nuestra línea de... queremos llegar que sea circular, en el fondo y también pueda terminar un ciclo de una forma natural. Entonces, si estamos

utilizando un producto muy tóxico, quizás eso no se va a poder degradar. En harto tiempo, miles de años, no sé.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea que al final ahí tenéis como una barrera técnica, porque queréis hacer algo, pero no sabéis como hacerlo posible.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí. Osea igual yo he estado investigando por mi parte porque como te digo no hay muchas oportunidades de hacerlo de otra forma y en el fondo todo lo hemos hecho así con el Juanca. Hemos sido autodidactas todo el tiempo porque aquí estudiar es super caro.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah, ¿sí?, ¿Se paga? Ah, yo pensaba que era como Argentina.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

No, no. Yo estudié cinco años diseño y al final fueron como diez millones de pesos (11.000 euros), once millones de pesos, no sé cuánto será eso en tu moneda.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

No sé, suena a caro. Voy a mirar... 11.000 euros. Uy, qué pasada, es muy caro.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Y eso que fue de los institutos baratos que hay acá en Chile, que en otras universidades... Yo estudié en un instituto porque la universidad era demasiado cara.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Fíjate, no tenía ni idea, yo pensaba que era ya te digo, como en Argentina.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, de hecho, cuando fue el estallido social acá en Chile, no sé si te enteraste, fue una de las demandas porque es muy difícil estudiar. Y si lo logras estás endeudado gran parte de tu vida porque tienes que hacerlo con créditos y con el banco, entonces no es muy fácil la verdad.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y además los salarios no creo que sean acorde a esa deuda.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

No, si eres como así muy ya esforzado puedes trabajar por la noche mientras que estudias tu carrera, algunas personas lo hacen así o sino ya es endeudarte con el banco a muchos años e ir pagando tu deuda así en cuotas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

No sí, sí. Aquí en Dinamarca, porque estoy estudiando aquí en Dinamarca es gratis. Es una pasada la verdad. En España también hay que pagar, pero no tanto, pero aquí es una maravilla, de verdad. Y encima te pagan por estudiar.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Tú me hablas de eso a mí me suena como irreal.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, es un sueño.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Aquí es tan caro y tú me dices que en otro país es gratis y es como “bah, así estudiaría muchas cosas”.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Yo ni me lo podía creer cuando llegué aquí porque si eres de la Unión Europea y trabajas diez horas a la semana nos dan como 500 dólares. Y yo decía “¿Me estás vacilando? Esto no puede ser verdad”, pero sí. Dinamarca es otro rollo. Deberían de ser todos los países así.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Igual todo lo que es Europa está como más evolucionado. Nosotros estamos lejos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Bueno, España ahí. Dinamarca es otra historia.

Vale y entonces relacionado con la propuesta de valor medio ambiental y la propuesta de valor al consumidor, te quería preguntar: Si tuvieras que priorizar una u otra. El valor que vuestros productos traen al consumidor o al medio ambiente, ¿Cuál estaría por delante, el valor al consumidor o el valor al medio ambiente?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Ah, qué difícil. Yo creo que la segunda porque en el fondo, si yo le otorgo un beneficio al medio ambiente, también le estoy otorgando un beneficio a la persona. “*I believe that I would prioritize the second because if I provide nature with a benefit I am also providing it to the customer*” pp. 63 in main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Bueno, muy buena respuesta. Pues esto ya estaría. Y ya lo último. Hay una parte de las colaboraciones que no voy a repetir porque ya me lo ha explicado muy extensamente Juan Carlos, sobre qué colaboraciones tenéis, pero sí te voy a preguntar sobre: ¿Qué valor crees que traen las colaboraciones a vuestra empresa? Osea qué valor crees que traen las colaboraciones a un emprendimiento como el vuestro?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

No sé qué colaboraciones te habló él, ¿De las tiendas de skate y eso?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, me habló de las tiendas de skate, me habló de los parques de skate y luego un poco de los sitios donde vendéis vuestros productos, las plataformas justas, Vloggy...

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Ah, sí sí. Yo encuentro que sin eso como que uno no puede crecer más allá. Las colaboraciones te llevan a crecer y a aprender un montón y se dan como instancias super nutritivas en ese aspecto, como por ejemplo la plataforma Vloggy, la plataforma justas cl., con las que vamos a participar también están vinculadas a otros proyectos que también van en la misma dirección. Entonces, también se van a dar instancias allí de poder compartir con esas personas y tal vez ir como generando redes, compartiendo experiencias y eso también entregárselo a las personas que van a estar colaborando externamente, osea el público al que

vamos a llegar. Y eso, siento que son instancias donde uno puede acercar un poquito más a la gente a estos conceptos, a estos estilos de vida, que como te comentaba antes no hay mucha información sobre esto. Osea se habla un poco sobre sustentabilidad y reciclaje, pero muy superficialmente. Osea que siento como que estas instancias son importantes para poder acercar y profundizar un poco en estas cosas con las personas que van a estar interactuando. Y se están creando muchas plataformas de este tipo en este tiempo. Sobre todo, porque no se puede salir y ha sido como la opción de muchas personas, crear y agrupar a distintos emprendedores o distintas iniciativas que tienen que ver con la sustentabilidad con un estilo de vida un poco más lento. Estamos agrupándonos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, osea la importancia de las colaboraciones en el fondo es compartir, en tiempos en los que no, no hay tanta información compartir esa información y complementarlos un poco, ¿No? El objetivo es complementarlos e intercambiar información, ¿no?

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Claro, sí. Y creo que la gente tiene ganas de saber más, porque nosotros hace poco hicimos una publicación que igual como que no la hicimos muy clara, pero siento que igual la gente interactuó harto con eso, siento que necesitan saber más. En esa publicación hablábamos de la distinción entre los productos reciclados, los productos sustentables y eso lo compartieron muchas veces. No así otras publicaciones de producto. Entonces, siento que la gente tiene ganas de saber más cosas, de profundizar un poquito más y esas instancias colaborativas son espacios que se dan para esto. Entonces si se puede aprovechar y si se puede encaminar hacia eso siento que sería súper beneficioso para la gente y para nosotros también porque uno igual siempre está aprendiendo cosas nuevas, de los demás también.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Y cuál es vuestro criterio a la hora de elegir con quién colaborar o con quién no? Porque a lo mejor os viene una plataforma y os dice “Quiero tener vuestros productos en mi plataforma”. ¿En qué pensáis para decir sí, o no? Cómo les evaluáis.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Si, igual hemos tenido otras propuestas de otro tipo de plataformas centradas solamente en PYMES, en pequeños negocios e igual para nosotros es un poco extraño porque no se dan estas instancias como te comentaba. Que nos hace más sentido a nosotros más aporte, participar en este tipo iniciativas con un propósito, que simplemente vender. Entonces, de repente nos quedamos con la duda de si participar en este tipo de plataformas porque si bien es cierto necesitamos vender, no sentimos que encajamos en ese perfil de usuario que va a estar consumiendo. Porque igual nosotros tratamos siempre de enfocar nuestro producto a que también sea una instancia de aprender un poquito más, siempre interactuamos con la gente a la que le estamos vendiendo. Entonces siento que es importante que, si es que no vamos a estar interactuando con la gente, porque nuestros productos se van a vender en una plataforma externa, que va a estar administrada por otras personas. Siento que en esos casos es super importante que esté super definido cuál es nuestro objetivo, cual es nuestra intención de hacer las cosas. Y si en el lugar todo habla lo mismo, es más fácil que las personas entiendan. pero si esto está en un lugar donde hay de todo un poco, siento que ahí no vamos a llegar de una manera muy clara con lo que queremos transmitir.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Desde luego. Al final es mantener un equilibrio. Porque claro al ser una empresa social, claro, el pilar económico, el pilar medio ambiental y el pilar social. Al final es el equilibrio. Y sí, es que tiene que estar todo en equilibrio claro.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, claro. Nosotros tratamos de ser un poquito estrictos en ese sentido porque igual estamos un poco hartos de tantas confusiones que la gente pueda tener como de esas mentiritas del greenwashing, de vender algo que no es etc. Entonces, tratamos de ser bien rectos en ese sentido. No sé si sea lo mejor, pero es importante para nosotros igual, tener esa coherencia.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, yo sí que creo que es una buena decisión, por lo que has comentado porque es la percepción que va a tener el cliente de vuestra marca, y cuanto más clara mejor. A lo mejor ya en un futuro me imagino, si la marca ya es más conocida, a lo mejor sí que se puede vender en otras plataformas, pero si la marca acaba de empezar yo creo que es mejor que esté más definido, que esté más claro el motivo de existencia de la empresa.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

Sí, y por ejemplo otro punto importante sobre todo acá en Chile, no se considera mucho lo que es el trabajo manual, osea el trabajo hecho a mano es poco valorado. Efectivamente, es más caro pero la gente prefiere comprar algo chino que algo que está hecho artesanalmente. Pero es más de diez veces más económico el precio de comprar algo que no está hecho artesanalmente. Entonces también siento que también por eso es importante estar en plataformas con ese enfoque porque la gente que va a llegar van a ser personas que aben n poco más de un poco más de lo que es un trabajo hecho a mano, que tiene un mayor valor porque está hecho no por una máquina, son horas de trabajo. Son horas de trabajos de nosotros de estar en el taller, en el computador, al final uno hace todo. Entonces siento que esto no se valora mucho y si uno está en otro tipo de plataformas pues no sé de reventa de otro tipo de productos la gente no va a entender y no vamos a poder comercializar ni comunicar el producto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, pues sí. Vale pues terminaríamos aquí. Muchísimas gracias por tus respuestas y por tu tiempo y bueno encantada de conocerte.

Dania Salazar (Rubrum Reutilización& Skateboards co-founder)

De nada, encantada.

Third interview. First customer of Rubrum Reutilización & Skateboards, Vanessa Antonieta Ceci Valera. 03/08/20 19:00 p.m. CEST'

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale pues lo primero es cómo conociste a Rubrum cómo conociste la marca.

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Había una feria aquí cerca de la casa y pasé a ver y ahí estaban ellos con sus productos. y ese mismo día él me contó la historia que usan las tablas de skate para realizar todo lo que hacen, los anillos, las pulseras, collares a parte de lo lindos que eran. Entonces, ese mismo día compré un collar y unos aros y los empecé a seguir por Instagram.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale y, ¿Qué fue lo más importante para ti la hora de comprar el producto? El diseño del producto, los materiales...

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Me gustó el diseño, cuando me dijo que estaban hechos de materiales reciclados y ya me encantó. *"I liked the design, but when they told me that their products were made out of recycled materials, then I loved it"* pp. 68 in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, osea que lo más importante para ti al decidir comprar fue que estuviesen hechos de material reutilizado, ¿No?

Vale. Luego, otra cosa, ¿Has tenido algún problema con el producto, osea se te ha roto en algún momento?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Nada, y el collarcito ya no tanto por la pandemia, pero me lo ponía mucho y está todo perfecto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Perfecto, y luego, ¿Es la primera vez que consumes una marca de accesorios sostenibles?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

No, es la primera vez pero siempre intento comprar productos sostenibles “*Yes, this is the first Brand of sustainable accessories that I know but I always try to buy sustainable products*” pp. 67 in main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea, ¿No conoces ninguna otra marca que haga algún accesorio de materiales reutilizados?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Sí, bueno conozco marcas de productos hechos a mano, valoro mucho los productos hechos a mano. Conozco marcas que hacen productos con cerámica.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

La siguiente pregunta es, de las últimas compras de accesorios, pendientes, anillos etc. que has hecho, ¿Qué porcentaje hay de accesorios sostenibles, por ejemplo, una marca como Rubrum y cuántas no sostenibles?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Digamos que sería un veinte por ciento.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y la última pregunta, después de comprar en Rubrum, ¿Te has sentido inspirada a conocer más marcas sostenibles?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

los envases y trae nuevos rellenados. Además, los productos son biodegradables.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Puede ser que la empresa se llame Algramo?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

La empresa se llama DNC limpieza.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah vale vale. Y, ¿Es todo tipo de productos tanto para lavar los platos como para lavar la ropa?

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Tienen productos para los platos, para la ropa, champú, jabón, de todo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Yo vivo aquí en Dinamarca no he visto nada parecido, que te recojan el envase. No, no conozco. Eso lo tienen que implementar aquí, lo de recoger los envases.

En tu caso fue más que estabas buscando productos sostenibles y encontraste Rubrum y el hecho de haber conocido a Rubrum te han dado ganas de conocer más también.

Vanessa Antonieta Ceci Valera (First customer of Rubrum Reutilización & Skateboards)

Sí, como los sigo a ellos, Instagram te va recomendando más cuentas relacionadas así que cada vez sigo a más marcas.

Fourth Interview. Second customer of Rubrum Reutilización & Skateboards, Catherine Herrera Alarcón 03/08/20 21:00 p.m. CEST

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Hola soy Diana, muchísimas gracias por acceder a la entrevista. Van a ser como unos diez minutos. La primera pregunta es cómo conociste a Rubrum

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Hicimos toda una academia de sustentabilidad juntos, un taller sobre economía circular y en el mismo grupo. Partimos una semana con hartos conocimientos y allí él comentó sobre su emprendimiento, sobre la reutilización y la verdad es que quedamos fascinados con su historia y todo el trabajo que hay detrás.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Creo que me comentó Dania ¿Era un taller de una fundación de mujeres que hacen talleres de sostenibilidad, o algo así? ¿Puede ser?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

En una asociación de consumidores conscientes, en donde 3 de las 4 directoras son mujeres. Es una asociación hecha por mujeres en donde si bien trabajamos con el sesgo de género, también trabajan y participan hombres. Pero pertenece a mujeres y son dos las directoras principales.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale y luego te quería preguntar también, cuando compraste en Rubrum, ¿Qué factor fue más importante para ti, el diseño del producto o que los materiales fueran reutilizados?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Ambos. Por un lado, obviamente, que por la percepción que nosotros tenemos y el trabajo que sabemos que vale todo lo que hay detrás, te da un punto importante, pero sobre todo además, los diseños son también bonitos, así que tiene una combinación de ambos.
"Obviously, when buying from Rubrum, the perception that we have of handmade work since we know all work that is behind it, is an important point. But above all, the designs are also very beautiful, so it is a combination of both" pp. 68 in main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Pero igual iría antes el tema de los materiales o igual igual?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Bueno, yo diría que igual igual, los dos aspectos fueron importantes, SI hubiese sido un buen diseño, pero si no hubiese sido de materiales reutilizados igual no me habría interesado pagar lo que pagué por ese producto. (*"Both (the beauty of the product and the materials) were*

important to me, but it had not been made from recycled materials, I would not have been interested in paying what I paid for that product") pp. in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, otra cosa, ¿Has tenido algún problema con el producto que se haya roto o algo así?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

No, nada.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale y en tus últimas compras de accesorios, más o menos las últimas cinco compras para hacernos una idea, ¿Qué cantidad habrían sido accesorios sostenibles y qué cantidad accesorios normales?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

A ver, las últimas han sido más bien sostenibles porque en el caso de Rubrum es sostenible porque es reutilización, pero en otros casos han sido artesanos, artesanos que trabajan con tradición y con productos que son por ejemplo típicos de acá de Chile. Entraría dentro de lo sostenible porque estás comprando a un artesano de primera mano, pero obviamente no caería en la categoría de circular.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, y más o menos, ¿Qué porcentaje había sido sustentable y no sustentable?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Sí, sí puede ser un cincuenta por ciento cincuenta por ciento. Yo le doy harto valor a las cosas que hacen los artesanos porque trabajan los materiales igual nobles que es o el cobre en el caso de las cosas que he comprado o alpaca que es como otra categoría de la plata. “*My last accessories purchases have been mainly sustainable ones, in the case of Rubrum because they are reusing materials and in the case of the rest of the purchases, I have bought from artisans that work with traditions and products that are from here(...)The things that I bought were made out of “noble materials”; more precisely cooper or alpaca*⁹” pp. 65 in main text

⁹ The definition of this term can be found in the glossary of terms (Appendix II)

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Alpaca, ¿No era lana la alpaca?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

No, no, no. Se llama alpaca, que es otra categoría de la plata. No tengo aquí para mostrarte, pero es muy similar a la plata y lo que tengo aquí que me he comprado son aros con temas mapuches, que son originarios de aquí de Chile. Son productos que yo sé porque yo he comprado anteriormente otros años que te duran eternamente, entonces bajo el concepto de sustentable si, ósea es como durable y además se puede reutilizar eventualmente.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y claro porque no es plástico sin mas

¿Y eso de la alpaca?, ¿Es un metal que se encuentra en Chile?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Sí, mira si me esperas en dos minutos te lo muestro. 5:06

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, me intresa.

A mí me sonaba a lana no sé por qué. Alpaca me sonaba a lana.

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Mira, aquí está (muestra el producto de alpaca). De hecho, tiene el mismo tratamiento que la plata. Después la puedes buscar, es plata, pero no me acuerdo de cuanto es la proporción.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Pero, ¿Es sostenible porque es de allí y no es plata que saquen de donde sea que no sabes?

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Sí, es de aquí. También he comprado otros productos con madera de aquí, que están por ahí tirados y los reutilizan la aprovechan.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Vale, y lo último que quería saber era si después de haber comprado en Rubrum, eso te inspiró a conocer más proyectos sustentables.

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Sí, lo que pasa es que yo llevo tres años ya voy para los cuatro años trabajando en el tema de la sostenibilidad, del reciclaje. Partí con el tema del reciclaje textil. Entonces ya a mí me interesa poder conocer más proyectos porque así tenemos más alternativas de compra “*Yes, what happens is that I have been working with the topic of sustainability and recycling for almost four years(...) so I am already interested in knowing more projects because that way we have more purchasing alternatives*” pp.67 in main document , para regalos o para lo que sea. Y para poder también ayudarlos como a expandir y que sean más conocidos, de que también haya más gente que lo valore.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, porque me comentaron que querían expandirse en cárceles, que parte de su producción la hiciesen en las cárceles, externalizando algunas partes de la producción.

Catherine Herrera Alarcón (Second customer of Rubrum Reutilización & Skateboards)

Sí, cierto.

Fifth Interview. Third customer of Rubrum Reutilización & Skateboards, Paty Prieto Candia 06/08/20 21:00 p.m. CEST

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Cómo conociste a Rubrum?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Lo que pasa es que yo hace rato que ando buscando productos un poco más sustentables y me mató al ver las cosas que podían hacer con la reutilización de skate. Osea el poder hacer las macetas, las arandelas que hay, los aros...todo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Los claveles de aire, ¿Las flores?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sí, son plantas que no van con tierra.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

No he visto yo nunca eso.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

¿Las plantas o las macetas?, ¿Las plantas no las habías visto nunca?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Esas plantas nunca las he visto no.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Son como espinillas y cuando estaba viviendo en Cojimbo las poníamos en una reja y absorbían el agua del aire. Tienen un nombre científico y todo lo demás. Para mí eran magníficas esas plantas, no se secaban ni nada, son como los cactus.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Entonces, ¿Los conociste por Instagram?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Los conocí por Instagram, los conocí por Instagram. La verdad no recuerdo exactamente cómo los conocí. Después me los topé en una feria que se hizo aquí en Valparaíso y los ví en vivo y en directo y eran una maravilla. Ahí es que compro los aros y demás y además de que tienen un buen propósito en el fondo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Claro, esa es la historia, el propósito circular en el fondo.

Porque por ejemplo cuando compraste algo de Rubrum digamos, ¿La prioridad para ti eran los materiales o la marca sostenible? Quiero decir, ¿El diseño o más el material sostenible?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Lo primero el diseño. En el fondo lo que ellos muestran, osea su discurso. El discurso que tienen para mí es un gran apoyo, para mí alguien tiene que hacerte parte de lo que está haciendo. Entonces tienen un propósito que va más allá del simple diseño. “*When buying a product from Rubrum I cared first of all about the design, what they show and ultimately their speech. For me, the discourse they have is a great support(...) they have a purpose that goes beyond simple design*” pp. 68 in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Entonces digamos que primero el discurso y el propósito y luego ya como complemento, aunque muy importante el diseño del producto.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Lo que tengo que decir es que la impresión de sus diseños es maravillosa, llama la atención, no es como otros. Y la mezcla de colores que tienen ahí, juegan muy bien con eso.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Si, a mi también me gustan mucho. Además, que son colores naturales. Como aprovechan el color de una manera estratégica,

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Exacto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Quería saber además si has tenido algún problema con el producto, algo que hayas comprado se ha roto o algo parecido?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

No, solo un aro que se me perdió.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah bueno, en el caso de pérdida supongo que no, pero ¿Sabes que si se te rompe un producto ellos se hacen cargo?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sí, sí, sí, tienen reparaciones siempre. Ellos están muy preocupados de cómo está el producto, si le sale algo... Hable con los chicos el otro día. Cuando podamos vernos me lo solucionará. Porque yo quiero volver a tener el par.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

También quería saber si es la primera vez que consumes una marca de accesorios sostenibles.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

De accesorios sí. lo que pasa es que nosotros estamos aquí al mando de la quinta región y estamos armando un grupo de upcycling the textiles. Llevamos desde finales de 2018 juntándonos. Todavía no decidimos que hacer de forma legal digamos si ser un gremio si ser una asociación, todavía tenemos que ver todo. Asociación no debiese ser por ahora, no tenemos nada descartado. Somos varios productores de upcycling the textil. Porque cuando uno busca productos ya uno busca que tengan que ver contigo, con lo que tu piensas para la vida y para el mundo. Tiene que ver con la ética. Es que ya no hay otra cosa.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Con tus valores. Eso es muy millennial, además.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sin demonizar lo que no se hace. Por ahí todos podemos fallar. (Aquí casi hay mal entendido no le entendía).

Yo tengo una niña chica, y el año pasado por el día del niño. Yo le digo, es el día de la niña, su abuela le regaló un carro de supermercado llena de mercadería distinta, pero todo de plástico. Al principio me molestó, pero luego dije, tranquila no pasa nada, es la abuela, no puedes hacer que todo vaya en esto, entonces...

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Esa es otra que las generaciones mayores las tienes que dejar así.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Nosotras hablábamos antes y por ejemplo le decía a Cony, me es más fácil convencerte a ti y a 50 más que tener una pelea familiar porque pedir que vayan al almacén (pequeño negocio) en lugar del supermercado. Además de que la gente mayor ellos tienen su forma de hacer las cosas. Entonces no puedes venir a cambiar la manera de otras personas o tener una pelea familiar por algo que, la lucha está en muchas otras partes. Además, hay gente que no le importa.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, además las personas mayores ya tienen sus costumbres etc., Yo creo que es mejor dejar a las viejas generaciones e ir en busca de las nuevas generaciones para que se den cuenta del problema que tenemos.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Aquí le gobierno aún les pide favores a las empresas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Les pide favores a las empresas?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sí les pide por favor a las empresas que implementen medidas. (Se lo pide por favor, aquí otro posible malentendido) Pero es que este tema nos afecta a todos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

En las últimas cinco compras, ¿Cuántas han sido sostenibles y cuantas no?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Cien por cien, o es sostenible o no es. Hace un tiempo que no me pinto. “*It is sustainable, or it is not, it is being a while since I do not wear makeup*” pp.66 main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Las uñas? Ah, ¿Maquillaje? vale.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sí

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Yo es que digo maquillar, y pintar a las uñas.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Me costaba encontrar una marca que cumpliese mis requisitos y al final dije ya está, no me pinto. Solo me pintaba cuando trabajaba en el banco hace 10 años ya.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Hay muchas marcas sostenibles ahora de maquillaje, pero no sé el precio, creo que se eleva.

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

A todo lo que afirme este patriarcado vale más. Una camiseta costaba 6 de niña y 4 de niño. Y yo digo, pero ¿Por qué? Y era porque llevaba corazoncitos o lo que fuese.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Después de conocer a Rubrum, ¿Te ha inspirado a conocer a más marcas?

Paty Prieto Candia (Third customer of Rubrum Reutilización & Skateboards)

Sí, también está ... que son joyas textiles. También está Runtu que es de Valparaíso. "Yes, I know other brands of textile jewelry and there is also Runtu, in Valparaíso that makes jewelry with eggshells" pp. 67 of main document. Ella trabaja con cáscara de huevos y resina. Hacen maravillas. Yo voy a empezar a trabajar para doble impacto.

Sixth Interview. Fourth customer of Rubrum Reutilización & Skateboards, Pilar Araneda Maiz 09/08/20 23:00 p.m. CEST

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Cómo conociste a Rubrum?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

En una feria de emprendimiento

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Qué tipo de feria, de artesanos locales o de qué?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

No, fue una feria que se hizo aquí en el año 2019. No vives en Chile, ¿no? Aquí es que el año pasado en Chile hubo un estallido social y entonces se hizo una feria para ayudar a todos los emprendedores que lo estaban pasando mal por toda esta situación.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Qué te hizo decidirte a comprar el producto? ¿el material, el diseño...? Qué es lo que más te llamó la atención

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Bueno a ver, me gusto, una de las cosas fue la creatividad, el diseño también, yo soy diseñadora gráfica, me gustó mucho el diseño, lo encuentro muy lindo, muy novedoso. Muy buen oficio de manufactura, además. También como el proyecto mismo sobre la reutilización de los skates que tampoco lo había visto. Entonces fue un poco de todo. Además, estuve harto rato conversando con él. *“One of the things that I liked was the design, I find it very beautiful and innovative. They also treat wood very well. They have very good finishes. Also, I liked the project itself about the reutilization of wood”* pp.68 main document

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Así que te acercas y él te explica todo?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Sí, lo le saqué conversación también, cuando algo me interesa... cuando estuve en España en una feria me pasó lo mismo.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Entonces digamos que fue una mezcla de todo ¿no?

A lo mejor fue un poco el diseño y luego un poco el complemento que reutilizaran materiales, pero no fue el tema sostenible el que te llamo la atención.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Lo encuentro muy buen diseño, muy buena manufactura, muy buen oficio. El colorido, el proyecto mismo... etc. un complemento de cosas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Quería saber si has recomendado alguna vez la marca de Rubrum, si te llamó tanto la atención que la has recomendado.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

A mi familia y lo compartí en redes sociales, en una historia.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Has tenido algún problema con el producto? roturas o algo así?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

No, me parece solo un poco rara la planta misma, porque como no tiene tierra. pero no, con el producto no, ningún problema.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Yo no sabía que existían las plantas así, porque claro yo veía las fotos, pero no veía que eran de aire. Claveles de aire o no sé cómo se llaman.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Sí, son bien extrañas.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y, ¿Es la primera vez que consumes una marca de accesorios sostenible o ya habías conocido en algún momento otra parecida?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Sí, conozco otras que te podría dar sus nombres para tu proyecto. Yo le hice el logotipo. Y es una marca que está llegando a España también. Se llama acurrucatejidos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah pues lo miraré.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

A mí me gusta involucrarme con los emprendimientos como diseñadora y eso es como mi marca favorita yo me enganché con la dueña, trabajamos codo a codo. Ella trabaja lanas naturales, tiñe naturalmente las lanas. Es sustentable.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Tiene muchos bebés en su Instagram.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Vende mucho a todos lugares de Europa. De bebés a adultos.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Qué interesante, pues les voy a seguir.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

¿Cómo te llamas tú?

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Yo?, Diana Ortega

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Ah, vale.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Y, ¿Compras mucho en marcas que sean sostenibles?, ¿Te importa que sean marcas que cuiden el medio ambiente etc.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Bueno yo creo que sí, bueno no sé si al 100%, porque a veces se escapa un poco el precio, pero trato de priorizarlas sí. Si puedo elegirlas sí que las voy a elegir.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

De las últimas cinco compras, ¿Cuántas habrían sido sostenibles y cuántas una marca corriente?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Yo trato de elegir las marcas que no llevan envoltorio de plástico, por ejemplo. Últimamente más sostenible que todo, pero aún falta, aún falta mucho, todavía no se ha masificado mucho.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

No, y lo que decías tú, que sube el precio y se hace difícil.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Rubrum te ha inspirado a descubrir más marcas sostenibles?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

No, igual después de Rubrum tengo las mismas ganas de conocer. No por Rubrum voy a conocer otras marcas. *"No, after Rubrum I have the same desire to meet new brands. Not because I got to know Rubrum I want to know other brands"* pp.67 in main document.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Osea, no Rubrum en concreto sino en general otras marcas. Vamos que tus ganas se han mantenido igual, ¿no?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Exacto.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

¿Cómo de implantada está la idea de economía circular en Chile?

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Falta, falta todavía. Hay una categoría de empresas que se llama la empresa B. Y hay otra empresa que es muy conocida aquí que se llama "Greenglass".

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Pero si quieres hablar con otro emprendimiento te sugiero Acurruca que es lo que yo conozco. Ah, mira. ¿Y por qué son conocidos? Ah, son vasos con causa, debe ser que cada vez que donas un vaso donas a alguna ONG o algo.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

A acurruga la conozco más, si quieres hablarle ella se llama Morelia. Hay otra empresa que conozco harto, busca en Instagram, se llama Superjusto.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Ah, super justo. También, lo que pasa es que ellos son, formaron una tienda y muestran varios emprendimientos para vender a granel, para eliminar el plástico.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah, pues es parecido a Algramo. Pero Algramo es una empresa que se está haciendo muy grande, quieren ir a EE. UU....

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Sí, a veces cuesta encontrar los emprendimientos en Google y es más en Instagram. Yo elegí Rubrum porque me gustó su proyecto, me gustaron sus diseños, me pareció interesante.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

No, y tienen muy buen oficio, no se le ve la astilla, la madera... muy buen pulido. Espera busca otra empresa para que te la anotes ahí, que es de una amiga de Finlandia. Bueno ella es chilena finlandesa, pero ha pasado toda su vida en Finlandia. Y llegó aquí y se casó con un chileno y creó una agrupación que hacen entrevistas a emprendedoras. Se llama Womentogether. No venden nada, pero ahí hay entrevistas a mujeres emprendedoras.

Diana Ortega Martín-Rubio (Entrevistadora/Interviewer)

Ah, a lo mejor esto me sirve para conocer a más emprendimientos.

Pilar Araneda Maiz (Fourth customer of Rubrum Reutilización & Skateboards)

Exacto te sirve para eso. Si quieres contactarla, puedes.

Appendix 2. Glossary of terms

Alpaca : Alpaca is a fine metal, known as “German silver” made out of cooper, zinc and nickel and occasionally, iron (Okdiario, 2018) (Peru treasure, 2016).

Anaerobic digestion: Process by which organic materia is exposed to a treatment to obtain biogass and fertilizer (biocycle, 2020)

Circular sourcing: Process of selecting suppliers that source materials from closed material loops (Lewandowski, 2016).

Composting: Processing of organic materials to obtain natural fertilizer (biocycle, 2020)

Co-processing: It is a process by which waste material is exposed to extremely high temperatures in rotary kilns that destinated to this purpose to be converted into a new usable raw material for industrial purposes or as energy to replace mineral sources (de Queiroz Lamas, Fortes Palau, & Rubens de Camargo, 2013).

Greenwashing: It is a form of disinformation based on hiding deviance and malpractices that some companies use to not deteriorate or improve their public image towards the public and stakeholders (Laufer, 2003).