

UNIVERSIDAD DEL ROSARIO



**ASPECTS THAT SHOULD BE CONSIDERED TO IMPLEMENT DIFFERENT
METHODS OF PAYMENT IN LATIN AMERICA**

GRADUATION PROJECT

SOFÍA VALENTINA DÁVILA MIRANDA

BOGOTÁ D.C, COLOMBIA

2020

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SOFÍA VALENTINA DÁVILA MIRANDA

ADMINISTRACIÓN DE NEGOCIOS INTERNACIONALES

MENCIÓN: MERCADEO

BOGOTÁ D.C, COLOMBIA

2020

Oath of Personal Work

I Sofía Dávila Miranda declare that the following Graduating Project for the master's thesis in the Master of Science International Management with specialization: Marketing, is product of my own work. No part of this research has been submitted in the past for publication or for degree purposes.

All this project is developed by me and it is support directly or indirectly by external sources that are correctly cited as such.

Acknowledgements

Many people helped me and supported me for the develop of this project, thanks to my parents and friends that are always pushing me to be better and to accomplish all my goals with greater expectations.

Special thanks to my GP Supervisor DR. CHUAH Phoebe, who always was willing to answer my questions and to help me to follow the track of my investigation.

Abstract

This project contains a deep study of countries in Latin America to determine if culture is the main aspect that companies should consider when implementing different payment methods. For this purpose, all indispensable aspects such as culture, politics, economics, the retail industry situation and the characteristics of each consumer behavior, would be take into account to understand how each of these countries work and how viable it is to implement these new services on them. As part of the growing development of Latin America, these systems would increase not only the customer satisfaction during the purchasing process but also it would bring a push up for their economies and their businesses to raise.

To support all the information registered above, different companies who implemented the system in the different countries will be studied for bringing the different methods of payment to the countries. For this reason, all the process they developed for implementing it in Latin America would be analyzed carefully and also compared with other companies that does not implement the different methods of payment, to finally determine if the application of this new services is supporting each enterprise's development.

What this project aim is to determine which aspects should be the most important to consider, regarding each of the countries studied, when a company is aiming to implement different methods of payment and to finally establish if these new services actually increase the customer satisfaction and the company's progress.

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1. Introduction of Business Problem

This project started from the perception of a foreigner in a developed country. Emerging countries had been always one step behind developed countries in anything concerning development; The lack of resources had made the process slow for some countries in Latin America and had made that the possibility of access to a new technologies and innovations become more difficult with time.

What this project aims, is to encourage the retail sector to implement an innovative system that contributes with the development of countries in Latin America (concerning the selected countries: Colombia, Chile, Mexico and Brazil), those who represented the highest growth rate of development in the past years, according to the United Nations study, to contribute with the implementation of services that brings efficiency to the different processes of this sector. Customers in these countries had seen the benefits and advantages of such resources (self-checkout system) and how it encourages their own countries to increase their development with the application of those. (United Nations, 2015)

The business problem presented in this project, concerns the possibility of the implementation of different methods of payment in the retail industry that can improve the citizens life and most important, the consumer experience while buying. It is important to consider different aspects of these countries that a retail company should take into account before implementing those facilities.

The objective is to determine if Latin America is ready to implement this technology in their daily life, and most importantly, to discover which factors should be localized for the people to adjust better to this.

Research Question: **Is the implementation of different methods of payment (as self-checkout at stores, screen in restaurants and more) viable in Latin American?**

2. Literature Review

2.1 Retail Industry Evolution

The retail industry is in charge of providing a range of products from the companies to the end customers. Retailers are the connection between the wholesalers and the client because in a same place, they are able to satisfy the different customers' needs. For this reason, this industry is over continuous competition, and it is driven by its customers change of needs, which leads it to be in constant adaptation to its customers purchasing processes and decision making to make them engage with the retail company.

The retail industry started in the 18th and 19th century, when people at villages started their own shops where all the workers from urban places brought their products to the shops to make easier the purchasing process for all the citizens. When this first retail shop was implemented, all people who lived in the city and their surroundings were able to find any type of product at any hour of the day in only one place: the village shops. Back then, the processes for engaging the customer to the shop (also the start of some marketing and advertising processes) consisted by physical proximity with the customers. During the Industrial revolution a lot of market innovators started using direct mailing, catalogs and more ideas to attach the customer and being able to inform them about the characteristics of the product and all the categories they were offering. Concerning the payment, the system was based on the exchange of gold coins, written checks, bitcoins or any other symbol of currency that the people could exchange for a "price" assigned by

the retailer for certain product. (*Retail revolution and the village shop*, <italic>c</italic>. 1660–1860.: *Sistema Integrado de Búsqueda*, n.d.)

Nowadays, the retail industry is based in all the changes in consumer behavior and their needs with time. From the 1990's to now, retailers have developed strategies of cross-channel retail, this consists in providing the opportunity to the client not only to review information about their products via online but also to buy them directly in their web page, without having to go to the store and buy it directly in there. These strategies not only created an attachment with the customers (by satisfying their need in minutes) but also it created a relationship with the customers where they cannot even notice the difference of the offline and online shopping. By implementing this new model, retailers where able to manage two different processes (buying and advertising products) through the same channel with the use of internet.

In addition to this, retailers now are able not only to provide local products to its customers but also to import products that they cannot find in the local shops and that bring a plus to the customer satisfaction for their process of buying.

On another hand, retailers are implementing any kind of technologies, such as CRM, to create a deep study of their customers profiles and like that being able to create smaller segments. When retailers have cleared their target market, it is easier for them to bring the clients the accurate advertising campaigns according to their particular needs. By this not only the customers are able to know the products, competitors and prices but also the retailers are able to get to know better

their customers. Also, retailers are able to use new sources of e-commerce to establish a bond with the client and to also to support all of their processes with the information they collect from them. Concerning the payments, customers also changed the checks and bills to “nontangible money”; this means that people no longer live with the cash in their pockets but with the money they deposit in their bank accounts. By this the customers are able to pay with their credit cards which discount the money directly from their accounts and transfer it to the retailer account. This method of payment was an advance in many sectors on the market and at the end it simplifies the processes of payment and make it easier for everyone. (*Toward Cross-Channel Management: A Comprehensive Guide for Retail Firms*, n.d.)

2.2 Retail Industry in Latin America

The retail industry had change in Latin America over the past 20 years. With the implementation of new technologies, retailers were able to engage and create a direct relationship with its customers. In Latin America most of the retailers working had changed and adapted to the modern way of consuming of their main target customers. In Latin America, consumers had increased their confidence due to the strengthens of their economies growing, which leads them to spend more, for this reason, retailers have the challenge of attracting and providing them the best buying experience. In addition, retailers must adapt to the fast-moving trends that run the market, so their job is also to bring different strategies through e-commerce and more facilities, for them to assure the amount of merchandise they should offer. *See Appendix A

In Latin America, consumers are following trends to which retailers must adapt and by doing this, the consumer's expectations grow; retailers had been aware of those changes and work to match them to each of the customer segments of the market. (*Confianza del Consumidor en LATAM Q4 2018 – Nielsen*, n.d.)

The retail industry in Latin America has been adapting to different methods of payment that best match each customer need. As it was described above, people around the world started trading since -1200 B.C as they needed a currency to exchange goods that they needed to survive; first, existed the exchange with the goods itself (ex. A bag of rice for a bag of salt) after that, the gold coins and furthermore when the bank institution was created, the bank notes were used as paper money that could be exchanged for gold coins. From 1950 to 2000 the first credit card was introduced in the market by USA, followed by the UK and then implemented all around the world. By 2002 the credit and debit card were circulating in countries with a strong economy system; the chip and pin card was created, but it was not until 2009 that the credit card increased the customer's trust and was implemented in Latin America. *See appendix B

In addition to these advances in technology, the apparition of internet introduced the online payment, this was a significant change for almost every industry in the market. All industries had to adapt to the new methods of payment and also adapt other processes (such as e-commerce) to meet the customer's needs. In this decade the majority of customers had access to a mobile phone from which they could buy online any type of product or service; for this purpose, methods like PayPal was created (1998) to facilitate transactions and provide security and trust to the clients while buying online. *See appendix C

2.3 Different Methods of Payment in Latin America and the World

Concerning Latin America retail sector, the methods of payment of any type of credit card nowadays is completely accepted and trusted by the majority of the population. Retailers keep accepting cash and any type of debit and credit cards; according to TecnoCom Report, 85,4% of cards are used in transactions in Latin America. (*The use of cards in Latin America keep growing*, n.d.)

The first implementation of the new innovation of retailers: The self-checkout systems, first it is important to understand how the process of purchasing (for example in a grocery shop) was. The firsts grocery stores were completely managed by the worker, so the client only had to go to the store with the list of items needed and the worker was in charge to select them and weight them to determine the specific price. Nowadays (since 1917 in Tennessee) in Latin America and all over the world that job is done 50% by the client and 50% by the worker; the client selects the items, and the job of the worker is to register each of them and ask for the money.



Figure 1: First self-service grocery store.

Source: (*Piggly Wiggly - The first true self-service grocery store*, n.d.)

Looking for a more efficient system, retailers mostly in Europe and North America, executed an innovation for the process of payment (The system of self-checkout) for retailers in supermarkets, pharmacies, fast food stores and any other type of shops where the customer could be able to pay its products without the accompaniment of any worker. This meant that now the process of payment at a shop was going to be reduced 80% by the client and 20% by the customer.

Whit these implementations, what retailers were looking was to adapt with time to all the customer's needs and brought to the market different facilities for them to adapt better to their processes of purchasing. Retailers aimed to implement them to increase the differentiation from its competitors and create a higher value for the customers at the in-store purchases and at the same time provides the opportunity for the retailers to decrease their overall operational costs. The reduction of operational costs, as any other sector in the industry, is what retailers aim for and it is the reason why they started implementing these facilities that contributes to an increase of their income level. In addition to this, another important fact that retailer consider for the employment of the system, was the lack of customer satisfaction with the registers machines as they had to spend more time doing long queues (which high risk of abandon the purchase, which means loses in sales for the retailers) and the fact that they had to directly enable communication with the worker, which sometimes didn't bring the best shopping experience. For the contrary, with the self-checkout system, the communication disappears completely and the customer is able to buy their products by themselves at a faster time. (*Self-Checkout - History*, n.d.)

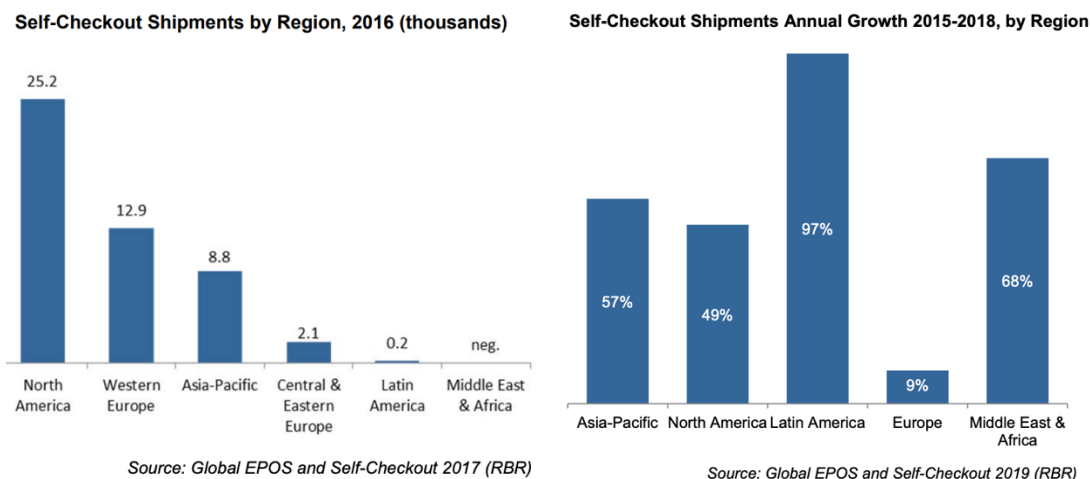
The first self-checkout machines were created and patented in 1990's but it wasn't until 2000's that the system was available for almost all developed countries, and with time these processes started to gain the trust and acceptance not only of the customer but of the retailers. Once it started to be implemented by some shops the clients themselves were the ones asking for the facilities in other stores (like fast food shops and malls). (*Self-Checkout - History*, n.d.)



Source: Sofía Dávila

Figure 2: Client using a self-checkout machine in France.

In Latin America, these systems are barely seen due to the higher amount of innovation and technology that the process itself regards, but consumers are more aware of these systems applied around the world and are aiming to use them. Retailer's companies started to implement the system by pilots recently in Latin America, taking into account a study developed by Richmond Road London, which is a leader company provider of services like consulting and strategy research in retail innovations and technology; it is notable the advance of the implementations in the last years. Concerning the graphs below, the change of 0.2 shipments of self-checkout machines for Latin America in 2016 and the considerable growth of the shipments from 2015 to 2018.



Source:(RBRLondon, n.d.)

Figure 3 and 4: Self-checkout shipments 2016 – Self-checkout shipments growth 2015-2018

In Latin America there are other types of self-checkout services that had been executed in the recent years. One of them is the Touchscreen Solutions, that are being applied by mostly fast foods retailers such as Mac Donald's; the system was first implemented in Argentina (2016) and it works with a touch screen in which customers can develop directly not only the selection of the products they want but also to pay for them in the machine. The company was looking forward to provide a different customer experience and make it fun for the clients. (*GOING APE OVER APPS.: Sistema Integrado de Búsqueda*, n.d.)

There are other methods of self-checkout services that companies are looking forward to implementing in Latin America such as: mobile scan and go and scanning stations; but for the moment companies are going forward to implement the ones explained before.

2.4 Factors that Drive Customer Satisfaction

After understanding how the retail industry works and how the companies started implementing different innovations to its processes, specifically, the self-checkout system, it is important to understand how those technologies improve the customer satisfaction during their purchases.

To understand what drives the customer satisfaction, it is indispensable to understand what drives the purchases of Latin Americans. According to author of the article *Culture Matters*, the process of purchasing in Latin America is driven by two main aspects: history and culture. Latin American countries obtained their independence from Spain and Portugal and after almost two centuries, these countries are still engaged with the assumption that the conquerors stole all their richest and this is the reason why countries as South Korea and Singapore, who gained their independence after them, are completely developed countries by now, while Latin American countries are still emerging. It is understandable that Latin Americans feel attached to some events from their past and consider them important in their actual way of living. This kind of appreciations drives their purchasing decisions regarding to how important some brands are for them and explains why it is difficult to implement new technological advances such as the new methods of payment, because change represents big risks in their culture. (*Culture Matters: The Real Obstacles to Latin American Development: Make your metasearch in the area below*, n.d.)

Regarding the customer satisfaction, during an interview of the vice-president of one the largest retail companies in Latin America NCR, Roger Bigio, explains the biggest releasement of

this technology (self-checkout service) in countries as Mexico and Colombia, he explained that were customers the ones demanding to retailers for implementing this kind of services, and mostly middle classes are currently active to start using the technology. He explained that this technology proved to increase the customer satisfaction and the affiliation of this with the company, but it also has the intelligence of recover important information about the customer purchases and their behavior during the purchase. As Bigio determined, this information is completely indispensable for people working in the retail industry and is information that is difficult to find by the normal ways of payment. (*NCR impulsa la implementación de nuevas tecnologías en Colombia para el sector Retail.* | *Global Media IT Colombi*, n.d.)

The customer satisfaction increases because these technologies makes easier and direct the process of purchasing. First, as it was expressed before, customers create a bond with the retailer as they feel they understand their needs and know what they are looking for without asking, by this, for example, the process of having to wait during long queues is completely gone and they appreciate that the time they lose waiting is converted to almost nothing. Another fact that was mentioned before is that the clients not always want to have direct interaction while buying, they want to avoid the “hello” and “good afternoon”, with the self-checkout machines the communication disappears. On another hand, the customers value the fact that the shop is not full all the time, that brings comfort for them to pick the products freely, and this is enhanced with the machines as the productivity in the store increases.

Of course, the implementation of this brings also benefits to retailers and workers. For the retailers, the production increases while the operational costs decrease, this produce that the

company improves their efficiency, and for workers this implementation means that they would have to know less about each product (price and reference) as the machine does all the work; in addition to this, workers get to achieve other tasks (like organizing the shelves) rather than just scanning every product that the client is going to buy.

The implementation of this services is really beneficial for retailers and also for the consumers, that is the reason why the purpose of this project is analyze the possibilities of implementing the self-checkout services to improve the quality of the sector and the customer satisfaction.

3. Methodology

This project is based on an explanatory study of Latin America current situation. This sample was selected as most countries in Latin America had represented a continuous development of ITC growth, which is also expected to keep increasing by 2022. For the development of this thesis, the countries Colombia, Chile, Mexico and Brazil of Latin America would be the focus of the research as those represent the highest scores of the ICT index of development. (• *ICT Development Index in LatAm 2017* | Statista, n.d.)

The structure that the project will follow is to divide the respective research by countries; this will determine which aspects are indispensable in every case and which are not important to take into account for implementing new technologies in the process of purchasing in retailers.

- **Politic Situation:** It will consider important political changes concerning the retail industry and the customer purchases. The political situation is considered indispensable to understand the level of trust of the consumers in their mandators and if they see implementation of new technologies beneficial for the country.
- **Economic Overall Status:** This aspect is completely indispensable as technology and innovation requires a huge amount of investment from companies. This factor clears up the stability in which the country is at the moment.
- **Cultural Aspects:** This factor is considered indispensable to determine and support the information obtained from the research; from this we can connect directly some aspects

that drive the customer behavior while purchasing and how much are they willing to implement the new system.

To collect better results and an approachable situation analysis, the theory of Hofstede's will be applied with the purpose of obtain a cross cultural study and determine the strongest influences that drives each culture behavior with the purpose to establish if each country is ready to the implementation of new systems of payment or not. Furthermore, to complement the culture study, the Motivation-need Theory of Maslow will be applied to analyze all dimensions in a culture's society that they consider as basic needs. This, with the purpose to define the essential desires and requests and consider if the implementation of new technologies is considered as a cultural upgrade of their basic need's satisfaction

- Retail Industry Structure: It will show the process of retail industry and how it is driven at the moment. Moreover, it looks to understand the degree of importance for they have for consumer and if retailers are looking forward to implementing innovations and if not, what aspects are retaining them to use the new technologies.

After collecting as much data as possible to achieve accurate results of the situation in each country, different companies that apply self-checkout systems will be studied and be taken as a model for implementing different methods of payment in emerging countries of Latin America. It is important to consider that this method is pioneer innovation in Latin America's retail sector (Fast Food companies, Hypermarkets and Supermarkets, Discount stores, Warehouses stores, Malls, etcetera) where the customer can choose their orders and pay them directly using a machine.

What the project looks in this stage is to determine which processes the companies determined and studied before considering the implementation of the new method of payment and which factors where the basis to it.

What this project is looking for with the information acquired by the process of implementing self-checkout services in the stores, is to compare it with other retail companies that hasn't applied the technology. This comparison will provide a wide explanation and demonstration of the possible viability of the implementation of new methods of payment (self-checkout ones) in Latin America. The results determined by this will provide an answer of our research question and will clarify which aspects retail companies consider when investing in technology and if it truly brings benefits not only for clients but for the company itself.

All the information considered to support the research explained above will be collected through interviews, field observations, company documents, press reports and articles from primary and secondary sources to contribute the analytical and critical analysis developed in this project.

4. Case Study

4.1 Colombia



Source: (*Colombia - Google Maps*, n.d.)

Figure 5: Colombian map

4.1.1 Country Description. Colombia is the number four larger country situated in the north part of south America and it is bordered by Panama, Venezuela, Ecuador and Brazil. The country has been hit by violence conflicts since almost two decades ago, its problems with guerillas, cartels and drugs are the major aspects for which it is recognized worldwide; however, in the actuality, the country had made significant improvement to recover its national security. (*Colombia country profile - BBC News*, n.d.)

Colombia is recognized for its natural resources and the enormous diversity that covers the wide range of ethnicities and traditions, the biodiverse and more. Also, it is represented by coffee, flowers and the happiness of Colombians.

4.1.2 Political Situation. Colombia is a unitarian republic and it is governed by a constitution executed in 1991. The president has a period of 4 years to rule the country and it is accompanied by the congress and a constituent assembly. Alvaro Uribe is the most recognized ex-president of the country as well as his party the Democratic Center, which is also followed by the actual president Ivan DUQUE.

Uribe is well recognized for its operations against FARC (Revolutionary Armed Forces of Colombia), group that had a reformation from its military label to communist political party.

Over the past years Colombia had managed its fiscal and macroeconomics deals with extreme care, reason why the investment in the country had decreased since 2013. The investment had dropped significantly until 2017 where the development growth represented 3.3% in comparison with the past years. It was expected that in 2020 the investment for innovation accelerate its growth, but with the actual situation of the COVID19, it changed and now the investment and private consumption will be affected.

However, the government have plans to increase the country's development during 2021 and 2022.

(South America :: Colombia — The World Factbook - Central Intelligence Agency, n.d.)

(Colombia: panorama general, n.d.)

4.1.3 Economic Status. Colombian economy has been a center of interest due to the important growth of the country over the past decades, which allows that the international investors see Colombia attractive for investing. Its principal mainstay for the country's economy is the exportation of coffee, but over the last 5 years it had been recognized internationally for its emeralds, oil and its flowers.

According to the Central Bank of Colombia, the country was expecting a boost for the next years, considering investing in new technologies as the most important driver for the development of the country. The objective was to focus its force into taxes' reformations and projects where the country could increase its growth. By 2020 the country expected to continue with this idea, but the Covid19 situation made the plans to be delayed for at least one year. (*Current Situation of the Colombian Economy - Report By the Governor of the Central Bank of Colombia | Banco de la República (banco central de Colombia)*, n.d.)

In addition to this, the inflation is expected to be held in the central bank's average expectation, but due to the drop-in oil prices it is probable that affects the GBP of the country.

*See Appendix D, to see a graphic explanation of Colombian annual growth of its GDP.

As it is stipulated by the central bank of the country, Colombia was ready to invest on projects that were looking for the development of the country, but most importantly they were financially prepared to assume all costs that these implementations were going to bring.

4.1.4 Cultural Aspects. Colombia is a country that since its beginning was influenced by violence, when the Spanish discovered their lands and started changing their traditions, imposing its religion and language. Over the years as it was explained before the main topic for which the country was recognized internationally was because of the violence. However, in the past decade the country had made all efforts to show the great potential that the country has.

Colombian culture has its roots from Europe, Africa and indigene cultures which makes its customs and traditions unique from other ones.

According to Hofstede's Insights the most significant drivers of Colombian culture are:

- Long Term Orientation: This insight means the degree to which some countries are attached to its past. Colombia has a score of 13, which means their link with the past is really strong in every aspect, which also makes it difficult for people to prepare for the future such as being open for the implementation of new technologies, or new methods of education. (Hofstede, 1980b)
- Indulgence: This is the degree to which people are able control their instincts and desires considering the way they are raised. Colombia scored 83 which makes it a considerably indulgent culture, this means they tend to be positive and with no regrets about doing what makes them enjoy life. This also means people are willing to spend more money to have more satisfaction of those things they like. (Hofstede, 1980b)

With this analysis of the Hofstede's Insights, we can determine some behaviors of Colombians that are important to consider for this project. The fact that Colombians are really attached with their past is important as it means that implementing a different system of paying would change

their whole purchasing experience. For example, if it is implemented in a normal supermarket in a medium class location, that would mean the majority of the customers would be resilient to try the self-checkout machines, as their normal process of paying is being changed, they will be thinking that it is difficult to use or simply don't see any purpose/benefits of using the machines. At the same time when we analyze the level of indulgence, it represents that those people who are willing to implement new technologies and that also are looking for the development of the country, will contribute to the implementation of self-checkout systems.

To continue with the cultural analysis, the Motivation-Need pyramid of Maslow will be implemented with the purpose of understand how Colombia stands in this category, to determine if some of its basic needs are being satisfied and to understand if the implementation of new technologies is considered as one of those that drive Colombian's behavior. It will be helpful for this study to determine if Colombian's improvement, technological development needs are being satisfied or not.

This theory aims to identify if the needs of an individual are being satisfied. For this purpose, it is based on five stages of the pyramid divided to respond to basic needs, psychological needs and self-fulfillment needs; where the lowest ones in the pyramid should be satisfied first before the higher ones are achieved. For Colombia, these needs are:

Colombia: Motivation-Need Pyramid - Maslow		
Motivation / Need		Analysis
Self-fulfillment Needs	Self Actualization	(Personal growth and looking for enrichment experiences to enhance their potential) People in this stage are part of the top of the pyramid, usually part of the high social classes, they have the resources, education and motivation to create their own projects, to be their own bosses. The use of self-checkout machines is not something out of their world, they know the system and they are proud of using it in their own country.
Psychological Needs	Esteem Needs	(Accomplishment, status and prestige) Colombians who are constantly looking for their personal development and for achieving success, these people are mainly in opposition of the use of arms and always avoid confrontations. For them implementing new technologies in the country brings a feeling of national pride, they aim to see their country progressing.
	Belongingness and Love Needs	(Feeling as part of a group, friends, family) In this stage we find people who overpassed the safety stage. In the study of Hofstede's Insights the theory determined that Colombia has one of the highest collectivist culture in the world, this means all population no matter their social status, feel as a part of a group where the other take care of them and the degree of loyalty is high.
Basic Needs	Safety Needs	(Feeling of security/safety, job, health) In this stage we can identify people who overpassed the physiological stage. In here there are people who have access to the public health system (Sisbén), who have a job and a stable home. This population is willing to use different systems of payment, it is something they only see in movies and being able to use them is a privilege.
	Physiological Needs	(Eat, sleep, rest, sex, etc) According to the study carried out, the least favoured people, those living in poverty, do not have access to these needs. These people represent 7.4% of the Colombian population and will not be using in the self-registration system since their possibilities of going to buy something in a store/supermarket are very limited and even if this happens there is a highly probability that they will not know how to use the machines.

Table 1: Colombia's Maslow Analysis
(Lussier, 2019)

(DANE, 2018)

(Hofstede, 1980b)

4.1.5 Retail Industry Structure. In Colombia, the retail sector started with commercial stores such as supermarkets, hypermarkets and mom-and-pop stores. (1905) The first supermarket in the country called Carulla, is one of the biggest in the actuality, their good service to the clients, its strategic location and the possibility to find everything in the store impulse the supermarket to another level, where everyone in the city of Bogotá wanted to go and buy in there. (Carulla, 2015)

After the great success of Carulla supermarket, over the years (XX and XXI) a lot of investors saw in Colombia enough potential to distribute their products through retail channels. Colombia is a growing country with urbanization continually growing, where a lot of international brands as Carrefour, Makro, Wal-Mart and more retailers identified potential customers to provide their services to.

In Colombia the retail sector is divided by suppliers and retailers, where the last ones have more power of negotiation, which means that they have the power to decide aspects such as prices, logistics, inventories, workers, percentage of participation in merchandising and more. By this, retailers in the country have the advantage to set those aspects as it is favorable for them, which position them with a strong position against suppliers. In addition to this, the retail market in Colombia is divided by brands, each of them targets a different type of customer, located respectively where they can reach those customers. This means that brands provide different categories of products to each type of customer, so they can satisfy more effectively each of their needs. (Silva, 2011)

This type of strategies provides the retailers with enough potential to differentiate each brand and to redirect customers to identify which products adapt the best to their needs. Over the past years retailers had had to transform their selling proposition, as consumers started to look for better quality products that not only meets their expectations but are also looking for the best in-store purchasing experience where they can find innovative retail systems. (Salinas & Rau, 2019) Retailers in Colombia are in a constant fight for gain market share, the competition is really high and the possibilities to gain customers are difficult to implement. That is the reason why some

companies (international ones) started to implement different ways of payment, this with the purpose to decrease their costs and also to provide the best experience for the customers while purchasing, as going to a supermarket /hypermarket takes too much time, Colombians prefer to purchase at a store that decreases that time and what the retailers are selling, is the benefit of “winning time” if customers use the self-checkout machines. (Silva, 2011)

On another hand, the market has a different perspective for the fast-food retailers, this segment has changed over the past decade, as consumers started implementing a healthy lifestyle retailer started providing more healthy products, consumers were looking for an open via to consume consciously and retailers opened that door for them. The chain for fast food has been transformed into a low-cost perspective, people started looking for stores where they can buy fast and at a low price, their experience at purchasing remains mainly in the time they wait until they get their orders and the price of it. Most of the companies in this sector are international, such as Frisby, MacDonald's, Subway, and others. At the same time this companies have a lot of national competition, such as (Corral, Cali Mio, Sierra Nevada) but what makes the internationals differentiate and create value for their customer experience, is the different ways of payment that they provide to their customers. (Euromonitor, 2018)

4.1.6 Homecenter Sodimac vs Home Sentry. Homecenter Sodimac is a retail chain



created in Chile (1952), it specializes in the commercialization of hardware, home improvement products, car center and construction utilities. It has presence in nine Latin American countries with more than 100 stores. (Homecenter, 2017)

Source: (Homecenter, 2017)

Figure 6: Homecenter self-checkout

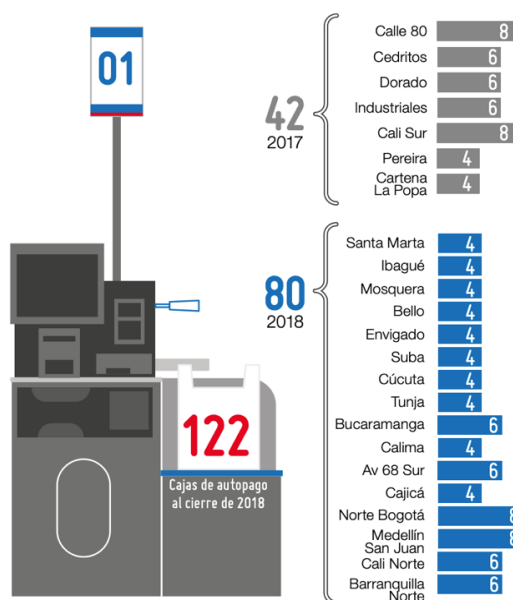
Homecenter is the first company in Colombia implementing the self-checkout system, in October 2017 with the purpose of providing an innovative system that automatically scan all products so the process of paying is shorter for clients, it was also looking for optimizing the experience of its customers as they didn't have to have physical contact while buying and they could buy their products and pay for them by themselves. (Homecenter Sodimac, 2017)

This system allows the clients to pay by different types of payment such as cash or credit/debit cards. In addition to this, through the machine, customers are able to pay with their store cards and have benefits from it (as discounts, accumulate points, and more). One of the objectives that the company was looking for before implementing the system, was to bring an

innovative, different technology that wasn't difficult to use, where the customers could identify easily its benefits and could take advantage of using it. (Homecenter Sodimac, 2017)

One indispensable factor that is important to consider, is that the company before implementing the technology, developed a deep research and determined that for the system to be successful they had to specially train more than 2.000 people about the use of the tools for the machine and the specific software that it has. The company understood the importance of providing enough support and orientation for the personal responsible who was going to be in charge of the machines (one person per 6-8 self-checkout machines) for them to accomplish the purpose of the project and at the same time to support clients while they pay for their products through the machines. (Portafolio & Gonzales, 2017)

The company implemented their first machines in a medium-class and high-class sectors of the capital Bogotá, where they considered people had enough education level to respect the use of the machines and at the same time were willing to learn how to use them. By December 2018, the company was aiming to implement the machines in all of their stores. (see figure 7 for more detail).



Source: (Homecenter Sodimac, 2018)

Figure 7: Homecenter self-checkout system implementation 2017-2018

Before implementing the system, the company was able to identify which points were indispensable to take care of such as the best locations to start implementing the technology, the training of the employees and of course the massive media communication where they announced the launch of the self-checkout system and were inviting people to try it. Those factors were indispensable for reaching the success of this innovative technology in a country as Colombia.

The direct competitor of Homecenter Sodimac in Colombia is Home Sentry, this shop is recognized in the country for providing different facilities for the house, from decoration to different kinds of household appliances and electric appliances. The focus of the company is to provide any product that their customers are looking for their homes, automobiles and pets.

Home Sentry is a Colombian company that started its operations in the capital Bogotá since 1995, and actually has more than 10 shops in the biggest cities of the country. The shop is a medium size company but works with a big enterprise system. It developed its operations to encourage its customers for buying via online, which provides its customers with the opportunity to buy 24/7 in the store with a fast delivery. In addition to this, the company invests in providing the best experience to the customers while buying, which means they have workers all the time prepared to answer any doubts that the clients may have (via email, chat, phone, social media, and more). (Sentry, 1995)

In comparison with Home Sentry, Homecenter Sodimac has the advantage to provide a better customer experience as they implemented the self-checkout system in their stores. According to the annual report of the company from 2017 to 2018, after the implementation of the new technology, the company received great benefits that were helpful to the development of the

company. Such benefits were the increase of 33% of its sales of products not located in the store, the increase of 142% of sales after the implementation of new technology (touch assistant screens). This technologies in which the company invested allowed it to be positioned with 58 points in client experience by the Net Promoter Score. (Homecenter Sodimac, 2018)

The data provided above determines that looking forward to the implementations of innovative technology was well executed in a country as Colombia, companies who has this focus have a competitive advantage towards its competitors and leads to gains in its market share.

4.2 Brazil



Source: (*Brazil - Google Maps, n.d.*)

Figure 8: Brazilian map

4.2.1 Country Description. Brazil, officially the Federative Republic of Brazil, is the biggest country in Latin America and South America. Also, is the fifth largest country in the world and the number six with the higher population. It faces the Atlantic Ocean and shares borders with every South American country except for Ecuador and Chile. Its capital is Brasilia, and its official language is the Portuguese. These aspects make the country one of the most multicultural and diverse nations, due to the high amount of immigration from around the world.

Brazil its recognized around the world for its city Rio de Janeiro, it is the center of its economic and cultural movements as it is the second most populated city in the country, and of course, because it has the icon of the seven wonders of the current world, Christ the Redeemer. It is a country full of diversity, its music and dances attract a wide range of tourists to its cities and to its popular carnival; also, its streets are full history and mystery which brings the different experience that tourists are looking for when they visit the country. (*Brazil country profile - BBC News*, 2019)

4.2.2 Political Situation. Over the history the country had a continuous fight to build an egalitarian and democratic society since it was colonized many times and slavery was a constant in this struggle. The actual president of the country is Jair Bolsonaro since 2019, he retired from the army and was able to win the presidential elections against the center-left party. Its focus for the government is to defend democracy and continue with the efforts made by past presidents, to decrease poverty and the enormous gap existent between the high and low social status.

Currently, Brazil is divided by 26 states, each of them work with financial independence and the autonomy of the administration, set by the Federal Constitution. (*Brazil country profile - BBC News*, 2019)

According to The World Bank, the country since 2003 was aiming to increase its productivity but it had struggled constantly because to the poor infrastructure of business environments due to the market fragmentation. The actual government is trying to implement new programs for companies that improved its results and is aiming to increase the levels of infrastructure investment as it is in disadvantage with its peers. (The World Bank, 2019)

4.2.3 Economic Status. When Portuguese colonizes arrived in the country, they implemented the production of primary products (sugar, gold and coffee) and since then Brazil, became a colony that produced for exporting and its economy depended on that. When European immigration had its boom, the country was able to strengthen its economy. (*Brazil country profile - BBC News*, 2019) In 2007 the country started to produce steel, cement and petroleum and by 2012 was the fastest growing economy reaching a GDP over 5%. The country had an enormous economic and social growth since 2003, by 2016 it achieved the goal of taking out from poverty to 29 million people, which came with a decrease of the inequality between social classes. (The World Bank, 2019)

In the actuality, its economy is based on the agricultural sector in spite of the trade barriers exiting in developed countries. Also, Brazil has a strong position on the manufacturing sector with a range of the automobile, steel, petrochemicals, aircrafts and computer industries.

At the beginning of 2020 its economy was expected to grow as it was in its best position in comparison with past years. But according to the reports of the International Monetary Fund in April 2020, the situation of the Covid19 and the increases people infected, it is expected that its GDP decreases from 5,3% to 4,7%. Its economy has been paralyzed and they are already working on strategies that may take out of the crisis the development of the country. (International Monetary Fund, 2020)

4.2.4 Cultural Aspects. Brazilian culture is one of the most diverse in the world, this as a result of the colonization of Europeans over its history, the slavery it brought and the migration mostly from Europeans, who were looking to live under the influence of its ideas and traditions. Due to the Portuguese influence almost 80% of the population has a Roman Catholic religion and since 16th century Portuguese is the official language. In addition, classes are structured and aspects as the color of skin and the amount of money are determinants of social status. (Bosi, 2005)

According to Hofstede's Insights the most significant drivers of Brazilian culture are:

- Uncertainty Avoidance: This insight is related to the degree people accept the fact that future is unknown. It studies the ambiguity of things people can't control and how they react to this, if they feel threatened or if they have beliefs to avoid this uncertainty. As most of the Latin American countries, Brazil has a high degree in this insight with a score of 76, this means Brazilians have a strong need to implement rules and respect them to remain peace and control over the society. Moreover, Brazilians always implement a space where they can relax and spend quality time with their love ones. (Hofstede, 1980b)

- Individualism: It is the degree to which individuals consider themselves part of a group or just independent from it. People who feel as part of a society are constantly looking for the well-being of all the members in exchange of loyalty. Furthermore, Brazilians have a strong collectivist culture since they are born, as they grow in big families and they are constantly looking to take care between each other.

As we could identify with the Hofstede's insight analysis, Brazilian culture focus on a collective belief, where family structure and strong values are the base of the daily life.

Concerning the self-checkout system, we can identify the strong importance of social classes in Brazilian culture, there are aspects that determine a person's status such as gender, race and wage, this means people who will get first the opportunity to try the self-checkout system will be the higher classes, supermarkets and malls would implement these systems looking for the high class to get it. As well as for the degree of uncertainty avoidance, for implementing this new technology would be indispensable that people get to understand the benefits that it brings but most importantly to provide enough information, so people understand how to use the machine.

However, according to the collectivist structure of Brazilian culture, it is expected that people would look to follow certain purchasing process according to what its family members use. The big influence of family on taking decisions, means that it would be assertive to reach the youngest members of the families as they will be more open to use the self-checkout system and inform them about it, looking forward for them to open a via for the other members to use it.

To complement the cultural analysis, the Motivation-Need pyramid of Maslow will be implemented to understand how Brazil stands in this category, to study if some of its needs are being satisfied and to understand if the implementation of the self-checkout system is considered as one of those that drive Brazilian's behavior. This project aims to determine the focus of the country on the development and if they are willing to invest on new technologies that could change the normal purchasing experience of customers.

Maslow's theory was created to identify if the needs of an individual are being satisfied. It is based on five stages of a pyramid divided to recognize basic needs, psychological needs and self-fulfillment needs; where the lowest ones in the pyramid should be satisfied first before the higher ones are achieved.

For Brazil, these needs are:

Brazil: Motivation-Need Pyramid - Maslow		
Motivation / Need		Analysis
Self-fulfillment Needs	Self Actualization	(Personal growth and looking for enrichment experiences to enhance their potential) People in this stage are part of the top of the pyramid, usually part of the high social classes, which means they have the resources to achieve its feelings of self-achievement and self-improvement, this segment is looking to implement to innovations from developed countries and will be willing to use the self-checkout system as a way to reach those goals.
Psychological Needs	Esteem Needs	(Accomplishment, status and prestige) Brazilians are constantly looking for their identity, as their history is linked with a lot of European cultures, they feel these cultures are more structured and stronger than their own. These feelings make them develop a feeling of proudness when they achieve some goals, it makes them more approachable to reach their objectives to be recognized by their peers. "Brazil has almost lost its identity [...] Brazilians think that only foreigners have the solution. Brazil has lots of resources [...] its self-esteem needs have to be recovered. I have spent 40 years studying Brazil, particularly this question of pessimism and optimism [...] this habit of saying the Brazil 16:17 is a waste of time." T. Skidmore, a sociologist from America and author of research books about Brazilian culture.
	Belongingness and Love Needs	(Feeling as part of a group, friends, family) In this stage we find people who overpassed the safety stage. Considering the past study of Hofstede's Insights theory, it was determined that Brazil has a collectivist culture, this means all population no matter their social status, feel as a part of a group where the other take care of them and the degree of loyalty is high.
Basic Needs	Safety Needs	(Feeling of security/safety, job, health) In this stage we can identify people who overpassed the physiological stage. The Brazilian government had increased its forces in implementing a health system ensuring that it is equalitarian and accessible for everyone (SUS). In addition, they had implemented projects aiming to support older people, in incapacity or in an extreme poverty. The government aims to support as much people as its possible, but still people in this segment would not be a target for using the self-checkout system at the beginning. This segment could be not willing to use a new system if they know the usual cashier machines.
	Physiological Needs	(Eat, sleep, rest, sex, etc) As it was studied before, Brazil had fought against poverty during the past decades, but during the past two years this percentage increased from 22,8% in 2014 to 25,3% in 2018, meaning that this percentage are the ones with more difficulty to reach this needs and some of them are not being satisfied completely. Another important fact to consider, is that 72,7% of Brazilian population have a dark skin, which is linked directly with poverty, so the majority of Brazilian population are fighting to achieve the basic needs for their life. As this percentage is so wide, this means there is a high probability that this segment will not be using the self-checkout system as companies implementing it will not reach this target population as the users of the program.

Table 2: Brazil's Maslow Analysis
(Cambray & Sawin, 2018)

(Skidmore, 2002)

(Sterling, 2012)

(Velasco, 2013)

(Hofstede, 1980a)

(Lussier, 2019)

4.2.5 Retail Industry Structure. Brazil retailer's history started back at trucks merchant's era, when people traded mainly with merchants that drove around different parts of the country with their trucks full of facilities that people in each town may needed.

Back in 1970 Grupo Machado (Machado group) was created by three merchant brothers who grew in the commercial business due to their father heritage and when they started providing supplies to the north region of the country, they realized that their trip was long, and it took time due to the conditions of the roads and the high distances they had to cover. When they finally got to the different towns that covered their route, people had bought already the products from other merchants. In addition to this problem, they found out that at the end of their trip they had a lot of products left that they couldn't sell. That is when they decided to create the first store in 1075, as a solution to sell the products left from their trips. This method was new but a complete success as one year later they were able to open their second store. (Diario Retail Sudamerica, 2017)



Source: (Diario Retail
Sudamerica, 2017)

Figure 9: Retailer store in Brazil

Retailers in Brazil are dynamic, it has some varieties and each of them are looking to engage with different types of customers depending on different socio and economic factors. The establishments can be specialized in hard-ware, food, and textiles mainly. Over the years the retail sector became one of the most competitive sectors in the market as it has different types of establishments making possible to reach customers with different profiles, those are:

- General: Shops created with the United States idea, those are large and located mainly in metropolitan areas where people with any type of profile can access to it. In areas with middle class community, it is common to find from 1 to 3 stores.

- Limited Line: This is determined by factors such as economic situation and size of the population. This are organized, clean, and the attempt of this retailers are to provide more quality products and the overall customer experience, from the light in the store to the possibility of parking provides more benefits to its customers.

- Specialty Stores: This are outlets that specialize in different kinds of products in which the country is rich, it goes from candies to umbrellas and textiles. It is mainly located in metropolitan areas and downtown locations; those are not well developed and have a high probability of failing. (Taylor, 1959)

For this reason, retail market is very competitive added with the high demand of customers that are constantly looking for new products to satisfy their needs. An important factor to consider is the high purchasing power of customers, they decide where and what to buy according to its

different needs, which makes the market to be in constant change trying to meet those customer desires.

In comparison to nowadays situation, where three quarters of Brazilian customers attend to three to five supermarkets, back in the 80's almost 80% of Brazilian customers were loyal to only one store or supermarket. This aspect makes retailers aware of the importance of provide a good selling proposition to its clients to reach their expectative and gain their trust.

A solution that retailers implemented looking for a way to differentiate against its competitors, is to develop new channels where customers can easily access to the products. E-commerce and door to door sales increased the customer satisfaction and make them be attracted to the different supermarkets. Nowadays Brazil is the Latin American country with more sales via internet. (La Motta, 2012)

This sector had been through a lot of complications such as the stop on its biggest trader partner: China or the economic recession in 2014 which led to a consumption crisis, where consumers decreased their expenditure harming all retail industry. Until 2018 the country was able to have a fully recovery and increased their optimism in the purchasing activities. Nowadays it is recovering, and it have been looking forward to implementing new technologies as a way to reach those aspects that customers are looking for and to decrease the competitiveness of the market.

4.2.6 Lojas Americanas S.A. vs Wal-Mart Brazil. Lojas Americanas S.A is a chain retailer company established in Brazil, Rio de Janeiro since 1929. Nowadays is one of the largest



retailers of nonfood items, it has around 1.306 stores all over the 26 states of the country.

Source: (Newtrade, 2019)

Figure 10: Largest retailer in Brazil

The company has established itself as provider of any types of products such as toys, candies, beauty products, household appliances, electronics and more. The store was initially created as a low-price store, their slogan was “Nada mas de \$2” (Nothing more than \$2) aiming to satisfy the need of those people who couldn’t afford high quality products at a considerable price. Over the years Lojas Americanas focused on its selling proposition and over the past decade implemented a new online system where customers could buy their products via online, establishing Lojas Americanas to be a direct competitor of the big chain stores in the country. (*Lojas Americanas S.A. - Company Profile, Information, Business Description, History, Background Information on Lojas Americanas S.A.*, 2005)

In June 2019, concentrating on its innovation purposes, Lojas Americanas announced its strategic partnership with an American technology company called Zippin. Zippin is a company

established in San Francisco and developed an innovative technology aiming to eliminate from scratch the process of checkout in retailer stores. (Magazine for Retailers, 2019)

The technology was created looking forward to innovating in the retail industry, it's a completely different way to improve the customer satisfaction while purchasing, as the system allows customers to have a contactless experience.



Source: (Zippin Web Page, 2018)

Figure 11: Zippin checkout-free platform

The system works with an innovative technology that traces all customers through the store with overhead cameras and with special sensors on every shelf that combined help to track every movement of the clients. Once the client enters the shop, it is necessary to download an app that

will be the online register of every item they choose, that's why the focus of the company is "enter, pick and go" because as every item the customer takes is registered on the system, the moment the client leaves the store gets its ticket to the online payment done through the app. (Zippin Web Page, 2018)

Lojas Americanas aimed to implement this innovative system as a way to differentiate from the extensive competition existent in the retail market in Brazil. The partnership made for these two companies make the success of the project being implemented in Brazil.

According to Krishna Motukuri, co-founder and CEO of Zippin, the process of implementing the system was prosperous due to the high level of efficiency of Lojas Americanas, once they signed the contract the company started focusing on adapting the new system and launched the pilot in three weeks. They made a study of all factors that could contribute to the success of the new technology such as the correct size of the store (from 250 to 3000 square feet) , looking for it to be convenient with the purchasing experience, the location was strictly appropriate to be a place with constant traffic of people and in urban places where customers were captive and fascinated to buy in an innovative store. (Business News Today, 2019)

After a deep study of this factors and after concluding the pilot and making the corrective adjustments of the software, Lojas Americanas was able to adapt its stores two months after. Also, the company had to work hard on adapting its software to the company's app Ame Digital App, so that customers can enter the stores with the use it. (Business News Today, 2019)

Wal-Mart Brazil is the third largest retailer chain in Brazil, it was created in 1995 and since it entered the market its recognition had grown as well as the number of its stores. Over its history it has worked with a lot of acquisitions or partnerships that helped with the extensive growth of the company. It is well recognized for its almost 500 stores in more than 15 states of Brazil and the loyalty of its clients had been increasing over the years. (Dun & Bradstreet, n.d.)

In comparison with Wal-Mart Brazil, Lojas Americanas was able to invest in new technology that since it was implemented brought numerous of advantages to the store. The implementation of Zippin brought an enormous recognition of the company in all the country, people in social media were expression how exited they were to enter in a store without having to wait or have direct personal contact with cashiers. By ensuring the privacy of the clients (as their faces will never be recorded by the system) the trust in the store increased and the customer satisfaction did as well. (Dun & Bradstreet, n.d.)

Other benefits of implementing this new technology was the ability to maintain real time track of every product in the store, which is beneficial not only for the retailer but also for the customers. A significant increase of its financial performance measured with EBITDA, was the great benefit of the company after implementing the system, it went from 209.2 in 2018, to 254.3 resulting in an increase of 21,6% compared to the same quarter of the past year. (Lojas Americanas, 2019)

There are a lot of benefits that the company Lojas Americanas got since the implementation is the new technology provided by Zippin and that is the major difference from its competitors of

the moment, and more specifically Wal-Mart Brazil. Because this project aims to identify the factors that contribute with the increase of customer satisfaction. Lojas Americanas was able to achieve that goal, because not only the implementation of a new technology helped but also the ability to have workers fully working for the customer service, being available all the time so they can assist clients on their purchases. That is an added value that other retailers on the market don't have. (Business News Today, 2019)

4.3 Mexico



Source: (Mexico - Google Maps, n.d.)

Figure 12: Mexican map

4.3.1 Country Description. Mexico, officially United States of Mexico, is the second-largest economy of Latin America, after Brazil. Its major language is Spanish, and its official religion is Christianity. Its territory, (as it is shown in the figure 12) is bordered by the Caribbean Sea, the Pacific Ocean and the Gulf of Mexico; its territory in extension can be compared as four times the size of Spain.

Mexico is one of the most recognized Latin American country around the world and its culture is established by ethnicity groups that were developed in the area (Mayas, Toltecs, Olmecs and Aztecs). These ethnicities provided a structured culture to which Mexicans are related nowadays. (*Mexico country profile - BBC News, 2018*)

Another reason for which the country is so recognized worldwide is because of the drug and violence that the country has suffered during years, during the past ten years tens thousands of people suffered from drugs violence as big cartels have complete control over the trafficking of drugs, mainly to the U.S. (*Mexico country profile - BBC News, 2018*)

4.3.2 Political Situation. The United States of Mexico is a federal republic which is based on a presidential democracy. Its official president from December 2018 is Andrés López, and as the constitution of the country stipulates, his mandatory regimen will last until 2024. The main focus for the president during these years, is to develop economic reforms that allow the country to be at the forefront of issues such as telecommunications, development of energy sector and its financial activities. The president aims to provide enough infrastructure for the country to be developed, and at the same time is looking for providing an equitable distribution of income to all population, since the gap of socio-economic distribution is getting bigger with time.

At the same time, the country is implementing strategies with the purpose to promote Mexican life and to stop migrations to the U.S at the same time that a good quality life is provided to everyone. (Export Entreprises, 2020) (*Mexico country profile - BBC News*, 2018)

4.3.3 Economic Status. The country economic status depends highly on the industries where it develops its activities, those are: the oil production, agriculture, high technology, manufacturing sector and the mineral exploration are the most constituted and the ones that contribute the most to the country's GDP. An important factor to consider about Mexican economy, is the close relationship it has with United States, as this is its biggest trade partner, and it receives almost 80% of its exportations. *See appendix E for an overview of each sectors economic activity. (Export Entreprises, 2020)

As it was mentioned before, the country focus on implementing social programs that also contribute to Mexican economy and provide security to citizens against the future outcome of the economic situation and the financial stressed that suffered some industries.

The past year, due to the high uncertainty for the presidential elections, the country recorded a growth of -0.1% which compared to the same period of the previous year. The outcome was really positive once the elections took position and the president was elected, but by March 2020, the COVID19 situation made the hopes to go down again, for which it is expected a fall on its growth of -6-6%. The inflation was also affected due to the virus, for which it is expected to drop 2.7% this year. (The World Bank, 2020)

4.3.4 Cultural Aspects. As well as the majority of Latin American countries, the culture of Mexico was determined by the conquest of the Spanish to the Mexican lands in 1519. Over the years, the country was involved in war, after its independence from Spain (who brought and imposed language and religion to the citizens) the country was in a continuous fight for land with U.S and other central America countries. Also, the country had continuously fought to maintain its Indian roots, and that is why in 1994 people revealed for the improvement of rights for almost 10 million Mexican Indians.

Over the years the country was hardly influenced by cartels and drug gangs who controlled the country on their behavior, but without considering the great danger that it brought to Mexicans, a lot of people got in the middle of cartels war and were hardly harmed because of it. From this was the beginning of Mexicans migrating to U.S, mainly because they had no trust in the government (influenced by drug gangs) and their quality of life was harmed. (*Mexico country profile - BBC News*, 2018)(Malat, 1957)

These aspects were determinant to the actual culture of Mexicans. People started to migrate to the big cities and nowadays almost 70% of its population are established on the major cities of the country. Its population is constituted by different ethnic groups that provide the different specifics of the culture and makes it unique from others; for this reason, along with Spanish 8% of citizens speak indigenous languages. Concerning its religion, the majority of people identify with Catholicism and others had implemented indigenous aspects as part of their religion. (Central Intelligence Agency, n.d.)

Mexican culture is based on the value of family, people have large families in which all are related/close even if its family from second or third generations. In the group if family, each member is aware of its responsibilities and are conscious in taking care of each other. “Parents are treated with a high degree of respect as is the family in general, and there may be constant struggles, especially for the growing children between individual wants and needs and those wants and needs of the family” said Talia Wagner who is family therapist from Los Angeles to an interview to Live Science. (Live Science Contributor, 2017)

Regarding Hofstede’s Insights, there are some important drivers of Mexican culture, those are:

- Indulgence: Mexico, with a score of 97 is the country with an entirely indulgent behavior. This insight relates to the extent people have the strength to control every desire or impulse in their life considering how they are raised. Indulgence with such as high score, means that Mexicans have weak power to control themselves when they want something.
- Long Term Orientation: this insight for Mexico has a score of 24, which makes them a Normative culture. This means people prefer to maintain its traditions and norms and are suspicious for new innovations that the present brings. For a country like Mexico (and how it was explained before) it is important to maintain its roots, as those are the base of their actual culture it is hard for them to step aside them to modernity changes.

Concerning Mexican indulgence that’s positive feedback regarding the self-checkout service, as people who are waiting for an improvement in a daily life basis such as this system will be

willing to try it and will be a considerable influence for the members of their family and close friends to use it as well. As this insight concerns the leisure time and how people spend their money to satisfy their desires, this means the implementation of a new technology would be one of these desires to fulfill.

On the contrary, we can identify the normative orientation of Mexican culture, which makes a real challenge to implement new technology such as the self-checkout one, as people would be resilient to try it for the fear of forgetting the traditional paying method with cashiers, to which they are used to. However, for the research developed, it was determined the high influence of United States over the “new culture” of Mexican people, the way of living is changing step by step the mentality of people, and that could be taken as an advantage from companies to focus on when implementing the self-checkout system. To continue with the cultural analysis, it is important to consider the Maslow Pyramid of needs, as this project aims to identify if in those needs, the self-development and the implementation of new technologies (such as self-checkout system) are present in the Mexican life.

In the table below, there is an explication of how each Mexican’ needs are being satisfied:

Mexico: Motivation-Need Pyramid - Maslow		
Motivation / Need		Analysis
Self-fulfillment Needs	Self Actualization	(Personal growth and looking for enrichment experiences to enhance their potential) Self actualization for mexicans is constantly related with its family, inside their group they decide which are the terms of actualization for which they will reach for. Mexicans look for develop and during the past decade they are constantly looking for the "American Dream", people seek U.S as their favorable future and even if they dont migrate they try to relate as much as they can with the americna culture.
Psychological Needs	Esteem Needs	(Accomplishment, status and prestige) The status has always been present in mexican social structure. According to the indigenous traditions and rituals of Mexicans a long time ago, only priests and nobles were the ones who had available some benefits such as doing rituals and being able to access to the best quality products. Nowadays people are constantly looking to achieve recognition specially inside their family groups, as this means that they are able to win the trust and respect from the other members.
	Belongingness and Love Needs	(Feeling as part of a group, friends, family) In this stage we find people who overpassed the safety stage. Considering the Hofstede's Insights theory, it was determined that Mexican culture is collectivist. This means all population no matter their social status, feel as a part of a group where people take care of each other and the degree of loyalty is high. Another important fact to consider, is that mexicans have a strong hierarchy structure and the respect for higher positions is well valued inside their own familiar gropups.
Basic Needs	Safety Needs	(Feeling of security/safety, job, health) According to the safety needs, Mexicans have been recovering from the extreme poverty situation of which a high percentage fo the population was suffering one decade ago. In the past years governments had worked so people who was considered in "extreme poverty" could pass to "moderate poverty" which means spending in average less than 20 dollars per day. As we can determine by this data, Mexicans are not fulfilling their safety needs, and the help from the government only represents 1% of the annual GDP.
	Physiological Needs	(Eat, sleep, rest, sex,etc) Mexican traditions and customs from their past have been linked with a pyramid of social clases, those have been a pilar in Mexican society and nowadays some of this roots are part of their daily life. People working the land and in construction were at the bottom on the pyramid and in actuality the situation keeps being close to it. Those people are the ones who can limitedly satisfy their physiological needs in comparison with others. On another hand, as it was mentioned before, Mexicans had a strong relation with indigenous rituals and customs, and people in this category were not able to develop them but to watch how those were done by higher clases. In actuality, Mexicans who can barely satisfy their Physiological Needs have lots of limitations to enjoy the advantages that higher clases have (such as new technologies or the access to a better quality life).

Table 3: Maslow analysis of Mexico
(Ortiz, 2020)

(Ruiz-Healy Times, 2015)

(Hofstede, 1980)

(Lussier, 2019)

4.3.5 Retail Industry Structure. As the other Latin American countries studied for this project, Mexico is not the exception regarding its evolution of retailer sector. According to Mexican Archeology, their first merchants were from the culture Potchteca, who primarily sold products such as precious stones or gold. On the other hand, the most common products such as food or fabrics were distributed by people in each community. With time the retailer sector got structured and was established mainly by minor merchants. One of the companies that marked a change for the sector to be at the forefront was Palacio de Hierro, who was a pioneer, innovator in the strategies implemented to provide the products that the clients were looking for. (Ramirez, 2019)

Mexico was one of the first Latin American countries who had a mall back in the 60s, while in other countries the first malls were created until 80s - 90s. With time, Mexican retailer industry was positioned to be one of the principal countries to which international companies were looking to invest due to the great advantage that it had in comparison with other countries. In addition to this, big companies not only saw Mexico as a potential entry point but also as a door for them to expand to other Latin American countries. (Ramirez, 2019)

In 2009, Mexico suffered a recession who took some years for them to fully recover, as people were not able to spend as before and the retailing growth decreased considerably. However the country was able to recover and by 2013 – 2014 a lot of investors kept positioning Mexico as their principal country in which to invest; most of these companies were from U.S. aiming to expand to a new territory where the culture and people could achieve products from the U.S. and follow the trends of American retail structure (ex. Walmart, H&M, etc.) (Castellanos, 2015)

*See Appendix F for a graphic demonstration of Mexican retail sector distribution.

By this moment it is perceived that Mexican retailers started implementing strategies to retain the customers and increase their sales. In these strategies we can find the implementation of technologies that improve the satisfaction of customers while buying, such as the use of credit cards to facilitate the payment of their purchases. The creation of new channels through the ones the customers can directly access to the products or services provided, as well as the implementation of omnichannel solutions that bring the possibility for the customers to communicate directly with the company. And as it was expected, technology was also an important tool in this stage, increasing the shopper experience.(Malacara, 2016)

Regarding the actual structure of retailers in the Mexican market, there is a competition policy among competitors in the grocery retail industry implemented by the ministry of economy of Mexico. This policy stipulates the rules for working in the market, specially concerning the competitive transparency when there are agreements between competitors. Both parts should compromise to avoid the abuse of dominance (firms should not take a dominant position against others, relating to the abuse of buying power and more), mergers should not impact the concentration of the retailer status and more.

This policy ensures that each of the participants in the retail sector are protected and play by a fair and equal distribution of power. (Ministry of Economy of Mexico-OECD, 2019)

As well as the other segments of the Mexican retail market, there is a huge change in the retail of fast food. As Mexico has been highly influenced over the past years by the U.S. tendencies,

the new trends of healthy lifestyle had incremented the health food on the retail market. The biggest retailers in this segment such as Mc Donald's, Burger King and Tim Hortons started a conscious implementation on healthy products (ex. Mc Donald's started using fresh meat instead of freeze meat). In addition to this, fast food retailers have opted for the implementation of new technologies that allow them to get closer to their consumers. Companies like Domino's created their own virtual applications through which not only customers can place their orders but also track the status of them. (América Retail, 2017)

What fast food retailers had been looking for the past decade, is a way to make easier the purchasing experience of the clients, they had transformed their services through different channels so the customers can feel more comfortable while they are purchasing. Basically, retailers in the whole industry are looking for making the customers life easier, to implement push strategies so the customer can have their products faster, easily and all by the comfort of their homes. Of course, the customer experience had not only focused on online buying but also on the onsite experience. Starbucks for example, created a store as if it was a museum where customers can directly interact with the process of coffee. (América Retail, 2017)

4.3.6 Mac Donald's Corporation VS Burger King. The first restaurant of Mc Donald's was created in 1948 by the brothers Maurice and Richard McDonald in California U.S. and from scratch it got famous due to it milk shakes, their business strategy was based on economies of scale, where they could produce a lot of quantities at low prices (almost half of the prices of their competitors), also the self-service was an innovative method at the moment which brought the possibility of lower operational costs. The great success of the hamburgers brought the company

to another level seven years later, with the help of an important salesman called Ray Kroc, turning the restaurant into the big and famous franchise of nowadays. (Encyclopaedia Britannica, 2020)



Source: (Encyclopaedia Britannica, 2020)

Figure 13: First Mc Donald's Franchise

Over the years the company was able to expand its franchise not only domestically all-over United States, but also internationally as its concept “pret a manger” attract people who were looking for affordable food, original flavors and fun for children. Its first apparition in Mexico was 35 years ago back in 1985 when the first Mc Donald's franchise was stablished in the capital Ciudad de Mexico, where people expected to taste the famous hamburgers and even waited in long queues to get them.(Encyclopaedia Britannica, 2020)

The great success of the company in Mexico was expected for both, clients and owners, and until today its one of the preferred fast-food retails that Mexican choose; the company even created the McNífica hamburger, which is 100% Mexican creation.

As other fast-food retailer in the Mexican market, Mc Donald's always maintained its position at the forefront and had been transforming itself to keep the customers happy. One example of this was the renovation of its menu when it had several problems (accusations) of being cause of obesity in the Mexican community, after this Mc Donald's renovated its menu and adapted not only vegetarian hamburgers and healthy products to the official burgers but also introduced a special menu of salads.

As well as the example explained before, Mc Donald's had innovated on its self-service method to attend clients. It seeks to renovate the self-service experience of the customers when they purchase at its stores by implementing touch screens to which customers can order directly and pay for their commands. The touch screen system was implemented successfully all over Europe and it had a satisfactory acceptance from customers. For this reason, at the end of 2018 the company renovated and remodel a famous franchise located in Palmas – Ciudad de Mexico and completely turned it into the new concept the company was aiming to extend all over Mexico which they called "Experience the Future". (Xalaca Mexico, 2018)

Before implementing this innovative system of payment/ordering in Mexico by touch screens, the company developed a complete campaign that motivated people to use the system: "Experience the Future", Mc Donald's identify the potential clients they had in Mexico and

adapted the new technology by showing the customer the ability they had for showing them the benefits that well developed countries had and they could bring it to them, they show them how easy and practical it was to use the system and how convenient it was to use it, not only for customer but also for the company itself. The company thought about the importance of providing high quality equipment that would enhance the overall customer experience, as clients have the opportunity to personalize their purchases and at an exchange will have a numerous of benefits such as more efficiency in the waiting time and more.

According to an interview made to the company in charge of the Mexican franchises of McDonald's: Arcos Dorados Mexico, they identify the importance of the actual need of the Mexican community for development and opportunities of growth, and as the big franchise had already implemented the screens system in Europe and had succeed on it, they saw on this new technology the perfect opportunity to fulfill the needs identified on Mexican consumers. (Malat, 1957; *Reaching the Mexican consumer - Santandertrade.com*, n.d.; Xalaca Mexico, 2018)



Source: (Ochoa, 2019)

Figure 14: Touch Screen in Mc Donald's Mexico

The concept was so well received by Mexican consumers that the project for 2020 was to transform almost 35 stores with the new concept of the company. "All the new locations we've been opening for the past two years have a different image. The new restaurants are transformed and ready to receive an additional change that we will surely have by mind for 2020 to digitize even more our business" (Translated from Spanish), said Francisco Bosch the CEO of the company in Mexico for an interview to a recognized magazine called Milenio. (Ochoa, 2019)

On another hand, one of the biggest competitors of Mc Donald's in Mexico (and the world) is Burger King. As well as other strong competitor in the fast-food retail market, Burger King had reached their customer expectative to the highest position to compete over such a robust peer as Mc Donald's.

Burger King was able to identify as well, the need of Mexican consumers to encourage technology on its processes and by the end of 2019 they reach a way to implemented via its delivery service. As Mexico is positioned as the first country in north America in traffic and the ninth over the world according to the Tom Tom Index, Burger King was able to identify the potential of reaching their customers while they are stuck in traffic. With help of google maps, the company developed "The Traffic Jan Whopper" which is a service that deliver their food to people while they are stuck in traffic.(Amigón, 2019; TomTom Traffic Index, 2020)



Source: (Coquillat, 2019)

Figure 15: Burger King Traffic Jan
Whopper

Burger king was able to identify a collective problem which make people to be stuck in traffic for almost more than one hour and reach that blue ocean to explore the possibility to deliver their services while their clients wait in traffic. The pilot was launched at the end of 2019 and people was aiming to try it as the company invested highly on the marketing campaign developed in various advertisement banners all over the Mexican roads. (Coquillat, 2019)

According to the case of Mc Donald's and Burger King, it is reflected the immense importance of the technology in Mexican lifestyle. Both companies reached certain level of priority for its customers as they are able to reach their needs in a completely different way, which adds value to their selling proposition.

Mc Donald's at the moment reaches the biggest market share in the Mexican fast-food retailers, and with the implementation of new technologies such as touch screen ones, was able to encourage customers to implement a completely different type of self-service that no other store

in México can offer. This implementation brought great acceptance over the clients and it brought a numerous advantage such as the possibility to completely personalize the hamburger which is a benefit that other fast-food retailers doesn't provide. The importance of implementing successfully the system was to identify the urge of Mexicans for development and Mc Donald's was able to fulfill the need by providing a service they can use in their daily life's.

On another hand, Burger kind reached a market that no one ever had looked to satisfy, people get bored while they wait, and bringing the possibility of eating the best quality hamburger while they wait is an opportunity never explored before. Although it is still on its pilot, they implemented an innovative delivery service that could satisfy a different segment of customers.

With this analysis it is clear that Mexican consumers are driven by reaching always the best customer experience while they find attached to brands that satisfy their needs of development. Both brands were able to adapt to the market and bring different perspective of what they try to achieve while they satisfy their customers, which is to bring the best quality service to the clients.

4.4 Chile



Source: (*Chile - Google Maps*, n.d.)

Figure 16: Chilean Map

4.4.1 Country Description. The Republic of Chile is located in South America and its territory covers a long area from the Andes to the Drake Passage as well as the Pacific Coast of South America, its length is compared in size with twice of the U.S state of Montana. Its major language is the Spanish and its major religion, the Christianity. Over the past years, it has been recognized as one of the most economic and social developed structures in Latin America in spite of its size. The capital and biggest city is Santiago, which is located in the center of the country as it is shown in the picture above.

It is recognized, as well as the other Latin American countries, for its multi-cultural roots, which are characteristic of its society nowadays. The country has a wide range of biodiversity, and its recognized worldwide for the Atacama Desert and its Andes mountains, which makes the country adaptable for different climates and environments. (BBC News, 2018)

4.4.2 Political Situation. The country has a strong democratic tradition (1970) when the first Marxist president Salvador Allende was elected after the 17 years of authoritarian ruling that Chile went through while the dictatorship of the general Augusto Pinochet.

Sebastian Piñera is the actual president of Chile since March of 2018, and its proposition from the center-right party to which he is part of, was to encourage the entrepreneurship and the development of the country, which is an important fact that contributes to the future implementation of new technologies in Chile. Its mandate is focused on providing alternatives to reform the public health system aiming to loop almost 80% of its population, to improve the public security, and the child protection.

This is the second mandate of Piñera, and since its first when the country's economy expanded almost 5,3% per year, the focus of the president for this second mandate is to strengthen its economic growth to answer the needs of the middle and low class population. (Congressional Research Service, 2020)

4.4.3 Economic Status. Its financial transparency is recognized all over Latin America, and its economy is known for its fast-growing speed over the past 10 years. Although its strength is highly recognized, Chile had been suffering for a considerable decrease on its development the past two years due to the high uncertainty that Chileans have about the future of the country.

Its GDP was highly affected by this situation and it decreased from 3,9% in 2018 to 1.1% in 2019. This situation created an even bigger uncertainty in the population and was derived in a considerable increase in the Chileans unemployment rate at the end of 2019 (7,1% to 7,4%).

At the end of 2019 Chile was not in its best position socially and economically, and the complicated situation it was going through caused revolution from the citizens who were asking for a better management of the country. As a result of this, the country was able to be taken into its current path, which means that the public spending was distributed properly and more importantly, the focus on the investment for innovations looking forward to the development of the country.

On another hand, while the country was recovering from all the 2019 reorganization, the 2020 arrived and the COVID19 came with it, which increased the instability and provoked even bigger unsteadiness on its economy. (Banco Mundial, 2020)

4.4.4 Cultural Aspects. Its culture has roots back over the pre-Hispanic era, when the first population arrived in the territory and started implementing their own traditions and customs. After the conquest of Spain, people had to implement the majority of their Hispanic traditions and to forget some of their own, for this reason nowadays Chilean culture is a mix of both. It is recognized for its big territory and the diversity on it, not only geographically speaking but gastronomically.

The fact that it was naturally separated by the Andes mountains or the Pacific Ocean, made the Chileans to develop a strong natural identity for which they are proud of.(Universia, n.d.)

Chileans are highly recognized for their kindness and for being very calm people. They give high value to its home, friends and religion (although younger generations are changing this aspect for a more deliberated and associated with the respect of each one believes). (Ministerio de Relaciones Exteriores, 2017)

For a deeper understanding of what characterize Chilean culture, the Hofstede Insights analysis will be developed, recognizing the most significant for this project:

- Uncertainty Avoidance: As the majority of the countries analyzed in this project, Chile is having also a high degree on uncertainty avoidance. With a score of 86, that means that Chilean population prefer to have full power of their future and feel threaten when they don't have a say, reason why they avoid any type of unknown situations. For this insight it is expected a high respect for rules and the need for an organized legal system, which is actually reflected on its low rate of corruption.
- Individualism: With a score of 23, Chile is again matching the other Latin American countries analyzed for having a collectivist culture. This degree shows the high importance for Chileans to be part of a group where they can feel safe and rewarded. The importance of this insight is that people look inside their groups, more commonly constituted by family, a level of loyalty in exchange of looking after each member of the group.(Hofstede, 1980d)

This study of this insights is, again, important as we can identify now the tendency of Latin American countries toward the respect for family and the need for control they need in their life. For the implementation of new technologies, such as self-checkout systems, it is indispensable to consider the mode of entry that a company needs to establish considering what is more important for the population.

In the table below, the Maslow pyramid of needs theory will be analyzed to complete the Chilean cultural analysis by understanding which of these needs are being satisfied:

Chile: Motivation-Need Pyramid - Maslow		
Motivation / Need		Analysis
Self-fulfillment Needs	Self Actualization	(Personal growth and looking for enrichment experiences to enhance their potential) Actually younger generations are starting to focus on their own development and to show more interest in explore their potential. The influence of developed countries is impacting highly the Chilean society and they are starting to achieve those self-development needs.
Psychological Needs	Esteem Needs	(Accomplishment, status and prestige) Specially in the capital, Santiago, the social classes are well established and the difference between them are clear in every aspect of the daily life. Prestige and status is achieved and people are not afraid to show it, but unfortunately only a small percentage of the population can have fully access to it.
	Belongingness and Love Needs	(Feeling as part of a group, friends, family) As it was explained before with the Hofstede's insights, the need for Chileans to be part of a group is important for their culture, which means it makes them able to satisfy this category of needs.
Basic Needs	Safety Needs	(Feeling of security/safety, job, health) Chile is recognized for being one of the Latin American countries with the highest social inequality, which affects mostly to the medium class and difficults the process of finding job and access to health services.
	Physiological Needs	(Eat, sleep, rest, sex,etc) Regarding this category, over the past 3-5 years the governemet had increased efforts to fight against poverty and to provide enough physiologiucal need that all citizens need, however the job had been really difficult due to the public revolution during 2019 where the index of poverty was evaluated in 8.9% of the Chilean population, which makes difficult to this percentage to satisfy the needs in this category.

Table 4: Chile's Maslow Analysis
(Lussier, 2019)

(Hofstede, 1980d)

(Banco Mundial, 2020)

4.4.5 Retail Industry Structure. In Chile, the first supermarkets were created in 1957 but it wasn't until the 80's that the retailer sector was well established and the sale of first need products increased considerably, which also lead to a customer's need for more variety and quality products. In addition, in this era the stores started to develop its own selling strategies and that's when low-cost stores established its selling proposition and found a way to attract all Chilean population.

The next innovation for the sector, was the implementation of the bar code, which allowed the stores to have more control over the products and at the same time to have an accurate inventory, decrease costs and improve all procurement processes to a more automatized one. Since its beginning, the retailer sector was built on a strong base, which by the 2000's helped national stores the fight international ones who wanted to enter into the country, such as Carrefour, who due to the aggressive competition it had with the national competitors ended up leaving the country. (*La historia del retail en Chile*, n.d.)(Analítica del Retail, 2018)

As the industry had grown over really robust propositions, the differentiation over the past decade have become an indispensable factor that all stores aim to achieve successfully. Each of the biggest retailers in the country as Hiper Lider or Jumbo have a strong selling proposition to which they are attached and focus to sell it to its customers so the fight for the markets share gets equally distributed among all competitors. (Logistec, 2016)

As it was explained before, Chilean retail market was strong and when retailers started to merge into Latin American countries, following the same proposition as in Chile it helped to strengthen the industry in Chile. Nowadays the biggest Chilean retailers have presence in almost all Latin American Countries, an example of that is Falabella who after 127 years has a strong position in 6 countries of the region (57 stores in Peru, 56 stores in Colombia, 58 stores in Brazil, 8 stores in Argentina and 2 stores in Uruguay). (Logistec, 2016)

On another hand, Chilean retail had an evolution regarding its different distribution channels, which since 1995 the supermarket one had led the market while other retailer channels such as pharmacies, food services and the traditional ones stayed always with lower preference to use from customers. (*La historia del retail en Chile*, n.d.)

4.4.6 Walmart Chile and D&S. Walmart is an American discount store created in 1950 by Sam Walton. The store had an effective selling proposition based on being leaders of the good service and low prices, to which Walton believed and helped to achieve the success of the chain. The good service focus proposition had its results after some years and helped for the company to expand all over the states in the 80's.

Walton brought a different selling proposition which aim to innovate the structure of the retail in the 80's and it implemented successfully a chain of stores that reached any type of customers and found its way to make them always come back to the stores as the shopping experience offered by Walmart was the only one with a different scheme in comparison with their

competitors. This different proposition that Walmart had offered through years made it to be one of the leader retailers worldwide nowadays. (Walmart WebPage, n.d.)

In 2008, Walmart arrived in Chile through a joint venture with the market leader D&S. Back in 1984, D&S (Distribución y Servicio) consolidated its stores following the American self-service scheme of “serve yourself and pay at the end” which was its slogan by the time.



Source: (Diario Estrategia, 2018)

Figure 17: Walmart Chile, different formats of stores

The company’s market entry was focused on a low-price store called Ekonomic and by one year later D&S was created as the master company in charge of the distribution and the correct development of the stores. Over the years, the company started to launch different formats of stores, each of one focused on targeting different customer segments. By 1989 Ekono and Fresh

Market format stores were positioned in the market and by 1995 the Lider store focused on an economic hypermarket was created. (Walmart Webpage, 2018)

The company kept with its concept of providing low-cost products of a high quality and by 2009 when Walmart was aiming to reach Chilean market, D&S was the perfect ally to achieve its goals. After long negotiations from both parts, the joint venture was established, and Walmart got 74,61% shares of the company and the rest kept in hands of the D&S family. Along its negotiations both parties agreed to follow a common objective of being sustainable as the company's business strategy. Following the concept agreed, by 2010, the new called Walmart Chile S.A., created its first e-commerce model called Lider.cl, where the company was able to innovate in the retail market by reaching a completely different segment of customers and selling them all their products via their Webpage. (Walmart Webpage, n.d.)(Ulate, 2009)

Following the concept to which both companies had settled from the beginning, Walmart pursued innovation at the beginning of 2019 by implementing a self-service checkout system on one of its format stores called Express Lider.

The new technology comes along with an application, which brings also an omnichannel proposition to the customer's buying experience, and like that clients only have to scan products and are able to pay for them with their phones, reducing considerably the time spent buying groceries.

Source: (Walmart Webpage, 2018)

Figure 18: Walmart Chile, self-checkout store.



Walmart was one of the first retailers in Chile who aimed for innovation and developed the self-checkout system on all of its stores, to provide a better buying experience and to accomplish all its customer's needs. This supermarket works on its 100% with the self-checkout system adaptation and the workers are fully trained so they can cater, serve and handle any doubts the customers may have.(Walmart Webpage, 2018)

The company achieved another level of technology to the retail industry in Chile. One important consideration of the company before implementing the system, was the need for customers to reach more productivity and independence in their purchasing process. On another hand the company thought of this technology as the future for the industry and for implementing it successfully they first adapted a pilot store, which was the example to make all changes needed to achieve more assertive the customer's expectations before launching all project to the population. As the lider of the store, Nicolás Undurraga said: "Nuestra transformación se explica en gran medida por la incorporación de la tecnología y la innovación como uno de los ejes centrales de

nuestro modelo de negocio” in English: “Our transformation is explained mainly by the incorporation of technology and innovation as the focal points of the business model”.(Walmart Webpage, 2018)

The company was able to seek over its competitors and to attach their customers by improving the buying experience not only on its webpage sales but also the in-stores experience. To accomplish this, the company aims to install this system all over its stores, starting to 60 by the end of 2019 which will incur in almost \$800 millions. (Walmart Webpage, 2018)



The company achieved a complete implementation of the new self-checkout service machines, by applying it on the format store called: Express Lider, which has a focus on providing the fast, facile and convenient solution for buying.

Source: (Walmart Webpage, 2018)

Figure 19: Walmart Chile, Express Lider store.

They identified this store as perfect to implement the service as it will contribute with the already established proposition of the store which aims to give products faster and efficiently to the clients, and that is improved when customers are able to use the self-checkout system and reduce their time of purchasing products at the stores.

In addition to the concept of fast and good customer service, Express Lider also focus on providing a wide range of grocery products, which are strategically distributed around the store so that clients can find the items easier and can buy the best quality products with a facility that any other stores can't provide.

5. Case Study Results

Overall, the research developed on four different countries of Latin America, important aspects that a company should take into account when implementing different methods of payment were identified. Those aspects will be explained in detail during this chapter.

- **History Attachment**

All countries analyzed were conquered by European countries such as Spain and Portugal. The fact that in the past, the population had to forcefully forget its roots and traditions and had to learn from scratch the culture of their conquerors left a feeling of powerlessness and inferiority which nowadays had impacted the society's behavior. When they were forced to give up their beliefs in the long-term basis it had encouraged people to conserve with special care the traditions that were not lost during those rough times, and that is the reason why in the actuality people is so attached to their past and got stuck to some beliefs that their ancestors had instilled in them.

Concerning the self-checkout system, this fact should be considered because even though young generations are changing the way these traditions are imposed, it is important to consider that the majority of population who will use this new technology are part of the Baby Boomers, Generation Y and Generation Z. Taking into account the self-checkout machines at grocery stores, it's evident the importance to start the project by launching it progressively (leaving the cashier machines and not eradicating them) or rather by implementing a first pilot to have a wider view about how customers would react to it.

The Latin American countries analyzed for this analysis showed a high degree of attachment to their past, which in this case means that people would be close minded and would prefer to stay in their comfort zone at first sight. On another hand, the kind of technology and innovation that the machines bring with them, might make people to feel scared due to the lack of knowledge about how to use it properly. In addition, because of the history they will probably feel threaten by these machines that could change their perspective of the whole purchasing experience to which they are attached from almost two decades ago.

- **Feeling of Accomplishment**

Again, a factor linked with the aspect explained before, is the feeling of accomplishment of Latin Americans. Since these countries were conquered, they had to follow what other countries saw purpose for them (for example, Colombia was the country where Spanish could exploit all gold back in the era), and this created a feeling of this created a feeling of inferiority. On the contrary, if we analyze the situation in which these countries currently live (conflict, poverty and inequality), we can see that it has led them as underdeveloped countries at the eyes of the world, less than what they are really worth. However, this does not make Latin Americans to feel less patriotic, they are very proud for their countries. This is evidenced by the search of each of the governments to improve the quality of life of the citizens in these countries and to seek recognition.

Regarding the self-checkout system, the fact that governments are looking for development makes them be open minded and to open the doors for the retail sector to innovate by implementing the machines. This allows Latin Americans to appreciate the progress of their countries and to make use of technologies that are known in developed countries, encouraging them to develop more with time and to evolve a culture where high technology can be accessible for everyone.

- **Country's Actual Status**

In this factor is important to consider that each of the countries analyzed are in a different social situation, however the results analyzed above were considered as a summary of all conditions evidenced.

First, the analysis developed showed that all countries (each of them in different proportions) suffered from extensive poverty. As it was investigated, governments of all countries had increase efforts in fight against the big percentage of people living in extreme poverty, and as it was analyzed by the Pyramid of Needs by Maslow, we can identify in the table below that the countries are not able to satisfy all the needs of their population and the efforts had only create a bigger gap between social classes.

Motivation-Need Pyramid - Maslow		Colombia	Brazil	Mexico	Chile
Self-fulfillment Needs	Self Actualization	✓ X	✓ X	✓ X	✓ X
Psychological Needs	Esteem Needs	✓	X	✓	✓
	Belongingness and Love Needs	✓	✓	✓	✓
Basic Needs	Safety Needs	X	X	X	✓
	Physiological Needs	X	X	X	X

Table 5: Need's Satisfaction per Country

Is indispensable to clarify that these results are based on overall researched based for the purpose of this project and with acquired knowledge as Latin American.

The table classifies which are the needs that are fully being satisfied in each of the countries chosen. As it was introduced before, the physiological needs are ones that are no being satisfied for the majority of the population and as it is well known these countries had suffered drugs and violence situations that unfortunately had led a big percentage of the population in the lowest stage of the pyramid of needs, where people can't satisfy the basic needs on a daily basis. On the contrary, it is shown the self-fulfillment needs being partially satisfied because only a small portion of citizens can achieve to reach the highest level of the pyramid.

Another aspect to consider is that each country has achieved the Belonging and Love Needs, which is a fact supported by the Hofstede's analysis of Insights where each of the

countries analyzed are collectivist which means their culture is attached to be part of a group and they feel the need to protect each other while they are part of those groups.

However, as it is shown in the table, the theory of Maslow is not being verified as people can't reach the highest staged of the pyramid without achieving the first ones, and as it is revealed none of the countries satisfy the basic needs, reason for which according to Maslow they should not achieve the levels above. This analysis of the actual situation of the citizen's live is important to consider before implementing a self- checkout store because as it was evidenced, as well with all the companies considered, the technology had been focused on reaching population from middle to high social classes.

In this phase of the analysis is important to consider some disadvantages that come with the implementation of this new technology, especially in the grocery stores, because the machines allow a pre-scribed relationship between the grocery stores and the customer where confidence is the base of it. This trust relationship has to be based in the culture and education in which each of the customers grew in with, because a lot of thefts had been recorded in grocery stores once the self-checkout machines were installed.

It is indispensable to consider the possibility that stores would need to save a percentage of their sales for thefts, because even though there is enough security at these shops, people may consciously or unconsciously, while learning how to use the machine properly, fall into this type of situations.

A final aspect that companies should also consider is that Latin American countries are beginning to grow at fast speed, which is something they can use as an advantage. The reason why the countries analyzed for this project was because their economies over the past years have been recognized as stable enough for implementing new technologies and because the government had worked investing highly in innovation looking forward to the development of the countries.

Specifically, Mexico has been considered the most economically developed country and with more history in the retail sector. However, nowadays Colombia and Chile are growing faster and faster which creates an opportunity for companies in the retail sector that seek to improve through technology to carry out the implementation of self-checkout system service. In comparison with the other countries, Brazil has a lot of barriers that make difficult the international investment such as high price for taxes, which limits the possibility to implement the technology. Despite this, a company could implement strategies such as Walmart did in Chile, that seek to implementing the self-checkout system by making an alliance with a well-known company already established in the country for over years and at the same time reduce the risk of losing the investment because people would be more open to try the new technology if the customers know the company and their selling propositions. By adapting to the specific customer needs and their preferences, the implementation of the system would be more assertive.

- **Politic Memoire**

The politic situation in which each of the countries states for, should be taken into account as it determines the level of trust that citizens have in the government.

Governments are the voice of the people and the people who conform it are in charge to seek for the community's welfare, however countries as Mexico and Colombia shown high levels of corruption in the previous analysis developed, which is related with the low confidence citizens have on the management of their countries. This will cause citizens not being able to see a prosperous future for their countries, which ends in lack of trust in the implementation of innovation and technology.

Concerning the self-checkout technology, in countries where corruption is seen as a "normal" daily problem, it may be difficult to implement the machines if, for example, a public company is involved. In the analysis developed in the case study chapter, the companies in Latin America that had reached for implementing the self-checkout system were private and well recognized in the countries. Each of the companies analyzed were already established for years in the countries and in addition, they all had a selling proposition that understood their customer's needs and seek for improving their customer's satisfaction.

This aspect is important to contemplate when implementing the machines, because people in countries where the government is not trusted, will not believe in a project to be developed properly and will assume that, as history tells, corruption would be the reason for it. In summary, people would trust in companies that are well recognized (not only in the country

but outside of it) and would support the implementation of the machines with a greater expectation of trying the new technology, rather than if it was a company supported by the government who were in charge of implementing the self-checkout system.

- **Target Customer**

This could be one of the principal aspects that any company should take into account before implementing a new technology such as self-checkout system.

Targeting a customer is one of the first tasks a company consider when their goal is to sell to a client (which is any company's objective). Targeting the perfect customer allows companies to reach more assertively those clients that are willing to pay for the product/service they are offering, and enterprises focus on this matter to develop strategies to attract them, but most importantly to retain them and make them always come back and keep buying. The same happens when a project is developed, rather if it is grocery stores or fast-food retailers as in this project, the main company's objective is to improve the customer satisfaction and one way to achieve that is by improving the customer's buying experience.

There is where the self-checkout machine works as a solution and retailers with presence in Latin America had chosen to implement this technology since the past two years, not only to differentiate itself from its competitors but also to enhance the customer's shopping experience.

In the case of the companies analyzed for this project, they targeted a specific segment of customer to focus the new service. The companies reached for middle - high social classes to focus the project, reaching for people that have enough access to education and can satisfy their basic needs.

The stores where the project is implemented were strategically located in places where people have complete access to it and are willing to use the machines. That is indispensable, because such an investment should target customers that have certain level of knowledge about the machines but most importantly, because in all the countries analyzed, this segment is the one with higher percentage of people.

On another hand, in Latin American countries the social status is important for the daily life, people are concerned about what other might think and showing the privileges that one has is common. Regarding this, companies that are looking to implement the self-checkout service reach those social classes, because it is highly probable that they would work as the mouth-to-mouth marketing and would help to encourage people to use the new technology as this means a good position within the society.

- **Young Generations Perspective**

According to the analysis developed in each country with the Hofstede's insight theory, the investigation determined that Latin American countries are collective societies. Collective societies in Latin America are mainly formed by members of the same family, which usually are big and have a leader; this groups are also are characterized by the strong relationship among all the members and how far they are willing to take risks for each

other. This aspect is important to consider because in those groups of families there is a strong level of respect for the older members, as it is associated with the knowledge and wisdom that they have.

Regarding the self-checkout system, the companies analyzed could reach to attract younger generations through social media so they can encourage the older ones to try the new technology while their shopping experience. This strategy is important to be considered before implementing the new technology, because in the case of Latin Americans, there is a disadvantage concerning the older generations due to the strong connection they have with their past and traditions. As it was explained before, some people (usually Generation Baby Boom and Generation X) might feel threatened by a new technology that could change the way they buy and might be resilient to try it because it would mean a threat to forget the usual cashier buying experience that they already know.

This is an issue that should be considered before implementing the self-checkout system in Latin America, because at the end, the older generations are the ones who have the monetary access to buy, but at the same time there are strategies that can be affected by the influence of the younger generations that are willing to try a new technology that is well known all over the world and might change the perspective of the buyers.

- **Covid 19**

In 2020 a virus was spread all over the world threatening to harm a lot of people, reason for which for almost 3 months governments implemented a compulsory quarantine to prevent the contagion of the people. The retail industry is the one that had survived the quarantine, as the majority of businesses had to stop their operations and was able to continue working for their customers.

The companies analyzed in each of the countries were able to work through all the sanitary preventions to prevent people to get infected with the Covid 19 virus while they buy at the stores. The fact that those companies have technology in which customers can avoid any type of contact with people, increased the level of trust and loyalty among the customer and the store. During this time, where people is protecting themselves, the implementation of self-checkout machines makes it more convenient for the customers to be protected while they buy.

- **Companies Outlook**

The four companies analyzed to develop the analysis for this project were able to implement successfully the self-checkout technology and there were considerable changes in their earnings before and after the implementation of the machines in the stores, so it is understandable that this technology improved the sales and kept the companies at the forefront of the retail industry, in comparison with its competitors.

See more detail in the table below:

Colombia				
Company	Years	Net Profits	Percentage of Growth	Machines Implemented
Homecenter Sodimac	2016	156.740	11,906%	0
	2018	177.924		80

Table in million pesos COP.

Table 6: Homecenter Sodimac growth

(Homecenter Sodimac, 2018)

As it is shown in the table, the company's profits over the years increased considerably before and after the implementation of the self-checkout machines. The growth represents a 11.9% which means the company was able to increase almost 10% in two years, in comparison with past years without the new technology.

Brazil				
Company	Years	Net Profits	Percentage of Growth	Stores
Lojas Americanas S.A. with Zippin	2017	237,6	196,338%	0
	2019	704,1		2

Table in million reais

Table 7: Lojas Americanas growth

(Statista, 2019)

In Brazil, the American start up Zippin, was able to implement an innovated self-checkout system all over United States and Brazil, which makes it possible for the Brazilian company to achieve such development regarding its profits. While implementing a completely

different method of payment, the company attracted the percentage of customers that were looking for a disruptive way of purchasing and it was well received by the population, which were aiming to download the app and buy in the store. As it is appreciated in the table, the company had a considerable growth on its profits and officially only two stores were installed in the country, which demonstrates the aim of people to reach new technologies for improving their purchasing processes.

Mexico				
Company	Years	Net Profits	Percentage of Growth	Stores
Mc Donalds Mexico	2017	5192,3	16,045%	0
	2019	6025,4		5

Table 8: Mc Donald's Mexico growth

(Yahoo Finance, n.d.)

The remodeling of stores through the implementation of assistive touch screens where customer could display orders in McDonalds in Mexico, it was recognized to be the newest technology implemented in the country for fast food retailers. The company just started the implementation of the screens by the end of 2018 and the beginning of 2019, and the transformation of locals have improved its net profits as it is shown in the table from 2017 to 2019. By these results it is understandable that the implementation was a boost to the growth of the company of 16% in three years.

Concerning Chile implementation of the self-checkout technology, the company just started the implementation in the stores by the beginning of 2020, which makes the comparison between all companies difficult as the time that the machines had been applied is still short.

The analysis above, represents the importance of implementing new technologies to innovate in the retail market of the Latin American countries analyzed. Customers are willing to try the different methods of payment and to increase their customer satisfaction by feeling attached to companies that implement machines that could improve their contentment. On another hand, it was demonstrated that the implementation of the machines actually improves sales in companies and by it, the enhancement of its Net Profits. Finally, the analysis concluded with the premise: as more machines are implemented, the profit is higher.

6. Practical Recommendations

The research for the purpose of this project had enlightened some indispensable factors that companies need to consider while implementing the self-checkout technology in Latin American countries. Factors such as culture, government, economy situation and the development of the retail industry are important to consider depending the country.

The first practical recommendation for companies seeking to innovate in the retail market, is to understand in which stage is the country regarding its retail development. Some countries as Mexico and Colombia had technology similar to the self-checkout one in shops, while Chile on the contrary by 2019 is already starting to implement the technology. Depending on which stage the country is regarding its retail development, the company can adapt to what the country is expecting and implement a technology that better matches the customer needs.

With this recommendation comes attached the importance of technology, as it was already explained in the chapter above, Latin American younger generations are aiming to change their countries' perspective and access the benefits that developed countries have. For this reason, reaching out to implement technologies that would change the perspective of the population, would increase the acceptance rate of it.

On the other hand, a second recommendation is to target younger generations. Even though those generations are not the ones who directly purchase and go to grocery stores, this kind of technologies increases the need of using a new innovation system and would create such as

influence for the older generations to try the machines. In the case of the fast-food retailers as McDonald's, again seeking for younger generations would be the right path while implementing a new self-checkout machine because younger generations are the ones who are willing to download an app and to change easily their perspective of buying as they are driven by the desire of using new technologies. In addition to this, it is important to consider the role that social media has to influence fast nowadays and reaching for younger generations that are looking for make easier their daily life activities and who are constantly sharing everything with their followers, would increase the knowledge of people about the system and how to use it.

As a third recommendation: differentiation is indispensable. Once a company identified in which stage the retail industry is in the country and their target customer, is important to auto-analyze if the company is prepared to implement the self-checkout system. By this, as any other innovation, would mean to be the first one creating/implementing it, so once the company is prepared to reach the self-checkout machine, it is indispensable that it has a different proposition that will attract the customers (for example, the application developed to be used with the machines in Brazil or the touch screens in Mexico). Is indispensable that the machines are unique and that provide a disruptive perspective of the purchasing process, this will increase the aim of customers to use it.

The fourth recommendation and the most important, relates to the importance of seek omnichannel strategies. In Latin America the retail market is starting to grow but history is repeating itself and the people in the industry are simply copying what American and Europeans

develop rather than seek to understand how it works and how to implement the right strategies to reach their objectives.

Omnichannel concept is rarely recognized in Latin America as companies are still trying to adapt themselves to the multichannel trend. This is the main reason for proposing this recommendation, as any other business to seek above the others is important to success and omnichannel is the way to go through to improve the relationship between the company and the client, and by this enhancing the customer satisfaction. When a company seeks to develop an omnichannel strategy, it is indispensable to create a network of information where customer can connect with every channel that the company has. The customer should be able to have the same communications/information by the company's social media, the official website or the store. The purpose is to unify all channels and to adapt them specially to how the customer better sees fit.

When implementing the self-checkout machines in the stores, it is important to consider the omnichannel strategy, because customers are changing their preferences every day and a good way to overcome this is by providing the necessary technology for the to adapt. For example, if we consider the store of Mc Donald's with the touch screens implemented in Mexico, if a customer prefers to order with the mobile app and to pick it up in the store, but its order was never processed and when he gets to the store, he has to make it all over again the overall experience of its purchase won't be good. The implementation of this strategy improves the perception of the customers regarding the brand but most importantly it will be helpful for the company to have a continuous control over the stock which will increase their productivity.

As it was explained before, the world is facing the virus COVID-19, reason for this fifth recommendation. In Latin America and all over the world the retail market was the one who never stopped working, for this reason it is important to keep the security measures even after the virus is managed. Even after the world is able to control the Covid- 19 virus spread, it is important to consider that bacteria is present in every object that people touch, and by ensuring that the self-checkout machines will be completely clean when customers are using them, it would increase the security feeling in customers. As it was mentioned before at the beginning of the project, people enjoy better their purchases if they don't have personal contact and by creating a safety environment while they purchase using machines, would increase it purchasing experience at stores.

Finally, the last recommendation regards the strategic alliances that international companies should consider when entering a Latin American country. If the company is not worldwide recognized, such as Walmart or Mc Donald's (companies analyzed in this project) it is essential that when entering a country, the company seeks to implement an alliance with a company that not only is recognized in the country but also that brings the feeling of belonging to the customers and makes them feel safe. This matter is highly important to consider because for Latin American population is hard to get out of its comfort zone and providing them a company that is known by everyone and that keeps the tradition of each country, would increase the probability of success of the project. In addition, is important to consider that implementing a strategic alliance not only would increase the positive image of the company but also would help for both companies to work as a team and to divide the risk that such investment could bring.

7. Limitations and Future Directions

- Develop the implementation of self-checkout machines for lower social classes. Over the analysis developed in this project, the implementation of the self-checkout machines rather if it was in a food retail shop or a grocery store, were developed in middle-to high social classes. It is understandable that companies look for the safest way to implement a new project and to ensure that the investment will have longer durability and it might be frightened by the insecurity recognized in Latin American countries.

However, this could be a limitation as well as a future direction, because companies should be able to implement it to give trust to the customers, understand the lower classes and to provide them the same opportunities than other clients with higher classes can access to. This big gap between classes is a problem that the majority of the countries analyzed have and an approach to ensure the trust that a company has on its clients would be to give them the equality that they have been seeking for a long time.

For this purpose, of course it is essential to develop a special strategy regarding the security, ensuring that people would have a complete induction about how the machines work and to create strategies that prevent difficult situations such as thefts. In this aspect, the constant companion/supervisor of workers is important, as clients might need someone to attend their needs. However, for this direction to work, it is indispensable to create a massive campaign were the company is able make clients understand the importance of using the machines properly and to take care of them.

- Companies should seek for a continuous improvement. Customers are looking constantly for the easiest way to develop their purchases and companies should adapt to their specific needs. The trends of the retail market are focused on improving the customer satisfaction, but most importantly, to make easier every process. By implementing the self-checkout machines, companies are making faster and simpler the process of purchasing, by implementing a delivery services they are enhancing the customer satisfaction by giving the customers a possibility to purchase while they are in the comfort of their homes. Those improvements should be the future directions for a company, because customers nowadays are looking and preferring companies that seek for the automatization of processes, operative improvements, an easy checkout (enter, choose, pay) and more that together work to improve the customer gratification.

On another hand, the implementation of new technology provides a numerous of benefits to companies, which will help them to be more organized with their stocks, to understand how to display products successfully, to decrease their overall operational costs and one they understand how all of this strategies work, they will be able to focus on how to deliver the best service to the clients.

- Understand the importance of enhancing each process of the purchase. When implementing the self-checkout machines, companies are ensuring that the payment process is being improved, but what about the selection of products or the decision point were customers decide to enter the store. Such factors should also be taken into account to understand all the process that a customer takes when he goes to buy, and most

importantly it helps to boost every step in the process and make the customers complete it.

Understanding the importance of how the products are displayed in the shelves, how customers reacts to colors, sizes and shapes of the products, will increase the opportunities of a satisfactory purchase.

- An important limitation that this project carries is the high attachment of Latin Americans with their family's roots. This matter could be considered as a limitation but when the right strategies are implemented, could be also a recommendation. In this point is indispensable to consider that the activity of going to the grocery store mainly is attached to the family, as they all go to together to develop the purchases for the home. Considering this statement, companies that are seeking to implement a self-checkout technology, should be considering the amount of time, the space and such aspects that are important for this project, as big families (from 3 to 5 members) will be all at the same time during the payment process.

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