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SUSTAINABILITY IN FASHION: CONSUMER BEHAVIOR AND THE GREENING OF THE GARMENT INDUSTRY IN MEXICO

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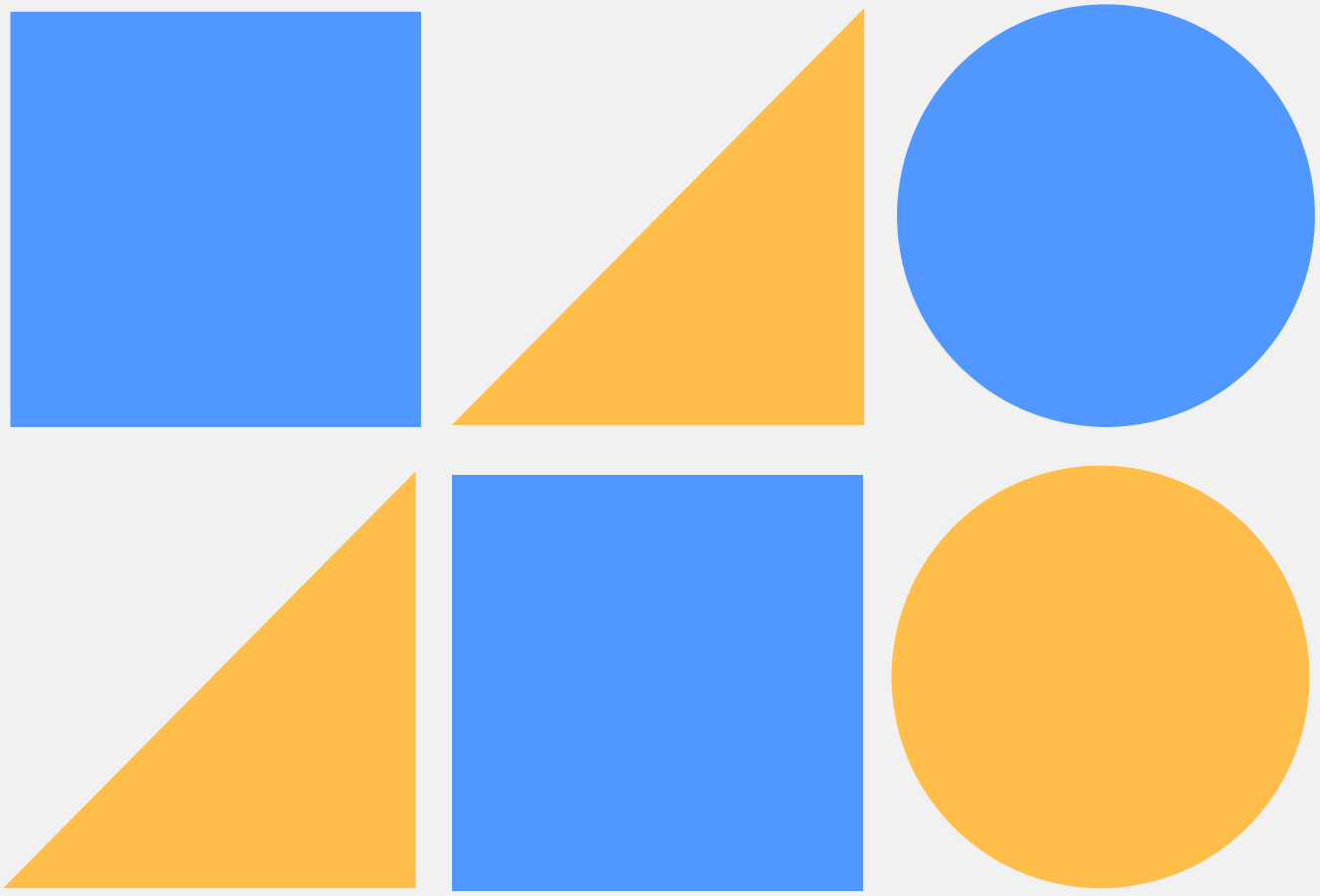

SUSTAINABILITY IN FASHION: CONSUMER BEHAVIOR AND THE GREENING OF THE GARMENT INDUSTRY IN MEXICO

Abstract

The following thesis provides an overview of consumer behavior in Mexico and its potential effect on the production of more sustainable garments in Mexico. The aim was to determine whether consumers' demand was making producers adopt greener production methods. To accomplish this, three specific objectives were set: define consumer behavior trends in Mexico towards sustainability in fashion; outline the current structure of the garment industry in Mexico, describing the relationship between the companies that compose it and how they transfer knowledge and innovation; and to explain the importance of consumer behavior and how it is linked to the processes of greening of industry of the garment industry in Mexico. Mixed methods were used, both qualitative and quantitative analysis and with the help of secondary research and literature review. Three companies (Falusi, Karosso and Ocelote) were interviewed to complete the section on Mexican production. This section was analyzed with qualitative analysis software, MAXQDA.

After studying both consumers and producers in Mexico, it was concluded that currently there is no greening of industry. Consumers are not demanding it from domestic producers and producers are not adopting greener alternatives on their own. However, some alternatives remain for a possible future greening of the garment industry: through transfer of knowledge from international companies through manufacturing enterprises, who would then transfer it to national producers; through a growing demand from consumers with higher incomes; or through an enforced greening by improving legal frameworks.

Keywords: consumer behavior, sustainable fashion, greening of industry, garment industry, Mexico

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Chapter 1 Introduction

The clothes we use every day say something. They have a personal meaning and are sometimes the first thing people see when looking at us. We all have different motivations as to why we purchase what we purchase and there are many factors we consider when buying new clothes, but it is not just us. The global population of 7.6 billion (Worldometers, 2018) which annually consumes an average of 7 kilos a year of textiles and apparel (Nimkar, 2018) translates into over 50 billion kg of textile products a year. To accommodate this demand, the textile and garment industries have increased their production and with it come a number of consequences ranging from the economic, social and environmental.

The amount of resources needed for such production is vast and diverse. Just four years ago, in 2015, the global apparel industry produced more than 400 billion square meters of fabric (Kirchain, Olivetti, Miller, & Greene, 2014). For that amount of fabric to be produced, it took nearly 100 million tons of fiber and filament yarns, about 40% of which are agriculturally derived -like cotton or wool- and 60% synthetic -such as polyester or nylon- (Gugnani & Mishra, 2012).

A recent study conducted at the Massachusetts Institute of Technology regarding cotton t-shirts estimated that producing one kg of manufactured dyed knit or woven cotton fabric, generated 10.8 kg of CO2-eq, and so when one considers an average t-shirt weighs less than 200 grams, that translates into 2.1 kg CO2-eq per shirt. Most of these greenhouse gases (80%) are generated during the manufacturing stage –when raw cotton is transformed into yarn, is dyed and weaved. The remaining 20% of emissions occur during the agricultural production, shipping and eventual release of biogenic carbon from landfilling. One must now put into perspective the 2.1 kg –roughly the same as burning 1 kg of coal or driving 8 km in a passenger car- needed to produce one shirt. In 2013, 10 billion kilograms or cotton were used in the apparel industry, which would be equivalent to 107.5 million tons of CO2-eq –equivalent to driving 400 billion km (Kirchain et al., 2014). Thus, what initially seemed like a relatively small impact at first, soon becomes much larger when thinking of the apparel industry as a whole.

This increasing demand, production and use of resources have derived in what today is commonly referred to as “fast fashion”, a buyer-centric business model that has taken over the global garment industry, percolating into developed and developing nations.

This way of production is characterized by its swiftness, as brands can have new products in store in just a couple of weeks. To do this, companies rely on producing prototypes quickly,

which then are produced in small batches of a wide selection of styles. The manufacturing portion is usually in developing countries close to the final destination where they will be purchased, low manufacture and labor costs allow for a larger profit margin (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). Companies are now very efficient when meeting consumer demand with their quick response times, which when combined with fashionable items and low costs translates into continued growth in sales and profits (Cachon & Swinney, 2011).

Globalization has thoroughly transformed the garment industry, displacing manufacture from developing nations, to offshore locations. Some of the environmental consequences have mentioned but there are many other aspects to consider, such as shipping -which is frequently done by air, to ensure fast delivery in stores, which as we know produces significant emissions of CO_2. Some of the social and economic consequences are carried over to the workers who actually make our clothes, who often endure very harsh conditions for very little pay, and who tend to be women or minority groups such as children and ethnic minorities (Turker & Altuntas, 2014).

Although most people usually think about what they are going to wear or what they will buy, what goes into the production of an item of clothing more often than not goes unnoticed. The true cost of clothing is hidden behind a cheap price tag.

I Problem definition

In recent years much has been said about the production of clothes and how these processes need to be changed. Consulting firms such as Nielsen and McKinsey have reported that more than ever before, consumers have started to wonder where the products they purchase come from. In a survey conducted by Nielsen Global Survey (2015), which included 30,000 online consumers in 60 countries throughout Asia-Pacific, Europe, Latin America, the Middle East/Africa and North America, 66% of global respondents is willing to pay more, and over 50% of them is influenced by key sustainability factors, such as a product being made from fresh, natural and/or organic ingredients (69%), a company being environmentally friendly (58%), or a company being known for its commitment to social value (56%).

Consumers care about where their products come from and start shopping consciously and companies respond to that and modify the way their products are made. These decisions are more and more motivated by environmental concerns (Hoffman & Hutter, 2012) and, as stated above, people have reported being willing to pay extra for a product that matched their beliefs.

Because of this growing number of consumers concerned with the environment, some companies have adopted sustainability measures as a response to these demands. It should be said that the adoption of sustainable production practices in companies of all sizes provides benefits not only for the environment, but for the companies themselves (Li, Chow, Choi, & Chan, 2016 p.67). Notwithstanding their size and inspiration, there are two types of companies: those companies that do not incorporate sustainable practices and those who do. The latter do so by adopting strategies such as better management systems, auditing their social and environmental outcomes, joining fair trade and clean transportation systems and eco-labelling (Turker & Altuntas, 2014).

This thesis will focus on the possibility of current shifts in garment production and what producers are changing in their production -if anything- to cater to consumer's recent interest in the environment. Although with a global backdrop, the focus will be on consumer behavior trends in Mexico in regards to the apparel industry to later evaluate if sustainability is something that matters for customers when purchasing and if it could be enough to shift the way garments are produced in Mexico.

II Justification

The relevance of adopting more sustainable practices in all aspects of our lives has not gone unmentioned in recent years. Adhering to the most common and well-known definition of sustainability, one may think of the 1987 Brundtland report. There, sustainability seeks to meet the needs of the present, without compromising future generations. This definition guided most of the official frameworks, like the Agenda 21 and subsequent UN programs, and has three main dimensions: economy, environment and society. Out of the 17 official Sustainable Development Goals, number 12 specifically states that we should be working towards "responsible consumption and production" (UNESCO, n.d.).

Fast fashion is the embodiment of irresponsible consumption and production and its quick rise as the preferred business model in the garment industry has made it impossible to ignore. Although it has gained social and academic recognition, the focus predominantly tends to be on the economic and social aspects, particularly on the employee abuse and other unethical working practices at manufacturing sites (Barnes & Lea-Greenwood, 2006, etc.), or on the energetic and polluting aspects of fabric production (Hasanbeigi & Price, 2015; Ozturk et. al. 2014, etc.).

Furthermore, the link between the environment and consumer behavior has yet to be fully developed in terms of fashion and the garment industry. One of the pioneering studies done

on consumer behavior of sustainable fashion consumption (McNeill & Moore, 2015) was used to categorize Mexican consumers into: self, social or sacrifice consumers categorized fashion consumers. Other notable works that were used as sources for this thesis were: Paul, Modi, & Patel, 2015, which focuses on green product consumption in general; Joy et al., 2012, which studies the implications of fast fashion on sustainability and Bruce & Daly, 2006, which studies buyer behavior for fast fashion. It is worth mentioning that whatever research was available of fashion and sustainability was conducted in countries other than Mexico.

Although it is an industry that has been relevant for Mexican economy and society during the last 150 years and nowadays employs over 300,000 people in Mexico, research on the topic is seriously lacking. In terms of garment production in Mexico, the studies have focused on the industrialization of garment production and the history of maquiladoras and exports, particularly in regards to the United States.

There is virtually no research being conducted to highlight the importance of consumer behavior in relation to the garment industry. All the information being produced about consumers is done by marketing agencies and not by academics.

Furthermore, the adoption of more sustainable practices, the so-called process of greening of industry, has begun and is being studied in developed nations. Through global trade it has been transferred to other countries but this thesis seeks to find out whether this possible greening of industry is happening within Mexican borders. That is why this thesis is relevant, as it deals with topics that even though are important and current, are not being researched in Mexico.

III Objectives

The general objective set for this thesis is to: explore the link between consumer behavior trends and the production of more sustainable garments in Mexico.

To do so, three particular objectives were set:

- Define consumer behavior trends in Mexico towards sustainability in fashion.
- Outline the current structure of the garment industry in Mexico.
- Explain the importance of consumer behavior and how it is linked to the processes of greening of industry of the garment industry in Mexico

IV Structure and scope of the thesis

When starting to write the thesis, the question as to which was the better way to present the information and findings arose. After establishing the main objective as exploring the link between consumer behavior trends and the production of more sustainable garments in Mexico, the main components were identified. There are three clear components: consumers, producers and the relationship between them. Each of the particular objectives deals with one main component each and that help define the structure of the thesis.

Figure 1. Components of the thesis.

Instead of the traditional structure of a thesis, this thesis is divided into three chapters, one for each of the components/objectives. This allows entire particular objectives to be clearly achieved. Consumer behavior trends in Mexico towards sustainability in fashion are studied in chapter two; producers, through the current structure of the garment industry in Mexico is discussed in chapter three; lastly, the relationship between consumer behavior and producers they are linked is discussed in chapter four.

Chapters two and three both give an overview of their respective topic, from a global standpoint. They their own theoretical and methodological sections, while chapter four is shaped more like a discussion, which is built on the findings of the two preceding chapters. All of them include short conclusions to keep in mind for the following chapter, or in the case of chapter four, to keep in mind before reading the conclusions.

It is important to mention that although maquiladoras are very much relevant in the garment industry in Mexico, they were not the focus of this thesis because most of them manufacture for international companies. Instead, the focus and empirical research was done directly with companies in charge of what they produce.

Also relevant is that this thesis, although critical of fast fashion, does not seek to condemn or criticize utilitarian use of clothes. The fact that people, in general, have to wear clothes and that often there are economic constraints to greener clothing is not lost on this thesis. The focus is rather on fashion consumption, where consumers have a saying in what, why and when they purchase clothes. The companies studied all produce fashionable items, for different domestic segments of the market, yes, but all target to middle and upper-class

consumers, who are afforded the luxury of buying items that would not be considered necessary.

Chapter 2, entitled “Consumer behavior trends in Mexico towards sustainability in fashion”, as was mentioned, seeks to achieve the first particular goal. To do so, it gives an overview of what consumer behavior is, followed by one of the leading theories used to explain it. After that, the topic of sustainable consumption and sustainability in fashion are introduced, complete with different stages of sustainability and the potential risks associated with traditional means and techniques of production. To complete the chapter, there is a section on Mexican consumers and trends regarding garment consumption.

Chapter 3 provides a snapshot of the garment industry in Mexico, both historically and currently. This chapter has a theoretical component, including the product life cycle, locational factors for industries and diffusion of knowledge and innovation. This chapter is completed with the results obtained through interviews with three garment-producing companies in Mexico. It is important to mention that as this thesis focuses on the relationship between producers and consumers, it does not go into particulars about the environmental and social aspects of the industry in Mexico, as what is provided is enough to determine the structure of the garment industry in Mexico. Similarly, the focus is on the make stage and not the source, use and last stages as those are not strictly in the hands of producers.

Chapter four no longer has a theoretical and methodological segment as it takes what was concluded from the previous two chapters to determine the importance of consumer behavior to the processes of greening of the garment industry in Mexico. To do this, it starts on a global level to show how the industry is becoming more and more consumer-centric and the overall importance of consumer behavior in the greening of the garment industry. It also includes a section on alternatives companies have begun to adopt to quench the demand for sustainable fashion. Once that has been established, it finishes with the answer to the question are Mexican consumers pushing for a greening of the garment industry in Mexico? Although the answer is not encouraging, there are still some alternatives routes to the greening of the garment industry towards sustainability, which are mentioned at the end of the chapter.

Chapter five provides the general conclusions of the thesis, including a synthesized version of the findings of each chapter. It also includes recommendations at different levels as well as possible future research.

The final section of the thesis provides complementary information to the thesis, including information pertaining to the interviews conducted.

Chapter 2 Consumer behavior trends in Mexico towards sustainability in fashion.

I Introduction

Consumer behavior can be summarized as the "study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires" (Solomon et. al., p.6, 2007).

This field has evolved from when it was referred to only as buyer behavior, because it comprises much more than just the act of exchanging valuables. It is an ongoing process, that starts before and ends after the purchase itself. The actors involved go beyond the purchaser -they may not be the person who actually uses the product; second, they may not make a decision on their own-, and these actors can be groups or organizations instead of individuals (Solomon et al., 2007).

The theory of reasoned action (TRA), developed by Martin Fishbein and Icek Ajzen in 1967, is one of the most helpful theories used to explain consumer behavior. This theory of reasoned action "aims to measure behavioral intentions, recognizing that certain uncontrollable factors inhibit prediction of actual behavior" (Solomon et. al., 2006 p. 155). This theory considers the fact that intentions don't immediately translate into behavior, recognizing that certain uncontrollable factors inhibit prediction of actual behavior, and therefore, past behavior is a better predictor of future behavior than consumer's behavioral intention. Additionally, this theory acknowledges the power of other people in influencing behavior, as many of our behaviors are not determined in isolation. This particular theory deals with attitude towards the act of buying, not only the attitude towards the product itself. It focuses on the perceived consequences of a purchase: "Knowing how someone feels about buying or using an object proves to be more valid than merely knowing the consumer's evaluation of the object itself" (p. 156). Almost twenty years later, this theory was extended by Ajzen (1985) with the theory of planned behavior (TPB), which now included perceived behavioral control. This extension took into account the intention to behave in a certain way, but the actual behavior itself is foiled because of subjective and objective reasons.

The TPB has been used and proven to be applicable and accurate in predicting behavioral intention that is pro-environment as well as consumer behavior across a wide series of eco-friendly situations (Raziuddin Taufique & Vaithianathan, 2018). Consumption is not a one-step action, rather a process involving various stages that start with the acknowledgement of a

need or want, reviewing and selecting from n alternatives and post-purchase and post-use behavior. All of these stages have repercussions that may challenge sustainability goals on all scales, as it is not an individual phenomenon rather a global one, encompassing investment, production and trade that involves “cultural, institutional, power, economic and infrastructure forces” (Milfont & Markowitz, 2016, p.1)

The garment industry heavily relies on the fast-paced production of new trendy products for a specific consumer in an industry that becomes more competitive each day. The purchase, use and disposal of garments are now based on a system of production with severe consequences for the society, economy and the environment (Gwilt & Rissanen, 2012).

This is why the role of consumers behavior is very important when talking about the garment industry, because they could potentially be a driving force for change, to make a widely unsustainable industry into something more sustainable. Mexico has long been a hub of production of garments, and now has become quite the hub for consumption as well. As such, it is important that consumers are aware of the true cost of their choices in apparel so that in the future, they ask more of producers.

II Methods

The main objective of this chapter is to define consumer behavior trends in Mexico towards sustainability in fashion. To be able to achieve this, further information will be provided on consumer behavior, followed specifically by the theory of reasoned action and planned behavior. Once their relevance has been established, the focus will be on sustainable consumption, followed by what sustainability in fashion entails. All of this theoretical information was obtained as secondary research, from scientific articles and books.

As a complement to the section on sustainability in fashion, a literature review was conducted to give insight into the risks associated with traditional methods of production. This literature review will give an outline of the state of scientific research being conducted in the areas pertaining to social and ecological risk related to fast fashion. The main categories used to categorize the literature follow a cradle to grave approach, divided into four stages source, make, use and last. This was accomplished, after reviewing over 30 articles that dealt with any of those stages.

The final section dealing with consumer behavior for sustainable fashion and Mexican consumers in particular was done based on empirical research from scientific articles as well as marketing reports.

III Consumer behavior

Although technically a branch of marketing, the study of consumer behavior has become a multidisciplinary task, as it combines elements beyond the obvious aspects of economics, incorporating concepts from social sciences concerned with human behavior like psychology and sociology. It is the study of how and when individuals and groups choose, buy, use and dispose of products, services or ideas that better satisfy their needs and demands. It goes further and delves into the impact these four processes have on the consumers and themselves. Understanding consumer behavior not only results in improved marketing strategies on the part of firms and organizations, but on a larger scale, can also lead to improved public policy (Tetteh, 2015).

In recent years, there has been a growing interest in the study of consumer behavior in response to the increasing awareness of the importance consumption has in our daily lives, as individuals, as a society and in terms of our economic and political choices. As such, there is some consensus that not all consumer behavior is beneficial for the individuals or for society, and there have been more and more studies focusing on these negative aspects, including environmental degradation and waste (Solomon et al., 2007).

There has always been a debate as to what goes on behind a decision. It is commonly assumed that consumers are constantly seeking and receiving information from diverse sources. This information is then processed and a logical, rational selection is made out of n number of alternatives. There are contrasting points of view, that place the consumer as being subject to environmental pressures and therefore are not capable of giving much conscious thought to their purchase. The idea is that consumers are influenced by external or environmental factors that eventually play a role in the decision process.

IV Theory of reasoned action and planned behavior

Although there are other attempts to study the reasoning behind our actions, the theory of reasoned action, commonly abbreviated as TRA, and the theory of planned behavior, or TPB, still remain in use and are accepted as a comprehensive insight behind specific behavior. The underlying belief of these complementary theories is that behavioral intention is one of the best predictors for behavior and that this behavioral intention is determined by the social normative perception and attitude towards said behavior (Montaño & Kasprzyk, 2008). As it has been previously mentioned, past behavior is in reality the best predictor of future behavior, but these theories still prove to be useful because gaps in information about past behavior make it hard to use it as the sole predictor.

The TRA suggests that "behavioral intentions, which are a function of salient information or beliefs about the likelihood that performing a particular behavior will lead to a specific outcome" ((Madden, Scholder Ellen, & Ajzen, 1992, p.1). In the original theory, both authors categorize beliefs preceding behavioral intentions into behavioral and normative. The former beliefs are the underlying influence on a person's attitude towards performing the behavior, while the latter beliefs influence the person's subjective norm regarding the performance of the behavior. As such, intention and behavior – eventually- are affected by salient beliefs and new information.

In both theories, attitudes and subjective norms have an effect on behavioral intention and on the actual behavior. The TPB includes a third exogenous variable -perceived behavioral control- that exerts direct influence on behavior and has indirect influence on behavior through intention. This indirect effect is based on the assumption that perceived behavioral control comes with motivational implications for behavioral intentions. How people behave is decidedly influenced by the confidence they have to perform the behavior, revealing how influential these perceptions are (Madden et al., 1992).

The outcome of this perceived behavioral control on the actual behavior varies on the situation at hand but is in truth important when it comes to behavior that is not entirely under volitional control and when the perceptions of the control of the behavior are correct. Perceived behavioral control is an accurate predictor of intention and target behavior. Taking this link into account, strategies can be developed and applied to change intention and behavior by changing perceptions of control. (Madden et al., 1992).

Both theories apply to a myriad of situations but can surely also be applied when talking about consumer behavior and more specifically, sustainable consumer behavior. As it has been previously mentioned, these theories provide a model for the "prediction of behavioral intentions and/or behavior" (Madden et al., 1992) and such is a valuable tool when one wants to understand consumer behavior.

As a way to summarize and even simplify this TPB one must remember three elements or constructs. The first is attitude towards a certain behavior, which translates to what a person -or specifically a consumer- believes an action or behavior will contribute to their life, either positive or negative. The second is subjective norm, which entails everything that surrounds the individual, including but not limited to: cultural norms, social network, location, religion, etc.; it also includes the beliefs about what other people think the individual/consumer should do and what if the individual intents to comply with those opinion from others. The third and final construct, which was added to the original TRA, is perceived behavioral control and refers

to how easy or difficult it is to display a behavior; whether an individual has the resources and ability to act in a certain manner, in other words, a consumer is more likely to purchase a certain product, the more resources and fewer obstacles they perceive to have.

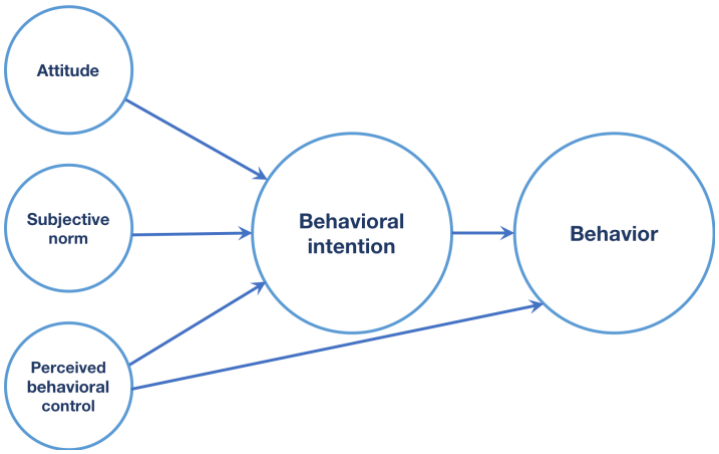

Figure 2. Theory of Planned Behavior (TPB) by Icek Azjen (1985). Adapted from: Madden et. al., 1992

If all three of these constructs are positive, they become accurate predictors of behavioral intention and in turn, they lead to an actual display of the behavior or purchase. In figure 2, one can see how these constructs all affect behavioral intention and behavior as a consequence.

V Sustainable consumption

As it has already been mentioned, the TPB has been used and proven to be applicable and accurate in predicting behavioral intention that is pro-environment as well as consumer behavior across a wide series of eco-friendly situations (Raziuddin Taufique & Vaithianathan, 2018). All of the processes involved in consumption have repercussions that may challenge sustainability goals on all scales, as it is not an individual phenomenon rather a global one, one that includes production, trade and investment, engaging different actors and forces (Milfont & Markowitz, 2016).

The now obvious idea that what we produce and consume has an impact on the environment is still relatively new. It started to develop in the 1970s and only got cemented into popular culture and global politics and economics with the publishing of the Brundtland Report "Our Common Future" (WCED, 1987). When the phrase "to meet the needs of the present without compromising the ability of future generations to meet their own needs" entered international policy and research on Agenda 21, it was adopted at the 1992 Rio Earth Summit and quickly became the most popular definition of sustainability.

The report shed light on just how unsustainable the existing patterns of development, production and consumption were. If humankind were to reverse it and take steps towards actual sustainability there would have to be actions greater than just developing new products

or substitutions, it would also mean developing and incorporating concepts like responsible consumption, consumption reduction and adopting a sustainable lifestyle. (Peattie & Peattie, 2009). In short, both the notion of more efficiently produced goods and a so-called green or sustainable consumer who, with his or her consumption choices, drives a market transformation that incorporates both environmental and social concerns (Seyfang, 2011).

Sustainable consumption now includes terms like anti- or reduced consumption (Cherrier, 2009), collaborative consumption, sharing, bartering and lending (Botsman & Rogers, 2010) and last but not least, consumption rejection, that comprises protests and boycots aimed at enacting change in the marketplace. With all the terms that have arisen, it is not uncommon for consumers themselves to define what consciousness and sustainability means to them (Moisander, 2007) and the same applies for research. During the elaboration of this thesis many concepts shared the same idea under a different name such as sustainable consumption, green consumption or pro-environmental consumption. However different the term may be, the definition tends to refer to consumers who consider the broader impact of their consumptions on their physical environment (Barnett et. al., 2005).

Remembering from the TPB that attitude refers to the extent of an individual's positive or negative assessment of certain behavior, when applied to the environmental context, attitude is a "cognitive and affective evaluation of the object of environmental protection" (Bamberg, 2003, p.21). It has been said that consumers with higher ecological concern are more likely to be pro-environment in their behavior as consumers (Rex & Baumann, 2007) and therefore, consumers that are more environmentally conscious are more likely to at least have the intention of embracing an environmentally responsible consumer behavior. An individual's attitude could be a summarized evaluation of their beliefs or feelings on an issue or behavior, while perceived behavioral control would be an evaluation of the self, regarding that behavior (Raziuddin Taufique & Vaithianathan, 2018).

Another construct from the TPB, subjective norm, has also been proven as an effective predictor of pro environmental-consumer behavior. As the environment of a consumer is made up of the people they associate with and brands they follow, it is no surprise that both play a significant role. Through social campaigns a more desirable behavior has been established and the most significant influence of pro-environmental consumption behavior comes from the influence of our own peers and social recognition (Biswas & Roy, 2015).

Lastly, in terms of behavioral intention or just how willing and determined an individual is to perform specific behavior, environmentally responsible consumers report being willing to act for environmental sustainability and betterment. When given the choice between two products

they perceive as identical, environmental aspects become key criteria in the decision making process (Raziuddin Taufique & Vaithianathan, 2018).

Consumers express their interest about a companies' practices and overall ethical behavior through consumer behavior and consumption (De Pelsmacker, Driesen, & Rayp, 2005). Boycotts against companies or products that do not meet our political, ethical and environmental standards have become more widespread. The power lies with the consumers because we can be "…choosers, communicators, identity-seekers, pleasure-seekers, victims, rebels and activists -sometimes simultaneously" (Solomon et al., p.6, 2007).

As previously stated, consumers have started to be more conscious and make what they believe to be informed choices about the products they purchase (Sassatelli, 2006). These decisions are more and more motivated by environmental concerns (Hoffman & Hutter, 2012) and, as stated above, people have reported being willing to pay extra for a product that matched their beliefs.

It is important to mention that although people report being willing to pay extra for a product aligned with their views, that is not always the case. There is a well-documented gap between what is said and what is done (Young et. al., 2010). Even though attitude, subjective norm and perceived behavioral control are positive and an individual or consumer has the intention to behave in a certain way, there is still a possibility to display different behavior. Historically, products with some sort of green or ethical label have very small market shares. When doing studies, reported attitudes may be inaccurate and one must keep in mind that most consumer evaluate a product jointly when purchasing, taking into account facts like quality, availability, convenience, brand familiarity and most importantly price (De Pelsmacker et al., 2005).

Some studies (Biel and Dahlstrand, 2005; Sener and Hazer, 2008) have identified a number of factors that may explain why reported values may not translate in the decision-making process such as: habit, lack of information, demographic characteristics, economic status, culture, lifestyle and personality, brand strength, among others. But there is no way to bundle sustainable consumption into one and that is why some argue that each individual's consumer behavior is a series of purchase decisions. These decisions "may be inter-related and underpinned by common values or they may be unconnected and situational" (Young et al., 2010, p.22).

VI Sustainability in fashion

When one talks about sustainability in fashion, one must think about the way in which apparel is produced, used and discarded. As it already has been mentioned before, the garment industry heavily relies on the fast-paced production of new trendy products for a specific consumer in an industry that becomes more competitive each day. The purchase, use and disposal of garments are now based on a system of production with severe consequences for the society, economy and the environment (Gwilt & Rissanen, 2012).

As a way to organize sustainability in fashion, Gwilt and Rissanen (2012) divide sustainability in fashion into four different stages: source, make, use and last. The first, source, deals with the environmental, social and economic impacts associated with the production of fabric and other material, with particular emphasis on the significant affect these processes have on the world's natural resources. When talking about the make stage, the focus is on the production of garments, particularly on the role and influence fashion companies and designers can have in the adoption of alternative practices during the manufacturing process. The use stage focuses on the consumer and their contribution towards extending the lifecycle of garments; at the same, regarding the way consumers engage with fashion, through the "selection, use, washing, care, repair and disposal" (p. 19) of purchased garments. The appropriately named final stage, last, deals with what happens after garments have been discarded and therefore included alternative systems and approaches that could reduce the amount of clothing contributing to landfill waste.

Source

Sourcing and manufacturing sustainable fashion materials is a complex aspect of the fashion industry. This is industry is constantly striving, as all industries do, to make a profit and to do keep their costs low, they start cutting corners early on. With budgets to stick to and deadlines to meet, producers look for cheap sourcing alternatives and the same logic applies for retailers and users.

However, when looking to source sustainably, producers and designers play a significant role because they lead the materials that will be used during production. Not only the raw materials but also for any other process that may be needed before making the clothes. That is why it is so important for designers to be informed and to question what kind of impact certain materials have. Because of the time sensitive nature of the industry, the best way to do this (other than independent research) is to develop a network of suppliers that are reliable and may even have certifications (Gwilt & Rissanen, 2012).

The natural resources needed to produce clothes vary depending on the type of fiber and the technology applied in its manufacturing. The environmental consequences of not sourcing sustainably can be quite severe. There have been a number of studies published on this regard, particularly in recent years. That being said, most of the existing literature focuses on the production of cotton. The social and environmental risks associated with agriculture are well-known, and the production of cotton is not any different. For a study conducted in the Punjab province in Pakistan, the main finding was that farmers were at risk of excessive rainfall and floods, excessive rainfall, increased incidents of crop diseases and higher input prices as major risks exposed to their cotton crop… age, education, location, off-farm income and access to market information are the factors which significantly (either positively or negatively) affect the farmers' risk perceptions and attitude" (Iqbal, Ping, Abid, Muhammad Muslim Kazmi, & Rizwan, 2016, p. 1). Also in Pakistan, another study relates possible health impact of cotton harvesting. Regardless of their age, cotton pickers may suffer from headaches, sleeplessness, cough, flu/fever, skin and eye problems (Bakhsh, Ahmad, Tabasum, Hassan, & Hassan, 2017). It is important to mention that with the introduction of genetically modified crops in the production of cotton, the research on their effect on human health has not been lacking.

Make

Once designers have a trusted network of suppliers, it is time to make the clothes. Predominantly clothes have been designed thinking of a cradle-to-grave model. Once sourced, materials are shaped into products, sold and disposed of and such has been the case since the 19th century, so a change is long overdue. Different actors of the fashion industry (including but not limited to: designers, buyers, knitters, textile designers, dyers, production managers) can be in charge of implementing more sustainable alternatives in their own particular field (Gwilt & Rissanen, 2012).

One of the alternatives that has gained traction and notoriety is referred to as "zero waste", which as its name suggests is production that generates little or no waste. This can be achieved both using new materials but wasting nothing or using materials that come from garments that have been disposed. And although this may be considered a somewhat extreme measure, the truth is that designers should strive to integrate sustainable strategies throughout their whole process. This becomes relevant when we remember that the fashion industry is not comprised by just one producer, but rather a large amount of them, in different sizes, with different markets, etc. But in the end, it is an industry that constantly learns from its competitors -proof of this is how similar from different brands can be, depending what is in style.

However, just as with the source stage, the make stage comes with many risks when not done sustainably. These risks go beyond the environmental area and will be briefly mentioned.

Land pollution

Trace metal contamination in soil is concerning mainly due to its toxicity for humans and its long persistence in the environment. It is clear that metals can occur naturally in soils and rocks, but its presence can surely be exacerbated as a result of human activities. Textile production was found to be a significant source of toxic trace metals, resulting in exceeding Dutch target values for Cd, As, Cu, Pb, Ni and Cr concentration in soil, indicating a potential risk to the environment (Islam, et. al., 2017, Islam, et. al., 2015).

Water pollution

The production of textiles for the manufacture of garments requires and creates many chemical compounds. As stated before, it involves "surfactants, dyes, pigments, resins, chelating agents, dispersing agents, inorganic salts, heavy metal, biocides, etc., and therefore they are heavily loaded with chemical oxygen demand, color and salt" (Ozturk, Karaboyacı, Yetis, Yigit, & Kitis, 2015, p.1).

Several studies link the presence of heavy metals to textile industries effluents. Some studies verified the presence of heavy metals such as Pb and Cd beyond permissible limit and mild cytotoxicity in correlation with metal contamination in ground water (Fung et al., 2005; Noreen, Shahid, Iqbal, & Nisar, 2017; Sanyal, Kaviraj, & Saha, 2015). Metal can negatively impact "water quality (irrigation, drinking), aquatic biodiversity (lethal and sub-lethal effects), food contamination/food security (bioaccumulation of metals in crops and seafood), human health (diseases) and livelihoods of people associated with wetlands" (Kibria, Hossain, Mallick, Lau, & Wu, 2016, p. 1).

Although some studies find that gamma radiation in combination with hydrogen peroxide can be implemented for the detoxification of textile effluents (Iqbal & Nisar, 2015), others argue that textile industry wastewater treatment seriously deteriorated water quality and biological communities (Colin et al., 2016). Like with land pollution, contamination does not only come from one specific location.

Workers' conditions

The focus on workers' conditions includes papers that narrate the story and development of sweatshops as a possible incentive towards corporate social responsibility as a consequence of globalization (Barraud de Lagerie, 2013).

Others state that poor plant working conditions were mainly contributed by the workers' social factors and the management policies. As such, it should be up to the government who steers the management in a better direction, working to improve the conditions in the apparel assembly plants (Tebyetekerwa, Akankwasa, & Marriam, 2017).

Garment workers' health and safety

As it was previously mentioned, this aspect of the apparel industry has garnered public attention in recent years. Factory restrictions and physical demands, time pressure, worries about mistakes and exposure to abusive language (Steinisch et al., 2014) can limit workers' ability to access health care services and health education programs. As a consequence of the social, economic and occupational vulnerabilities, some employees -particularly females in Cambodia- have a higher risk of acquiring (Webber, G., Edwards, N., Graham, I., Amaratunga, C., Keane, K., Socheat, 2010). Female workers are also more vulnerable to emotional, physical, sexual, and economic violence in the workplace (Naved, Rahman, Willan, Jewkes, & Gibbs, 2018).

It is also important to mention that workers' their exposure to textile chemical residues links both producers and users. Although it is more strictly regulated nowadays, less than 20 years ago people were still testing for concentrations of formadehyde, Cd, Cr, Pb, Cu and As in shirts, socks and other undergarments (Pollak, M., Sestakova, B., Pollakova, 1999). Workers' health should not only be considered as physical wellbeing, but should strive for a holistic approach, that focuses on more than physical infrastructures (Prentice, De Neve, Mezzadri, & Ruwanpura, 2018).

Use

Consumers not only have to make a choice when making a purchase. Consumers are now users and when it comes to clothes, that means wearing, washing, drying and taking care of them. A significant portion of fashion's environmental impact is generated during this phase, with doing laundry too often -often in inefficient washing machines, with very little clothes (small loads) and too warm water and sometimes even using a drying machine (Gwilt & Rissanen, 2012). And that goes for every single person who owns clothes, i.e., everyone.

Also, because now clothes come out quicker and are cheaper, many consumers have changed their relationship to clothes and stopped viewing them as something lasting, worth being taken care of. As such, consumers are less likely to make alterations that could possible extend a garment's use (Gwilt & Rissanen, 2012).

The research on the possible risks associated with the use of garments has mostly focused on the use of perchloroethylene, which is a solvent used in dry cleaning. Its use is concerning both for humans and the environment. Some epidemiological and toxicological studies have controvertibly discussed the carcinogenicity of perchloroethylene. Even so, the accurate cancer risks at low levels of exposure associated with dry-cleaning equipment are unknown and require further (Keoleian, G., Blackler, C., Denbow, R., Polk, 1997). Despite this uncertainty, the focus should be on finding alternatives and choosing water-based cleaning - like GreenEarth®, which is acetal and liquid carbon dioxide- and is preferable to dry cleaning from a human and environmental health perspective (Troynikov, Watson, Jadhav, Nawaz, & Kettlewell, 2016).

Some articles focus on the use and risks derived from the use of azo dyes. These dyes are a group of organic compounds containing azo bonds. Their use is widespread in textile industry and almost 70% of synthetic dyes contain azo group (Golka, Kopps, & Myslak, 2004). Out of these, 7%–8% have been prohibited by governments as they are able to release carcinogenic aromatic amines, like 3,3′-dimethylbenzidine and benzidine. As a result, it is not very probable for them to appear in textiles currently (actual drop in probability of occurrence has dropped around 90%), yet it is not unheard of for them to still be found and quickly become cause for concern.

Last

As it was mentioned, this stage deals with what happens to garments once they are discarded. A large percentage of what is discarded ends up in landfills. As a way to counteract, it has become quite popular to use second-hand products. This has become relevant because the existence of preferred disposal routes and acquisition channels of second-hand products allows the recovery of reusable products in a more efficient manner and can be explored by decision makers to increase the recovery of post-consumer products" (Fortuna & Diyamandoglu, 2017, p.1).

Some research deals with all the stages and do a life cycle analysis, considering things such as the ecological and carbon and energy footprints. From these articles (Munasinghe, Jayasinghe, Ralapanawe, & Gajanayake, 2016) it is worth noting that the highest contribution of carbon emissions is produced during the production of raw material. Not surprisingly, the production of the garment is responsible for consuming the largest amount of energy and in terms of carbon emissions, the apparel industry produces 10% of the world's carbon emissions (Muthukumarana, Karunathilake, Punchihewa, Manthilake, & Hewage, 2018).

Other pieces focus on the ecological footprint of the textile industry, considering embodied energy, energy productivity, natural productivity, equivalence factors for land type, etc. As a result of an obviously high footprint, they call for "standardization of the contribution of global warming potential emissions different from CO_2 to the EF; contribution to the EF of other emissions as NOx and wastes; standardization against reliability should be considered when using local absorption factors to evaluate EF of processes or products" (Roca & Herva, 2015, p. 1).

VII Consumer behavior for sustainable fashion

Every time we decide to buy (or not) a product or service there is a potential for that choice to contribute to a more or less sustainable pattern of consumption. Every single purchase has implications that go further than our pockets, including ethical, resources, waste and community impact (Young et al., 2010). Buying clothes has become second nature to most of us. It is not uncommon for people to purchase new items whenever they feel like it, not necessarily when they need them. The global garment industry has exponentially grown with the goal to attract customers into stores as frequently as possible in order to increase the frequency that they purchase trendy items (Barnes & Lea-Greenwood, 2006).

Consumers may purchase a product not because of what the product itself does, but rather for what it means. This is not to say that the primary function of the product is irrelevant or unimportant, but that the role and meaning they have in everyday lives goes beyond their designed task (Solomon et al., 2007).

The relationship a consumer has with a product has been classified in different ways, but they can be roughly categorized into four different types of consumption activities: consuming as an experience- in which the main goal of the consumption is aesthetic or emotional; consuming as integration- in which consumption is used as means to express oneself; consuming as classification -in which consumers demonstrate their association with objects; and lastly, consuming as play -in which consumers use objects to partake in a shared experience and combine their identity with that of a group (Fournier, 1998 in Solomon et al., 2007). This is the case with what we wear, as our clothes are always on display portraying a message about who we are.

Fashion refers to a style that is accepted by a large group of people at a given time. It works as a symbolic innovation, a reflection of our society and on a personal level, a form of expressing one's identity, values and personality, a form of communication between the self and others (Solomon & Rabolt, 2008).

Therefore, fashion consumption refers to the use of clothing for purposes beyond utilitarian needs. This desire to be "fashionable" is what may sometimes outweigh sustainable consumption goals. There is paradox between wanting to stay in fashion but limit or edit consumption. The most obvious culprit behind this oversight tends to be the lack of knowledge of the negative effects of the fashion industry on the environment (Morgan & Birtwistle, 2009). However, as it has already been mentioned, there are other factors involved in this gap such as price, trends and brand strength. Sustainably produced fashion has the potential to be an alternative to merge our desire to both be fashionable and not have a negative impact on the environment.

Combining the preceding ideas, sustainable fashion consumption is the use of clothing for purposes beyond utilitarian needs, including identity making, achieved without jeopardizing the ability of future generations to meet their needs. It includes consumer attitudes and behavior that lead to reductions in the triple- bottom line (economic, environmental and social) impacts of the fashion industry.

One of the pioneering studies done on consumer behavior of sustainable fashion consumption (McNeill & Moore, 2015) categorized fashion consumers -aware of concepts like sustainability- in three groups: "self" consumers, who are more concerned with satisfying their own hedonistic needs; "social" consumers, who care more about their social image and "sacrifice" consumers, who attempt to reduce their impact in the world. These groups have contrasting views on sustainable fashion and its counterpart fast fashion. It was found that each individual's consumer behavior -or more precisely if they gravitate towards sustainable or fast fashion- is determined by their overall level of "concern for social and environmental well-being, their preconceptions toward sustainable fashion and their prior behavior in relation to ethical consumption actions" (p.220). It is also noteworthy that there is a significant relationship between attitudes and behavior that hinge on the perception of fashion as self-representing or functional, the influence of an individual's peers and levels of consumer knowledge regarding fashion items.

Out of the three kinds of consumers, the "sacrifice" consumer is the archetype for sustainable fashion consumption. They are highly concerned for the environment and are able to ascertain and process the ethical and social implications of the fashion industry. There is no gap between their attitude and their behavior but still want to be fashionable while reducing consumption (McNeill & Moore, 2015). These last two types of consumers become a challenge for producers as they have to combat the common thought that finding clothes that are both sustainable and fashionable is an oxymoron, this to continue encouraging consumers to buy. It is not possible to say a consumer will always behave as a "sacrifice" consumer. Although

their beliefs and attitudes are well defined and strong, there are countless circumstances that could produce a different behavior. Likewise, both "self" and "social" consumers are possible to behave as "sacrifice" consumers in particular occasions, even though they may not share the same beliefs and attitudes.

VIII Mexican consumers

As individuals, consumers everywhere can be vastly different in every purchase, even when talking about the very same person. Therefore, it is no surprise that Mexican consumers can be paradoxical and versatile, compulsive and reflexive, spenders and savers (Conraud Koellner, 2010). When talking about Mexico, one must remember that inequality runs deep. Mexico is home to a man who has consistently been part of the 10 richest people in the world but also has 43.6% of its entire population living below the national poverty line (World Bank, 2016).

A bargain is always celebrated and Mexican consumers are always looking for "high quality" products and a positive experience at a low cost and quickly. There is also an increased interest in the self and creating an own identity and reflect it both being individualistic and looking for new ways to belong. The internet has empowered Mexican consumers, giving access to information and giving a voice to their thoughts and concerns (Conraud Koellner, 2010).

Still, it is surprising that there is no previous scientific research that focus on consumer behavior and the garment industry, let alone focusing on the shift towards sustainability in Mexico. The main sources of information are marketing agencies, complemented by general figures provided by the National Institute of Statistics and Geography (INEGI for its name in Spanish).

Sustainable consumption in Mexico

As it was previously mentioned, sustainable consumption is made up of two basic elements: more efficiently produced goods and a so-called green or sustainable consumer who, with his or her consumption choices, drives a market transformation that incorporates both environmental and social concerns (Seyfang, 2011).

There has been little to none research on sustainable consumption in Mexico and even so, it is usually confined to the largest cities in the country.

In terms of attitude, a study conducted in Mexico City, Guadalajara and Monterrey in 2011 (León & Vera Martínez, 2011) found that 41% considers green products to be more expensive than their non-green counterparts and 26% of those aware of what a green product entails agree with the cost assessment. However, 62% considers green products to be more beneficial than traditional products, even though purchasing them may require a bigger effort.

Because subjective norm is so subjective in what it entails, the same study focused solely on awareness of the existence of green products and green brands, as a result of consumer's exposure to them in their environment. Only 15% were able to correctly identify green products, while 47% was not able to do so (they misidentified products as being green while they weren't) and 38% reported not knowing any green products. Among those more that were able to identify green products, consumers aged 20 to 29 were predominant. And among all age groups, most were not able to name a store specialized in green products.

From this, in terms of perceived behavioral control, consumers perceive obstacles when shopping for green products: it requires greater effort and most don't know where to get them.

Their behavioral intention translates into 86% being willing to learn more about sustainable shops, 84% saying they are willing to start or increase their spending in said stores. While the majority of people surveyed (79%) said they were willing to change their purchasing habits, only 20% of those who actually know what a green product is, are willing to buy more of them. Motivation for them to increase sustainable consumption would come from: environmental protection, health improvement, access to information and communication with brands, accessible prices, pollution reduction and an overall decrease of negative impact on the planet.

In terms of actual behavior, only 35% of the consumers surveyed reported actually purchasing green products and 81% has not replaced traditional products with the green ones. The products that are most commonly purchased are: food and beverages, paper products, recycled glass, shopping fabric totes, cleaning supplies, electronics like lightbulbs and personal hygiene products.

Garment consumption in Mexico

Mexico has a very unique position within the garment industry as both consumer and producer. Intermittently, Mexico has been the main provider of textile products for the United

States, the biggest market in the world for such products, fostered by the signing of the North American Free Trade Agreement (NAFTA) in the 1990s.

Since then, in the period spanning from 2000 to 2014 in Mexico, along with other emerging economies such as Brazil and India, apparel sales grew 8 times faster than in Canada, Germany, the United Kingdom and the United States (McKinsey, 2016). There are estimates that the consumption of garments in Mexico will grow at a rate of 8% between 2016 and 2020 (Euromonitor International, 2017).

Although developed countries consume more clothes, if emerging nations were to catch up, and there is not a shift towards environmental efficiency and sustainability, the negative impact of the garment industry on the environment will be much worse.

As with sustainable consumption in general, no scientific research is being done in terms of sustainable fashion in Mexico, and therefore, the following information is pertaining to fashion in general.

How much is spent?

As a developing nation, Mexico has seen economic and demographic growth over the last decades. As a side effect, Mexico is now a predominantly urban country: in 1950, almost 43% of the population lived in urban settings, but this number has grown exponentially and by 2010 it was almost 78% (INEGI, 2018) and among these, almost a quarter of all households is now considered to be middle class and they purchase as such. These urban centers are now home to a growing number of international and now most consumers are heavily influenced by American consumer behavior (Euromonitor International, 2017).

Mexico has been going through what some would call a rough patch in the economy; the exchange rate has decreased significantly -a staggering 42% between 2013 and 2016. For consumers, this means being on a saving mode and sacrificing some characteristics for a cheaper alternative. This manifests itself in diminished branch loyalty, buying low price brands and in multipacks (Surviving the storm. Key learnings and trends for future growth., 2017).

The latest data available from the National Household Income and Expenses Survey (Encuesta Nacional de Ingresos y Gastos de los Hogares 2016, 2017), which is the largest study of its kind in Mexico, surveyed 81,000 households and reported an average income of $46,521.00 pesos and $28,143.00 pesos in expenses, every quarter, or 3 months. This translates to roughly $2300 and $1400 USD respectively.

This study estimates Mexicans spend 4.6% of their income on clothes and shoes, which translates into $1302.00 pesos or $65.00 USD. Although it may not seem like a lot it is a share larger than that spent on healthcare (2.7%).

Some marketing firms have reported that Mexicans spend between $200-$500 a month or $10-$25 USD, which is within what is reported officially (Mercawise, 2017). Because Mexicans consumers are in a frugal mode, 65% of consumers report an increase in number of purchases when there is a sale or special discount.

Even though this is the case for the majority of the population, there is also small but significant segment of the population, referred to as premium consumers. They are reportedly willing to pay a premium for products of high quality that satisfy their requirements, such as a sustainable production behind it (Surviving the storm. Key learnings and trends for future growth., 2017).

In any case, the 25-34-year-old group in 2015 accounted for 21.3% of all sales, making it the most profitable segment. It is followed by the 15-24 aged group with 20% and the 35-44-year-olds with 15.4%. In total, it is a very lucrative market, with reported sales for "26 billion dollars during the same period (Trendex, 2016).

Where is it spent?

In 2015 the majority of these purchases occurred in department stores (38%). Other important purchase locations are small boutiques/stores (32.1%), traditional and street markets (12.4%), self-service stores/supermarkets 8.2% and from catalogs (1.3%). There is a clear distinction of where different socioeconomic groups shop: the wealthiest shop in department stores, boutiques and have access to national and international brands, whereas, the least wealthy, buy clothing in street or informal markets or cheaper stores like Suburbia (Pallares & Saldaña, 2016). While there is a growing number of transactions done online, these are few and far between and for smaller amounts of money, but that may change soon with the arrival of e-commerce titans like Amazon. (Trendex, 2016).

The most popular retailers in 2015 were Walmart and its subsidiaries (Suburbia and Aurrera), with 16.2%, Liverpool/Fábricas de Francia with 11.1% and Inditex with 7.3% (Trendex, 2016). These numbers have shifted in the last years as Liverpool and Fábricas de Francia have merged into one, and Liverpool purchased Suburbia, which means that this one company, Liverpool now has an even greater share of the market, reaching different socioeconomic levels. It must also be noted that the stores belonging to Inditex (Zara, Pull and Bear, Bershka,

Oysho, Massimo Dutti, Stradivarius and Uterqüe) have increased their number of storefront locations.

The items that were most popular with male consumers during 2015 were: formal wear 30%, jackets/coats 25.8%, shirts 24.5%, other tops 24%, pants 21.9% and sportswear 15.3%. With female consumers the distribution is similar: jackets/coats 26%, formal wear 25.7%, pants 21.5%, tops 20.8% and sportswear 14.9% (Trendex, 2016). The rest of purchases were underwear and hosiery, but as the focus is on fashion and not utilitarian purchases so they aren't considered.

There is no reported bias towards or against clothes produced in Mexico, as most consumers are aware that much of what is sold is produced nationally (Mercawise, 2017). Consumers, however are also aware that many of the brands which sell these clothes are foreign and that there is an ever-growing number of these retailers. Such is the case of Swedish company, H&M, which has been growing at a rate between 10-15% a year (Pallares & Saldaña, 2016) in Mexico.

Motivation

Marketing studies have pointed out that 6 out of 10 Mexicans have an interest in fashion and purchase garments as presents 57% (Mercawise, 2017). Because this is pertaining to fashion, consumers want the experience- in which the main goal of the consumption is aesthetic or emotional Solomon et al., 2007). This interest is more of a penchant as it does not translate into thought out purchases, as more than half of buys are made spontaneously ("11 datos reveladores sobre el consumidor mexicano y la moda," 2012). This spontaneity is explicably linked to income level, as people with a smaller income cannot afford to shop without a plan.

The fashion information mainly comes from mass media (internet, television) as well as magazines and storefront displays. An item must be fashionable, fit and preferably be fabricated from "good" materials. Regardless of income, fashion, as previously mentioned fashion has the purpose to express one's identity, values and personality, and works as means of communication between the self and others (Solomon & Rabolt, 2004).

IX Conclusions

Although the Mexican population is vastly diverse it is possible to state some generalizations on whether Mexican consumers are on a path towards sustainability. Knowledge and consciousness about green products –and sustainability in fashion particularly– is still lacking. However, people report being open to it, acknowledging the advantages these products

possess when compared to traditional products while also being aware that they are more expensive.

When generally speaking about sustainable consumption, Mexican consumers must become deeply aware of green alternatives and their advantages. In terms of perceived behavioral control, the existence, availability and location of these alternatives should be clear to consumers o that they feel better equipped to make this decision. “When people believe that they have little control over performing the behavior because of a lack of requisite resources, then their intentions to perform the behavior may be low even if they have favorable attitudes and/or subjective norms concerning performance of the behavior” (Madden et al., 1992, p.4). Sustainable fashion, along with other green products, should be easily available to consumers.

It is important to mention however, that some of the most popular green products are those that represent a reduction in costs and that as an added bonus are beneficial for the environment, such as electricity and water saving alternatives (León & Vera Martínez, 2011). This unfortunately cannot be said for garments, as the sustainable options are significantly costlier than their fast fashion counterparts.

The motivation behind Mexican consumers’ choices when it comes to fashion is in general because they want an experience, and considering the stores at which they purchase, it is very likely they are self and social consumers, as none of those stores specialize in sustainable fashion, with the exception of a couple of lines. Also, with the countries’ current economic status, most consumers have turned to more affordable alternatives. They are concerned with satisfying their want for affordable fashionable items that expresses their personality and social image. The process behind their clothes is not one of the main concerns when shopping for clothes.

As it was reported, around half of all purchases, are done spontaneously, without thinking or doing much research. These impulse buys happen more often in people with higher incomes. Regrettably, those who have to plan their purchases are not able to afford the higher prices of sustainable fashion.

Chapter 3 Producers: current structure of the garment industry in Mexico

I Introduction

The term globalization has been used and overused to talk about so many different topics. There have been many debates that dwell on whether it is the cause or the solution of many of the problems we face nowadays, but as that is not the focus of this thesis, one will only part from the definition of globalization as a "supercomplex series of multicentric, multiscalar, multitemporal, multiform and multicausal processes" (Jessop, 2002 in Dicken, 2011 pp. 113-114). Because these processes occur unevenly in terms of space and time, the degree of how interconnected two or more parts of the world can be is continuously changing.

As with many other industries in the world, the garment industry has undergone significant change both in Mexico and overseas. There have been substantial changes in the where and how our clothes are produced, as well as changes in its distribution and consumption. "We live in a world in which deep integration, organized primarily within and between geographically extensive and complex global production networks, and through a variety of mechanisms, is increasingly the norm" (Dicken, 2011, p.7).

The International Labor Organization (2016) estimates that at the beginning of the century, around 20 million people worldwide were employed in the textile, clothing and footwear sector; nowadays the number can be as high as 75 million people. And to further exemplify its magnitude, this organization states that the commercialization of finished garments generates 3 trillion dollars and accounts for 2 percent of the world's Gross Domestic Product (GDP).

During the last 20 years apparel prices have gone down primarily because of two reasons. First, production moved to low-wage countries with cheaper labor and laxer laws. Second, competition between retailers has increased, and now they refresh their offering much more frequently than before, creating 24 mini-seasons throughout the year (Morris & Barnes, 2008) instead of the former 2-4 seasons that existed 30 years ago (Birtwistle et. al. 2003), which made it possible to forecast demand as long as a year before the time of purchase based on previous sales data (Guercini, 2001).

These are all components of what has come to be known as fast fashion. Fast fashion has been defined as "a business strategy that aims to shrink the processes involved in the buying cycle and lead times for getting new fashion products into stores, in order to satisfy consumer demand at its peak" (Barnes & Lea-Greenwood, 2006, p.259).

In short, for it to be considered fast fashion, it must at least combine the following components: "short production and distribution lead times, enabling a close matching of supply with certain demand… and highly fashionable "trendy" product design" (Cachon & Swinney, 2011, p. 778). Fast fashion has made it possible for everyone to have access to the latest fashion trends at a so-called reasonable price, but the true costs are significantly higher. While the social aspect may be easier to spot, the environmental impact is just as severe.

For fast fashion to exist, one needs to consider other industries that come into play. For one, the textile industry is required to produce the fabric, transforming natural resources into materials that then are transformed into clothes by the garment or apparel industry. The natural resources needed to produce clothes vary depending on the type of fiber and the technology applied in its manufacturing. However, no matter what the fabric is, textile production uses large volumes of fresh water (in processes like scouring, washing, dyeing, bleaching, sizing and finishing) and produces just as much water waste (Takahashi & Kumagai, 2006).

These waste waters generally contain "surfactants, dyes, pigments, resins, chelating agents, dispersing agents, inorganic salts, heavy metal, biocides, etc., and therefore they are heavily loaded with chemical oxygen demand, color and salt" (Ozturk et al., 2015, p.1). When not treated adequately, these wastewaters are seriously damaging to the environment and the people in contact with it. Although in recent years laws have been passed to ensure that this happens, they are lax and poorly enforced in the countries where production takes place.

Just four years ago, in 2015, the global apparel industry produced more than 400 billion square meters of fabric (Kirchain et al., 2014). For that amount of fabric to be produced, it took nearly 100 million tons of fiber and filament yarns, about 40% of which are agriculturally derived (like cotton or wool) and 60% synthetic (such as polyester or nylon) (Gugnani & Mishra, 2012).

Mexico plays both roles in the garment industry, as a consumer and as a producer. The previous chapter already dealt with Mexican consumers and now is the turn for producers. Producers play an obviously important role in the industry as it is in their power to stimulate demand with changes in fashion, because otherwise the demand for garments increases at a slower rate than the rate at which incomes grow (Dicken, 2011).

II Methods

The main objective of this chapter is to outline the current structure of the garment industry in Mexico, describing the relationship between the companies that compose it and how they transfer knowledge and innovation. To be able to achieve this, an overview gill be given about the garment industry in general and its evolution over time. This will be followed by a section on change in the garment industry. The product life cycle theory, locational factors for industries and diffusion of knowledge and innovation come after that.

After that has been established, the topic of the garment in Mexico will be broached with a historical and current snapshot. To conclude this chapter, there will be a case study including three garment companies in Mexico. These companies are all different, in terms of what they produce and what their values and objectives are. Their insight will be used to shed light on to what the future could bring to the Mexican industry, as well as some prevailing challenges.

The main restriction for companies was that they were in charge of their own design and production and not just manufacture for other companies. Although many companies were contacted, these three companies agreed to participate because of a direct recommendation for an external third party. This is not a representative sample.

The interviews conducted all started off by questions regarding the interviewee and their role in the company and general information about the company. Then the questions were about the extent of the company's share during the entire production chain. The remaining questions were structured in the four stages of sustainability in fashion. Although they were set questions, the answers prompted follow-up questions, not mentioned in the available in the annexes. The transcript of the interviews was codified and analyzed using MAXQDA. The coding system used is also available in the annexes.

III Global garment industry

The garment industry has reconfigured and is more organizationally fragmented, generally lacks technological sophistication and outsourcing is a regular fixture. The following figure (3) shows the main steps involved in the garment industry, as well as the main flows of both materials and finished products, as well as information. All of these stages and actors are involved in the fast-paced clothing production of today.

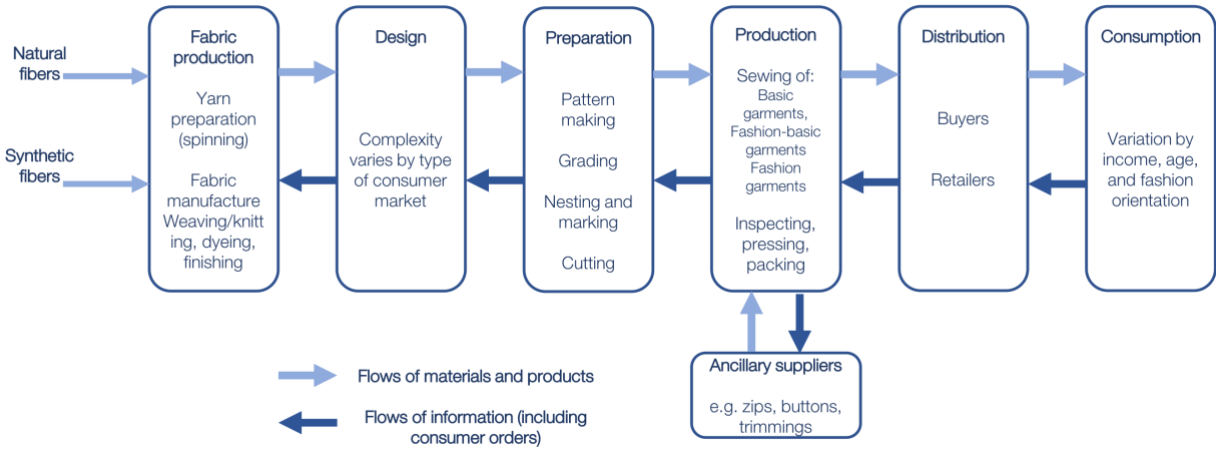

Figure 3. The clothing production circuit. Adapted from: Dicken, 2011, figure 10.1.

Most garment manufacturing companies can be characterized as being labor intensive rather than capital intensive. Factories tend to be small and with fairly unsophisticated or outdated technology. Not too long ago, in 2013, the world was shocked by the news of the Rana Plaza building collapse. Thousands of people lost their lives because of the precarious conditions the factory was in. It was severely unkempt and did not follow regulations as a consequence of cutting costs.

The ever-shrinking costs of garments have to come from somewhere, and as labor costs are the most substantial production factor in the garment industry, producers are always looking for ways to reduce those costs. This has generally meant moving production to countries where labor is cheaper and has typically employed vulnerable groups such as women and ethnic minorities, that cannot find work elsewhere. As a great part of the garment industry has become subject to a race against the clock to get the latest fashions in stores and ready for consumers, a great deal of production has been located and relocated to be near the largest markets -like Mexico and the United States (Dicken, 2011).

The garment industry has become very fragmented and even at a global scale, is mostly made up of small companies. These small enterprises are part of a large system, with different tiers in which they work as subcontractors. There is just a handful of large companies, which becoming more relevant and because of their magnitude, they are the ones able to fund research and innovation (Dicken, 2011).

Also worth mentioning, is that large retailers have typically been the main points of purchase for clothes and as such, they had a great say in what was being produced. As it was previously

mentioned, Mexican stores like Liverpool and Suburbia are the biggest retailers, and it is the same in other countries like Wal-Mart and in the United States. However, there is a fast-growing market for more specialized retailers, catering to more affluent consumers in the fashion-basic market and a result, stores like Zara, H&M and Uniqlo have begun to change the game.

Evolution of the garment industry

For a very long time, some 170,000 years, humans have used clothes to protect themselves from the elements. What started as animal furs draped or tied, evolved to cutting and sewing the fur, and eventually to dyeing of materials -around 30,000 years ago. Body art was transferred to their garments and clothes became more than just utilitarian, they became symbolic (Hogenboom, 2016). There is evidence that suggests that ancient civilizations did this routinely and produced linen – Egyptians in 5500 BC- and silk -by the Chinese in 4000 BC. Clothing became engrained with societies and the technological advances dating from the industrial revolution allowed what once was an industry involving bespoke pieces bought just a couple of times a year to evolve into an industry that with the help of mass production is able to reach all social strata in record time (Upton, 2013).

These technological changes in the garment industry are what have determined current respond speed and productions costs. When manufacture is streamlined because of technological innovation the time and even labor required to make clothes are reduced and productivity soars.
These are the largest types of change in the garment industry: those that speed up the production process and those that incorporate automated and mechanized operation and replace manual labor.

Dicken (2011) has characterized 6 different stages of development, visible in figure 4, which countries that produce garments ideally go through and is compatible with the life cycle of a product (figure 5). The first stages are currently more associated with developing countries, while the final stages are associated with industrialized nations where clothing production has already peaked and is on the decline.

Along these 6 stages, the two former types of change take place, however, there was very little change between the 19^{t}th century and the early 70s and it has not been until recent years that greater improvements have taken place. Still, it remains a labor-intensive industry, as most innovations have occurred outside the realms of sewing, for example in grading (replicating a sample size into other sizes) and cutting the fabric -automatization makes it significantly faster

and produces less waste. These outcomes are clearly beneficial for producers as they not only save money but they can deliver products quicker. Still, 80% of all product costs go towards assembling/sewing the garments (Dicken, 2011). Naturally, producers have a strong desire to change this to be able to compete with the low-cost labor available in developing nations.

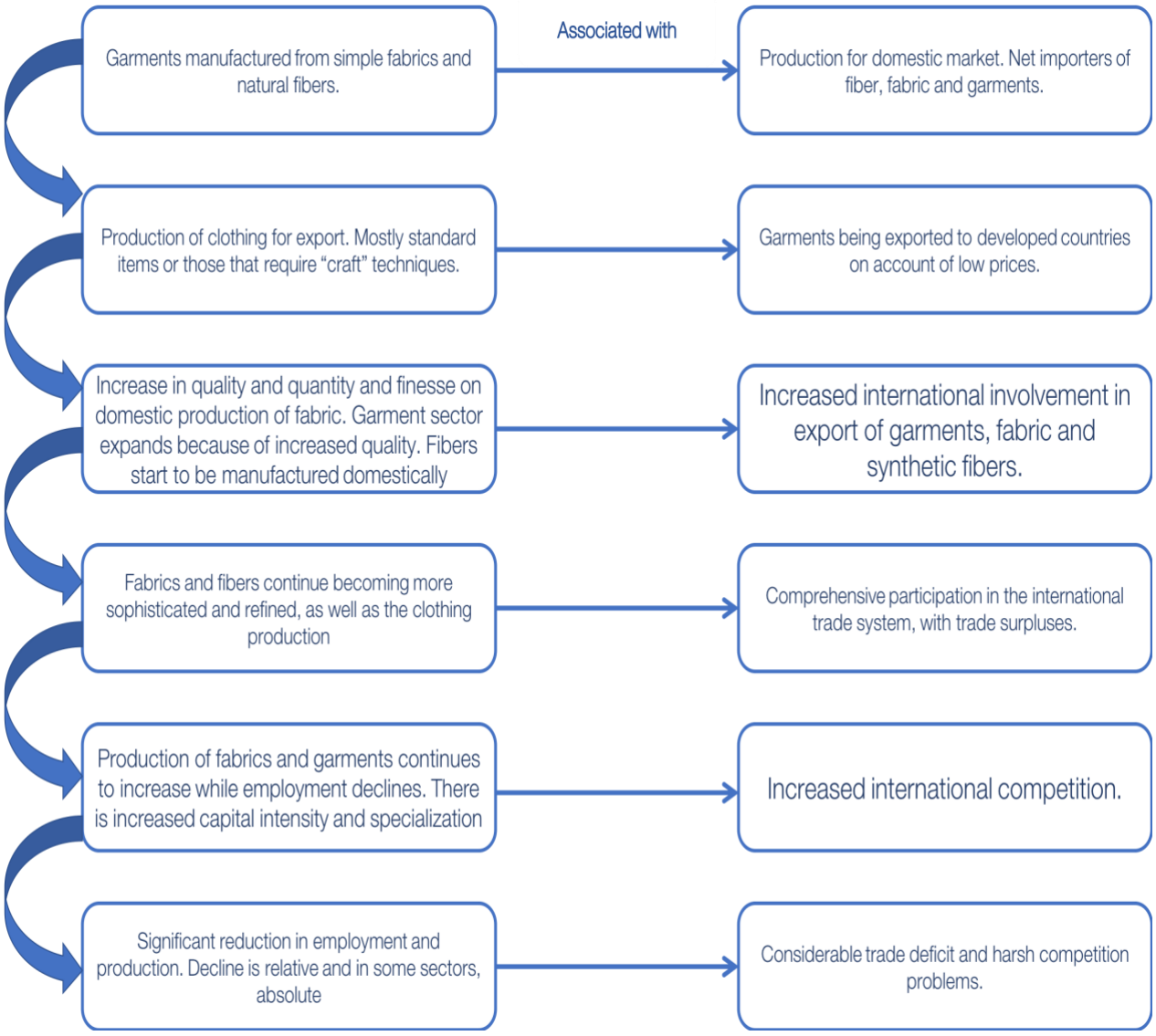

Figure 4. Idealized development of textile and garment industries. Adapted from Dicken, 2011, figure 10.2.

Change in the garment industry

Talking about change means talking about a series of events, decisions and actions that are interconnected and produce an outcome. As with most topics, there are several theories as to why and how it unfolds. In this thesis, change will be approached with the life cycle theory, which sees it as a "process that unfolds over time in a prespecified direction" (Hayes, 2014, p.1).

Product life cycle

Change is understood as a progressive sequence of cumulative and predetermined stages contributing to the final prespecified outcome, where each stage is a necessary precursor for the next stage. This theory of change is used to explain the development of an industry and therefore will be used to explain how the garment industry changes through time.

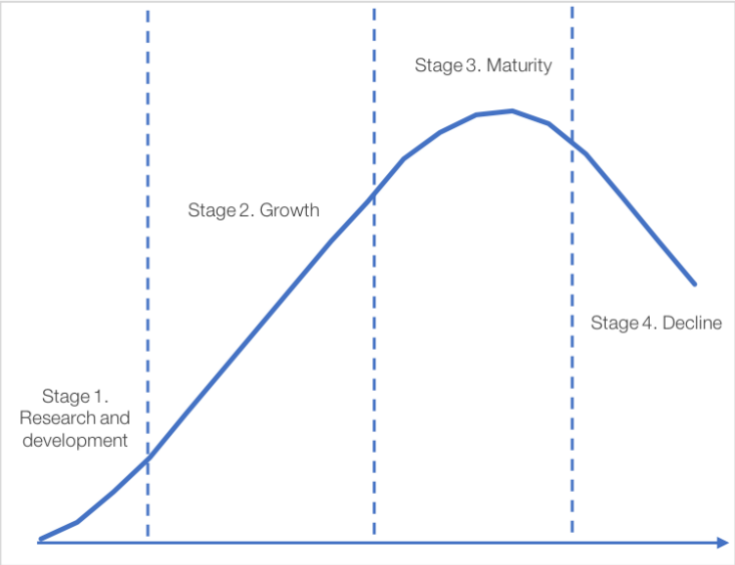

Figure 5. The product life cycle. Based on Hayes, 2014.

Figure 5 depicts the product life cycle of a product. It shows its evolution, from its inception, going through the following stages of growth and maturity, to end with the decline. This theory states that "developed countries are internationally competitive in growth products and less developed countries (LDCs) are competitive in mature products" (Mullor-Sebastian, 1986, p.1).

The first stage is when a new product is introduced. The product is conceptualized and manufactured and whoever is doing it, has a monopoly on the market until its competitors copy, improve or adapt the product. Once the product is established, then the growth stage starts, sales grow and competitors enter the market and the product begins being exported and therefore, sales and profits are high. The product reaches a maturity stage and because it is standardized, it is easy to find in the markets. There is greater competition and as a result,

producers strive to cut costs and tend to move production to locations with lower costs, especially if it is a labor-intensive industry, such as the garment industry. Finally, the decline stage, as its name suggests, is when a product becomes obsolete and production is almost exclusively done in low cost places. The profits decline and eventually the product is retired from the market, thus ending its life cycle.

It is developed nations that spend money on research and product development and at the beginning, it is these same industrialized countries who produce the product. As the product reaches the maturity stage, it becomes standardized and price elasticity of demand rises. Manufacturers become more concerned with costs and as a consequence, production is moved to "middle countries", which in turn export products in growth stages to less developed countries and become exporters of products in the mature stage to industrialized countries and adapt it for their own domestic market (Vernon, 1966 in Mullor-Sebastian, 1986). This same theory can be used to explain how garment industry changes.

Diffusion of knowledge and innovation

In the garment industry, change can be for better or for worse, innovation however is an improvement that involves a learning process. As with anything else, learning can come from different sources, either by doing it yourself, watching others and even collaborating with them. Although the world becomes more interconnected by the minute, this is a process that benefits from closeness. Globally and nationally, localized knowledge clusters (figure 6) have formed, and share roughly two kinds of knowledge: explicit or codified knowledge, which is easy to express in documents, software, hardware, etc., and tacit knowledge, which refers more to the knowledge individuals can possess which is nearly impossible to communicate to others through the aforementioned mechanisms. The former kind of knowledge is easily transmitted across distance, now more than ever given the significant advances in communication and transportation technologies. The latter, however, is tricky to convey even when nearby; it is not impossible to diffuse it at a distance, but it is certainly aided by proximity (Dicken, 2011).

In addition to the flow of local news and buzz, there needs to be pipelines to communicate with actors in different locations. In short, the creation of knowledge and innovation involves a "complex set of networks and processes operating within and across various spatial scales, from the global through the national and the regional, to the local" (Dicken, 2011, p.106). It seems unlikely that a cluster would thrive and innovate on its own indefinitely, that is why it is important to have relationships with the outside, to allow information and knowledge to come in, but also to allow information to go outside to other clusters in other regions.

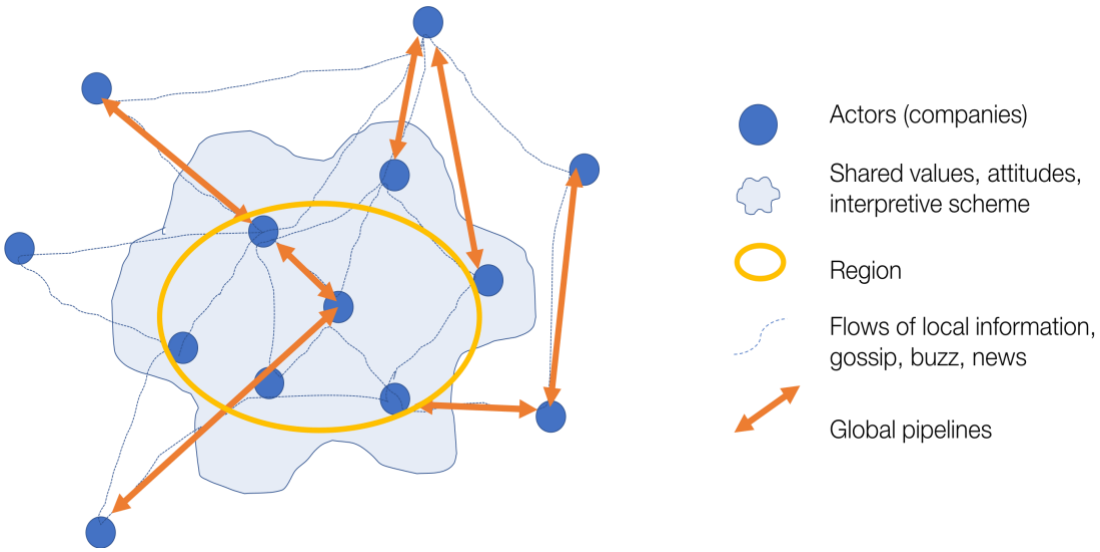

Figure 6. Localized knowledge clusters. Adapted from Dicken (2011), figure 4.15

There is a specific context in which innovation can happen. It is determined and influenced by a number of factors, or innovative milieu, such as the social, political and economic institutions, knowledge and know-how, acquired over time and so-called conventions, which are just the implicit rules between partners (Dicken, 2011).

Traditionally, innovation has come from developed countries and after, as it has been mentioned, its transferred to developing nations at later stages of the products' life cycle.

The innovative milieu locally forms "nexus of untraded interdependencies set within a temporal context of path-dependent processes of technological change" (Dicken, 2011, p. 105). The following figure (7) represents the characteristics of the innovation process that are enhanced by geographic proximity. It may appear that vicinity is a positive altogether, but at a certain point, these knowledge clusters become unsustainable on their own and to keep thriving, at least some of the actors must interact with the outside world. This means establishing relations with other sources of information, suppliers, customers and other knowledge clusters. New ideas and knowledge can flow from the outside in, as complementary to the ideas being generated within the cluster.

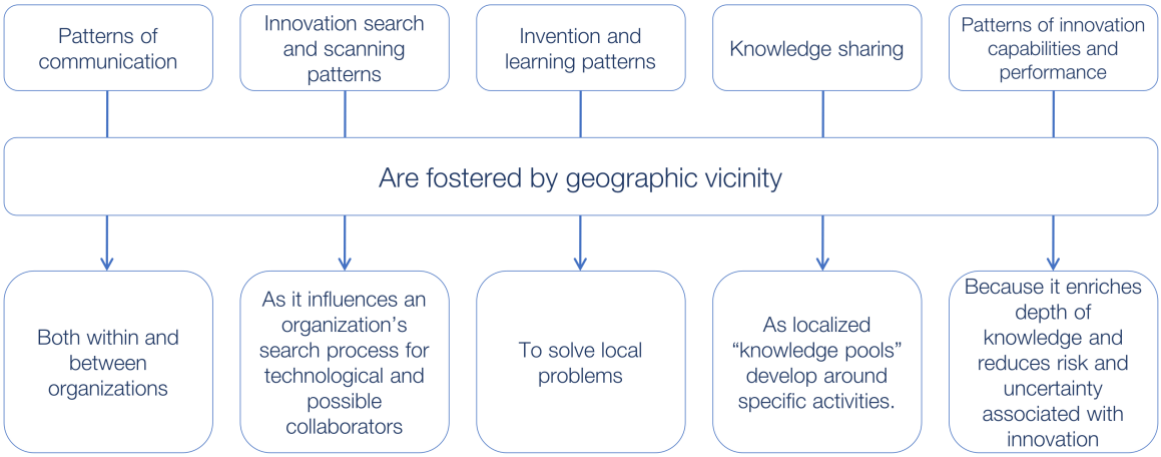

Figure 7. Characteristics of the process of innovation that are sensitive to geographic vicinity. Based on Dicken (2011).

Locational factors for industry

Other than the transfer of knowledge and innovation, there are other benefits to being located in vicinity of similar companies, or locational advantages. When companies agglomerate they can not only generate innovation but also increase productivity. In the case of the garment industry, it would refer to a region were more-or-less the same products are being produced, which has the support of a network of suppliers, consumes, banks, transportation, extended workbench -which in this case translates into cheap labor to manufacture clothing. Companies start as being polarized, when they are stand-alone, then they would agglomerate and the final stage would be a cluster (Solheim & Tveterås, 2017).

One of the classic theories about this, the theory of industrial location by Weber, states that the prime location for production is a triangle formed by the location of the market and two material raw sources. As an alternative, industries should outweigh transport costs vs. lower labor costs (Ecyclopaedia Britannica, n.d.).

IV Garment industry in Mexico

The garment industry is still a very important one in Mexico. Even after the rise of China as a giant of garment production, Mexico still produces many garments for the US market and was fostered by the North America Free Trade Agreement (NAFTA). To be exempt of tariffs and other fees, garments exported from Mexico to the US had to be made of fibers that came from North America as well. This resulted in a more integrated garment industry within North

America because the fibers and fabrics were made in the US, while the garments themselves were cut and sown in Mexico. This division of labor that allowed duty-free production, added to the low labor costs and geographic proximity made Mexico an ideal producer for American companies.

This is the premise of maquiladoras. Simple garments made out of imported material with very cheap labor. Although they are still a very important feature of the garment industry landscape in Mexico, they are not the focus of this thesis because as they are subcontracted by foreign companies, they don't have the power to decide on any changes in production, towards sustainability or not. Furthermore, there is a growing number of companies that are producing garments for the domestic market, on their own terms, more or less.

What once was an industry anchored in the northern border-states, is now an industry that is beginning to flourish in other regions. This is because "labor costs in the interior or Mexico tend to be lower than along the border while the quality of production tends to be higher" (Dicken, 2011, p. 326) and so there are now production hubs located in the Yucatan peninsula, on the coast state of Jalisco and in central states like Puebla, Tlaxcala, Guanajuato and Mexico city and its periphery.

Historical development

As it has been mentioned several times before, the garment industry has always been intertwined with the textile industry and it is precisely how it started in Mexico. Its origins can be traced back to the first half of the 19th century; in 1837 there were only 4 factories with two thousand spindles each and that quickly turned into 47 factories with over 110,00 spindles by 1844. Following the first stage in the development of the garment industry as conceptualized by Dicken (2011), at this stage, the production was artisanal and for domestic consumption. The prices of cotton in Mexico were up to four times pricier than its American counterpart, as expected this resulted in low productivity and second-rate profits. Even then, the machinery needed came from countries like the United States, England and France (Arroyo López & Cárcamo Solís, 2010).

During the next years, the industry kept growing but at a slower pace, while reinforcing the structure of labor. Other industries started to flourish; capitalism was expanding, with numerous new enterprises owned by the bourgeoisie and many foreigners. The domestic textile and garment industries continued to thrive because they were being protected by the government, by setting high taxes and tariffs on fabric and garments from other

countries. These protective measures were in effect for decades and as a result, between 1850-1870, investment in these industries grew enough to make up 25% of total investment. By this time, the textile industry employed more than 43 thousand people, mostly young people and children, and despite all of the money going into the textile and garment industry, the conditions these workers had to endure were difficult to say the least. They would work between 14 and 16 hours a day with only 15 minutes for lunch and negligible compensation. (Arroyo López & Cárcamo Solís, 2010) .

The end of the 19th century and the beginning of the 20th century in Mexico cannot be explained without talking about the Porfiriato. Porfirio Diaz was president of Mexico from 1876 to 1911, except for a term between 1880 and 1884. His motto or "bread or the stick" brought order and progress to the country along with harassment and persecution for his detractors. Internationally though, Mexico became an attractive country for investors because now the finances and currency were stable and social and political calmness was a given under his rule.

This reflected in the textile and garment industries as well as the manufacture of consumer goods doubled. Along with foreign investment, the manufacturing industries in Mexico grew because of a growing domestic market, growing population and improved means of communications both internally and internationally. By the end of Diaz' rule, of the 3,401 million pesos being invested into the Mexican industry, 131 million were for manufacturing and countries like France invested directly into the textile industry. By that same time, there were 30% more factories, the number of people employed grew by 60% (Arroyo López & Cárcamo Solís, 2010).

Because there was an accumulation of investment capital in Mexico both from other countries and from domestic manufacturers allowed new production techniques and patents to improve the industry. Mexico began exporting clothes and so it was during this time that the garment industry reached the second stage as characterized by Dicken (2011).

The following years there was a decrease in production in the textile sector and an almost complete halt in the garment industry due to the Mexican Revolution. After the conflict, Mexican society, economy and politics were fundamentally different. The manufacturing industry was reborn, attending to the increased domestic demand and multiplying the number of factories with more advanced methods and the textile industry expanded from the middle of Mexico where it used to be located -primarily near Mexico City and Puebla-

to other states like Tlaxcala, Hidalgo, Jalisco, Veracruz, Monterrey, Coahuila and San Luis Potosi. However, domestic textile production was overall being outnumbered by imports from foreign countries, along with machinery and tools. Back in 1877 only one quarter of materials were imported but by 1925 it had skyrocketed to 60% and by 1940 it was 75% -the main imports were dyes, synthetic fibers and other chemicals needed for the manufacture of clothes (Arroyo López & Cárcamo Solís, 2010).

Cotton was no longer being imported form the United States. It was being produced domestically in the states of Veracruz, Oaxaca, Guerrero, Michoacán, Jalisco, Nayarit and eventually reached even the northern states of Sonora, Sinaloa, Nuevo León, Tamaulipas y Coahuila. Thanks to the railroad network built in Diaz' regime, cotton was being exported and some foci of production started to form, again, with foreign investment. The Lagoon in Coahuila became an area where cotton was being grown and wool was being produced and this area eventually became a hub for textile and garment production (Arroyo López & Cárcamo Solís, 2010).

World War II had a positive impact in the manufacturing industry in Mexico as it hardly had any competition either domestically and internationally, added to the profits from longer workdays, low salaries. However, after the war's end, this situation changed dramatically as there was increased competition in the international markets and the internal market contracted. "This situation impacted negatively in the Mexican textile industry, that also began to show signs of grave problems stemming from the lack of modernization of the productive plant, tariff protectionism and the enforcement of a system of licenses and prohibitions, the low levels of productivity, and high production costs and the size of factories" (Vera Muñoz & Vera Muñoz, 2013, p. 160).

It was also during these trying times that the chemical industry began to flourish and with that came the production of chemical fibers -such as viscose and other cellulose-based fibers. This was reflected in more factories with foreign investment and the development of other industries -like knits in the garment industry that did not use cotton as the main raw material. These had the benefit of not being subject to environmental cycles the way cotton was and required a fraction of the preparation cotton required. This could be seen as the beginnings of the third stage in the development of the industry as conceptualized by Dicken (2011). Despite this, by the 1950's there were other industries that began to overshadow the textile and garment industries in Mexico, which even began downsizing: in 1950, the textile industry has a 24.7% share of all manufacture in Mexico and by 1960 it only represented a 17.4% (Vera Muñoz & Vera Muñoz, 2013).

The overall industrialization of Mexico continued for the next decades. Import substitution and inflation control were beneficial for the manufacturing sector. During the 1960s, as a way to reactivate the textile and garment sectors, the government launched a program. The goal was to build more factories, modernize and renovate what existed. As a consequence, the labor force decreased, as fewer employees were needed. The outcome of the program was not what had been expected because the production costs were still very high (Vera Muñoz & Vera Muñoz, 2013).

However, the production of new chemical fibers increased significantly and was used domestically and exported as well. Nonetheless, the efforts to modernize the industry had been in vain and by the end of the 1970s, the textile and garment industries were characterized by outdated technologies, deeply fragmented production chain between both industries, failed programs and policies and an overall lack of interest from business owners to improv3 (Vera Muñoz & Vera Muñoz, 2013).

Between 1970-1978 textile exports grew at annual rate of 20.5% but between 1978 and 1980 the industry decreased a whopping 32.2% (Arroyo López & Cárcamo Solís, 2010). It was during this period that the Multi Fiber Agreement was signed (1974). This international agreement allowed importer nations -particularly the United States and European countries- to set quotas on textiles and garments coming from developing nations. These quotas were unique to every country and although it had no immediate repercussions for Mexico, it would affect not only Mexico but shape the entire industry. As there were limits on what could be imported for each country, the purchasing countries diversified where they sourced clothes and fibers. Although the textile and garment industries were past their prime, chemical fibers kept evolving and growing. As it was mentioned, the focus was on fibers like viscose and acetate, but during the 1970s, petroleum-based fibers began being produced. Nylon and polyester are very popular fibers until today because they are easy to combine with other fibers, they are cheaper than cotton and they tend to last longer (Vera Muñoz & Vera Muñoz, 2013).

The end of the century marked the beginning of a new role of the textile and garment industries in Mexico that resembles what exists today. García-Castro (2004) identifies three game changers that would shape this transition: the end of the import substitution system as means towards industrialization caused by an external debt crisis that shook Mexico in the 1980s; the creation of the World trade Organization (WTO) in 1994 and the incorporation of textiles and garments to the General Agreement on Tariffs and Trade

(GATT), thus eliminating quantitative restrictions and regulated dumping; and lastly, the signing and entry into force of the North American Free Trade Agreement (NAFTA) in 1994, which as it name suggests regulated the commercialization of garment and textiles, reducing tariffs for products made from Mexican, American and Canadian fibers.

Textile production was no longer profitable and with the aforementioned changes, the garment industry rose to prominence during the 1980s and 1990s, with countless companies dedicated to the assembly of garments with raw materials from the United States, commonly known as maquiladoras. These maquiladoras became significant sources of employment and exports. They were mostly located in the northern border states, making for a quick and easy entry to the American market (Arroyo López & Cárcamo Solís, 2010). In 1990 there were only around 250 maquiladoras and only 10 years later, there were over 1100. During the first half of the 1990's 463 new factories were set up, out of which over 70% were American. Also, retailing giants entered the business -such as JC Penny and Liz Claiborne-, ordering large amounts of garments and demanding higher quality; they also preferred a whole item of clothing to be manufactured in the same facility or in close vicinity, allowing for less segmentation and quicker response times. The aforementioned Lagoon in Coahuila became a popular destination for this "complete package", particularly for the manufacture of denim jeans (Arroyo López & Cárcamo Solís, 2010).
Unfortunately, this increase in productivity and quality did not spread to all the companies in these two industries. "Small and medium-size companies, plus most of the maquiladoras that manufacture commodity products, did not integrate complete production chains and kept operating with low technology, unqualified labor and minimal administrative and design abilities" (Arroyo López & Cárcamo Solís, 2010, p. 63). The Mexican textile and garment industries lagged behind and they were not able to supply the fibers necessary to avoid importing fabric and a great deal of the distribution and commercialization was left to big foreign firms, making smaller companies just a link in the chain.

By the beginning of the century, Mexico was exporting 8,700 million dollars' worth of garments to the United States, making it its main exporter. This trend continued for the next years thanks in part to tariffs being reduced progressively to reach 0.28% and labor costs being lower than what they would have to pay to produce domestically (Arroyo López & Cárcamo Solís, 2010).

Then, in 2005, the Multi Fiber Agreement ceased to exist and the import quotas that had been applied to textiles and clothing were no more. Countries like Mexico were aware of

the threat that new producing countries represented -specially China- and importing nations were elated with the prospect of purchasing cheaper products (Dicken, 2011).

Developing nations like Mexico had survived and grown even with the help of this quota protection and without it, they would have to compete while being in no state to compete because as it was mentioned, most of the companies had outdated technology and there were other countries with cheaper labor. Although Mexico still had a geographic advantage over the Chinese for the American market but soon Chinese competition would take over a significant part of the domestic market as well (Arroyo López & Cárcamo Solís, 2010).

This last transformation was experienced worldwide, as the fiber-textile-garment production chain would shift into a global commodities chain, driven by consumers. As it was previously mentioned, it is now a market dominated by smaller retailers and international brands in an transnational network characterized by segmentation and fast-paced design and subsequent manufacture in developing countries (Vera Muñoz & Vera Muñoz, 2013).

Current state

As it has been shown, the garment and textile industries have been of significance for over more than 150 years. During this time many changes have shaped the industry that today exists and although it has never recovered the prominence it once had, it still remains a significant source of income for Mexico as a whole and for many people that are employed in the business.

It is an industry comprised of around 20,000 companies that are responsible for producing 10% of the manufacturing sectors' contribution to the national GDP and around 90% of these are small and medium size companies (in Spanish commonly referred to as PyMES) that generate at least one million direct and indirect jobs. These small companies employ 2 out of 10 occupied people; this is very different to large companies were just 37 of them employed 4 out of 10 people. Overall, these companies employ over 300,000 thousand people, more or less an 8% of the entire workforce and the biggest source of employment for women in the manufacturing sector (INEGI, 2011).

Manufacturing garments has become the most important part of the industry overall as it makes up more than half of the gross value added (54.3%), while the manufacture of leather

goods represents 17-9%, textile production 15.9% and the manufacture of other textile products -that are not clothes- only 11.9% (INEGI, 2014). In the garment industry in general, garments are the most important product, followed by hosiery, knits, leather garments and accessories (INEGI, 2011). The biggest trading partner is the United States and to prove it, in 2014 65% of all textiles and 96% of garments were exported to this country (ProMéxico, n.d.). When it comes to imports though, the biggest player is China, followed by other Asian countries and then North America (CANAINTEX, 2018).

Of all garment production, 83.9% is produced in only 11 states, where 7 out of 10 people are employed. These states can be seen in the following map (figure 8), the darker the shade, the more production, focusing on these eleven states which are: Mexico City, Mexico State, Puebla, Coahuila, Jalisco, Yucatán, Nuevo León, Guanajuato, Aguascalientes, Hidalgo and Durango. Out of the 195 large companies -those that employ over 251 people, 142 of them are located in one of these states (INEGI, 2011).

In the upcoming pages there are a series of figures to further illustrate the current state of the garment industry in Mexico. Although imports are just as important as exports in the greater scheme of things, however the focus of the following graphs shall be on the latter.

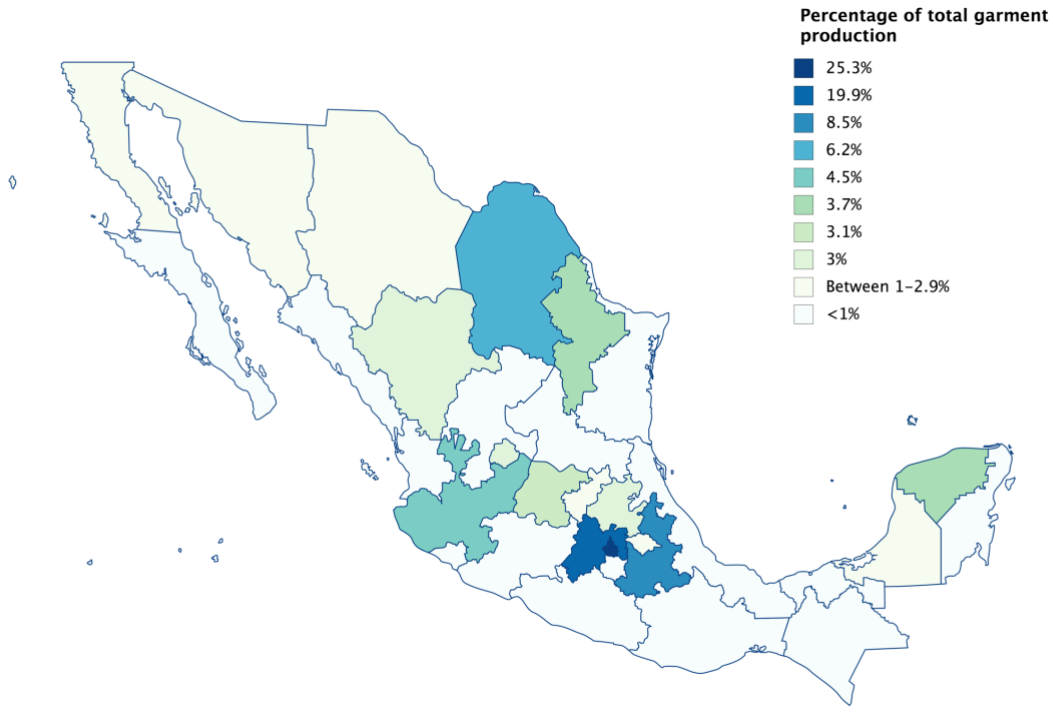

Figure 8. Mexican garment production by state (percentage). Based on INEGI, 2011

Figure 9 shows just how many people are employed in this industry, at least formally, with access to social security.

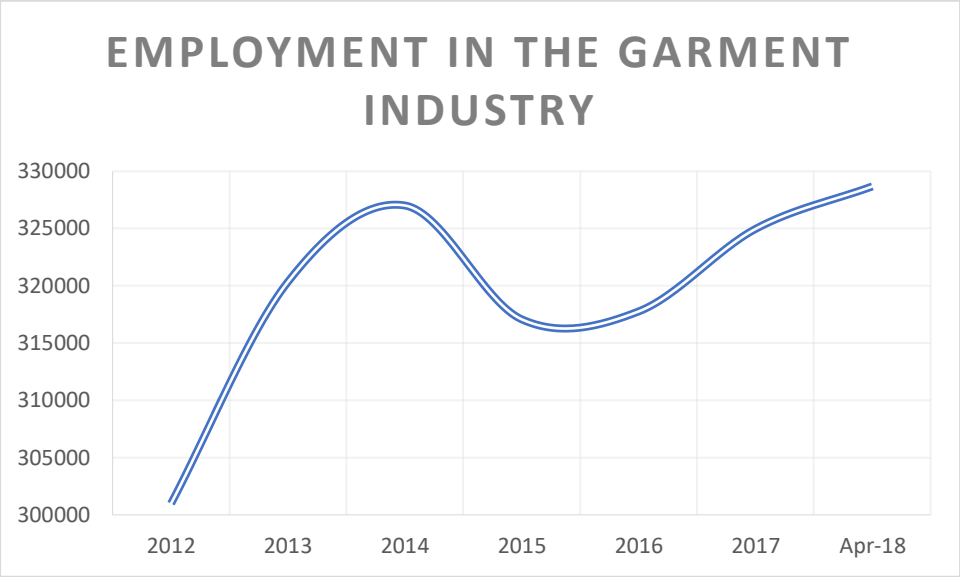

Figure 9. Employment based on number of employees registered in the Mexican Social Security Institute (IMSS for its name in Spanish). Based on: CANAINTEX, 2018

In the following figure (10) one can see total exports in millions of dollars in the last 9 years. The most obvious dips coincide with slumps that the United States' economy suffered. As they are Mexico's biggest trade partner overall, it reflects on the Mexican garment industry.

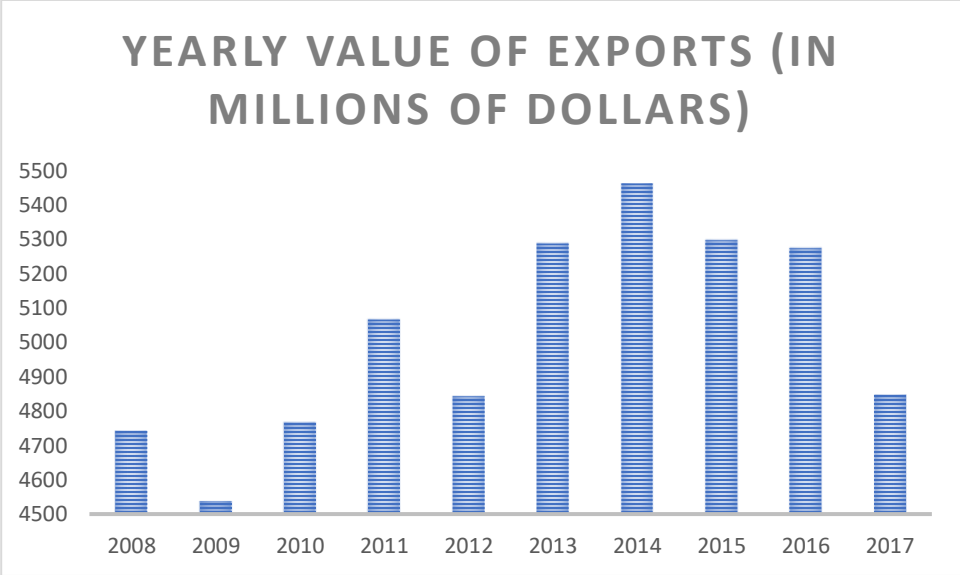

Figure 10. Yearly value of exports 2008-2017 in millions of dollars. Based on: CANAINTEX, 2018

The next graph (figure 11) shows total exports in millions of dollars. The latest data from 2018 is until the month of April and so the same period is used to compare it to other years, just to give an idea of how this year is going.

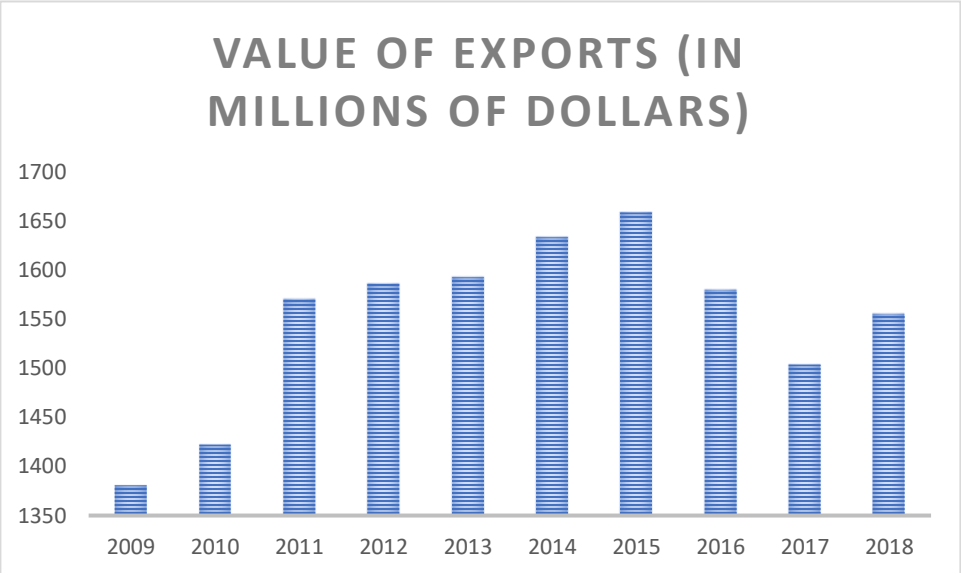

Figure 11. Value of exports from January to April, 2009-2018. Based on: CANAINTEX, 2018

V Case study: three different Mexican companies

As a way to better understand the Mexican garment industry, understand how it works both internally and between companies, and learn whether it is experiencing a greening of industry and moving towards sustainability a study was made in three companies. Maquiladoras were excluded from the analysis because as they manufacture for other companies, they do not have decision power over means of production and what will be manufactured. Although this is not a representative sample, it serves as a way to see how these small and medium companies are working. As it was mentioned it is these companies that are the driving force of the garment industry in Mexico.

About the companies

Falusi S.A. de C.V is a small company -with fewer than 50 employees-, located in Mexico City. They manufacture clothes for women and men, with a few incursions into children's apparel, for domestic consumption. They are responsible for the design and preparation -cut, grading, etc.-, distribution and sale of their merchandise, both independently in their own boutiques "Lo'Fassi" -of which they have four in the metropolitan area of Mexico City and one in Monterrey- and through small retailers throughout the country and discount sites like Mercado

Libre. In addition to their own small manufacturing section, they subcontract maquiladoras to help with production. Although they guarantee health insurance for their own employees, the same cannot be said for what the employees of the maquiladoras that work for them.

Grupo Karosso is a large specialized in sporting goods, founded in1990. The largest part of the company produces athletic footwear but considering the growing interest in athletic clothes -the trend frequently called athleisure- they have a department that specializes on apparel with 20 employees. These employees have social security benefits, weekly doctor visits and constant training. They are located in San Francisco del Rincón, Guanajuato, in an area that is a hub for footwear and leather production. They design, prepare and produce the garments in-house and distribute and sell it in the same networks they developed for their footwear. They sell their clothes for the domestic market through small retailers, not big specialized chains and on their own website and discount sites like Mercado Libre.

Ocelote is a micro-company -less than 10 employees- founded in 2015, with social security benefits. They are located in Mexico City and produce basic clothes which they define as "timeless" and at many times unisex. They design, prepare and produce everything in-house, in small batches which they then distribute and commercialize for domestic and international markets. They have two boutiques, in arguably the most important cities in Mexico, Monterrey and Mexico City, but they also sell their clothes in upscale retailer Palacio de México and other small collective shops, as well as on their own online store.

COMPANY	FABRIC PRODUCTION	DESIGN	PREPARATION	PRODUCTION	DISTRIBUTION	RETAIL	
						STORE FRONT	ONLINE
FALUSI S.A DE C.V.							
GRUPO KAROSSO							
OCELOTE							

Figure 12. Production chain of the three studied companies. Based on Dicken, 2011.

Sustainability

As this thesis is focused on reaching sustainability, interviewees were asked what they thought it meant for the fashion industry. The owner of Ocelote alluded to sustainability even before being asked about this, while the owner of Falusi said nothing while being asked directly. Two of the three had clear idea about what it meant.

All three interviewees were asked the same questions and lasted roughly the same. The responses reflect what they consider relevant or know about the industry they work in. Figure 13 shows a visual representation of the topics interviewees most talked about. The brown dots at the very bottom represent how much they spoke about the last stage, followed by the use stage in orange, the make stage in yellow, sustainability in green, the source stage in blue and finally about what they think is in the future for the Mexican garment industry.

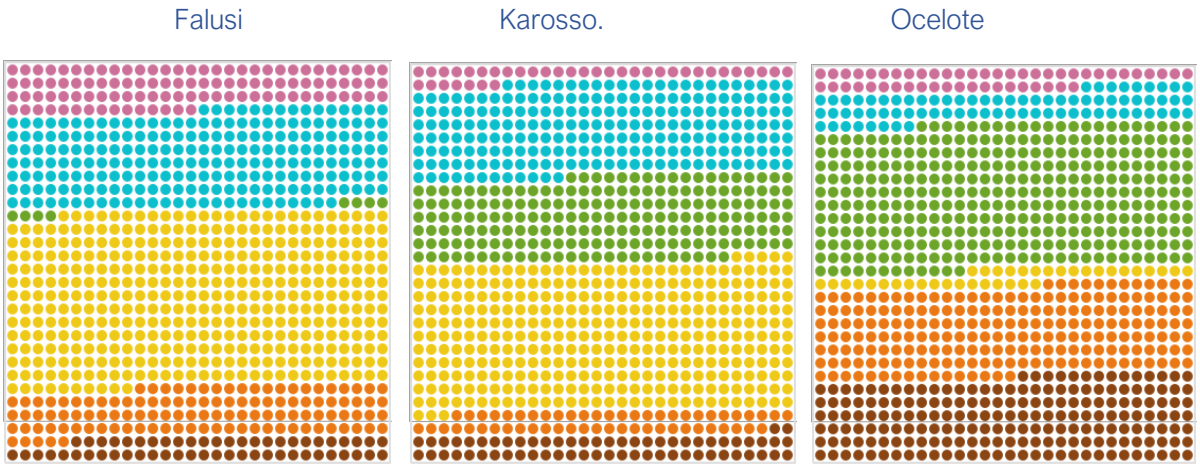

Figure 13. Interview portrait. Color-coded prevalence of topics.

It is clear to see the difference between brands in what they prioritize. The most obvious difference is how old the companies are. Falusi is a family owned company, which has been in the garment industry for several decades, whereas Ocelote is only 3 years old. However, although it is important to highlight that although people at Ocelote and Karosso know what sustainability entails, and are aware of the social, environmental and economic aspects, they still have not changed their practices.

Obstacles for sustainability

The main obstacle they identify as to why they cannot adopt more sustainable practices is the high costs accompanying it. Karosso was aware of the high development and development costs associated with developing new fibers, while Ocelote reported high prices for already developed fabrics.

It appears to be that price is one of the prime causes hindering sustainability in the garment industry in Mexico as it has been mentioned both by consumers and producers as a deterrent.

Four stages of sustainability

To further characterize how these companies produce garments, the following sections have been divided according to the four stages defined by Gwilt & Rissanen (2012) mentioned in the previous chapter.

Source

All of the companies reported using imported goods to manufacture their products. Falusi stated they imported fabric from Asia; Karosso from Colombia and Ocelote imports cotton from Canada but also uses dome fabrics produced in Mexico.

None of them used fabric that are certified as being "greener", such as organic cotton or fabrics made out of plant-based or recycled fibers such as modal or Lyocell. When asked about what determined whether they used one of these fabrics or more traditional ones, all cited cost as the biggest factor. The scarce attempts that have been made to introduce sustainably produced fabric resulted in a loss for the company (Karosso) because consumers did not respond well to the higher price.

Make

For the actual manufacturing of the clothes, only two of the three companies produce their own merchandise. As for the materials they reported using, they all reported using both natural and synthetic fabrics, frequently in a blend, including cotton, wool, viscose, nylon, spandex and polyester.

Two companies, Karosso and Ocelote reported taking measures to generate the least amount possible of waste. Karosso repurposes leftover fabrics from previous seasons, if needed with some alterations like color or print to be able to make items for newer collections.
Ocelote reports producing as little as 5% waste during their production and because they produce in small, limited batches, they don't have much left-over inventory.

Use

Because all of the producers use polyblends, they say their items are durable. Falusi states that the products stay in optimum state for one year, wearing them at least once a week. Ocelote claims that because they use better quality materials, their products can last well over

3 years, again, being used 52 times in a year. Because of the nature of the use and fabric of their products, Karosso only guarantees 8 months of use.

Beyond the label on the garment itself, none of the companies gives advice to its consumers how to wash their product and prolong its life for as long as possible.

Last

As for discarding clothes, all three companies said they try very hard to make sure that there is no product left over that would have to be destroyed. To various degrees, they all make discounts on the clothes and leftover materials for them to sell. Karosso has an outlet facility on site which allows employees and citizens to purchase discounted items. When they don't sell there, they are moved to online platforms like Mercado Libre at a heavily discounted price; this is a practice that Falusi also uses to prevent keeping inventory.

Because of their almost bespoke nature, Ocelote are the only ones who have buy-back programs, in which customers that no longer want a product, can sell it back to the brand. Because some of their offering is limited edition, the garments quickly find new owners. However, none of the brands has a program for recycling unwanted/old garments and they don't plan on doing so.

Future of the Mexican garment industry

When asked directly about what they perceived to be the biggest challenges that would shape the future of the garment industry in Mexico, the answers vary according to each of their perspectives and positions.

As it was seen in figure 13, Falusi focused on the source and make stages, and correspondingly, the challenges perceived are in those stages. "It is a difficult scenario due to the import of the material, unfair competition, and the opening of the market to very large companies that offer their merchandise at very low prices, making it more difficult for the national industry to offer products that can compete efficiently against these companies… all the product that comes from the East, not only those that come from China, but from India and from all sides, which causes the national market to become more and more compact" (Soltero Estrada, 2018).

However, the other interviewees remained positive, focusing on improving their garments. Unlike the gloomy scenario that Falusi is living, Ocelote details a rebirth in the Mexican garment

sector. He lists brands that like his, focus on producing fewer quantities of high quality garments. "… I believe that in the last 5 years there has been a very strong boom and currently, with the explosion of social networks, it puts us on the map globally, we have a greater recognition, we have a greater presence, higher demand, so I think these are encouraging times for the industry and I think there are more things coming" (Flores Valdez, 2018).

Challenges of the Mexican garment industry

Having been studying the Mexican garment industry for quite some time, I feel like there is a third perspective to include and it was previously mentioned as an obstacle for sustainability. As history shows, the industry has always been lagging behind technologically, even after several governmental programs and policies to foster it. This is a problem the Mexican industry has been dragging and continues until today.

Although in recent years there have been a number of companies created with a different approach to the garment industry, that produce fewer quantities and higher quality products, there is still no research and development happening. Referring the product life cycle (figure 5), Mexico is inserted in the global production chain in the third stage -maturity- as a manufacturing country. It is still developed countries who develop the technology. Mexico just uses technology and production methods that other company in another country has already developed and perfected.

And how could they learn? From knowledge clusters formed with other companies in their vicinity. Karosso is not located in Mexico City like the others, but it is located next to other four companies in the athletic apparel world and make both shoes and clothes. When asked about their relationship with its competitors, they recounted being civil and maybe sharing distribution carriers from time to time, when they are unable to do so with their own suppliers. They share a municipality and parts of the same market but that is it. They view their competitors as a way to be continue improving but still lack the patterns of innovation, capabilities and performance and invention and learning patterns to gather the characteristics detailed by Dicken, visible in figure 7.

Falusi and Ocelote are both located in Mexico City, in almost neighboring neighborhoods, with a 15-minute drive between them, yet neither knows of the other. This could well be attributed to the stark difference in what they produce and who they sell to. With other similar companies, Ocelote reported they have a friendly relationship with the most relevant up and coming designers and brands in Mexico. They communicate constantly, through a group text, and share information on suppliers -as long as it does not involve key materials such as fabrics,

but he says that for things like buttons and labels, they are there to help. They also report sharing facilities from time to time, as a way to keep costs at bay because they are "small business owners or entrepreneurs in the global fashion industry, where there is a lot of competition…if we do not help each other out, it is much more difficult" (Flores Valdez, 2018). Ocelote reported using their competitors as benchmarks for what is in style, prices, quality and marketing strategies.

The word innovation struck different chords in the interviewees. Even after explaining that it could refer to means of production, Ocelote referred to innovation only in terms of the designs they use for their garments. Falusi on the other hand, combined them and reported using international trade fairs as sources for both. "With regard to the change in items produced, we make trips to international exhibitions where we assess the trend, then it is tropicalized and applied to the national market. And regarding the production process, it is the same, based on new techniques we acquire the machinery necessary to deliver and make better quality work more efficiently" (Soltero Estrada, 2018).

Karosso on the other hand pointed out several sources for innovation. It has happened on occasion, that an employee will suggest trying out new means, materials or models, and that there are always one or two items which the owners take a chance on, producing limited quantities to see if it is well received. Then there are external sources of innovation, which they have experienced through their fabric suppliers; they let them know of new fabrics that are being used in the industry and by their competition. This of course makes them at least try and work with new fabrics.
She recounts that their main fabric supplier told them than military uniforms were being produced in Irapuato, in a maquiladora that the popular American brand Levi's used to make their jeans. As a result, the uniforms are being produced with the same ecological regulations as the Levi's denim. The same occurrence happened inside Karosso itself, with their serigraphy team, which is used both for the footwear and clothing branches of the company. They are now exporting prints to a Japanese company, that only uses water-based dyes, are biodegradable, among others things. Working with a company that cares, makes a world of difference; compared to Mexican clients that "want things very cheap, fast, with traditional dyes… the smell, when you enter the plant and you almost want to faint" (Cisneros Sánchez, 2018).

VI Conclusions

After documenting both global and the Mexican garment industry, it is clear that it is an industry strongly linked to the socioeconomic state of the time and place. It has become a fast-paced industry, relying on fluctuating variables such as age, income, social status, among others. “Much of the business of producing and selling clothing, therefore, depends upon firms’ abilities to predict, or to influence, what consumers wish to buy” (Dicken, 2011, p. 306)

In Mexico, what once was a flourishing industry, began lagging behind decades ago and has never quite caught up. The tone has been set by economic uncertainty, industrialization and the opening of markets for international commerce. It is an industry that generates jobs, contributes greatly to the GDP but has always been an industry powered from outside the borders. Whether the early English and Frenchmen or the hundreds of maquiladoras established towards the end of the last century, they have all chosen Mexico for its geographic position, close to the world’s biggest garment market, and for its access to cheap labor (Vera Muñoz & Vera Muñoz, 2013).

However, it is a very segmented industry, both domestically and internationally, and Mexico has yet to develop more and more centers where they offer the “complete package”. That is one of the reasons why it continues being a place where clothes are manufactured with internationally sourced materials. Even though two of the interviewed companies are located in Mexico City, they are not part of a cluster. Falussi is making use of the extended workbench available in the area, while Ocelote is benefiting from a network of suppliers.

Regardless of maquiladoras, even in small companies, new technology and machinery gets to the country when it is already in the mature state in developed nations and in many occasions, innovation comes from external international sources as well. The networks between companies are not strong or developed enough to form knowledge clusters, where innovation could come from therein.

Chapter 4 Importance of consumer behavior to the processes of greening of the garment industry in Mexico

I Introduction

The preceding chapters have dealt with both consumers and producers. In this chapter, the focus will be on the relationship between these two and whether consumer behavior is guiding the Mexican garment industry towards sustainability.

As it has been made clear, buying a piece of clothing entails much more than the actual garment. There have been a number of large-scale movements in response to debatable labor and production practices employed in the clothing industry. International organizations like Greenpeace and Oxfam have launched campaigns to monitor different actors along the production and supply chains, to ensure they are refraining from illegal or dangerous practices. These official campaigns are usually accompanied by increased scrutiny and even boycott from consumers and have prompted positive responses by some of the world's largest retailers.

Whether by legal regulations, as a response to stakeholders or to satisfy consumer demands, sustainability has begun to be embraced by companies and some have even adopted supplier assessment schemes that include social and environmental standards. Companies now acknowledge that adopting sustainable practices can even give them a competitive advantage (Seuring & Müller, 2008).

As it was mentioned in the previous chapter, large retailers have historically been some of the most important players in the garment industry. Because their sales were so big, they had a larger say in what was produced. However, there are smaller, more specialized stores that have gained notoriety in recent years, although especially within niche segments of the market. Regardless of their size, retailers are heavyweights in the garment industry. Because it is a heavily fragmented industry, it is them and not manufacturers who more often directly deal with consumers. The growing number of retailers has increased competition and has resulted in a demand for a rapid response from producers because whoever can get the fashions in store quicker, gets the sale.

As for the three cases presented in the previous chapter, they all take part in the retail process as well, which makes their statements helpful to understand where Mexican garment industry stand in the global context.

II Global changing relations in the garment industry

The previous chapter dealt with the evolution of the garment industry, which has changed significantly in the last 20-30 years. It is important to remember there was a growing and evolving customer base, globalization, entry to markets that had long been protected (Morgan & Birtwistle, 2009). Back then, large-scale retail chains had a great amount of influence on manufacturing companies. They required the mass production of standardized basic items at a low cost. There was also a fixed schedule of showing two collections a year, spring/summer and fall/winter, at trade fairs. This allowed for the demand to be able to be forecast up to a year before customers would purchase it, depending on previous sales data (Guercini, 2001).

Nowadays, huge retailers are being replaced by highly responsive, buyer oriented, strategically linked low cost supply chains with shorter lead times (Tyler, Heeley, & Bhamra, 2006). This transformation has been possible with the introduction of an agile supply chain structure, quick-response systems to assess day-to-day sales and just keeping up to day with what consumers are demanding (Bruce & Daly, 2006).

The following images (figures 14 and 15) show the transformation of the garment industry into a buyer-driven industry.

Before, manufacturers would produce the apparel in one or more plants, gather it in their warehouse and ship it to the retailers' warehouse from where it would be distributed to the stores. They would order larger batches and once it was in store, they would keep track on how well it was doing and then, eventually that information would get back to the retailers and with that feedback they would make future orders. The newer model, is significantly leaner as it involves much smaller consignments, delivered when required, which can be shipped directly to stores.

"The boundary between production and retailing, therefore, is becoming increasingly blurred as the power within the production shifts further towards the buyers" (Dicken, 2011, p.316).

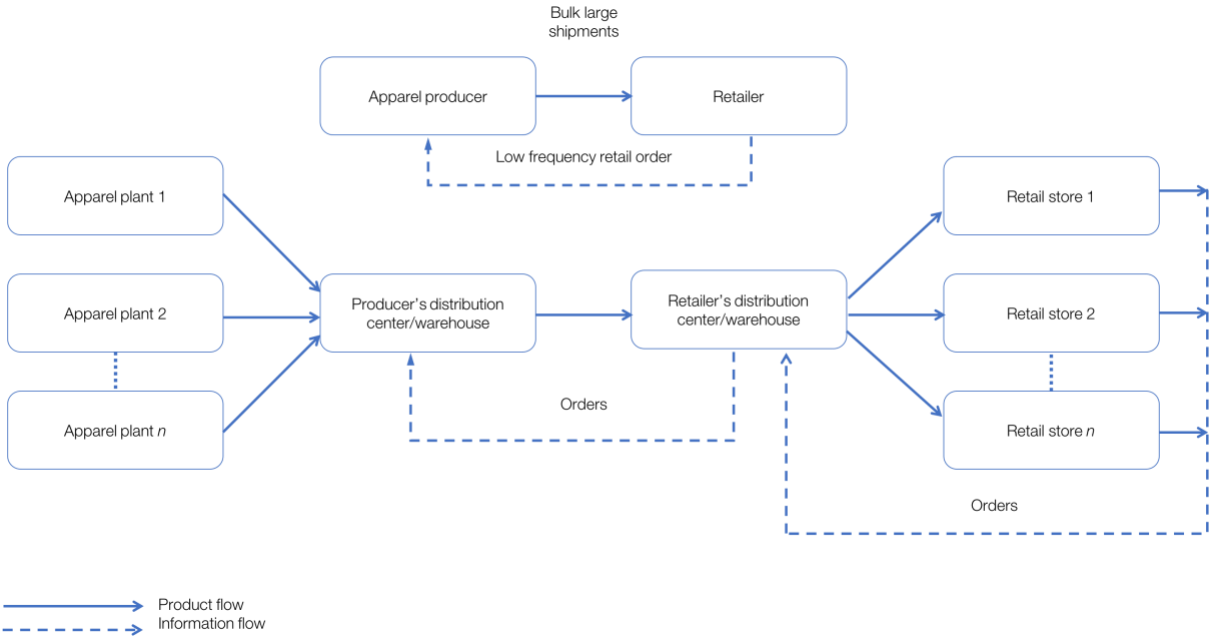

Figure 14. Traditional manufacturer-retailer relationship. Adapted from Dicken 2011, figure 10.8 (a).

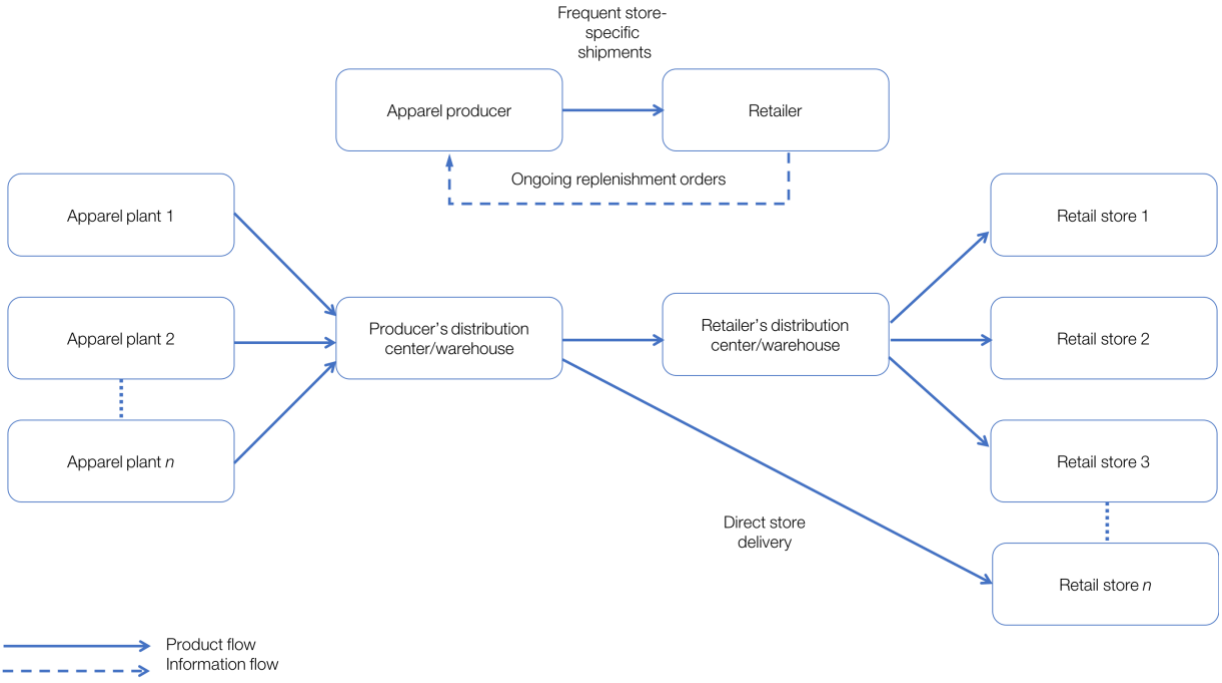

Figure 15. New leaner relationship between manufacturers and retailers. Adapted from Dicken, 2011, figure 10.8 (b).

III Consumer behavior

Because the industry has shifted to directly address the demands of consumers, in the quickest way possible, it is important to think about what consumers want to buy. As it was mentioned in the first chapter, the theory of reasoned action is based on the premise that humans, and consumers, with free will and volitional control are subject to their attitudes, subjective norms and intentions when making a decision. However, the number of events when humans have complete volitional control is very limited and this is when the theory of planned behavior comes in. As it was mentioned, the TPB was developed as an extension to the first one, and to account for all of those moments previously mentioned, added the concept of perceived behavioral control, as a "person's belief as to how easy or difficult performance of the behavior is likely to be" (Montaño & Kasprzyk, 2008). Perceived behavioral control - along with attitudes and subjective norms and the subsequent behavioral intention- are predictors of behavior, as long as the perceived behavioral control is not misguided.

"The degree of success in actually carrying out that intention depends on the strength of our belief in our ability to carry out that behavior" (Jackson, 2005, p.48). When someone is confident they can achieve a certain activity, then they are more likely to succeed than someone who doubts they can do it.

In terms of clothing this means consumers need to feel confident in that they can succeed in purchasing more sustainable alternatives.

As aforementioned, a growing number of consumers is concerned about the environment and shop accordingly. Although there are many possible reasons for this concern, it is likely that *sacrifice*, *social* and even *self* consumers have been exposed to at least one campaign promoting sustainability or denouncing transgressions of various kinds. Perhaps it is a campaign like this that started the journey towards sustainable consumption for people who are now sacrifice consumers.

The fact remains that, these campaigns by non-governmental organizations (NGOs) play a significant part when establishing responsible and sustainable business practices in the industry (Lorek & Spangenberg, 2014). Their effect on consumers, besides of awareness, can also engender environmental, social and ethical concerns and later changes (Grappi, Romani, & Barbarossa, 2017).

Perhaps most famously, in 2011 Greenpeace published a report entitled "Dirty Laundry", exposing several prominent international brands and their use and discharge into water of

hazardous chemicals in China. In 2012, Greenpeace also published a report entitled "Hilos Tóxicos: Al desnudo, Exponiendo el papel de la industria textil en la contaminación de los ríos en México". This report highlighted the fact that the environmental consequences of the garment industry are not confined to Asian countries as some may have believed. It reported on the pollution of rivers in Mexico as a result of irresponsible practices in the garment industry -particularly in the production of denim. To round up its contribution, Greenpeace launched the "Detox" campaign to campaign against the use of toxic chemicals and to reduce the environmental footprint of the manufacturing process in the garment industry (Brigden et al., 2012; Casper et al., 2011; Greenpeace, 2011).

Research has shown that these kinds of campaigns has an effect on how consumer evaluates a brand and alters their consumer behavior accordingly. They evoke feelings of not wanting to be as guilty as the companies being exposed. Obviously, companies never want to be the subject or target of such a campaign, especially when they have reached social and self consumers as part of their market. Even when they are targeted, these companies can commit to change these practices, which not only works to mitigate the effect of the campaign but in the future may even garner them a larger market and respect from their peers and consumers (Grappi et al., 2017).

IV Companies' response

Because there is a growing number of consumers concerned with the environment, from their exposure to campaigns or elsewhere and are starting to demand, the fact remains that some companies have adopted sustainability measures as a response to these demands.

Greenpeace's Detox is perhaps the most far-reaching campaign of its kind. Since its launch in 2011, 76 brands, retailers and suppliers committed to by 2020 eliminate hazardous chemicals from their processes, to eliminate PFCs (per/poly fluorinated chemicals, water and oil repellent chemicals that have been identified as persistent, bioaccumulative and/or toxic) and replace them with non-hazardous alternatives as well as to be fully transparent when disclosing information about the suppliers used and their chemical discharge. Two years ago, they conducted a follow-up study, where they evaluated the progress of 19 companies. Out of those, only three -Inditex, Benetton and H&M- were given the "avant-garde" status, because of their success so far in the three categories, with "credible timelines, concrete actions and on-the-ground implementation"; twelve were categorized as being in "evolution mode" for having made some progress but still need to evolve quicker to achieve the goals in time, these companies are C&A, Fast Retailing, G Star, Mango, Miroglio, Valentino, Adidas, Burberry, Levi's, Primark, Puma and M&S; there are four "faux pas" companies -Esprit, Limited Brands,

Li-Ning and Nike- which have failed in taking “individual responsibility for their supply chain´s hazardous chemical pollution” (Greenpeace, 2016).

Additionally, H&M adopted the “Clean Shipping” campaign to keep track of their fuel usage and carbon emissions during their distribution. Uniqlo has also pledged to reduce their carbon emissions rate by 10% as part of the Tokyo Carbon Reduction Reporting Program (Li et al., 2016).

As it can be seen, these campaigns have been successful with very large international companies based in developed nations. However, the adoption of sustainable production practices in companies of all sizes provides benefits not only for the environment, but for the companies themselves as these measures allow for better financial performance by cutting back on unnecessary packaging and reducing energy consumption and waste managemet (Li, Chow, Choi, & Chan, 2016.

A lot of companies have now developed voluntary codes of conduct, to prove to consumers and the world that they are committed to end sweatshops conditions or eliminate the use of certain toxic dyes and chemicals from their processes. As it is such a fragmented and internationalized production chain, to keep tabs and monitor all of the contractors involved in the production of clothing is a very difficult but worthwhile task. However, it is important to keep in mind that “codes of conduct are awfully slippery. Unlike laws, they are not enforceable” (Dicken, 2011, p. 07).

Still, companies can grow their profits and brand reputation by implementing “market-based sustainability programs which incorporate the interests of consumers and stakeholders” (Li, Chow, Choi, & Chan, 2016 p.67).

In the end, regardless of their size and inspiration, there are two types of companies: those companies that do not incorporate sustainable practices and those who do. The latter do so by adopting strategies such as better management systems, auditing their social and environmental outcomes, joining fair trade and clean transportation systems and eco-labelling (Turker & Altuntas, 2014).

Ecolabels

The adoption of ecolabels has become one of the most prevailing means producers of green products of all kinds have to communicate to consumers of the background of their product. The introduction of ecolabels came with the endorsement of the Agenda 21, that came out after the Rio Earth Summit. The Agenda 21 identified ecolabels as a way to contribute to the development and adoption of voluntary "effective transparent, verifiable, non-misleading and non-discriminatory consumer information tools to provide information relating to sustainable consumption and production" (United Nations Environment Programme, 2018).

There are three types of ecolabels, as defined by the International Organization for Standardization (ISO): type I focus on specific impacts applied to specific sectors, and should include environmental impacts that occur during the entire life cycle, be established after a lengthy consultation with stakeholders, and to use the life cycle assessment to formulate quantitative environmental data; type II refers to self-declared environmental information displayed on a label regarding a single attribute; type III are environmental product declarations that provide more detailed quantitative information about the product and its matrix structure is reminiscent of nutritional labels (Clancy, Fröling, & Peters, 2015; United Nations Environment Programme, 2018).

The ecolabels employed in the textile and garment industry, such as Oeko-Tex and the Forest Stewardship Council- are closest to type I, but fail to be one in its entirety because they only focus on one stage of the life cycle. They work by helping consumers know which services and products produce lower environmental impact in their whole life cycle. Although they guarantee that whatever is claimed on the label is true, this does not necessarily mean that the product is more sustainable than other products without the label (Clancy et al., 2015).

It is a helpful tool but it requires previous information on the topic for consumers to be able to fully grasp what the label implies. Many producers use these labels as a way to give technical information about a product without necessarily making the product greener. When wanting to achieve the goal of sustainable consumption and production from the Agenda 21, it must be possible to include all kinds of consumers, and not just those who have previous knowledge (Rex & Baumann, 2007).

V Alternatives towards sustainability

As a way to round up this final section of the thesis, I would like to elucidate on alternatives that garment producers can adopt when working towards sustainability. Although there are a

number of alternatives and more are being developed, the majority of producers are not incorporating them into their processes. The reason behind this, much like what the producers from chapter 3 stated, is that the technological and financial investment required are very expensive. With this argument in mind, many companies are continuing their outdated unsustainable practices.

Perhaps the most obvious change they can make is the source stage. There is a growing number of alternative materials that are range from organic, to made from recycled materials, to deadstock fabrics and repurposed vintage clothing.

Tencel Lyocell is a fabric made from renewable wood materials, similar to rayon, made by the company Lenzing. This Austrian fabric is made from eucalyptus and beech trees, which are fast growing and less resource consuming than cotton in terms of land, water and use of pesticides. They produce it with a closed loop approach, which means that more than 99% of the non-toxic solvent used, can be recycled and reused in the system, instead of becoming wastewater (Tencel, 2018). Viscose and Tencel Modal are also synthetic and made from wood materials, which yields twice as much material as cotton in a same-size plot of land and without the use of fertilizers (Reformation, 2016).

Recover yarns are made out of discarded garments and general textile waste. There are different types of yarn produced by this Spanish company, that combine upcycled cotton with virgin cotton and fibers but also with post-consumer RPET bottles, which are dyed without harmful chemicals, which are not released into the environment (Recover, 2018).

Even the budget for materials does not allow importing fabric like those, there are a number or alternatives producers can use that are either less resource intensive or have quicker decomposing times. One of these fabrics is linen, which comes from flax and is a breathable comfortable material, that hardly uses any water and limits the emissions of carbon to one fourth of what cotton would emit per kilo. There are other natural and man-made fabrics that have shorter degradation rates, some made out of cellulose, such as hemp, jute and rayon and acetate; while other natural fibers such as wool, alpaca, cashmere have controversial production means but have the same benefit of shorter degradation rates. Cotton is also a very controversial material, because of what is required for its production -abundant water, pesticides and other hazardous chemicals, as well as the negative impact they have on farmers. However, in terms of degradation, it is still a good enough alternative.

Some processes involved in the treatment of the textiles used have stopped using azo dyes and other hazardous chemicals and have started to be replaced with clay-based products that don’t require treatment after being used. Also, one of the biggest dye and chemicals

manufacturer in the world, Swiss company Archroma, has developed Earth Colors, made from biowaste, to dye their products (Nimkar, 2018).

These newer materials are already being used in the garment industry, however it must be noted that they are being developed and used in developed nations, where traditional manufacturing of clothes reached the decline stage in the product life cycle (figure 5). These countries have already started stage one and two on sustainable alternatives. With time these fibers will become more widespread as they reach the maturity stage.

Many of these fabrics already include closed-loop processes in their manufacturing, which limits the discharge of potentially dangerous chemicals. During the make stage producers could adopt closed-loop processes when preparing the fabric for production and adopt resource efficient measures during the entire manufacture process to improve efficiency, reduce costs and waste.

The use stage involves the customer directly. Because of the wear and wash, this stage is responsible for generating a significant portion of a garments' carbon footprint. When not given the proper care, a garment's life span can be seriously reduced, resulting in the purchase of new garments. Here, there is a trade-off with clothes made out of polyester because they last much longer, as long as consumers use them constantly and with care. It is important that brands engage with their consumers and inform them about ways to make their clothes last longer in optimum conditions (Pessôa, Araújo, & Arruda, 2015). This might be conflicting for some if not all brands, because in the end they want to generate more profits.

The last stage offers many opportunities and allows room for upcycling, thrift and vintage shopping, clothing exchange programs -both between consumers and between consumers and producers or retailers-, recycling and donating clothes, to prevent clothes to reach landfills. This requires a change in the mindsets of both producers and consumers, for both to be able to see new possibilities of use instead of seeing something that is trash. This involves a change in the consumer behavior and the underlying notions of fast fashion consumption. Consumers need to be more aware and educated about the processes that need to happen for them to be able to buy clothes and as a response (Pessôa et al., 2015). Some of the measures that can be taken as consumers is to have capsule wardrobes, with just a handful of items that are from good quality and that can be combined with all of the pieces; so-called lowsumerism, which as it name may suggest involves consuming fashion in small(er) quantities; or purchasing slow fashion, which is a counter to fast fashion, which prioritizes value proposition and the development of a relationship between consumer and producer, based on

the tenants of higher quality and authenticity (Todeschini, Cortimiglia, Callegaro-de-Menezes, & Ghezzi, 2017).

VI Greening of industry: the garment industry in Mexico

The process -and study- of the "greening of industry" is more or less recent, as the areas it is related to, only gained relevance during the latter half of the 20th century. During the 1970s and 1980s, air, water and soil pollution problems begat some of the first environmental regulations set in place for companies. Their economic approach generated resistance from companies as they did not want to incur in the extra costs they generated (Penna & Geels, 2012).

During the 1990s, with the involvement of scholars, the approach was to target entire industries and work towards developing win-win green strategies that would result in competitive advantages through business and management tactics. Some of the determinants of this greening include external factors like "environmental policy, consumer demand and media attention to organizational factors such as leadership style, corporate ethics and resources" (Penna & Geels, 2012, p.1000).

The third and current discussion on greening of industry deals with the relationship between processes that go within industries and their external context, with the help of tools from organization theory and innovation studies, among others. It is now seen as an ongoing process involving political struggles, public debates, technical and economic considerations and capabilities (Penna & Geels, 2012).

The main objective of this chapter if to explain the importance of consumer behavior and how it is linked to the processes of greening of industry of the garment industry in Mexico. The relationship between producers and consumer and how consumers can contribute to the adoption of more sustainable practices has already been established. The question remains on whether a process of greening of industry is happening in the garment industry in Mexico.

Whichever the approach, the fact remains that there several actors that are important for there to be a greening of industry. It includes consumer demands and concerns regarding the ethical -and in this case environmental- implications of the production of garments. The sources behind the greening of industry can have political, legislative and/or economic motivations.

Consumer demand

As it was previously mentioned, another possible source for the process of greening of industry is due to consumer demand. When asked about how they communicate with their customers and the process behind their decision about what to produce, the three producers had similarities and differences in their approaches.

Falusi reported basing their production again on what they saw at international fair trades and it was also during national fairs when they sell clothes directly to their customer base. At those domestic fairs they see how people respond to certain items and order larger production on those. Because they are retailers themselves, they can interact face to face with consumers and answer any question they might have. In this day and age, social media presence of brands is to be expected. Their boutiques "LoFassi" have a Facebook page (@LoFassiModa), with 4123 likes and although they post regularly, there are few posts by customers. When they ask questions, they tend to be about pricing, sizing and opening hours, not about their production process. They also have a Twitter account (@lofassimexico) where they only have 35 followers and have not posted in over six months, so it is safe to say that this is not s significant channel of communication. The same can be said of their Instagram account (@lofassi.mexico) which only has 105 followers with fewer than 10 likes per post and zero comments.

Karosso however described a much more complex process when choosing what they will produce. They start off with market and trend research, which they do by attending conferences and workshops sometimes given by the fabric suppliers themselves. They inform them about the upcoming trends, the cuts, colors and patterns. Based on that they develop the designs, including appliques, patterns and prints, some of which are done in-house. They compile a list of proposals, which they complement with whatever the biggest international brands are doing, to make sure their products have a place in the market. Once the proposal is finalized, it is presented to the managers and owners, who decide on what will be produced. Although what they choose is final, they meet with people form the sales, general management and marketing teams to reach their decision.

As for their relationship with clients, they too benefit from being direct retailers, which as they say, allows them to find out what customers have liked and disliked. They have a large online presence: their Facebook profile (@karosso) has over 490 thousand likes who frequently engage with the brand. They ask questions regards sizes and availability, but they also post pictures and comments regarding their positive or negative experience with the brand, which are promptly responded to. They also have a Twitter account (@karossooficial), which despite having over 1600 followers, has been inactive for almost a year. Their Instagram profile (@karossooficial) has 3285 followers who are frequently liking their posts but rarely commenting or asking questions.

Lastly, Ocelote reported not feeling constrained to the fast fashion model, they reportedly take their time deciding on what to produce and then actually manufacturing products and delivering them to consumers. They focus on designing products instead of entire collections, which they first develop as samples that are sent to their showrooms/stores. There, they see how customers react and if generates interest in them. If a product is not successful in-store, they readjust the fabrics, colors, fit, etc., so that when they put it officially on the market, they are sure it will be well received. Many of their products are limited editions, which makes them even more popular, if there is significant demand for a product, it is added to the "Zero Collection", which is available always and now includes 60 items from 2015 until today. Out of the three companies, they are the only ones who receive feedback from their customers before producing the items, which allows for greater response to what consumers want.

When asked about how they communicate with their customer base, they responded that their most direct channel was in their showroom, where they can interact directly. Because they are a younger brand, they too have an online presence with 4676 likes on their Facebook page (@ocelote.net), less than 500 followers on their twitter account (@oceloteNET) and over 16.4 thousand followers on Instagram (@ocelotenet). Their Instagram profile is the most active out of the three; they post about their newest launches, their clothes being used in editorial photoshoots, and by celebrities. Customers interact with the brand mostly to express their liking or approval of certain items, but none asked about their production.

In different capacities, all companies reported listening to consumers' concerns when purchasing clothes. Before or after the production of the garments, they are receptive of what customers think and want. Although I did not have access to any private communication that may have occurred between customers and the companies through social media, it is safe to say they did not really care about the behind the scenes process or its social, economic and environmental consequences.

When coupled with the findings of chapter two, there is an evident lack of knowledge and awareness about sustainability in fashion. Based on what the producers said about their clients, they could be categorized as self and social consumers. As a result, they are unaware both of the downsides of traditional production modes and the possible benefits of purchasing more sustainable choices.

Domestic producers

As it was already mentioned in the previous chapter, one possible source for the creation of knowledge and innovation is through knowledge clusters, located in an industrial sector of a country. The recalling the idealized visual representation of them (figure 6), which includes the various ways actors interact with each other and with others outside the region, be it suppliers, customers, or other sources of information.

After studying the overall structure of the garment industry in Mexico and referring to the three particular cases presented in chapter three, one can conclude that the garment industry is not adopting innovative sustainable practices as a result of the interactions between companies. The producers interviewed are not part of a cluster of knowledge and the visual representation of their configuration would look more like the upcoming figure (16).

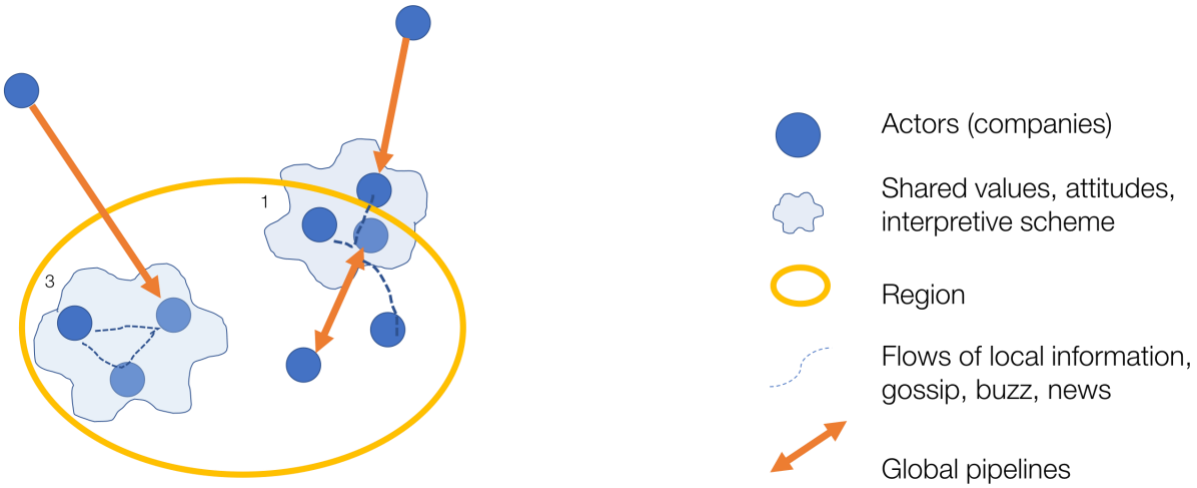

Figure 16. Transfer of knowledge in 2/3 interviewed companies. Based on Dicken, 2011.

Because only two of the three companies, Falusi and Ocelote, are located in the same city, only they were portrayed in the figure. Number 1, Falusi reported having limited interaction with its competitors and going to international trade fairs to stay up-to-date in terms of machinery and designs. This is represented by the orange line, which in this case is only incoming. Because they use maquiladoras to complement their own production, they have relationships with other companies in the area. The case is similar to that of Ocelote, number 3 in the figure, which detailed its relationship with its competitors as friendly, in which they shared some suppliers. Although they do not attend trade fairs, they also use outsiders as inspiration for designs. Neither of the companies does any collaborative work with its competitors; the only thing they share is their geographic vicinity.

These two companies are displayed in two different spheres of shared values and attitudes. They are two companies with different markets and very different approaches when it comes to producing clothes. The companies they interact with are obviously with in their own sphere.

Alternative sources for the greening of industry

Given the fact that the two previous potential sources from producers and consumers turned out to be nothing more than potential, and in fact are not contributing to the greening of the garment industry in Mexico. There is no substantial demand for green garments and thus no greening of industries by the same leverage of the international example along the globalized production chain. However, there are a still other possible alternatives that could happen in the future to do so. The following figure (17) provides visual representation for those alternative routes.

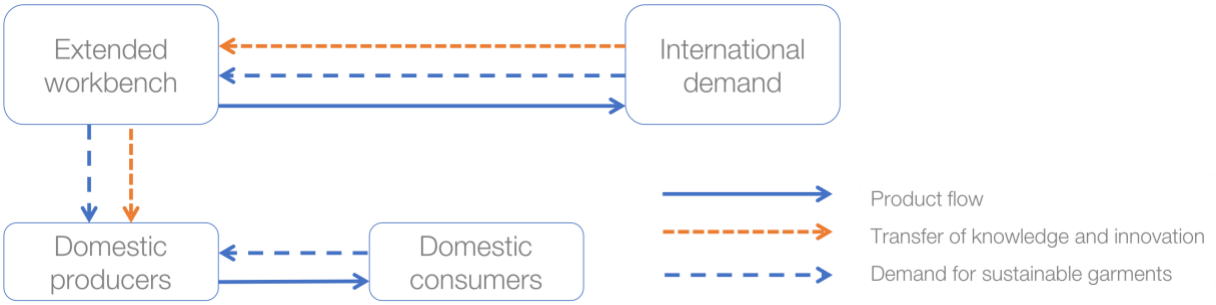

Figure 17. Potential greening of the garment industry in Mexico. Based on Hamhaber, 2018

As it was mentioned in the previous chapter, maquiladoras still represent a significant part of the garment industry in Mexico. Although they manufacture clothing for domestic brands, the bulk of them manufacture for international brands. They are the extended workbench for these international companies and they satisfy the demands of developed nations. One possibility is that these international brands and consumers demand sustainable garments, or demand that the materials and processes used are certified or ecolabeled.

There have already been examples of this, as told by Karosso. They recounted two accounts of how when international brands such as Levi's bring their business to a maquiladora, they have certain demands as some of them have already committed to more sustainable practices.

Once maquiladoras have adopted these practices for international brands and later adopt them for domestic consumption as well, it is feasible that this knowledge would then be passed on to other domestic producers, becoming widespread.

There is still a great amount of clothing being produced and consumed in Mexico. As it has was mentioned in the second chapter, that some of the most popular green products are those that represent a reduction in costs and that as an added bonus are beneficial for the environment, such as electricity and water saving alternatives (León & Vera Martínez, 2011). This unfortunately cannot be said for garments, as the sustainable options are significantly costlier than their fast fashion counterparts. Therefore, it would not be impossible for this premium sector of Mexican consumers, start to demand sustainable choices from the national market -because it is them who can afford the higher prices- and by thus an analogous greening on industry in a pure domestic framework.

The final possible alternative is for an enforced greening by improving legal frameworks. This could include (but not limited to): establishing substitution schemes, where producers are liable, as a precaution for the bad use of chemical substances. This would not only foster innovation but also would contribute to the elimination of toxic chemicals in the garment industry. Another measure would be to broaden the scope of the dangerous substances regulated by current discharge permits (NOM 001 and 002), as well as reduce the maximum levels for heavy metals and call for a progressive reduction of their discharge. Although Mexico has an Emissions and Transfer of Pollutants Register (RETC for its name in Spanish), established in 2004, it still remains optional and is limited in the amount of chemicals listed. If it became mandatory to adhere to it, and if it were broader in its scope, it could greatly reduce the emissions of dangerous chemical substances. In addition to making it compulsory to set up a register of discharges, emissions and leaks of dangerous substances readily available to consumers and public in general. To ensure that these measures could be implemented successfully, the law should mandate frequent audits, giving technical assistance and maybe provide financial incentives as well as promoting research in supporting fields. Lastly, it goes without saying that if nothing else, the government should make sure that current laws are properly enforced and that in the future they include mechanisms for checks and inspections with clearly defined sanctions (Brigden et al., 2012).

Chapter 5 General conclusions

As a way to begin this final section it would be convenient to remember the objectives set for this thesis. The general objective was to explore the link between consumer behavior trends and the production of more sustainable garments in Mexico. Although the results of this investigation were not positive, there were still some valuable findings.

I Findings

The search was for proof that Mexican consumers were a driving force behind the greening of the garment industry in Mexico. The journey to get to the answer to that question provided findings related to the particular objectives and are as follows:

- Define consumer behavior trends in Mexico towards sustainability in fashion.

Mexican consumer behavior in fashion is not walking towards sustainability. There is a lack of awareness in Mexican consumers about green alternatives and their advantages. There is little knowledge about what goes behind the production of each item, and all four stages -source, make, use and last- are not the main concerns when shopping for clothes. Also, with the countries' current economic status, most consumers have turned to more affordable alternatives. They are concerned with satisfying their want for affordable fashionable items to expresses their personality and social image but the process behind their clothes is not one of the main concerns when shopping for clothes.

As it was reported, around half of all purchases, are done spontaneously, without thinking or doing much research. These impulse buys happen more often in people with higher incomes. Regrettably, those who have to plan their purchases are not able to afford the higher prices of sustainable fashion.

For Mexican consumers to be able to purchase sustainable garments they first of all need a positive attitude towards it. They ideally have time to think about their purchases beforehand, and not just impulse-buy whatever is on display in the stores. Last but not least, they should feel like it is easy for them to do so, which means that sustainable alternatives should be made easily accessible -both in availability and price. Because values may not translate in the decision-making process it is important that factors such as habit, lack of information, demographic characteristics, economic status, culture, lifestyle and personality, brand strength, among others, are all aligned towards sustainability.

- Outline the current structure of the garment industry in Mexico.

From this section it was concluded that the garment industry in Mexico has historically lagged behind. For the last 150 years, technology and innovation has come from other countries, either by foreigners establishing companies in Mexico, through the extended workbench or through international trade fairs, which producers attend to buy ready-made advancements. New technology and machinery arrive in Mexico when they are already in the mature state in developed nations and in many occasions, innovation comes from external international sources as well.

Even when companies report feeling threatened by the arrival of Asian-made clothing, when the time comes to source their fabrics, they do not consumer domestically-produced fibers and instead purchase them from Asian countries. Although there may be a difference in price, the advantage of having (synthetic) fiber production in Mexico is still untapped by all three producers interviewed.

Although there are many old-fashioned companies, there is also a growing number of companies that are putting Mexico on the map in terms of design and originality. Even then, the competitive advantage is not coming from the adoption of sustainable practices.

- Explain the importance of consumer behavior and how it is linked to the processes of greening of industry of the garment industry in Mexico

Be it enforced by legal regulations, as a response to stakeholders or to satisfy consumer demands, sustainability has begun to be embraced by companies and some have even adopted supplier assessment schemes that include social and environmental standards.

From examples outside of Mexico, it is clear that with the current structure of the garment industry, the consumer is king, but it appears that at least for Mexican producers today, that only applies for the design of the products. International campaigns have not permeated the domestic garment industry, at least not in small and medium enterprises.

Currently there is no greening of industry to speak of. It feels like this relationship is stuck in a vicious cycle, where consumers do not see sustainable alternatives in store, defining their perceived behavioral control. At the same time, producers are not manufacturing these products because they are not being demanded by their market.

II Recommendations

In the final section, there were possible alternatives towards the greening of industry, but perhaps the best results would come from a combination of those. The greening of the garment industry cannot depend just on consumers. In their everyday lives, consumers have lives and many preoccupations and thus don't have time to do research, interpret and find products that align with what was found (Young et al., 2010). There is no doubt that consumers are an essential part of the garment industry, but there are still too many barriers to sustainable garment consumption other than just demand. The first step would be to improve and strengthen environmental education, at all levels. This would at least give a positive attitude so that when the time comes, consumers are aware of what sustainability even means.

The route towards the greening of industry should be complemented with stricter and updated governmental regulations Likewise, companies should be made aware of the many advantages of more sustainable production and should be encouraged to make use of them, to incorporate ecolabels, recycling and upcycling techniques and any other tool possible to help pave the way towards a greener garment industry in Mexico.

I have the hope that in a near future, measures like these will become widespread throughout the global garment industry. Companies need to grasp that the benefits of the greening of industry would be felt in their wallets. When referring to the product life cycle, it is possible that they are still in the growth stage, but as soon as it reaches the maturity stage and is available in developing nations alike and it just becomes something indispensable to maintain competitivity, this would lower costs and make it available for consumers of all incomes.

III Further research demands

While conducting the research needed for this thesis, many gaps were found and have already been mentioned in the introductory chapter. They provide a clear guideline as to what research could follow. Due to time restraints, the focus was just on the make stage in the Mexican industry, but it could be helpful to expand it to include the other three stages in detail.
In addition to that information regarding consumer behavior and its links to production, there could also be some research on what it would take for the garment industry in Mexico to become a cluster and collaborate and start generating knowledge and innovation instead of just receiving it.

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A note to my fellow consumers:

Thank you for making it this far. I know, it can be hard to read an entire thesis.
I write to you in hopes that this project of mine has in some way shape or form taught you about what is behind a piece of clothing.
I know that every day we are bombarded with ads and photos of beautiful garments and they are made in such a way that makes us want them.
I know that sustainable garments are very expensive and not everyone can afford them.
I cannot ask for a boycott on the entire garment industry as that would have terrible economic consequences for all of the actors involved along the production chain.
But I can ask for some reflection and thought before purchasing.
Ask yourself if you really need to buy it.
I know that, at least for me, the answer is not always yes, and what sad life would it be if we couldn't shop for clothes.
So, when you do find yourself shopping, look at the labels.
See where it is made.
See what it is made of.
Do you think the quality/price ratio is fair?
Will you wear it at least 30 times?
Will you take care of it and make it last as long as possible?
And, after your time with the garment is over, don't just toss it.
Donate. Thrift. Upcycle.

Thanks,

Arantza

Annexes

IV References

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V Interviewee profiles

COMPANY	PERSON INTERVIEWED	ROLE
FALUSI S.A DE C.V. LO´FASSI	Sinué Soltero Estrada	Owner and CEO
GRUPO KAROSSO KAROSSO	Valerie Giovana Cisneros Sánchez	Design Manager
OCELOTE OCELOTE	César Flores Valdez	Owner and CEO

VI Interview guideline

Datos generales	
Nombre de la empresa	
Nombre de entrevistadX	
Puesto/posición	
Ubicación	
Mercado objetivo	
Edad	
Género	
Nivel socioeconómico	
Nacional /internacional	
Supply/production chain	
Plantado y cultivo de materia prima	
Tejido de fibras (a tela)	
Terminado de telas y distribución	
Diseño de la ropa	
Producción de la ropa	
Distribución	
Venta	

Questions asked:

Source:
¿De dónde provienen los materiales usados?
¿Tienen alguna certificación?
¿Qué factores influencian la selección de uno sobre otro?
¿Se usa algún material de segunda mano o reciclado?
¿Se usan fibras naturales, sintéticas o híbridas?

Make
¿Cómo determinan qué se producirá?
¿Tienen algún canal de comunicación directo con los clientes?
¿De dónde provienen los cambios/innovación en la forma de producción?
¿Cómo caracterizaría su relación con sus competidores?
¿Hay canales de comunicación/cooperación entre ustedes?
¿Producen alguna línea/producto sustentable/ecológico?
¿Qué tipo de prestaciones reciben sus empleados?

Use
¿Cuántos usos se pueden obtener de sus productos?
¿Cuáles son las indicaciones para obtener el mayor/mejor uso de sus productos?
¿Tienen alguna campaña para promover el cuidado de la ropa?

Last
¿Tienen algún programa de devolución/reciclaje de ropa?
¿Qué se hace con el excedente de ropa?

Final questions:
¿Cómo definiría la sustentabilidad en la industria del vestido?
¿Cómo ve el futuro de la industria del vestido en México?

VII Excerpt of transcript

Ocelote interview with César Flores Valdez. Make section.

…
¿Qué determina lo que van a producir? En una nueva colección como deciden si van a hacer esto o aquello?
Mira justo es lo que a mi me funciona. No se si has visto en Netflix el documental de Steve Maden. Velo, te va a gustar y especialmente ahorita que estás haciendo tu tesis de eso.

Prácticamente lo que te dice el documental de Steve Maden, porque no lo había hecho yo formalmente. Yo tengo afortunadamente la ventaja de tener estos puntos de venta y que no estoy la verdad tan casado con la industria de la moda, en cuanto a tiempos, y en cuanto a fechas, y en cuanto a esquemas de trabajo. Hay muchos paradigmas detrás, en cuanto a cómo se debe trabajar y que en realidad no creo que sea necesario. Por ejemplo, yo lo que hago es que estamos constantemente en desarrollo de nuevos productos, no tanto en presentación de colecciones. Ahorita es la primera vez que vamos en presentar en Fashion week, y si estamos haciendo una colección especial para Runway , pero de entrada, yo se que ahí van piezas que no van a ser comercialmente exitosas, tanto por los materiales, por los costos, por el tipo de prenda que estamos apostando un poquito más a moda. Pero lo que hacemos generalmente en el taller, es que cuando sale un desarrollo, lo primero que hacemos es que mandamos los "samples" a la tienda. Entonces, eso nos da una primera pista de la recepción que tiene el producto, del fit, si rota. Por ejemplo, si yo mando los desarrollos a la tienda y no se mueven en un mes, sé que es un producto que no va a tener éxito sabes. Entonces me da tiempo de ajustar telas, de ajustar colores , de ajustar fit para que cuando realmente salga al mercado, cuando realmente ya el producto esté en el Palacio, ya sé que por lo menos hay un cierto tipo de personas que lo recibe bien, entonces así es como hemos estado trabajando en Ocelote, y se ha hecho también un atractivo porque saben nuestros clientes que si vas al show room de Ocelote, pues a lo mejor hay prendas que no va haber siempre sabes, entonces eso me ayuda a darle variedad, me ayuda a darle como rotación, tener fresca la marca y no tampoco presionarme o casarme con que se tiene que hacer una producción mínima de tanto sabes.
Nosotros ahora que entramos al Palacio entramos con la colección cero. Cada colección de Ocelote, los productos más vendidos se van a la colección cero, entonces ahorita nosotros tenemos un archivo de 60 esenciales, de productos que están en constante demanda sabes. Tenemos como la línea chamarras de piel, como la línea T-Shirt, los pantalones, o sea, hay cierto tipo de productos que ya es una demanda constante por así decirlo. Yo ya sé que si llega clientela extranjera, no tiene caso que sea una colección nueva o pasada porque ya no están tampoco fijándose en eso, sino que se están fijando más en el contexto general de la marca y de lo que la marca ofrece, entonces así pueden ser productos de hace 3 años, como productos que apenas se están testeando sabes . Creo que también es algo nuevo en cuanto a oferta de marca que no es tampoco algo cuadrado y me gusta que se remonte un poquito más al tema de custom made, de sastrería, cuando a lo mejor es una simple T-Shirt sabes .

Entonces, ¿el showroom es su canal de comunicación más directa que tienen con sus clientes?
Exacto

Si es que van a empezar a trabajar con una nueva tela o a producir de alguna manera que nunca lo hayan hecho antes, ¿estos cambios o esta innovación de dónde viene?

Eso si viene sobre todo de la diversificación que le queremos dar a la marca, por ejemplo hoy que ya tenemos 3 años en el mercado,y que ya tenemos una cartera de productos grande, como que el reto ahora es la innovación justamente, entonces son cuestiones de uso, por ejemplo, ahorita a lo que le vamos a apostar, que creo es muy fuerte, es el deportivo, son apuestas, no es algo que sepamos que vaya funcionar per se, pero ahorita la próxima colección de esenciales deportivos, que no generalmente van a ser para hacer ejercicio verdad, pero creo que hay una tendencia muy fuerte de sportwear en streetwear, entonces vamos a sacar esta parte, estamos jugando con, por ejemplo mandamos a hacer todo este tema de elásticos brandeados, bordados y es en lo que estamos trabajando ahorita y probablemente en la próxima que no teníamos absolutamente nada de mezclilla, que es un mercado también grande, me gustaría incursionar en el tema deportivo. Pero en cuanto a innovación, la verdad creo que es únicamente fijarte donde están las partes grandes del pastel. Hay mucha compra de accesorios, de zapatos, de bolsas, entonces como que no hay que buscar tampoco el hilo negro, o sea, más bien para nosotros, es encontrar un producto de calidad que encaje en una industria que tenga volumen de ventas. Ahorita si me preguntas que me gustaría hacer, pues me encantaría hacer accesorios, bolsas de piel, me encantaría hacer mochilas, porque se que son productos que tienen demanda sabes.

Más allá de lo que van a producir, de algún modo cambian la manera en que producen, algo que por ejemplo si alguien está haciendo en Japón blusas de tal manera, o alguien igual aquí en México que está haciendo, como cambiando, eso no?

No, eso no. Eso es justamente lo que menos trato de hacer. Trato de mantenerme completamente aislado de lo que esté trabajando cualquier otra persona, porque por lo mismo, no me interesa la moda, ni la competencia directa. Yo soy mas research, sobre todo del pasado.

¿Cómo caracterizarías la relación de Ocelote con sus competidores?
La competencia para mi me sirve para dar parámetros de precio y de calidad sobre todo, más allá de otra cosa, la competencia me da parámetros de imagen, de calidad y de precio. Me gusta estar al pendiente de las marcas para ver qué tipo de modelos están usando. Para ver qué tipo de fotografías están haciendo. Para entender el tipo de siluetas y colores pero no para tratar de imitar o para tratar de copiar modelos de producción o cosas por el estilo .

¿Dirías que hay algún nivel de comunicación o de cooperación entre ustedes o no?

De hecho en la industria mexicana, yo por ejemplo tengo un chat donde tengo , creo, el 80% de los diseñadores emergentes en México . Estamos en el chat Alexo Iribarri, Chris Goiri, Mcartie, Big Magnolia, Chihua, quien mas, Lorena Sarabia, este, todos los que están ahorita haciendo algo importante o relevante estamos en ese chat y todo el tiempo estamos, oigan saben de alguna costurera, saben a dónde puedo mandar a hacer etiquetas. Yo por ejemplo que tengo el taller, de repente digo, tengo un espacio de producción a alguien le interesa algo, porque siendo microempresarios o emprendedores en la industria de la moda global, es una competencia enorme y si no nos echamos la mano entre nosotros, es mucho más difícil . Entonces creo por eso también, que sin hablarlo sin hacerlo formal, cada quien tiene muy específica su manera de trabajar. Por ejemplo yo sé que no le puedo pedir un contacto de mezclilla a Shilvert porque se que para él la mezclilla es su fuerte. Pero si le puedo pedir unas etiquetas o si le puedo pedir que me eche la mano donde comprar, no sé ,hilos, me explico. Como que solitos hemos entendido cuales son nuestras limitantes, Yo por ejemplo no le pasaría mi contacto de algodón a nadie, pero si le puedo pasar mi contacto de piel, porque sé que las pieles se consume aquí en México. Entonces como que la competencia, sobre todo aquí en México se ha convertido más en un apoyo que en una competencia directa, sobre todo en un mercado emergente como este de moda nacional, de consumo nacional, hay sobre todo mucho pastel que crecer, antes que empezar a ver a tu posible competidor sabes.

Dentro de lo que producen ahorita, o tienen pensado en el futuro hacer una línea de algún producto que sea sustentable o ecológico o algo así?

Me encantaría. De hecho ya quiero explorar opciones, porque me imagino que ya debe de haber opciones accesibles a un precio justo, que me permita también a mi tener un producto en el mercado competitivo sabes. Como que anteriormente cuando inicié la marca hace 3-4 años te digo, fui a ver opciones, las diferencias en costo de la materia prima entre ser un textil sustentable o no, había mucha diferencia en precio sabes. Creo que debe haber ahorita ya más opciones y mejores precios y me encantaría ya hacer ese cambio, porque sé que el consumidor también lo percibe de alguna manera. Ahorita me he estado confiando mucho y creo que ya estoy en mi zona de confort, que el simple hecho del diferenciador es que sea producto mexicano. Yo creo que ahorita aquí en México, la mayoría estamos teniendo un boom de ventas con extranjeros. Entonces creo que si aparte le damos un plus de que es producto mexicano más sustentable, entonces creo que va a ser algo muy bueno.
El tema de lo sustentable no creo que sea únicamente en el textil. Independientemente creo que hay muchos productores en textiles que no precisamente están haciendo que la industria sea mala y sobre todo lo que yo siempre trato de transmitir, la sustentabilidad también está

en la manera de producir y en la manera de trabajar. Nosotros con Ocelote, yo creo que si me preguntas, tenemos menos de un 5% de desperdicio. Porque nunca, nada de lo que se produce, a diferencia de otras marcas que si salen fallas técnicas se tira la prenda o se rompe o se hace mucha basura. Nosotros tenemos muy poco porcentaje de desperdicio. No tenemos tampoco rebajas abruptas de precio que hacen que se devalúe el trabajo también de la gente sabes, entonces, para mí el tema de la sustentabilidad va más allá que tener telas orgánicas sabes. Creo que es un plus y creo que es algo en lo que se fija la gente, pero hay algo más que ser una marca sustentable.

…

VIII Codes used in MAXQDA and their recurrence