INSTITUTO
UNIVERSITÁRIO
DE LISBOA

# The Impact of Interactive Screens on Store Atmosphere
A case study of Leroy Merlin

Joana Rita Branco Santos

*Master* in *Marketing*

Supervisor:
Professor Mónica Mendes Ferreira, Assistant Professor in Department of Marketing, Operations and Management
ISCTE Business School

October 2020

iscte

BUSINESS
SCHOOL

---

Marketing, Operations and General Management Department

# The Impact of Interactive Screens on Store Atmosphere
A case study of Leroy Merlin

Joana Rita Branco Santos

*Master* in *Marketing*

Supervisor:
Professor Mónica Mendes Ferreira, Assistant Professor in Department of Marketing, Operations and Management
ISCTE Business School

October 2020

## Acknowledgments

The quote "*The effort is always recognized*" is and was my life motto which I wrote in my office since the first day I started my thesis and that kept me motivated every day. I could say that this year was "the year", the most challenging and difficult one I have ever went through, but also the one that made me grow the most personally and professionally. I just want to express my gratitude for all the good things that happened and to my parents, brothers, boyfriend, friends, colleagues and professors who help me and contributed to my thesis.

Being away from home is not easy and in these five years had its difficult moments. So, I would like to thank my family for all the sacrifices, my boyfriend for all your patience and warmth and my friends for the constant concern. They were always with me during these five years but specially during this year in which they had the greatest patience to listen to my concerns and complaints, my lack of time and even…my bad mood. Thank you for all your support and concern throughout these years. I promise that I will now have time for everything you want.

This year I met a second family, my colleagues at Leroy Merlin, who welcomed and accompanied me throughout this year. Thank you for all your help, patience, monitoring and availability, specially to my Illumination and PDH team who provided me all the information and opinions I needed.

Thank to everyone who dedicated some minutes of their time to participate in my questionnaires and who listen my ideas and gave me their advices and contributions, I feel so glad.

Finally, I'm also very thankful to my supervisor Mónica Ferreira who gave me valuable inputs for my thesis, who accompanied and guided me during this incredible five years at ISCTE and who made me fall in love with the world of marketing, making me a much more creative and critical person.

Now, it is time to fly to another chapter!

"*If you Dreams don't scare you, they aren't big enough!"*

**Resumo**

Atualmente, com o aparecimento de novas tecnologias, os consumidores estão a tornar-se cada vez mais exigentes quanto às suas escolhas, valorizando maioritariamente as experiências, em vez do produto por si só. Esta nova geração está sempre atenta às novas tendências e alguns até preferem comprar online, devido à facilidade e rapidez do processo. No entanto, em alguns tipos de produtos, este tipo de clientes, embora sejam uma geração digital, necessitam de tocar e testar os produtos fisicamente para consolidar as suas escolhas.

Assim, os retalhistas devem adaptar as suas lojas físicas, de modo a criar uma experiência memorável aos seus visitantes, adaptada a todos os targets, capaz de interagir e emergi-los num ambiente único, que os impacta sensorialmente de forma positiva e que poderá ser convertido na sua satisfação, no aumento de compras e, no melhor cenário, na criação de uma relação de lealdade com marca.

Adicionalmente, os *Marketers* têm mostrado que as novas tendências do retalho impactam o percurso do cliente em loja e os ecrãs interativos são um exemplo de uma delas, que podem influenciar a experiência em loja do cliente e a possibilidade de voltar a visitá-la, tornando-se uma boa oportunidade para os retalhistas interagirem com seus clientes.

Por esse motivo, o presente Caso de Estudo é baseado no mercado da Bricolage em Portugal, que está em crescimento, e o principal objetivo é estudar a marca Leroy Merlin e em como os seus Kiosks - um tipo de ecrã interativo - afetam a sua Atmosfera de Loja.

**Palavras-chave**: Ecrãs Interativos, Atmosfera de Loja, Retalho, Experiência de cliente, *Phygital*

**Classificação JEL:** L68 Appliances; Furniture; Other Consumer Durables
L81 Retail and Wholesale Trade; e-Commerce
M310 Marketing
M370 Advertising
M390 Marketing and Advertising: Other

**Abstract**

Nowadays, with the emergence of new technologies, customers have become more demanding about their choices, increasingly valuing experiences rather than the product itself. This new generation is always on the lookout for new trends and some even prefer to shop online, as it is easier and faster process. However, in some types of products they need to physically touch and test in order to consolidate their choices.

Thus, retailers must adapt their physical stores to fit them and create a memorable retail customer experience, adapted to all targets, able to interact and emerge in a unique environment that positively impacts them sensorially and that can be converted into customer satisfaction, increasing purchases and, in the best scenario, creating a loyalty relationship with the brand.

In addition, Marketers have shown that the new retail trends impact and improve customer journey and the Interactive Screens are an example of one, which may have influence on factors such as customer experience and the possibility of visiting the store again, making a good opportunity for retailers to engage with their customers.

For that reason, the present case study is based on the DIY and Home Improvement market in Portugal, which is growing, and the main purpose is to study the brand Leroy Merlin and in which and how its in-store Kiosks impacts its store atmosphere.



**Keywords**: Interactive Screens, Store Atmosphere, Retail, Customer Experience, *Phygital*

**JEL Classification System:** L68 Appliances; Furniture; Other Consumer Durables
L81 Retail and Wholesale Trade; e-Commerce
M310 Marketing
M370 Advertising
M390 Marketing and Advertising: Other

**Índex**

**Appendixes A: List of Figures**

**Appendixes B: List of Tables**

**Appendixes C: Questionnaires**

## List of abbreviatures

**Proxi –** Smaller size proximity stores

**MSB –** Medium size stores

**GSB –** Larger stores

**COVID** or **COVID-19 -** Coronavirus

**PDH –** Plataforma do Habitante

**CRM –** Customer Relationship Management

**NPS** – Net Promoter Score

**KPI** – Key Performance Indicator

# 1. The case study

## *1.1. Problem presentation*

In the last few years marketing has suffered a lot of changes, especially since consumers are becoming more aware regarding the products and services that they like and want. Compared with the recent past years, the product is no longer just a product or a service, but much more than that (Kotler, 1973). Consumers are searching for a unique shopping experience with the brand, creating a major challenge for brands, particularly for retailers - the sector where this thesis will address itself.

In fact, the Portuguese retail sector grew by 3.4% in 2018, to a total of €20.95 billion, according to APED, the Portuguese Retail Association (2019), which indicates a dynamic and sustainable retail sector, that has contributed to a growth in employment and economic activity in the country. Portugal is one of the European Union countries in which its revenues from retail are increasing above the average (PÚBLICO, 2019), becoming a good opportunity for retailers to invest on its strategies and stores.

Some studies show that the stores and the way products are communicated there, influences the customer's purchase intentions, thus the future will be focused on how engaged a customer is with a company. A research made by KPMG (2019) supported that, denoting that the customer experience is more important than ever as retailers are striving to differentiate themselves in a challenging and crowded market. So, in order to do that, they are working for differentiate its customer experience by investing on store atmosphere improvement, manipulating the sensorial factors, such as visual, hearing, olfactive and tactile (Kotler, 1973), with the main purpose of emerge the customers in a new and complete in-store environment.

Furthermore, in an article published at Forbes (2018), added that the future is about creating unforgettable and invaluable experiences, anticipating customer's needs with the purpose of constructing a true relationship with them. Therefore, it defends that the *Phygital* marketing represents the next logical step, thus the brands which are addressing these behaviors effectively stand to gain considerable ground on competitors, as *Phygital* components can provide more personalized experiences to customers resulting in increased in-store visits, enhanced loyalty, customer engagement and a greater share of wallets.

The technological improvements brought shoppers, who are following its customers and keep tracking the technological advances, the possibility to apply to its stores the new retail trends, doing the mix and match between the offline and the online channels and creating a strong omnichannel in which customers are more engaged with the brand. Therefore, one of the new trends which are increasingly being applied in stores is the Interactive Screens and companies which are applying Interactive Screens at its stores say that this trend is fully immersive, the content is meaningful, and the experience becomes memorable (Forbes, 2018). Brands like Tesco, Carrefour and recently, ToysRUs, are using this technology to promote its items, so it's essential to understand how companies could apply into its in-stores and which is the impact on its customer's behavior and on brand's performance.

A research conducted by Roggeveen, Nordfalt and Grewal (2015), where the authors analyzed the impact of the interactive screens in three different formats of food retail stores - Hypermarket, Supermarket and Smaller Stores -, indicated that in-store displays have a novelty effect, such that the lift shortly after the displays were turned on was a whopping 17 percent in the hypermarkets format and that lift declined to 3 percent after five months. However, even a 3 percent lift still means substantial profit increases for the retailer. The profits for the interactive display are much greater than those percentage sales lift, because the retail chain receives sizable revenue from manufacturers that pay to promote their products on these displays. So, it's possible to conclude that it will increase the profit, even a bit, in the three types of format (Roggeveen, Nordfalt & Grewal, 2015).

Given these data in consideration, it has become extremely relevant to study and do a deeper research about the impact this technology may have on stores of other types of retail, in order to understand how they affect customers' satisfaction and engagement and how retailers could benefit in a superior way from its effects and adapt this technology to its stores. Furthermore, in the last year of 2019, Leroy Merlin implemented a new version of Kiosks – a type of Interactive Screen at its stores. Thus, Leroy Merlin will be so relevant to study, since it's the European and Portuguese market leader with millions of clients all over the world which are always searching for new ways of attracting new customers and engaging with the actual ones.

### *1.2. Market*

### *1.2.1. DIY and Home Improvement Market*

Leroy Merlin operates in the DIY and Home Improvement market which is divided into four distinct segments - DIY (Bricolage), Building, Gardening and Home Decoration (see Figure 1). The company is also part of the French group ADEO, which belongs to the Mulliez family, which also owns Auchan, a massive European supermarket chain, Decathlon, a sports equipment retailer and Norauto, a car repairs and accessories retailer. Therefore, ADEO group's sales volume has been growing since the last years and actually the group is the number one – the leader - on the Portuguese and European DIY market and the third, considering a worldwide context (ADEO, 2019).

Competing with the group, there exists The Home Depôt and Lowe's which occupies the first and second position, respectively, on the best worldwide best retailers, taking into consideration the sales volume in the last years, which means that DIY and Home Improvement Market is high consolidated, dominated by one to five players, according to a research made by Mordor Intelligence (2020).

So, the ADEO group has consolidated its position on the market as the third market player and the first non-American in the sector. As a result of its investments and its performance, the share value is also growing constantly since 2014. Even with the fall of the ruble and the real and the pandemic time caused by Coronavirus, the company's performance is considered very satisfactory (ADEO, 2020), as it is possible to note on Figure 2, where the sales volume of the ADEO Group has been also growing since the last years, most properly since 2012 till 2020, when the economic crisis became more stable and since the average age of homes in European is high, so countries and consumers have a desire to improve their houses supported by increasing income levels and economic growth. Nevertheless, augmenting prices of home building products may restrain the home improvement market growth, according to Pulidindi and Pandey (2019).

As it is possible to analyze on Figure 3, ADEO achieved 25.6 billion euros in the last year of 2019, with 1644 million euros in EBITDA in which 5% was a contribution of Leroy Merlin Portugal. Therefore, the ROE in 2019 grew in about 5.7% compared to 2018, which shows the positive financial situation of the group (ADEO, 2020).

In mid-2007 and 2008 a global economic crisis began which had repercussions in Europe where one of the affected countries was Portugal, the country that it's going to be considered in the present case. So, between 2010 and 2014, the Portuguese economy sank until the third quarter of 2013 (Varzim, 2018). Taking this into consideration, many companies saw their sales decrease, as consumers' purchasing power had also been impacted as many of their salaries were reduced. Even so, ADEO group sales were always growing from 2012, when the economic situation was already more stable. It could be explained for many factors, since DIY and Home Improvement's sector has the big advantage of surviving and growing both in a crisis scenario and also in a case of economic growth. For that reason, the group took advantage of it in its favor (Leroy Merlin, 2020).

For one side, the economic crisis created a scenario which has made people look for more cost-effective solutions for their homes, describing themselves as "*committed DIYers*" who has a special ability for completing repairs and enhancement to their homes within a controlled budget and who loves to go for DIY and Home Improvement stores (Keiningham, Aksoy, Williams & Buoye, 2015), like Leroy Merlin. They went on to research and make their own products at home, so Leroy Merlin started to gain special attention for them (Leroy Merlin, 2020). In this case, Leroy Merlin Portugal didn't feel directly the effects of the crisis directly since it covers such a wide target of people.

Furthermore, the growth of the company during the crisis period could also be explained by the continuous increasing in the number of stores, which brought a larger number of customers, since, despite the crisis, the company continued to invest in new stores and due to the increasing employability at the ends of 2013, people were having more purchasing power. It could be justified by GDP's tax of growth, which had increased since 2014 and became positive till the last year of 2019, when it grew 2,2% considering the last year (Real GDP Growth Rate, 2020).

Moreover, on the other hand, in a scenario of economic growth - what was experienced, from 2014 till the current year of 2020 - people were investing in buying a house and decorating it, which also reverted into the growth of the sector. In this way, the company was focused on creating new customer attraction and loyalty strategies, as well as finding out what needs were emerging in the market so that it could adapt and reinvent itself (Leroy Merlin, 2019).

In the last months of 2020, a global COVID-19 novel Coronavirus pandemic - an illness caused by a virus that can spread from person to person, from respiratory droplets when an infected person coughs, sneezes, or talks or by touching a surface or object that has the virus on it, and then by touching your mouth, nose, or eyes (Centers for Disease Control and Prevention, 2020) - has spread all over the world and, although the results are not yet fully known, since this impact is still being measured, economists believe it will have severe negative impacts on the global economy. Therefore, according to Statista (2020) the major economies will lose at least 2,4 percent of the value of their Gross Domestic Product (GDP) over 2020.

Despite this, according to a digital report provided by We are social and Hootsuite (2020), since this Coronavirus (COVID-19) pandemic began there has been a growth in demand for items online, in which 9.7% was in Home and Garden and 7.7% in Home Appliances and Furniture. It is also known that the number of online transactions grew by 120% in Home Furniture and DIY, having been the fastest growing segment in the world – which is very positive for ADEO group in times of global economic problems.

### *1.2.2. External strategy & Pandemic context*

Following the global economic problems caused by the COVID-19, a global pandemic that is still occurring, the retail sector in Portugal was growing till the first months of 2020 and Portuguese customers had a greater purchasing power comparing to the last years, justified by the GDP growth (Real GDP Growth Rate, 2020). However, people had to reduce their outings, since the virus is so contagious, it is vital that retailers create well-defined strategies in order to adapt to the new reality and take advantage of this problem to distinguish themselves from competitors, creating competitive advantages.

#### *1.2.2.1. Environmental Factors*

Considering the environmental factors, nowadays the retailers give much more importance to the sustainability factors. Furthermore, the companies are trying to use eco-friendly products Mordor Intelligence (2020), limit paper, water and energy consumption, use recycling paper for the packaging of the items, are trying to avoid plastic on the production and store environment, the chemical components of the products are chosen carefully. Moreover, one of the ADEO's ambitions is to "*create and develop an authentic ecosystem within the network of ADEO companies"* (ADEO, 2019). As an example of these, in Spain, Leroy Merlin has introduced a Workplace Prevention Week, there were specialized workshops of sustainability habits for all the employees and, more recently, it was also design sustainability webpages on the official website.

Leroy Merlin has been working closely with its suppliers in order to develop more sustainable products at all the product stages: in their design, production, packaging and distribution, since for the brand, "*The world is our home. Nothing more natural than Leroy Merlin to help preserve it"* (Leroy Merlin, 2020).

#### *1.2.2.2. Technological Factors*

The technological factors are gaining even more importance in all the sectors, due to the new needs of millennials and the competition between companies. Therefore, manufacturers have constantly focused on technological advancements, design innovations, improving the product quality and following the changing trends (Mordor Intelligence, 2020).

Even almost all retailers started its activity with physical stores, as was the case of Leroy Merlin, the market is taking several steps in online selling and the e-commerce area grew exponentially in this pandemic time, since people were in quarantine at their homes. So, retail managers are investing in the creation of online selling platforms, on the transformation and efficiency of its processes, by using technology to support the sales and logistics team, and on the customer's shopping experience. In order to do these, they are using online channels, like social media platforms (Shankar *et al.*, 2011), virtual and augmented reality (Grewal, Nordfält & Roggeveena, 2017), official website, advanced mobile devices and interfaces (Souidena & Ladharia, 2018) and others.

Besides that, 82% of all DIYers are likely to explore products in the physical store, even if the final purchase is made online, and Millennial DIYers are more likely to make the final purchase of quality products in-store, especially for products, like paint, which people needs to see and try the product physically (Mordor Intelligence, 2020). So, the retailers are not only improving the general buying process but also the in-store buying process by applying technological devices as a way of optimization of the point of sales. Moreover, in-store displays play a major role in how the DIY customers learn to manage DIYs, which also made the big and smaller retailers saw a boost in the sales by implementing these tactics and improved the store-consumer relationships (Mordor Intelligence, 2020), as the Interactive Screens.

In times of pandemic, more than half of people are buying online via mobile, in which it grew 55% on aged 16-24y, 57% on aged 25-34y and 54% on aged 35-44y and it is also identified that the number of website traffic increased 19% in Home Improvement and DIY sector (We are social & Hootsuite, 2020). This means that retailers should take advantage of this time to invest in their e-commerce experience and in more actual, digital and efficient store concepts. Furthermore, considering COVID-19, consumers will also place greater emphasis on both convenience and safety factors. Consequently, during the lock-down, brands started to use online social groups and live streaming videos to reach consumers through new channels without the need for foot traffic (KPMG, 2020), which was the case of Leroy Merlin that adapted its services, as Workshops into live streaming ones (Leroy Merlin, 2020).

At this time, customer data has now become both an important and a valuable asset to improve business efficiency and increasingly provide more targeted and personalized services. So, companies are searching for new business models to better connect sourcing, logistics, customer interaction and product sales both online and offline and they also need to think more clearly about their investments into three main areas: customer loyalty programs, customer data, and technologies aimed at making the shopping experience easier, safer and more efficient. Therefore, considering the online experiences, consumers have greater expectations in terms of unlimited selections, instant delivery, transparent pricing and more flexible payments (KPMG, 2020).

#### *1.2.2.3. Legal Factors*

Furthermore, the market is searching even more to ensure that its brands are safety for its customers, concerning its products, the stores, the services and practices. The same is applied for the employers, which are educated to know how to be safe and ensure that the customers are safe while shopping. Concerning the COVID-19, the stores stricter security measures, such as wearing masks, disinfecting hands and controlling the number of people inside stores.

Moreover, it's important to note that, at the same time, the market, while innovating, it has to deal with the legal and privacy issues, in order to ensure the online security as the new data base protection, which was approved by the European Union in May 2018, defined. In addition to enhancing the legal protection of data subjects' rights, the General Data Protection Regulation (GDPR) defines new rules and procedures from a technological point of view for data subject processing and using such personal data, even in the interests of data subjects (European Commission, 2019). Moreover, the market must manage this type of legal issues while deciding to implement an idea, using its channels.

#### *1.2.2.4. Social Factors*

Regarding the social factors, the market is aware of the new society characteristics, of both customers and employees. So, retailers are adapting its stores and environments with the main purpose of presenting the best social experience and satisfaction to its customers, who are even more "DIYers", and the best conditions for its employees. The companies are also supporting social causes with the purpose of developing and increasing people's conditions and making people' dreams reality, investing part of their resources in this theme. They often even use their employees, giving them time to support valuable causes, so the employees are even more concerned about this problem.

In this pandemic context, several retailers have contributed strongly to help hospitals and needy families, by donating masks and other equipment to combat this virus, which was the case of Leroy

Merlin (2020) which also which also joined the #SOSCOVID movement by donating more than 2,000 visors and providing packaging materials for the distribution of visors from north to south of the country.

#### *1.2.2.5. Economic Factors*

Regarding all this situation which has had a strong impact on all activity sectors, there are many studies and researches that have been carried out in order to understand how companies can best adapt in this context. According to an article published by McKinsey, written by Atmar *et al*. (2020), in the next months or even years, driving unique in-store experiences will become even more critical than it has been to drive traffic, facilitate the omni-experience, and improve profitability, so the retailers with the highest degree of touchless automation in stores may enjoy a strong competitive advantage, as they face lower risk to consumers, employees, and their overall operations.

Furthermore, many shoppers have been left "looking for projects" to tackle at home, since they found themselves working from home and felt that they finally had time to dedicate to projects that they had traditionally putted off. So, since millions of consumers decided to scope out projects to complete their homes and gardens, the Home Improvement sector appears to be on solid ground as the Coronavirus roils much of the retail business, according to an article written by Cain (2020) to the online Journal Business Insider.

Although professional builders have been more "negatively affected" by the Coronavirus, the consumers are upping their home improvement spending, the "pipeline" for major, expensive remodels remains small, which is converted into smaller amounts of money spent in each purchase. Moreover, according to the author Petri (2020), for the Journal The New York Times, while government officials scramble to find a solution for products with protect people from the virus, Do-It-Yourself (DIY) makers are pressing ahead in what some corners of the internet are calling a "*medical hackathon*", which are hacks that people could apply in order to construct their own masks, ventilators and others. This and the fact of people are searching for new home solutions, made the term "DIY" grown exponentially since March (Google Trends, 2020), as it is possible to note on the Figure 4, when the virus arrived to the most of countries around the world, which caused companies in this sector of DIY and Home improvement to start receiving many more visits to their online platforms and physical stores.

### *1.2.3. DIY and Home Improvement Market in Portugal*

The three major DIY countries in Europe, which are Germany, France and United Kingdom represent 50% of the continent's market (Insightdiy, 2020). However, the Portuguese companies are taking several steps on its market, so the DIY and Home Improvement market in Portugal is growing, although the Portuguese market does not often publish its results. Furthermore, considering the data taken from the company Consumer Guidance Institute Portugal (2019), making an estimate, the total value of the DIY market in Portugal was around 800 million euros in 2018, being dominated by the ADEO group. In addition, it has been growing every year, even in the recent times of pandemic, which represents a good sign for the future of this market.

Accordingly, the ADEO group is the Portuguese market leader and it grew 10% on its purchases, which is reflected in the increase of 16% on ROE, in the last year 2019 (ADEO, 2020). For the present year, 2020, the group is going to continue to invest heavily on the transformation of its stores, having defined more nine store transformations and one new physical store (Leroy Merlin, 2020).

Louis-Alexis Mulliez and Pedro Malveiro, the actual Portuguese VALADEO’ presidents (2020), are focused on investing on two main areas: the Digital and the Supply Chain, by the creation of an ultra-accessible and co-built offer, with an exceptional human relationship and by using services which facilitate people’s life. However, the people will continue to be the major investment of Leroy Merlin, since they believe that the collaborators and clients, called by *Habitants*, are the most important asset.

In these pandemic times, people spent more time at home and started to increase online searches and purchases for home appliances, which meant that sales in the sector had not felt the negative impact of the crisis ahead. Retailers now must invest quickly in their online platforms, in logistics centers and in the creation of free delivery campaigns, for example. Therefore, they are also facing challenges in terms of recruitment, safety and hygiene and the deadlines and return processes had to be adjusted, according to Journal Expresso (2020).

Consequently, the Portuguese retailers are investing on technological factors, especially on their e-commerce platforms, since 80% of Portuguese people search for products online and 74% purchase online (We are social & Hootsuite, 2020). Therefore, in this pandemic context, the Leroy Merlin’s online sales has been growing since March 2020 to July 2020 in about 400%, resulting in 16 091 046€ (Leroy Merlin, 2020), which represents a boom in the e-commerce since society was confined to their homes and the company took advantage of that fact to make its online platform more dynamic, offering more promotions and campaigns, like free delivery ones (Leroy Merlin, 2020).

However, considering the COVID-19, the Portuguese government defined that the stores that sell Home Improvement products would not close, since it sells products of necessity. Thus, the stores remained open registered a high volume of sales, which could be justified by the fact that, being a DIY and Home Improvement company, it also sells staple products, as electricity, construction and plumbing ones which are essential for an emergency, people being at home wants to take their time renovating and decorating their homes and also because the works continue and professional customers continue to pick up the necessary materials (Coentrão, 2020).

Additionally, the Portuguese retail companies are investing on its physical stores, since its proved that 30% of customers aged 16-64y started to know new brands using in-store displays and promotions (We are social & Hootsuite, 2020), for example, and in the case of Leroy Merlin Portugal its physical stores continue to represent the majority of store sales, which signified 98,6% of Leroy Merlin total

Revenues in 2019 (Leroy Merlin, 2020), less than 2% for e-commerce. In 2020 the company expects to exceed 3%, as online sales have boomed so far, although it is still quite low compared to physical sales.

Therefore, DIY and Home Improvement are also investing and applying the new technological trends of retail on its physical stores, as Interactive Screens, in order to create smart stores with immersive experiences which drives people to their stores and makes they live with experiences and memories (KPMG, 2019), which makes them feel in a real home, a home of their dreams.

### *1.2.4. Market Players*

#### *1.2.4.1. Global Market players*

The DIY and Home Renovation market has been growing as it was clarified previously and has a high level of competitiveness between the players. So, besides Leroy Merlin, there are other relevant players in the market, which represents an important factor for Leroy Merlin, in order to continue innovating and reinvent itself constantly with the purpose of maintaining or even growing its position in the market. At this moment, it is the top player in the European and Portuguese markets, and also one of the "Top five" in the worldwide.

Taking into consideration the DIY and Home Renovation Market, there are some important players which are investing on this area and which represents the majority of the volume of sales:

- The Home Depôt – an American company, which is the leader in US DIY market;
- Lowe's Home Improvement – the second biggest player in US DIY market;
- Brico Depôt – part of a French group owned by Kingfisher group, which is present in 10 countries in Europe, including Portugal within 3 stores;
- Brico Marché - the first non-food insignia of the Los Mosqueteiros, a French known group, present in Portugal within 38 stores;
- BAUHAUS – a Swiss company with more than 250 stores in Europe;
- HORNBACH - owner by the French Kingfisher group.

Due to the huge competitiveness, these big retailers are undertaking home improvement to make residential properties more comfortable, upgrade air conditioning and heating systems, waterproof roofs and basements, soundproof rooms, and to extend their homes and boost energy savings, according to Global Market Insights (2019). Moreover, since automation technology continues to mature, it is becoming increasingly a point of competitive advantage, with consumers responding positively to the improved convenience that it can deliver at the physical stores. Thus, retailers will need to prioritize automation that creates positive consumer experiences using, for example, interactive screens like Digital Kiosks at its stores (Capgemini Research Institute, 2019).

#### *1.2.4.2. Portuguese Market Players*

Since the present pedagogical case is going to have its bases in the Portuguese market, it becomes more relevant to be focused just on the Portuguese players, since represents a relevant competition in the country.

Considering the Portuguese market, Leroy Merlin occupies the position as a market leader. Furthermore, there exists a high degree of competitiveness of companies. However, the competitors vary according to the localization of each store, since there exist general players which are present around the country and local players which just act as a competitor in its location. So, the most relevant players in Portugal which will be considered are MaxMat, Brico Depôt, Brico Marché, since are the retailers which operates in the same market with a considerable market share, offering identical product categories and which has similar number of stores in Portugal, according to Statista (2018). Although IKEA is not a company that acts and competes directly in the same market as Leroy Merlin, there are some product categories with a large weight in the company's sales that compete directly with Leroy Merlin, such as Garden, Kitchens, Bathrooms, Decoration and Lighting. So, it becomes relevant to take it into consideration (IKEA, 2020).

*MaxMat* - MaxMat is owned by the biggest Portuguese food retailer – Sonae – and also by a Dutch company. Moreover, it has been present in the Portuguese DIY market since 1994 and owns 31 stores in the country, with a range of 15.000 references of products (MaxMat, 2020). It is also present in the segments of DIY, Construction Material, Bathrooms and Garden, like Leroy Merlin. Its philosophy is based on low prices offered, using the slogan "*Low prices' professionals*" (Maxmat, 2020) which attracts a lot of consumers which are searching for cheaper prices with a large range of products. MaxMat stores are in industrial city zones and its store atmosphere doesn't offer an experience to customers, since que products are only arranged in the linear, the collaborators just help the clients in case of doubt and also there are not many services available at stores. The brand has its own website where customers could see the products available, but they can't order it. So, the brand is just Leroy Merlin's competitor considering the type and range of products.

*Brico Depôt* - Brico Depôt is a French group owned by Kingfisher group, which is present in 10 countries in Europe with more than 1100 stores, including Portugal, where it owns just 3 stores. Moreover, the stores operate as a low cost and self-service format, being present in 15 different segments of the market (Brico Depôt, 2020). Furthermore, the brand promises to have high quantities of stock, with the best quality and the company is also known for the high variety of services which it offers to its customers. Moreover, it could be considered similar to Leroy Merlin regarding the services and the type of stores and departments.

*Bricomarché* - Bricomarché was the first non-food insignia of the Los Mosqueteiros, a French known group. Actually, the group is present in Portugal with 38 stores which operate in five different segments: DIY, Construction Material, House Furniture, Garden and Pet Shop (Bricomarché, 2020).

Each store has its own autonomy, like Leroy Merlin, in store management since the stores operate under a franchising business method. Brico Marché' proposition is to offer the best quality products with low prices and has an official website where customers could see the products available and ask for a quote from one of the existing stores or create a list of products, not being able to buy the products directly.

*IKEA* - IKEA was founded by Ingvar Kamprad in 1943 in Sweden and today IKEA is a global home furnishing brand that lives in the hearts of the many people and which entered Portugal in 2004 with the opening of IKEA Alfragide, and currently has 5 stores in the country - Alfragide, Loures, Loulé, Matosinhos and Braga – which receives about 14 million visits and an online selling platform, in 30 millions of visits (IKEA, 2020). In the last years the company has opened larger and smaller stores, collection points and planning studios and its mission is to "*to offer a wide range of well-designed, functional home furnishing products at prices so low, that as many people as possible will be able to afford them"* (IKEA, 2020).

In spite of IKEA just compete directly in the segments of Decoration, Lighting, Kitchen, Storage, Bathroom and Garden, it's one of the major players regarding the store atmosphere concept, since it its known by its store experience which incentives customers to visit and buy the products, and its online platform, which represents twice as many in-store visits. IKEA could be perceived as the main competitor of Leroy Merlin, considering the investments on store atmosphere and online selling. Just as a curiosity, both IKEA and Leroy Merlin stores are located close to each other, in Portugal, adopting the same location strategy.

#### *1.2.4.3.Interactive Screens Market Players*

In spite of the existence of the previous described players in the market, one of the biggest players on the DIY and Home Improvement Market which also competes with the interactive screens at Leroy Merlin' stores is the Amazon – the leader of the e-commerce market and also considered one of the big fours tech companies, competing directly with Google, Apple and Facebook.

Since the main goal of the Kiosks is to become a point of sale at the physical stores, where customers could also order online available products, Amazon is the only competitor concerning both the service offered and the type/range of products accessible.

The Amazon company defines itself as a company "*guided by four principles: customer obsession rather than competitor focus, passion for invention, commitment to operational excellence, and long-term thinking*" (Amazon, 2020). The company started as an online marketplace for books but later decided to expand its business to sell electronics, software, video games, apparel, furniture, food, toys and jewelry. Nowadays, it sells almost every kind of products, including home improvement ones, which competes directly with Leroy Merlin and recently, the company decided to take another step, so this online retailer's move into physical retail market, with the creation of its first bookstore – Amazon Books

– and then Amazon Go (Forbes, 2018). Moreover, Amazon promises to continue to revolutionize commerce and challenge the status quo.

Regarding Amazon Go, these physical stores allow consumers to simply pick up items without needing to stop at the check-out, since Augmented Reality (AI) and cameras capture the purchase and charge the consumer, which reflects on the enhancing of the convenience (Grewal *et al.,* 2019) and also highlighting all the friction points in the customer shopping journey and eliminating them as much as possible in its own stores (Forbes, 2018). This decision was the result of a huge market analysis which indicates that very few people exclusively shop online or only in store, they marry the best of both worlds. So, Amazon understood that customers want to make choices and they need a multichannel where they could have the opportunity to choose between the online and in-store channels when they shop. Furthermore, if Amazon remained as only an e-commerce retailer, it would be missing out on all the ways a customer might want to shop, thus the customer experience in-store started to gain a special dimension, since there exists particular ranges of products which people needs to touch and try, in order to evaluate and engage with them and also with the brand (see Table 1).

## *1.3. Leroy Merlin*

### *1.3.1. Company Overview*

According to the company's view (Leroy Merlin, 2020) Leroy Merlin stores are DIY (Do-It-Yourself) superstores, which provide self-service and sales assisted services specifically tailored to each country, facilitating purchase, set-up and follow-up of customer projects. Thus, it is centered on four main sectors – DIY (Bricolage), Building, Gardening and Home Decoration.

Leroy Merlin has the strong mission "*Help each client create his dream home!"* (Leroy Merlin, 2020), based on a characteristic and differentiating culture which is based on teamwork, constant challenge and professionalism, whose main objective is centered on the satisfaction of its customers. Moreover, the company described itself in seven core values: trust, commitment, simplicity, closeness, listening, transparency, honesty. For Leroy Merlin, its major asset is people, so each employee has a fundamental role in the company, since they represent the sector, the store and the company. In this way, the company has a philosophy of sharing the knowledge, power, assets and intentions.

### *1.3.2. Business Idea and History*

Everything started about 100 years ago, in 1923, when Adolphe Leroy and his wife Rose Merlin decided to open a store of second chances products, in France, selling surpluses that Americans left in France after the First World War, named *Au Stock Americain*. In 1933, after 10 years, due to their success since the American products were very interesting., the couple also decided to sell affordable construction, building fixtures and fittings and furniture products.

In 1960, the brand Leroy Merlin was officially created when some warehouses were opened in northern France, proposing an innovative concept of launching a free delivery service - being the first company to offer free delivery services - and hiring about 200 collaborators. Therefore, in 1973, the first self-service DIY retailing area was opened, and the brand increased the number of references and outlets, putting the slogan "all for the house". At the beginning of the 80's, some stores were opened, with a total of 33 stores. After that, the brand was acquired by the Mulliez family, a pioneer in big distribution and specialist in mass marketing, becoming a subsidiary organization which are in the same group of brands like Auchan, Decathlon and Norauto, for instance. At this time, the company began to develop new store concepts to become a recognized world leader in the home renovation industry, abandoning its production of prefabricated chalets and structures and investing on furniture, kitchen and decoration.

In 1989 was an important milestone for the brand which started its expansion, internationalization and acquisition period, with the opening of its first store in Madrid, Spain. Nine years later, in 1997, the brand continued its internationalization with the opening of stores in Poland, Italy and São Paulo. In 2003, a store was established in the fourth country, Portugal, more properly in Gondomar. In the next years, were opened other stores in the country, such as in Sintra (2004), Almada (2005), Albufeira (2006), Alfragide and Amadora (2009), Matosinhos and Maia (2010), Coimbra (2011), Gaia (2015), Loulé (2017), Aveiro, Leiria and Torres Vedras (2018) and so one, extending geographically it's the presence in Portugal.

In 2007, it was opened the first store in Greece and after that the ADEO group, a group controlled by Mulliez family, has become the name of the entity that simultaneously brings together Leroy Merlin and seven other DIY and decoration brands, each with its own control and concept: Bricoman, Bricocenter, Weldom, Aki, DomPró, Zôdio and KBane. So, it become more international and in the last years, Leroy Merlin has opened its first stores in Russia, China and South Africa in 2014, 2017 and 2018, respectively. Thus, at this moment, this group is present in 16 countries and four continents around the world with a total of 850 stores and more than 124.000 leaders (ADEO, 2020).

### *1.3.3. Leroy Merlin in Portugal*

In Portugal, Leroy Merlin started its commercial activity in 2001 and is present in 48 different cities, which covered almost all Portuguese cities and each store has its autonomy. Sintra and Alfragide' stores, present in the Lisbon Area, represent almost 20% of the sales volume for the company in Portugal, since they are the ones with the highest sales volume in Iberian Peninsula.

Nowadays, as it was explained before, due the acquisition of AKI, the company is undergoing a merger and transformation process with AKI' company, summing up about 48 stores – 21 Leroy Merlin stores and 27 AKI stores in the country. One of the main purposes of Leroy Merlin is to transform all AKI' stores into Leroy Merlin 'stores. This process of transformation is so complex and requires a strong strategy of rebranding, doing the mix and match between the two brands. AKI should be renamed Leroy

Merlin and have an offer similar to the Leroy Merlin one, always respecting their different dimensions. Thus, considering the different types of stores' sizes, the Portuguese market will have three new dimensions, the larger (GSB), medium (MSB) and smaller (Proxi) sized retail stores, instead of having Leroy Merlin and AKI stores. So, from this moment on, these acronyms will be used to represent the different store formats.

These different stores ' formats allowed the company to test and provide a greater supply in quantity in less dense geographical areas. In Portugal, the sales volume grew 50% in six months due to the transformation, since company took advantage of the AKI' strengths, such as its competence in the labor and maintenance market, adding the sale of projects, construction market and Leroy Merlin's digital development, building a win-win relationship (Leroy Merlin, 2019). In the last year of 2019, Leroy Merlin had transformed five AKI's physical stores.

Furthermore, the company believes in the power of having good partnerships, so it guarantees the development of local policy favors and partnerships. Therefore, each Leroy Merlin store enjoys a large degree of autonomy in its management in order to develop initiatives that promote local economic, social and cultural development. A good example of these initiatives was the partnership with Os Queridos - obras, a company which are part of "*Querido, Mudei a Casa!*" program and that makes major changes in the houses of people who apply and who usually have more difficulties. This program is broadcast on one of the channels with the highest audience in Portugal – TVI, that achieved 15,6% of the share in 2019 (Jornal de Negócios, 2020) - which results in a good return for the company because Portuguese people become aware of the products used in the program, being a relevant partnership for both entities. Another example is the fact that each store also has partnerships with local small size stores, supporting the regional economy.

One of Leroy Merlin's main strategies is to invest in ROPO (Research Online and Purchase Offline), which means that it aims to invest on its online platform, in order to provide a good experience in product research and inspiration mainly, so that people when they go to the store, could buy much more easily. Thus, although its digital platform already has sales equivalent to a store of larger size (GSB), the sales in physical stores are still the focus and core of the company. Besides that, it is why Leroy Merlin Portugal is and wants to invest in its selling process, by creating experiences instead of just selling products and services, by trying to create new ways of interaction with its customers and of differentiation from its competitors, using more specialized collaborators and more technological devices at its physical stores, due the digital era and the new trends which customers are following, with the purpose of transforming their purchases into experiences.

In the last year 2019 the offline revenues of Leroy Merlin, from physical stores, grew in about 6% comparing to the last year, achieving 794 265 155€. This significant growth represents all the investments that have been made in physical and online stores, in order to respond to the needs of the market (Leroy Merlin, 2020). Moreover, AKI stores achieved 197 030 680€ in the last year, which summing up with Leroy Merlin revenues signifies 991 296 835€ in the total of Portuguese stores revenues (Leroy Merlin, 2020). Regarding the online sales, it grew in about 50% comparing to 2018, achieving a total of 7 565 304€.

#### *1.3.4. Physical Stores and Products*

The main purpose of Leroy Merlin is to offer to its target their dream home, guaranteeing them the best quality products and specialized service. The Leroy Merlin' portfolio englobes more than 130.000 references of products, of four different market segments – DIY (Bricolage), Construction Products, Home Decoration and Garden. The physical stores are installed in city industrial centers, close to other commercial surfaces and, at this moment, considering the transformation process, its area varies between 1800 $m^2$ and 17000 $m^2$, ranging from smaller to large.

Considering the different types of markets, the huge range of products are divided into 13 sectors, according to its characteristics and functions. So, both points-of-purchase - stores and official website - are divided into these 13 different categories: Air Conditioning, Housekeeping/Wardrobes, Pipeline, Construction, Sanitary, Ceramics, Decoration, Kitchens, Electricity, Lighting, Hardware, Garden, Tools, Wood, Painting and Carpets. Furthermore, it's important to note that each sector is managed and controlled by a sector chief and a section responsible who helps him on his mission. The sellers are responsible for managing its own section and a family of products. So, each section has its own autonomy and each collaborator too – one of the principles of Leroy Merlin.

There exists a predefined store layout with the purpose of maintaining a similar brand concept and recognition across the different stores and also to make it easier for consumers to find the products they want. However, due to the autonomy that the company offers to each store' direction, sometimes some stores tend to tailor its layout according to its concept, size, sales and customer type. The layout was designed carefully with a commercial strategy in order to improve the customer journey. When customers enter the store, for the main entrance, the first sectors that appear are the picking and decorative ones – Decoration and Lighting - since are the more attractive ones concerning the visual aspect. There exists a main corridor that goes from the entrance, passes through these picking sections and ends up in the garden section, in order to force people to pass through the remaining sections, in which may appear the need for purchase that kind of items, as it possible to see on Figure 5. Complementary sections, such as electricity, home automation and plumbing are nearby, in order to facilitate purchase, since these types of products are usually acquired together.

Considering the products, the company works with the best brands of the market and also has its own products, the private label brands, called in Portugal market as "*Marca do Habitante" (MDH).* So, regarding the different types of market segments, Leroy Merlin has created 15 different brands – MDHs - each one present in a strategic segment. It has its own values is known by its superior quality, with a good price-quality relation: Inspire, Lexman, Spaceo, Sensea, Sterwins, Standers, Naterial, Artens, Axton, Delinia, Dexter, Equation, Evology and Geolia. Furthermore, these brands have achieved the customer's confidence in the last years and it represented 29,1% of the sales in Portuguese Leroy Merlin's stores in the previous year, 2019 (Leroy Merlin, 2020).

### *1.3.5. Leroy Merlin Customers*

Considering Leroy Merlin' data and strategy, its target could be divided into two main groups – the private ones (Business to Consumer) and the professional ones (Business to Business).

The *private target (B2C)* englobes the people who go to the stores to find solutions for their homes, the ones which love DIY ideas and bricolage and/or the ones who just need a big store with different types of solutions, a huge portfolio of quality product and specialized employees in the several bricolage areas who are able to clarify any doubts or help them in some problem. So, the private people could be simultaneously the client and the final consumer, who goes to the stores to search for DIY solutions, called "*bricoleurs*".

The *professional target (B2B)* englobes companies or just professional individuals, such as civil engineers, constructors, decorators, designers, architects or other service providers who work or have direct relation with the Leroy Merlin's segments. Sometimes, the client is professional, but the consumer is a private who contracted a construction service, for example, to help him. So, this type of target is so important since it has become a strong influence in the consumer behavior of private clients. The company is investing in specialized solutions for this type of client since it understood that they play an important role in the brand' revenues and brand equity and they could be strong promoters of the brand.

Besides that, in order to have a more complete analysis and closer to reality, Deloitte Digital (2018) – a consultant group – conducted an external study, which took into consideration 6.801 customers, in order to understand the different target personas of Leroy Merlin. According to them, "Leroy Merlin customers have different characteristics, motivations and needs. Thus, it is possible to identify some groups of customers that typically have the same set of characteristics before, during and after interaction with the business and its employees" (Deloitte Digital, 2018, p.31). Consequently, in that analysis it was possible to identify five types of customers: Professional customers (925), Project customers (1.321), DIY customers (2.456), Garden customers (815) and Undifferentiated Customers (1.284), as it is possible to analyze on the Figure 6 and Figure 7. Moreover, the study concluded that 14% of the Project customers and also 12% of Professional customers are millennials. Therefore, 50% of Project customers are between 35 and 55 years old and 36% are more than 55 years old. Taking these five different groups of customers, Deloitte Digital defined 4 different kinds of customers, called *personas,* as it is possible to see on Figure 8, which has different needs and wants, uses different kinds of services and has different types of interactions in store.

Furthermore, considering the data retrieved from the accessibility to the official website and Kiosks in 2019, which is possible to analyze on the Figure 9 and Figure 10, in which accessed more or less two millions of customers, it is possible to state that the major percentage of customers that accessed was from female gender (56,3%) and most of them are aging between 35-44y (26,5%) and 25-34y (25%). Moreover, these two groups were also the ones that spent more money online and in Kiosks, summing up 1 077 258,2€ in the last year. Therefore, the older customers, aged 45-more than 65y represents 35,5% of the total online revenues and spent a total of 798.991,44€. Thus, the younger customers, 18-24y, represents just 13,3% of the purchases and spent 269.833,84€, since due to their age they are the most likely to still not have a house or a construction project and probably do not work to have enough purchasing power to spend in this kind of products. Additionally, the women are the gender which more navigates on the website and Kiosks, except for Heating, Tools, Woods, Electricity, Canalization and Construction Materials sectors, which are more technical sections usually searched for by men.

After COVID-19 pandemic, it was verified that three different groups of customers, aged 18-24, 35-44 and 55-64, began to access more of the company's Website and Kiosks, increasing their number of interactions. It could be explained several reasons, among which: people started to buy more online so they would not have to go to stores and when they went to stores, they started to use more Kiosks instead of having to contact employees.

### *1.3.6. Omnichannel Strategy*

Considering the high level of technology improvements and competitiveness that is currently lived, Leroy Merlin is investing on its offline and online experiences, with the purpose of constructing a strong and integrated omnichannel, with no barriers between these two types of communication. This means that each customer can use online, offline or a mix of both ways to purchase.

Although the company started just with a physical store, it was one of the first companies offering free delivery services, being now recognized by the wide variety of services that it offers, more than 85 services, which are related with delivery, click and drive resolutions, products' installation, energetic certification services for some equipment, customer loyalty card with financing options, after-sales service and also in-store services. These services (see Figure 11) has gained more importance since customers are valuing even more their shopping experience, so Leroy Merlin is forming its collaborators in order to offer the best and specialized attendance ever. Thus, in-store services are so important, in order to make its customers 'experience complete as possible.

In order to follow up and listen the doubts of the customers, the brand also created a service of Customer Relationship Management (CRM), which answer and help customers with their doubts, every day by call, which also contributes for the creation of a relationship based on trust and transparency (see Figure 12) and recently, it was also created an online chat, in order to help customers during their online purchases or solve some problem that may occur, with two different options of chat available: a chat provided by an artificial intelligence robot which answers to some predefined type of questions and an online chat answered directly by e-collaborators (collaborators specialized on online attendance) which are available according to the schedule of the store that customers have the option to choose. Therefore, in this pandemic context, a distance selling service was also created, through the telephone and chat, so that people could safely do their shopping in the comfort of their homes but using the help of a collaborator in it, which is succeeding, since the company realized that it has an age group of customers that does not work with electronic devices and with the telephone service breaks that barrier.

In other wise, the online has gained more and more importance due to the new generation which increasingly valorize and use technologies at the buying process. So, there exist official website, which calls PDH – "*Plataforma do Habitante*", which means inhabitant platform-, at each country where the company has physical presence, where customers could find the products that exists, verify the availability in their convenience stores and order to their homes or nearest stores, using the delivery and installation services which are available. The PDH is also investing on inspirational and interactive content, so it has available inspirational ideas, bricolage tips, do it for yourself ideas and workshops, making the connection between the website and the stores and products. At this moment, the e-commerce experience of Leroy Merlin Portugal increased 589% in this first months of 2020 comparing to the last year of 2019 (Leroy Merlin, 2020), which reflects the investments that company has been doing for the optimization of this platform to provide the best experience and become a stronger channel and source of income, being one of the top priorities of investment for the present and also for the next following years. According to this, the PDH has a huge impact on the three main phases of customer journey, *pre-purchase*, *purchase* and *post-purchase*. On pre-purchase phase, customers use the PDH to check the products, prices, get information and inspiration and ask for device on the online chats available before buying something, therefore they have the opportunity to order and pay the products they want directly on the PDH – purchase phase and lastly, evaluate their service and products after the purchase or talk directly with collaborators, through online.

To complement the website and integrate with other services that the company offers to its clients, Leroy Merlin also created an App for them, where they could access their loyalty card, consult their invoices, search for the products and see some promotions.

Leroy Merlin are also investing on its communication on social media platforms, having accounts in the most used digital platforms for its target – Facebook (298 787 likes), Instagram (94 400 followers), YouTube (45 300 followers), Pinterest (3296 followers) and Spotify (334 followers) – where the company share daily images, videos, ideas and workshops using its products in creative ways.

The Workshops are provided at physical stores for clients that applied for that and recently, considering these pandemic times, via live streaming directly on Leroy Merlin' Facebook and Instagram, available to all the followers. It covers all company's product categories, where are explained by specialized trainers or influencers how to use some product or technique.

Regarding the communication, Leroy Merlin is also present in TV and Radio commercials. In TV, it has a partnership with the Portuguese TV show "*Querido, mudei a casa*", where homes of people with financial and life problems are transformed, mainly using Leroy Merlin products – a powerful way to promote it. The company also uses e-mail, SMS or post office marketing as a strategy to promote its products, create more visibility due to special campaigns and to achieve every different persona who use different types of devices to see the news. The Official Newsletter is also sent by e-mail to every client which has signed for it, where firm communicates its recent projects, campaigns and products.

The MUPIs and Outdoors are also used by Leroy Merlin, in areas close to its stores or in large highways with the mainly purpose of indicating the distance between the localization of it and Leroy Merlin and getting people to go to the nearest store, promote some kind of product or campaign or show some active promotions and there exist an official Catalog where it launches its new collections and shows customers a selected range of its new products and additional ideas for using it on their homes. This catalog is also available online – e-catalogs.

It's important to bold that it's not easy at all to create an omnichannel, with all the channels integrated, and not a multichannel, with a lot of variety but without a conductive line between all the channels. Thus, Leroy Merlin has a specialized team responsible for the *Phygital* projects because it believes that this will be the future of the market since the customers are no longer just customers and consumers but much more than that, they are "*experientiators*", considering the company's vision for 2027 (Leroy Merlin, 2020). So, Leroy Merlin traced its 2020's objectives which are focused in Experience, Team and Solutions. Thus, the first area of investment – Experience - demonstrates the importance that the company is giving to the customer' experience.

### *1.3.7. The Importance of Store Atmosphere*

In the last few years, the store atmosphere is gaining more and more importance, since the customers are becoming more demanding and searching for new ways of interaction with the products. Thus, considering the merger process that Leroy Merlin is passing with AKI, the store atmosphere is one of the principal elements that the group must consider since it represents the brand image, so it should be thinking carefully.

Before this transformation process, the Leroy Merlin's physical stores were recognized by its bigger size. However, since AKI physical stores are smaller, the group decided to distinguish three types of stores, according to its size, the smaller size (Proxi), medium (MSB) and bigger (GSB). Moreover, although there has to exist a similar store layout in both store sizes, it makes sense to adapt the store atmosphere to the type of concept, since the target audience and needs of the same varies according to each store type. Leroy Merlin invests heavily in its physical stores, in order to create a comfortable and appealing environment for all its customers and visitors. In this way, all stores are "clean" spaces, with green and white colors, identical to the brand logo, with neutral natural light and with decorative spaces that lead the customer to dream. Thus, the most decorative departments, such as Lighting and

Decoration, are spaces which create various types of environments, called as *"dream spaces",* using the different products of the company in an inspirational way.

There is also a Showroom, a different concept of physical store, located in the major store of Portugal – Alfragide. This Showroom is made up of different rooms in the house, from bathrooms and kitchens to dream gardens. It is a place visited by many people to get inspired and it is also a space dedicated to the realization of major home projects, since the company believes that the future of its stores will pass a lot through the creation of inspiring environments, in order to construct an interactive store experience and design environments that interact with their senses, more specifically with the visual and touch. For that reason, Leroy Merlin is also investing in technologies at its store atmosphere, like Kiosks, as a way to help customers on their shopping experience, creating a visual and touchable involvement with a big and interactive screen and also a point of difference compared to its competitors.

The collaborators are so important to maintain the coherence and the interactive environment that characterizes Leroy Merlin. Thus, they are constantly trained to always be available and very friendly to customers, in order to create an environment and exclusive service too. Moreover, regarding the services, the company is also investing on its in-store services, with the purpose of offering the most complete experience possible to its customers without having to leave the store. Thus, there are services available for wood cutting, tailoring, tool rental, color tuning center, personalized budgets and more.

In other countries there are available other stores concepts, such as Street Stores, Showrooms, Ultra Proxis and others. So, Leroy Merlin Portugal are looking for new store concepts and in the next years, the company wants to open different concepts, such as a small store located on the Lisbon city center, with more digital devices and with a smaller area, between 400 $m^2$ and 800 $m^2$. Therefore, it is also important to note that even if the online stores are growing, physical stores will continue to be a major investment and will have a great weight on sales, regarding the type of products that company offers it is very important for customers since they could see, touch, understand how to do their projects and interact with specialized employees.

### *1.3.8. Phygital – Physical & Digital*

After some investments on online and after some market studies, the concept of *Phygital* was born with the necessity of adapting the new trends of marketing at the physical stores, doing a match between the offline and the online strategies, with the main purpose of bringing to the physical stores a closer, efficient and human customer experience. For instance, the percentage of the purchases of decoration and furniture products in-store, with direct influence from digital media is growing and represents 58% of the total revenues (Deloitte Digital, 2018). So, the idea is to take the best part both from e-commerce experience and physical retail stores.

Instead of people becoming even more digital and prefer to purchase products online, the interpersonal interactions are critical and valuable for customers’ purchase intentions, since some customers feel the necessity to see, touch and try on the items. They could order online but they need to interact physically with the products first to make sure they are doing the right thing. The companies should implement parallel strategies, since the consumer could interact in both environments indiscriminately and it could be complementary to each other.

Given the new market needs and trends and since Leroy Merlin is a company that adapts quickly to changes and seeks innovation, so *Phygital* is one of the main areas where the company is investing.

#### *1.3.8.1. Leroy Merlin's Phygital Projects*

The Leroy Merlin's App is a good implementation that matches both online and offline environments. The App brought to its customers the opportunity to have their loyalty card in a digital form. It also offers the possibility for clients, which goes to the physical stores or buys online, to have their purchases stored in the App's history, so they could have access to it easier, they might also check their available discounts and existing promotions, being a way to company promote its products and make a connection between online and physical stores. Therefore, the Scan Search it's also a *Phygital* project which began to be implemented a few years ago, just in a few stores, through a scan reader, so that customers could search for their products via scan, more quickly and easily. Currently, Scan Research is one of the *Phygital* projects where the company is investing a lot now, having a recent digital tool available on its official website, which customers could take advantage of.

More recently, since company is investing on *Phygital*, so already launched some projects and intends to launch more in 2020 as Online Architect, which are a platform where customers could contact and book a service with an architect to make their project in a remotely way; Kazaplan, an online service, able on the official website, where customers could draw and visualize their home projects and add directly to their shopping card the products they need to conclude their projects; 3D Via, a new functionality available online on the website and at stores, where the customers could construct their own kitchen's projects and buy it from home; Digital Calculators and Simulators which are tools produced to help customers at the buying process with the main purpose of calculating, for example, the liters of paint cans or wallpaper rolls needed for a specific area and Online Distance Services where customers can be served online by specialized employees who accompany them in their purchases, virtually and without having to go to the store.

#### *1.3.8.2. Interactive Screens as a Phygital Project*

The actual customers live in a digital era, where the new generation are increasingly searching for new ways of interaction with the brands and products and also new ways of purchasing products. They want fast, easy and experiential solutions. Thus, Leroy Merlin is investing in its customer's experience, in order to create a differentiated relationship with them.

On AKI, the recent acquisition of the group, the company started to utilize some Interactive Screens as a loyalty way of interaction with the clients, where they could easily do their loyalty card. The brand also implemented small store screens with a barcode reader at store strategic points, so customers could check the price of each product faster. Furthermore, in November 2015, Leroy Merlin decided to implement on its physical stores some interactive screens, called Kiosks. The Kiosks was born with the necessity of creating a point of difference at the stores which could impact the customer experience there. This new trend represents a new channel of showing the products and services at stores, in an interactive way. The customers could visualize what the screen shows and touch on it, choosing what they want to see, according to the options that the company put available.

The company are responsible for deciding what the Kiosks provides, such as the type of content, type of actions (visualize, search, purchase, and others), where the screens are located at the stores and in which type of stores makes sense to implement it, some kind of publicity which could appear there and others issues. Moreover, the first Kiosks were created exclusively with digital catalog functionality, where customers could view the products available on the official website and conduct research. At this juncture, given the merger process that is taking place between Leroy Merlin and AKI's stores, it is essential to re-evaluate what kind of functions it would make sense to add in order to create a much more personalized experience according to the three types of store that exists: Proxi (little size), MSB (medium size) and GSB (bigger size).

The company believes that digital displays can also become a physical selling point, where people can make their own kiosk payments quickly and effectively themselves, which completely changes the consumer experience in store. So, according to this strategy, the company crafted new models of Kiosks which were design for four main purposes: extension of the range of products available in store (being a long-tail device), sales support tool integrated with the other commercial actions, possibility for the customers to carry out their project autonomously and complete their purchases directly on Kiosks.

### *1.4. Interactive Screens – Kiosks*

Leroy Merlin is investing in the improvement of its customer's experience at store and Kiosks was and is viewed as a device able to create a considerable impact on it. Thus, since September 2019, the company decided to invest on Kiosk's development and restructuring, which represents a large investment for the company, of an average of 161.000 euros, since there exist 183 Kiosks actually, which is attributed to each store that decides to implement the Kiosks.

In order to have the best device, it's necessary to create a strategy based on what the company needs, what customers are searching for, what collaborators use more and what market is searching for. Therefore, any detail for Kiosks is a key factor – Visual, Functionalities, Localization, Promotion, Price, People, Process and Physical Environment - for the success of the device.

*Visual*- Considering the visual aspects, the Kiosks are a Phillips smart multi-touch display, sharp and with excellent responsiveness. The image is provided with an excellent readability and quality (Leroy Merlin, 2020). The size of the screen was chosen regarding the needs of customers and it varies according to the local of the store where it is inserted on (McLean, Al-Nabhani & Wilson, 2018).

There exist five different models of Kiosks which vary according to the location in-store where it is, since each department has a specific area and at some sectors there is no space for a Kiosk that is on the floor, so it has to be adapted to put it on the posts of sectors. So, there exists two different structures available today: the foot structure (Figure 13,14,15 and 16) and the grid structure (Figure 17). The grid structure is always adapted to put on the posts in one side of the department, as shown in Figure 17 – Model 5. Therefore, the type of store' size is also very relevant to be managed, since in the smaller stores it makes sense to put smaller devices and in the big ones the opposite. Since each store autonomy, the decision between the type of model is up to the store itself.

The Kiosks was designed with a white structure, where the screen display is inserted on. In that structure, there is written the official website link in green color and highlighted the words "search more solutions" and "buy faster" in black color as a promotion strategy, in order to make customers realize the main Kiosk' functions. The colors white and green were chosen taking in consideration the colors of Leroy Merlin' logo. Regarding the screen properly, each Kiosk' screen has a different homepage, regarding the department where it is inserted on. For example, if a Kiosk is implemented on the decoration section, the first page that customers will see is a page with decoration products. In other words, if it is not inserted properly on a section, the first page that customers will see is a general page, like a homepage.

*Functionalities* - As it was explained before, Kiosks was designed to be useful on the three main phases of the customers journey: pre-purchase, purchase and post-purchase (even with lower impact actually). So, these devices were installed in stores with the purpose of creating and transforming the customers 'experience into something different and helpful. In consequence, Leroy Merlin is continuing investing in its functionalities. At this moment, Kiosks could be used to: visualize, search, compare, add products to wish list, see tutorials and inspirational ideas, calculate and purchase.

*Localization* - The location of Kiosks depends, one the first perspective, on the type of each store, since there exist three different types of stores, depending on its area:

*Proxi - Smaller size proximity stores:* Since there are smaller stores, with area between 1800 m2 to 3500 m2, which are divided into some departments according to the type of products. There also exists less quantity of products, since there are product ranges that must be chosen to not be available at this type of stores, so just exists the basic range of products.

Each collaborator is responsible for a department or some departments, however he has the know-how of all the products available and is also able to assist customers with the basic questions of decoration till more technical ones related to electricity, for example. Regarding that, the major percentage of customers visit this type of stores merely for buying basic products for their bricolage projects or to solve some problem that may occur at their homes (Leroy Merlin, 2020). However, there exists another percentage of customers who visit this type of stores searching for another type of products which are just available at the website or at the big stores.

So, Kiosks are an excellent technological device which could have bigger impact at this type of stores, since it may be used as a long-tail tool, meaning that customers could view the products available online or in another stores, compare the products and prices and it's also a good tool for collaborators, by helping them on their work's life. In this type of store, Kiosks are of great importance for managing queues, as a sales support tool and as a long-tail device, as it was explained already. Collaborators point out that it is very important that it is located near the council point of each section and that all Kiosks have the programming for its homepage as the section where it is located on and not a generalized page, so that it is customized to the location where it is.

*MSB – Medium size stores:* This type of store has a middle size, with area between 3500 m2 to 7000 m2, among Proxi and GSB considering the area and number of products. There just exists six MSB – Torres Vedras, Montijo, Oeiras, Guimarães, Caldas da Rainha and Portimão – which were AKI stores transformed into Leroy Merlin' ones. This type of store is so similar to Proxi concerning the range of products available and the tasks which each collaborator is responsible for, but in a bigger size. Besides that, the Kiosks assumes also a big importance and there are the stores where the Kiosks have more impact, as it could be possible to analyze further. It is strategically located near project sections, since are the ones with more people flow and where Kiosks are more relevant. However, the number and the localization of Kiosks depends directly on the area of the store, since the bigger the store, the more Kiosks it will have.

*GSB – Larger stores:* The GSB are larger stores, with area superior to 7000 m2, which have a specific layout and are divided in 13 sections, regarding the type of products. This type of stores offers more than 130.000 references of products, so regarding the huge range of products, each section is composed by specialized collaborators per section – being one of the biggest differences between Proxi.

Customers who visit these types of stores could be so different and visit it for many different purposes. For example, this type of stores is so searched by professional customers who are constructing a big project (B2B) but also by particular ones (B2C) who like to prepare little bricolage projects at their homes or just to solve some problem there. Usually, regarding its size and range of products available, this type of stores is a space usually visited to inspire, so there exist people who go there just to have inspiration for their homes and appreciate the new trends of bricolage and decoration.

The Kiosks are located, generally, at each section and are generally used to compare products, since the huge range of products that exist. Therefore, customers are capable to search, visualize, compare and buy anything they want without employee's assistance, which is very helpful since there exists a large number of visits per day in this type of stores. For that reason, Kiosks could be used against the long queues for assistance that exist sometimes or even for payment.

In other wise, although there are these different types of stores, each with its own autonomy, the company is the same and it all have to meet certain requirements to maintain consistency:

- In the case of smaller stores, as Proxi, where just exists two corridors, the first kiosk must be visible from the store entrance, the second normally after the curve to the second corridor and the third in the last third of the store, following the customer path in store;
- Kiosks must be on the positive side of the customer journey and must be equally distributed throughout the store, becoming fully integrated with the store layout;
- The suggested locations must have a light point and a good Wi-Fi signal;
- In minimum, each store must have three different Kiosks.

Lastly, it's also important to state that although the physical localization of Kiosks is on retail stores, customers navigate online using the official website.

*Price* - The main purpose of Kiosks is to offer a different experience to customers, by helping them while they are shopping at physical stores. In consequence, it's a free "service" available in almost all stores and in the future, Leroy Merlin wants that all stores are equipped with Kiosks.

The results, in terms of sales and customer satisfaction that the company expects to have in present and future, will make the big investment that they have made - approximately, 700 euros to 1200 euros per Kiosk, which will results in a total of about 161.025 euros since the beginning of implementation, September 2019, to July 2020 - and are making actually worthwhile in every way.

Moreover, the price of the Kiosks will always be free because the objective of this device is to improve the experience of consumers in the physical store and not earn money directly from it. The company will earn money indirectly with this since if the customers are satisfied with it, they will return to the store and certainly make more purchases, which will be converted into money.

In the future, Leroy Merlin believes that Kiosks could be also an impactful point of sale for customers, being a time saver and faster service to pay. Since September 2019, around seventy products have been ordered through twenty-one transactions and totaling 3854.22 euros. Although it is not yet the direct return that the company wishes, it is already a worthy start and it is natural that there are still not many purchases there directly in Kiosks, since it is a recent service and has not been widely advertised until it exists in all stores and it has operated more as sales support than direct sales system.

*Promotion* - Taking in consideration the transformation process which Leroy Merlin is going through, the company decided to redefine the Kiosks in the last September 2019, in order to improve some tools and the user experience. Thus, the company took advantage of the communication of these transformations on the Leroy Merlin and AKI' official websites and at stores, in order to promote the Kiosks, since the new transformed stores are all equipped with the new models.

In these new stores mainly, employees also assume an enormous importance, since they are the biggest promoters of the Kiosks in stores. Consequently, the company has been working on the animation and motivation of employees so that they use the Kiosks and promote them to customers, which has been completely impactful, as can be seen in the number of views in the transformed stores (see Table 4). The company also provides a Q&A which is designed with three purposes: help collaborators understanding the functionalities of Kiosks, to be a support and advice guide for consumers and a way of showing the range available in addition to the one available in the store.

On the "older" stores it is a little bit more difficult to promote Kiosks since there was already an older version of the Kiosks with some problems, so both consumers and employees are no longer as motivated to use the new ones. However, in each Kiosk there exists a communication of some of the advantages of Kiosks in their own frame of the structure.

In this pandemic time, Leroy Merlin published on its LinkedIn an image of Kiosks, as a way of promotion for the autonomy purchases directly there, without human contact (see Figure 18).

*Process* - The process for using Kiosks has been working for years and company are still investing on it, in order to create easier and simpler processes to customers, since the target of Leroy Merlin is composed by people with a big range of difference in age and which are searching for completely different products, services and experiences.

Moreover, at this moment, the Kiosks are accessible to everyone who visits physical stores and since there exist several Kiosks in a store, the first thing people will have to do is to access the Kiosk they prefer, or which are closer to him. Furthermore, it is important to mention that, depending on the location of the Kiosk, the homepage that is scheduled to appear will be different, being adapted to the section where it is inserted, with a page that shows the products of that section. The process of the usage of Kiosks is designed on Figure 19.

*People* - Leroy Merlin has a strong culture based on some values and a mission where the "*Habitant*" is the center of its activity, being composed by all the types of customers, collaborators, partners and all the stakeholders. Thus, the company wants to transmit that on its platforms – the physical stores, official website and social media. In physical stores the employees are the responsible for that, by being always available to help someone, being pleasant for everyone and promoting the products and services. Consequently, the collaborators are one of the key factors in order to make Kiosks succeed, since they could be the big promoters of this device. Some customers, like the older generation, are not able or are afraid to use a smart device alone, without any assistance. So, the collaborators are formed to assist, teach and solve any problem that occurs during the customer experience, being an important store loyalty mediator by helping consumers feel more confident about using this technological device (Adapa *et al*., 2019). In other wise, when some company wants to apply a device into its business, it must consider that any technological device needs maintenance and assistance, since it could appear some bug or problem that must be solved faster as possible. Therefore, in this case there exists a specialized technological systems team that is responsible for assembly Kiosks in each store, ensures that every factor is ensured and that reports and solve any problem that may occur. So, since there exists a large number of stores and there are others that are being transformed, sometimes it could be difficult to be present and available to answer faster to some problem that may occur. So, the collaborators are also responsible for the maintenance of Kiosks, being formed to solve little technical problems that may happen and need to be always alert to Kiosks, essentially while someone is exploiting it.

*Physical environment* - One of the major challenges while the company were designed the Kiosks was to provide a device which had an excellent interface in terms of usability, fast and able to answer every movement/touch of customers. The first version of Kiosks, since it was designed five years ago had some usability problems and sometimes the navigation became slower as it was expected. It was converted into customers and collaborators dissatisfaction, which company has the big responsibility to manage and recover. For that reason, Leroy Merlin invested in different new models of Kiosks designed by Phillips with a smart multi-touch display, sharp and with an excellent responsiveness.

Moreover, one of the priorities for 2020 is to invest on the speed and maintenance of the actual Kiosks since the company understood that was one the characteristics that customers and collaborators value the most and which makes Kiosks a device which really impacts the store atmosphere, as it will be possible to analyze further on the results of que questionnaires to Leroy Merlin 'customers and collaborators (Appendix C).

### *1.4.1. The impact of the Interactive Screens on Customer Journey*

Taking these in consideration, the Kiosks are changing the customer journey, due to the impact that it is gaining on the store customer experience, mostly during the pre-purchase and purchase phases.

During pre-purchase phase, which is the need recognition, search and consideration' phase, Kiosks assumes a really important position, since customers interact with it and they could use it for many purposes: search for the products they want, verify products stocks, see all products information provided, check for the best prices, compare some products characteristics and prices and search for ideas and inspiration photos. If the variables, in this case the visual and touch ones, are managed correctly and in an innovative way, it will originate an extraordinary customer experience, which consists of what is memorable and that can lead to a purchase behavior (Farias, Aguiar & Melo, 2014). Consequently, if Kiosks are able to provide a good experience on pre-purchase phase, customers easily would buy their products there, having an impact on purchase phase.

Moreover, the customers, using Kiosks, are able to make their purchases faster and easily by their own, without employees' assistance, solving one of the major pain point that customers find in stores, which is the long queues in payment (Capgemini Research Institute, 2019). Although, there exist a chance for employees to help them with the screens, since there are people who require help while they are shopping (Adapa *et al.,* 2019). The company believes it will be a strong source of sales, customer relationship, as well as a way of connecting the physical with the digital, also promoting the company's website, which is also one of the channels that is strongly betting, if it works as expected.

#### *1.4.1.1. Impact measured by Kiosks Data*

Taking the data retrieved from Kiosks Usability Month Report from Leroy Merlin, between October 2019 and April 2020, since it was restructured in September 2019, it is possible to verify that most of the people use this technological in-store device generally in the afternoons (see Table 2). It is comprehensive, since most of them are working during the day and Sunday's afternoons is the time of the week peak interactions, since are the free days where usually Portuguese people use to hang out with the family and do some shopping. Taking in consideration that at Sundays is the time when there is a bigger flow of customers at stores, consequently it is normal to have bigger interactions at Kiosks. However, it could be also explained by the fact of being the day with major queues to ask something to collaborators and for payment, so customers may use the Kiosks to get around this type of problems.

As it is also possible to verify on the Kiosks Report, the stores where Kiosks are more used, explained by the bigger range of interactions per Kiosk are the MSB stores, followed by Proxi and lastly GSB (see Table 3). Even if GSB stores usually have a larger number of Kiosks, MSB and Proxi has more interactions, as it could be possible to analyze by the number of pages visualized, summing up the interactions from all Kiosks. Moreover, there is additionally possible to confirm that the range of interactions in each Kiosk is larger in MSB and Proxi stores compared to GSB (see Table 4), which makes it possible to assume that customers and/or collaborators use more Kiosks there than on GSB stores. The Albufeira's case could be excluded and considered as not significant as it's a GSB store which has just one Kiosk, so it becomes natural that it has more visualizations, since it's the only one and GSB stores generally has more clients than the other formats (Leroy Merlin, 2020).

One of the circumstances which must be considered is that the number of interactions also depends on the sector at stores where the Kiosk is inserted, because there are sections where customers could use Kiosks for more purposes than in others. For example, there exist "project" sections, like Bathrooms, where Kiosks may be so helpful to compare all the characteristics of each product more easily, since it is usually a big investment. In other wise, in a picking section, as decoration, it can be less impacting because purchases are made mostly by impulse and for aesthetics.

On GSB, the pages where customers interact more are: Garden, Bathrooms, Ceramic Floor, Tools and Heating (see Table 5). In consequence, when the managers of each store are choosing the location of each Kiosk, they should base their strategy on this kind of information, in order to choose these sections as a priority, along with other factors that they find relevant as well. In other side, in Proxi stores the pages which are more visualized are also from Garden, Promotions, Woods, Heating and Bathroom (see Table 6) and on MSB stores, the pages which are more visualized are also Garden, Electricity, Bathroom, Lighting, Storage (see Table 7).

#### *1.4.1.2. Impact measured by Collaborators Experience*

Leroy Merlin is known for the importance it gives to its employees, and they are treated as the most important asset (Leroy Merlin, 2020). In this way, in order to be able to assess the impact on the company's store atmosphere, the opinion of the employees, who work with them on the ground and take the commercial perception of the business into consideration. Thus, it was conducted an online questionnaire to employees (see on Appendix C - Questionnaire 1), invited to participate in this test voluntarily and anonymously, which had about 526 responses to achieve a more quantitative and qualitative perception of their feedback. The questionnaire was used on Qualtrics and some questions used a 7-point Likert scale.

The socio-demographic characteristics were captured to better understand the participant's behavior and the majority are male (53,7%) and the others 46,3% are female. Regarding the aging factors, most collaborators who know what the Kiosks are, are 35-44y (49,8%), 31,8% are 25-34y, 13,4% are 45-54y, just 4,8% are 18-24y and only one person are more than 54 years old (0,2%). Additionally, in terms of education level, 39,6% of the participants have bachelor's degree and 8,3% have master's degree, while 49,6% have Elementary or Secondary Education and 2,5% have Professional higher technical courses.

Since the type of store size, is an important factor to measure the impact of Kiosks, 54,2% of the respondents works on GSB stores, 29,5% in PROXI stores and just 10,8% on MSB stores, which is kind normal, since there exists lower quantity of MSB stores. Moreover, 5,5% are from internal services. Therefore, 39% of them are salespeople, 27% are section managers and chiefs and 8,9% are human resources managers, management controllers and store directors. In lower percentage, the rest of the responses are from logistics, maintenance and accounting staff (5,8%) and 19,3% have other functions on store or in the internal services.

In order to understand their behavior and since, at this moment, Kiosks are a dynamic way of showing the official website, 514 of the respondents (97,7%) usually visit the official website of Leroy Merlin and 12 people don't (2,3%), since they don't feel the need to use it, don't like it or don't have time. Therefore, most of them visit every day (53,9%), 19,8% visit 4 to 5 times per week, 13,8% visit 2 to 3 times per week and 12,5% just visit one in a week.

Regarding the Kiosks, 94,3% of the collaborators know what a Kiosk is, and 30 collaborators don't (5,7%), which is a warning factor for the company, although it is a low percentage. When they are questioned about the main objectives of Kiosks, 53% of collaborators indicate that it is a sales support tool and also which improves the store experience. Moreover, 15,7% think it has the purpose of long tail increase in store, 12,9% that it is a possibility of doing their projects in autonomy, 13% as a way to reduce the long queues and 6,6% as a way to purchase the products directly.

Since the location of Kiosks is an important factor which interferes with the use of it, 38,5% says it is reasonable and 36,3% that it is good. However, many of the employees suggest that the location be next to each section, mainly in sections where there are long queues or in project sections, at the entrance to the store, close to the main corridors and near the payment boxes.

Regarding the use of Kiosks, 79% of collaborators don't usually use Kiosks during its workdays because the majority of them prefer to use other resources (34,4%), 16% because don't have any Kiosk in their store, 15,8% because they don't have any Kiosk close to their section, 2,3% because don't add value to the service, 1% because they don't know how to use it and 30,5% of them because of other issues like such as maintenance or speed problems. The ones that use (21,4%), use mostly for three main purposes: product consultation (27,6%), as a sales support tool (14,5%) and research (10,7%).

As collaborators, they give much importance to functions as Product consultation, Research and Sales support tool and as clients, they give much importance to the same and to Prices consultation.

Since intuitiveness is one of the tools that improves the Kiosks experience, the majority of collaborators rate it as reasonably intuitive (25,6%), intuitive (41%) and very intuitive (14,5%). Considering factors such as Interface, Speed, Search, Log in Privacy, Navigation, Device quality / Ergonomics, Location, Visual aspect and Support service, the ones that are better evaluated are the interface, location and visual aspect. On the other side, the ones worse evaluated are the speed, log in and privacy. Moreover, the factors that they would improve on Kiosks would be the speed, navigation, location, location and privacy.

Finally, thinking on new Kiosks functionalities, they would like to have: Direct ATM terminal at Kiosk, Consultation of the price of the articles per Scan system, See availability of services, Quantity / price calculator in an exclusive menu for Kiosks, Product comparator in an exclusive menu for Kiosks, Easy Log In, Products / Sections Locator in the store, Make the House Card quickly and Consult points and discounts on the House Card.

#### *1.4.1.3. Impact measured by Customers Experience*

On the other side, it is so relevant to have in consideration the perspective of Leroy Merlin' customers (see on Appendix C – Questionnaire 2), since the main objective of Kiosks is to improve their shopping experience by creating an impactful store atmosphere that stimulates their senses. So, it was conducted an online questionnaire, which had about 60 responses, since with the COVID-19 it's dangerous to make personal one, to customers of Leroy Merlin who were invited to participate voluntarily and anonymously. The questionnaire was used on Qualtrics and some questions used a 7-point Likert scale.

Regarding the socio-demographic characteristics of this sample of customers who answered the questionnaire and who knows what a Kiosks is, 29 of them are female (67,4%) and 14 are male (32,6%). Moreover, most of them are 18-34y in which 37,2% are 18-24y and 39,5% are 25-34y and there exists also answers from people 35-44y (15%) and 45-54 (9,3%). In terms of education level, 58,1% of participants have bachelor's degree, 25,6% have master's degree and the other participants have Elementary or Secondary Education (16,3%). Considering their location, 55,8% are from the center of Portugal, 23,3% from south and 20,9% from north.

In order to better understand the how many and why customers visit Leroy Merlin stores, it was asked for it and 88,3% of the participants usually visit and also, in general, 54,7% of them visit because of the proximity to their homes, 11,6% because of the store 'size, 12,6% because of the product 'availability and 10,5% due to the friendliness of the employees. Therefore, it was asked the same for the official website – PDH – and 78,3% usually visit it, on average minus 10% than in physical stores, since 64,3% prefer to buy directly their products on the physical stores, 14,3% of them needs to try and touch the products in person and 7,1% don't like to buy online.

The people who visit the online store, usually visit one in a month (55,3%), 21,3% 2 to 3 times per month, 4,3% 4 to 5 times per month, 8,5% every week and 10,6% every day and they prefer to use mainly their Smartphone to access and then the Desktop, Tablet and lastly the Kiosks. Considering these two types of stores, 87,2% of the participants prefer to buy at physical stores instead of buying online.

Regarding the Kiosks, 71,7% of clients knows what a Kiosk is and 28,3% don't. Moreover, 30,2 % of them never used it, 32,6% very rarely, 18,6% rarely, 16,3% sometimes and just one person always uses (2,3%), which means that the company should redesign a communication strategy in order to promote this devices in stores, since the three many reasons that explains these values are the fact that they prefer to ask employees for help (38,6%), they never saw one in their store (15,9%) and they don't think it adds value to them (15,9%). For this reason, with the purpose of understanding if the Kiosks has a good communication in stores, it was asked how customers knew and/or arrive to Kiosks and 66,1% because of their location in store, 8,9% advice from collaborators and in 7,1% communication in store and, in lower percentage, because of recommendation, publicity, social media or news, which proves the communication problems.

Although most people were aware of Kiosks because of its location, this can be improved, since although the majority of the participants evaluated the in-store location as reasonable (34,9%) or good, very good and excellent (46,5%), there exists another percentage of them (18,6%) who evaluate it as bad to terrible. Therefore, concerning the type of Kiosks more used, 40% of them use the Kiosks located on the main corridors, 30,2% of a specific section and 20,9% of store ‘entrance. The participants who used the Kiosks used and give more importance mainly to three functionalities: Product consultation (26,4%), Prices consultation (16,1%) and Research (14,9%).

Regarding the intuitiveness, the opinions are very dispersed, since 32,6% rated it as nothing intuitive to not very intuitive and also as intuitive to extremely intuitive and 34,9% as reasonably intuitive. Moreover, considering factors such as Interface, Speed, Search, Log in Privacy, Navigation, Device quality / Ergonomics, Location, Visual aspect and Support service, the ones that are better evaluated are the research, visual aspect, interface and location. On the other side, the ones worse evaluated are the log in, speed and privacy. Moreover, the factors that they would improve on Kiosks would be the speed, navigation and privacy. Even the Kiosks have some issues to solve or improve, the majority of participants (65,1%) answered that Kiosks impacted positively their in-store experience, in which 32,2% impacts moderately and 28,9% are impacts.

Finally, thinking on new Kiosks functionalities, they would like to have: Direct ATM terminal at Kiosk, Consultation of the price of the articles per Scan system, Quantity / price calculator in an exclusive menu for Kiosks, Product comparator in an exclusive menu for Kiosks, Products / Sections Locator in the store, Make the House Card quickly and Consult points and discounts on the House Card. Furthermore, in order to evaluate the customer satisfaction, and possible loyalty with Kiosks, it was asked if they would use the Kiosks again in the future and most of them answered positively (76,8%). Moreover, 48,8% of them would recommend the Kiosks to a friend, which is a positive signal.

### *1.5. Case study questions*

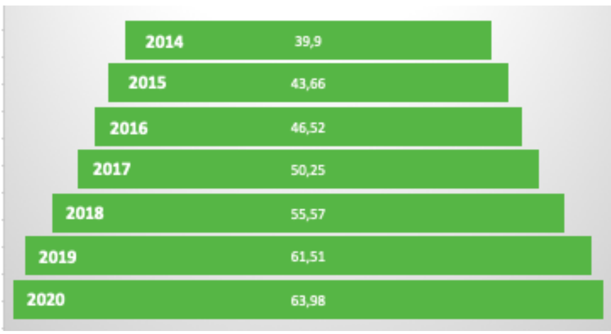
1. Describe the current DIY and Home Improvement in Portugal and based on the pandemic context, identify the main reasons for the importance of the new trends in retail applied in store. Do you consider it a good time for companies to apply for them? Explain and give real examples that are not mentioned in the case.
2. Starting with the contextualization of the case and the current strategy of Leroy Merlin, develop a SWOT analysis based on it. How can the company use its strengths to take advantage of its opportunities to avoid potential threats and exploit its opportunities to overcome weaknesses?
3. Explain how Leroy Merlin could use its differentiation factors to overcome this pandemic context which has challenged the market. Develop strategic actions to attract and retain the Portuguese shoppers.
4. Taking into consideration the fact of e-commerce is increasing, mainly during this pandemic context, and the current generations prefer to shop online instead of a physical store, do you think that the store atmosphere is outdated, considering the Leroy Merlin business? Base your answer within the four human senses - vision, touch, smell and hearing- mentioning which ones makes sense to be developed or adapted and in what in-store Kiosks may impact and why.
5. Considering this pandemic time caused by COVID-19, how can Kiosks impact stores and make people choose to shop there instead of buying online? Explain why and give 3 grounded ideas.
6. "*Consumers increasingly expect that efficiency and engaging online experience to be replicated in-store*" (Capgimini, 2020). Regarding the major pain points that occur at the physical stores and which affects the customer journey, explain the importance and the impact that Interactive Screens may have on it, regarding the Smart Stores concept.
7. Considering the data available on this case study, how do you evaluate the impact of interactive screens at Leroy Merlin? Does it impact positively or negatively? Base your answer on the theoretical framework "*The impact of Smart Retail Technologies"* (Figure 20) and the feedback obtained from the clients and collaborators, do you think that Kiosks should be reformulated? What will be the next steps? Explain and describe your ideas.

## 2. Appendixes

### 2.1. Appendixes A: Figures

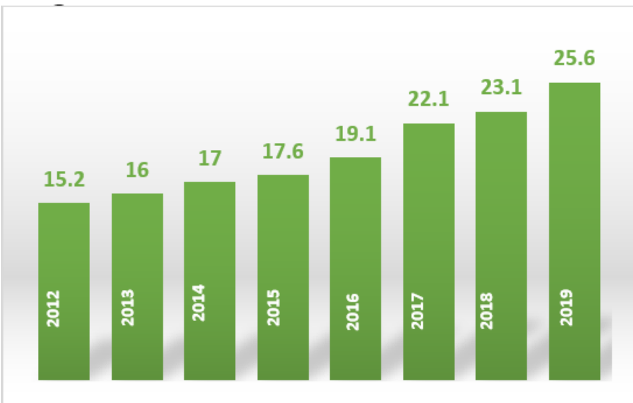

**Appendix A: Figure 1 for the 1st figure of Chapter 1- Bricolage and Home Improvement**

Source: Leroy Merlin (2020)




**Appendix A: Figure 2 for the 2nd figure of Chapter 1 – Evolution of Valadeo' Share Value, since 2014 to 2020**

Source: ADEO (2020)

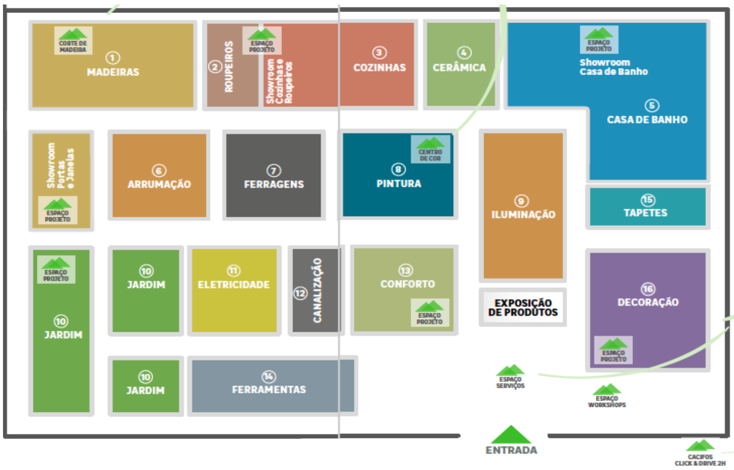



**Appendix A: Figure 3 for the 3rd figure of Chapter 1– ADEO's Revenues, in billions of euros**

Source: ADEO (2020)

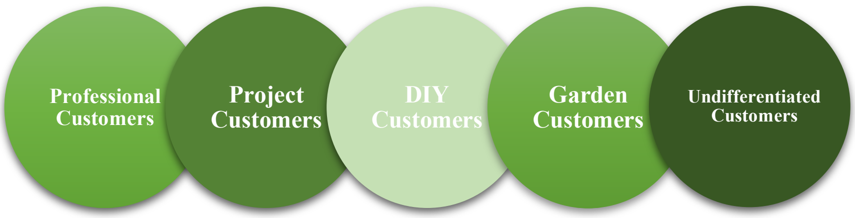

**Appendix A: Figure 4 for the 4th figure of Chapter 1 - Growth of the world "DIY", between June 2019 and May 2020**

Source: Google Trends (2020)



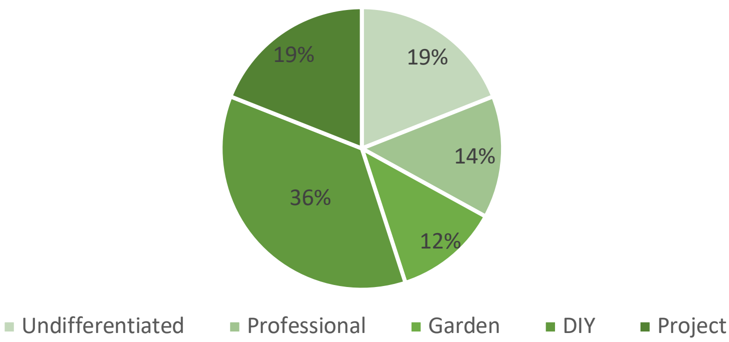

**Appendix A: Figure 5 for the 5th figure of Chapter 1 - Leroy Merlin Store's Layout**

Source: Leroy Merlin (2020)




**Appendix A: Figure 6 for the 6th figure of Chapter 1 - The five type of Leroy Merlin Customers, according to Deloitte**

Source: Deloitte Digital (2018)



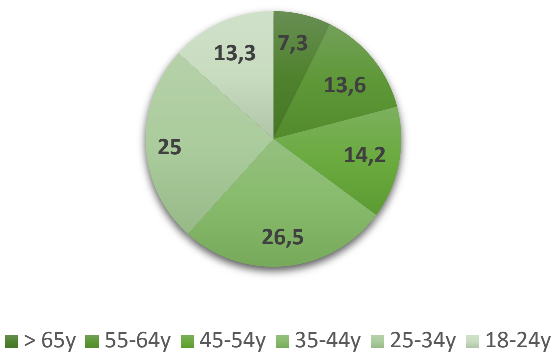

**Appendix A: Figure 7 for the 7th figure of Chapter 1 - The five different types of Leroy Merlin Customers, in percentage**

Source: Deloitte Digital (2018)

| João Ricardo | André and Silvia | Maria Lourenço | Elisabete Rocha |
|---|---|---|---|
| 49 years old | 28 and 29 years old | 37 years old | 64 years old |
| Professional Customer: Constructor of small properties.<br><br>Person who likes to maintain a good relationship with their clients and who uses their mobile as a tool to communicate with their employees and clients.<br><br>Only uses internet to communicate with his friends and during his days, he usually goes into construction material stores to collect the products for his day life. | Pilot and Flight Attendant.<br><br>Project Customers, who bought a house recently and are currently searching for inspiration to renovate their home.<br><br>Digital natives who are always connected and couldn't live without their phones.<br><br>They are always searching for online reviews and do their online research before travelling, going into a store or into a restaurant. | Product Manager in a multinational company.<br><br>Lives in Lisbon alone, so she enjoys staying at home.<br><br>Digital native who search online before going into a physical store and gives much importance to reviews.<br><br>Usually likes to give original decorative presents to her friends, like DIY options. | Pre-reformed woman.<br><br>Married for 40 years and since the last 6 months that lives in Sintra alone with her husband.<br><br>Just uses her phone to call to her closer family and only uses her computer to work.<br><br>In her free times, she likes to hang out with her family and read. At this moment, the security and comfort are the main necessities for her.<br><br>Her children 'advices are so important for her. |

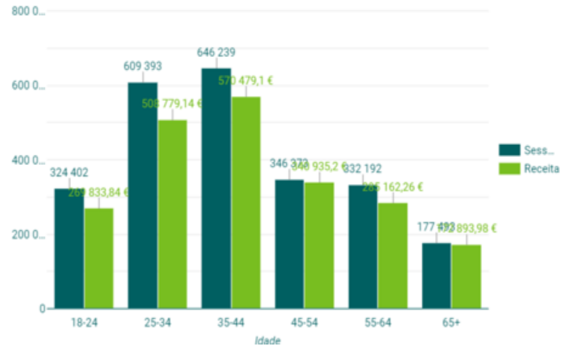
**Appendix A: Figure 8 for the 8th figure of Chapter 1 – Leroy Merlin Personas, by *Deloitte Digital***

Source: Deloitte Digital (2018)



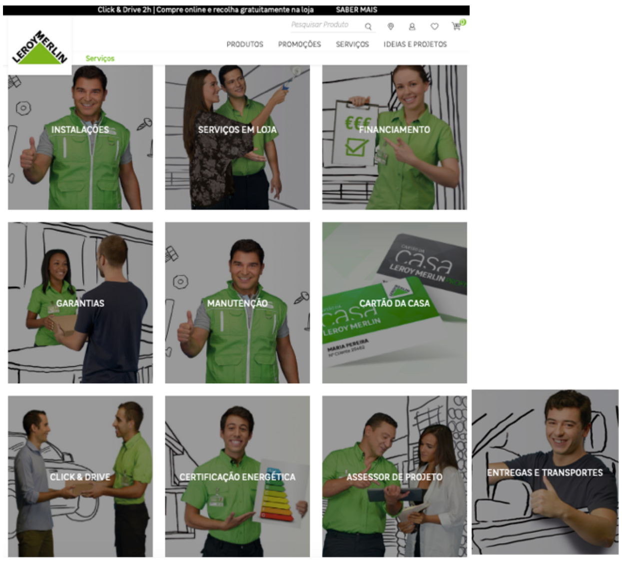

**Appendix A: Figure 9 for the 9th figure of Chapter 1 - Number of online visits per age ranges, in percentage**

Source: Leroy Merlin (2020)




**Appendix A: Figure 10 for the 10th figure of Chapter 1 - Total of money spent online per age ranges**

Source: Leroy Merlin (2020)




**Appendix A: Figure 11 for the 11th figure of Chapter 1 - Services : Leroy Merlin Portugal**

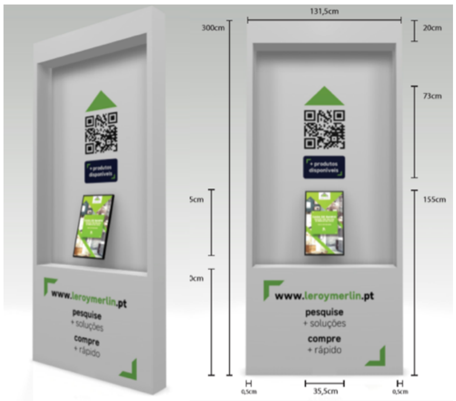
Source: Leroy Merlin Portugal (2020)


**Appendix A: Figure 12 for the 12th figure of Chapter 1 - CRM: Leroy Merlin Portugal**

Source: Leroy Merlin Portugal (2020)

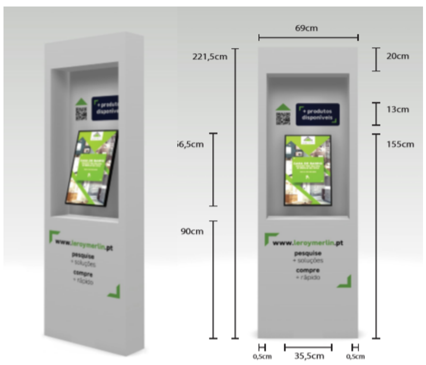

**Appendix A: Figure 13 for the 13th figure of Chapter 1 - Model 1 of Kiosk**

Source: Leroy Merlin (2019)



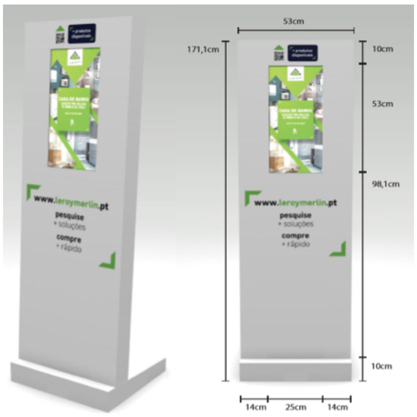

**Appendix A: Figure 14 for the 14th figure of Chapter 1 - Model 2 of Kiosk**

Source: Leroy Merlin (2019)




**Appendix A: Figure 15 for the 15th figure of Chapter 1 - Model 3 of Kiosk**

Source: Leroy Merlin (2019)




**Appendix A: Figure 16 for the 16th figure of Chapter 1 - Model 4 of Kiosk**

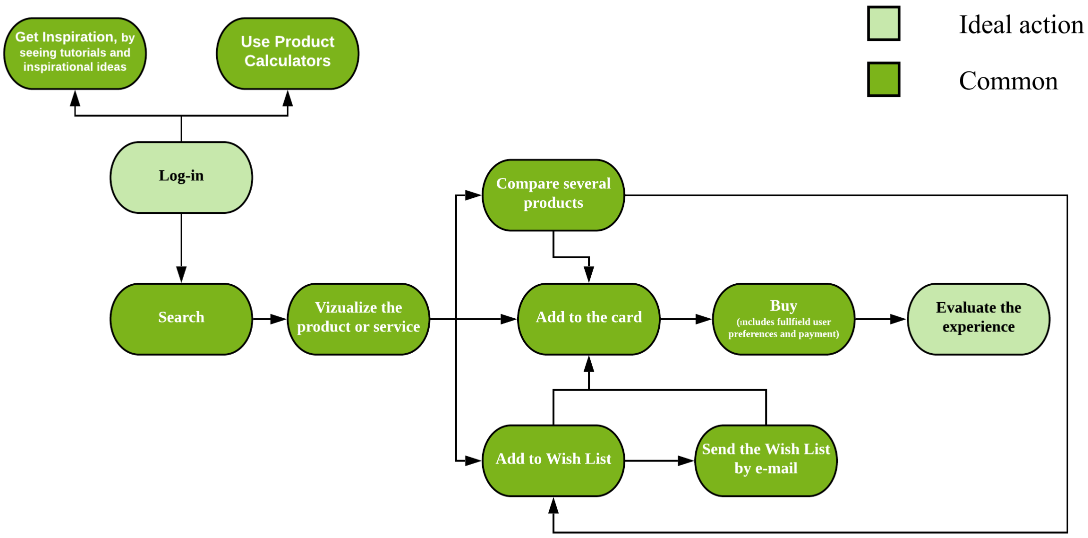
Source: Leroy Merlin (2019)

**Appendix A: Figure 17 for the 17th figure of Chapter 1 - Model 5 of Kiosk**

Source: Leroy Merlin (2019)

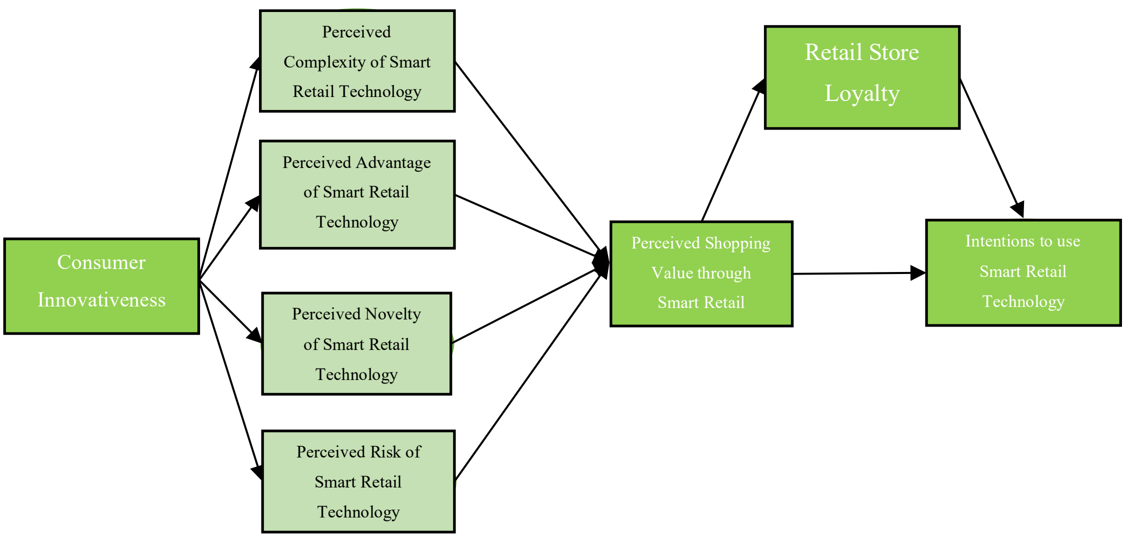
**Appendix A: Figure 18 for the 18th figure of Chapter 1 - LinkedIn publication in a COVID-19 situation**

Source: Leroy Merlin (2020)




**Appendix A: Figure 19 for the 19th figure of Chapter 1 - The process of Leroy Merlin Kiosk's usability**

Source: Own elaboration based on Leroy Merlin (2020)




**Appendix A: Figure 20 for the 1st figure of Chapter 4 – Framework: The impact of Smart Retail Technologies**

Source: (Adapa *et al.,* 2019).


**Appendix A: Figure 21 for the 2nd figure of Chapter 4 – Informational Kiosk in Dubai Mall with store 'location**

Source : Own elaboration (2020)


**Appendix A: Figure 22 for the 1st figure of Chapter 6 - Suggestion of a new model of Kiosk**

Source: Own elaboration (2020)

## 2.2. Appendixes B: Tables

**Appendix B: Table 1 for the 1st table of Chapter 1 - Competitors of Leroy Merlin**

| | LEROY MERLIN | Global Competitors | Direct Competitors in Portugal | | | | Kiosk's Direct Competitor |
|---|---|---|---|---|---|---|---|
| | | | MaxMat | Brico Depôt | Bricomarché | IKEA | Amazon |
| **Strategy** | Best quality products and specialized service | The Home Depôt<br>Lowe's Home Improvement<br>Brico Depôt<br>Brico Marché<br>BAUHAUS<br>HORNBACH | Low prices' professionals | Warehouse store with low prices | Best quality products with low prices | Wide range of well-designed, functional home furnishing products at prices so low | Widest choice of products and services offered at competitive prices, fast delivery and exceptional customer service |
| **Stores in Portugal** | 48 | | 31 | 3 | 38 | 5 | 0 |
| **Range of products** | 130.000 products available online and in stores, depending on the size | | 15.000 products | 10.500 products | More than 10.000 products | 12.000 products in the total IKEA (IKEA, 2020) | More than 1.1 million products of Home Improvement (Dayton, 2020) |
| **Segments which competes with Leroy Merlin** | DIY (Bricolage), Construction Products, Home Decoration and Garden | | DIY, Construction Material, Bathrooms and Garden | Garden, Heating, Bathroom, Kitchen, Wood, Ceramics, Painting, Construction, Plumbing, Electricity Lighting, Decoration, Tools and Storage | DIY, Construction Material, House Furniture, Garden and Pet Shop | Decoration, Lighting, Kitchen, Storage, Bathroom and Garden | Home Improvement |

Source: Own elaboration based on Leroy Merlin and competitor's data (2020)

**Appendix B: Table 2 for the 2nd table of Chapter 1 - Kiosk's Interactions considering the time and day of the week**

Dia da semana / Visualizações de página

| Hora | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Grand total |
|---|---|---|---|---|---|---|---|---|
| 12 AM | 13 | 10 | 20 | 10 | 11 | 20 | 14 | 98 |
| 1 AM | 25 | 10 | 20 | 17 | 14 | 12 | 19 | 117 |
| 2 AM | 20 | 26 | 24 | 8 | 22 | 19 | 11 | 130 |
| 3 AM | 14 | 26 | 20 | 9 | 19 | 13 | 8 | 109 |
| 4 AM | 9 | 37 | 10 | 6 | 20 | 11 | 16 | 109 |
| 5 AM | 12 | 122 | 29 | 35 | 21 | 21 | 16 | 256 |
| 6 AM | 17 | 62 | 57 | 76 | 50 | 40 | 33 | 335 |
| 7 AM | 92 | 124 | 107 | 78 | 118 | 98 | 84 | 701 |
| 8 AM | 169 | 141 | 130 | 104 | 96 | 94 | 130 | 864 |
| 9 AM | 106 | 181 | 118 | 135 | 141 | 137 | 72 | 890 |
| 10 AM | 264 | 137 | 197 | 128 | 113 | 143 | 95 | 1,077 |
| 11 AM | 391 | 143 | 282 | 254 | 178 | 203 | 180 | 1,631 |
| 12 PM | 379 | 152 | 285 | 144 | 166 | 197 | 164 | 1,487 |
| 1 PM | 267 | 133 | 222 | 141 | 134 | 160 | 148 | 1,205 |
| 2 PM | 416 | 141 | 232 | 145 | 188 | 165 | 124 | 1,411 |
| 3 PM | 692 | 321 | 242 | 237 | 176 | 200 | 192 | 2,060 |
| 4 PM | 802 | 326 | 187 | 305 | 164 | 164 | 164 | 2,112 |
| 5 PM | 722 | 154 | 375 | 272 | 259 | 239 | 180 | 2,201 |
| 6 PM | 581 | 189 | 349 | 278 | 229 | 251 | 185 | 2,062 |
| 7 PM | 324 | 180 | 314 | 227 | 248 | 188 | 118 | 1,599 |
| 8 PM | 126 | 87 | 205 | 116 | 88 | 106 | 77 | 805 |
| 9 PM | 22 | 18 | 62 | 26 | 34 | 21 | 83 | 266 |
| 10 PM | 13 | 15 | 34 | 10 | 41 | 33 | 72 | 218 |
| 11 PM | 3 | 11 | 16 | 36 | 29 | 27 | 13 | 135 |
| Grand total | 5,479 | 2,746 | 3,537 | 2,797 | 2,559 | 2,562 | 2,198 | 21,878 |

Source : Leroy Merlin (2020)

**Appendix B: Table 3 for the 3rd table of Chapter 1 - LEROY MERLIN' stores with more Kiosk' interactions**

Dados dos Kioskes por Loja

Select date range | Loja | Formato de Loja: GSB, MSB, Proxi (3) | Zona de Vida

| | Nº Loja | Loja | Nº de Kioskes em loja | Visualizações de página | Média de Visualizações por Kioske | Sessões | Média de Sessões por Kioske |
|---|---|---|---|---|---|---|---|
| 1. | 57 | No Shop | 0 | 3,438 | null | 682 | null |
| 2. | 34 MSB | Montijo | 11 | 3,077 | 279.73 | 366 | 33.27 |
| 3. | 39 | No Shop | 0 | 1,963 | null | 249 | null |
| 4. | 31 MSB | Torres Vedras | 9 | 1,406 | 156.22 | 631 | 70.11 |
| 5. | 13 GSB | Leiria | 14 | 1,242 | 88.71 | 461 | 32.93 |
| 6. | 48 | No Shop | 0 | 1,143 | null | 308 | null |
| 7. | 40 PROXI | Parque das Nações | 3 | 859 | 286.33 | 229 | 76.33 |
| 8. | 18 GSB | Santarém | 12 | 851 | 70.92 | 239 | 19.92 |
| 9. | 58 PROXI | Mafra | 3 | 809 | 269.67 | 139 | 46.33 |
| 10. | 60 MSB | Oeiras | 11 | 789 | 71.73 | 270 | 24.55 |
| 11. | 51 PROXI | Penafiel | 3 | 776 | 258.67 | 172 | 57.33 |
| 12. | 52 PROXI | Santa Maria da Feira | 4 | 574 | 143.5 | 182 | 45.5 |
| 13. | 14 GSB | Aveiro | 5 | 548 | 109.6 | 192 | 38.4 |
| 14. | 11 | Braga | 4 | 537 | 134.25 | 214 | 53.5 |
| 15. | 61 | Torres Novas | 3 | 523 | 174.33 | 154 | 51.33 |
| 16. | 38 | Cascais | 3 | 453 | 151 | 186 | 62 |
| 17. | 41 | No Shop | 0 | 395 | null | 159 | null |
| 18. | 47 | Viana do Castelo | 3 | 384 | 128 | 163 | 54.33 |
| 19. | 4 | Albufeira | 1 | 351 | 351 | 126 | 126 |
| 20. | 9 | Coimbra | 5 | 340 | 68 | 246 | 49.2 |

Source : Leroy Merlin (2020)

**Appendix B: Table 4 for the 4th table of Chapter 1 - Stores with the highest average number of views by Kiosk**

Dados dos Kioskes por Loja

Jan 1, 2020 - Apr 11, 2020 | Loja | Formato de Loja | Zona de Vida

| | Nº Loja | Loja | Nº de Kioskes em loja | Visualizações de página | Média de Visualizações por Kioske | Sessões | Média de Sessões por Kioske |
|---|---|---|---|---|---|---|---|
| 1. | 4 GSB | Albufeira | 1 | 351 | 351 | 126 | 126 |
| 2. | 40 PROXI | Parque das Nações | 3 | 859 | 286.33 | 229 | 76.33 |
| 3. | 65 PROXI | Sacavém | 1 | 285 | 285 | 129 | 129 |
| 4. | 34 MSB | Montijo | 11 | 3,077 | 279.73 | 366 | 33.27 |
| 5. | 58 PROXI | Mafra | 3 | 809 | 269.67 | 139 | 46.33 |
| 6. | 51 PROXI | Penafiel | 3 | 776 | 258.67 | 172 | 57.33 |
| 7. | 61 PROXI | Torres Novas | 3 | 523 | 174.33 | 154 | 51.33 |
| 8. | 31 MSB | Torres Vedras | 9 | 1,406 | 156.22 | 631 | 70.11 |
| 9. | 38 PROXI | Cascais | 3 | 453 | 151 | 186 | 62 |
| 10. | 52 PROXI | Santa Maria da Feir | 4 | 574 | 143.5 | 182 | 45.5 |
| 11. | 11 | Braga | 4 | 537 | 134.25 | 214 | 53.5 |
| 12. | 47 | Viana do Castelo | 3 | 384 | 128 | 163 | 54.33 |
| 13. | 56 | Figueira da Foz | 3 | 329 | 109.67 | 114 | 38 |
| 14. | 14 | Aveiro | 5 | 548 | 109.6 | 192 | 38.4 |
| 15. | 2 | Sintra | 1 | 94 | 94 | 14 | 14 |
| 16. | 13 | Leiria | 14 | 1,242 | 88.71 | 461 | 32.93 |
| 17. | 1 | Gondomar | 1 | 76 | 76 | 15 | 15 |
| 18. | 60 | Oeiras | 11 | 789 | 71.73 | 270 | 24.55 |
| 19. | 18 | Santarém | 12 | 851 | 70.92 | 239 | 19.92 |
| 20. | 9 | Coimbra | 5 | 340 | 68 | 246 | 49.2 |

Source : Leroy Merlin (2020)

**Appendix B: Table 5 for the 5th table of Chapter 1 - Pages with the highest number of views in GSB stores**

| | Página | Visualizações de página |
|---|---|---|
| 1. | /Produtos/Jardim Garden | 310 |
| 2. | /Produtos/Casa-de-banho Bathrooms | 233 |
| 3. | / | 193 |
| 4. | /Produtos/Pavimentos-revestimentos/Ceramica Ceramic Floor | 140 |
| 5. | /pt/politica-de-privacidade-e-cookies | 113 |
| 6. | /Produtos/Ferramentas Tools | 107 |
| 7. | /Produtos/Aquecimento-e-Climatizacao Heating | 75 |
| 8. | /Produtos/Ferragens | 65 |
| 9. | /Produtos/Decoracao | 57 |
| 10. | /Produtos/Madeiras | 50 |

Source : Leroy Merlin (2020)

**Appendix B: Table 6 for the 6th table of Chapter 1 - Pages with the highest number of views in Proxi stores**

| | Página | Visualizações de página |
|---|---|---|
| 1. | / | 3,008 |
| 2. | /Produtos/Jardim Garden | 193 |
| 3. | /pt/ofertas-do-mes Promotions | 186 |
| 4. | /pt/politica-de-privacidade-e-cookies | 148 |
| 5. | /Produtos/Madeiras Woods | 143 |
| 6. | /Produtos/Aquecimento-e-Climatizacao/Outlet-Aquecimento Heating | 98 |
| 7. | /Produtos/Casa-de-banho Bathrooms | 75 |
| 8. | /pt/promocoes | 66 |
| 9. | /login | 57 |
| 10. | /Produtos/Cozinhas | 53 |

Source : Leroy Merlin (2020)

## Appendix B: Table for the 7th table of Chapter 1 - Pages with the highest number of views in MSB stores

| | Página | Visualizações de página |
|---|---|---|
| 1. | /Produtos/Jardim Garden | 2,626 |
| 2. | / | 196 |
| 3. | /Produtos/Eletricidade-e-domotica Electricity | 167 |
| 4. | /Produtos/Casa-de-banho Bathrooms | 158 |
| 5. | /pt/politica-de-privacidade-e-cookies | 149 |
| 6. | /Produtos/Iluminacao Lighting | 124 |
| 7. | /Produtos/Roupeiros Storage | 116 |
| 8. | /Produtos/Decoracao | 109 |
| 9. | /Produtos/Ferramentas | 103 |
| 10. | /Produtos/Aquecimento-e-Climatizacao | 102 |

Source : Leroy Merlin (2020)

## 2.3. Appendix C: Questionnaires

### Appendix C: Questionnaire 1 - Collaborators' questionnaire about Kiosks

# KIOSKS

**Kiosks's Experience - Collaborators of LEROY MERLIN**

Os **Kiosks** são uma estrutura com um ecrã interativo, em que os clientes e colaboradores têm a oportunidade de fazer as suas pesquisas e compras online, enquanto estão em loja.Utilizas os Kiosks no teu dia a dia? Gostaria de saber o teu feedback de forma a otimizá-lo para tornar a tua experiência ainda melhor! O presente questionário servirá para melhorar a experiência dos nossos Kiosks. Este terá a duração de, aproximadamente, 7 minutos. | **The Kiosks are a structure with an interactive screen, in which customers and employees have the opportunity to search for their produtcts and shopping online, while they are in the store. Do you use Kiosks in your daily life? We would like to know your feedback in order to optimize it to make your experience even better! This questionnaire will serve to improve the experience of our Kiosks. This will last approximately 7 minutes.**

Qual é o formato da tua loja? | **What is the format of your store?**

- ◯ PROXI
- ◯ MSB
- ◯ GSB
- ◯ Serviços Internos | **Internal Services**

Em que loja PROXI trabalhas? | **In which PROXI store do you work in?**

- ◯ AKI ALVERCA
- ◯ AKI BARREIRO
- ◯ AKI BRAGANÇA
- ◯ AKI CASCAIS
- ◯ AKI CASTELO BRANCO
- ◯ AKI CHAVES
- ◯ AKI COLOMBO
- ◯ AKI ÉVORA
- ◯ AKI FARO
- ◯ AKI FIGUEIRA DA FOZ
- ◯ AKI FUNCHAL
- ◯ AKI GUARDA
- ◯ AKI LOURES
- ◯ AKI LOURESHOPPING
- ◯ AKI MAFRA
- ◯ AKI PALÁCIO DO GELO
- ◯ AKI PARQUE DAS NAÇÕES
- ◯ AKI PALÁCIO DO GELO
- ◯ AKI PARQUE DAS NAÇÕES
- ◯ AKI PENAFIEL
- ◯ AKI PONTA DELGADA
- ◯ AKI PORTO
- ◯ AKI SACAVÉM
- ◯ AKI SANTA MARIA DA FEIRA
- ◯ AKI SETÚBAL
- ◯ AKI TELHEIRAS
- ◯ AKI TORRES NOVAS
- ◯ AKI VIANA DO CASTELO
- ◯ AKI VISEU

# KIOSKS

Em que loja MSB trabalhas? | **In which MSB store do you work in?**

- CALDAS DA RAINHA
- GUIMARÃES
- MONTIJO
- OEIRAS
- PORTIMÃO
- TORRES VEDRAS

Em que loja GSB trabalhas? | **In which GSB store do you work in?**

- ALBUFEIRA
- ALFRAGIDE
- ALMADA
- AMADORA
- AVEIRO
- BRAGA
- COIMBRA
- GAIA
- GONDOMAR
- LEIRIA
- LOULÉ
- MAIA
- MATOSINHOS
- SANTARÉM
- SINTRA

Qual é a tua função? | **What is your function?**

- Vendedor | **Salespeople**
- Vendedor Projeto | **Project Seller**
- Responsável de Secção | **Section Manager**
- Chefe de Secção | **Head of Section**
- Responsável Recursos Humanos, Controlador Gestão, Diretor Loja | **Human Resources, Management Controller, Store Director**
- Equipa de Manutenção ou Contabilidade | **Maintenance or Accounting Team**
- Equipa de Logística | **Logistics Team**
- Outro | **Other**

# KIOSKS

Costumas visitar o site leroymerlin.pt? | **Do you usually visit the website leroymerlin.pt?**

- ◯ Sim | **Yes**
- ◯ Não | **No**

Quantas vezes o visitas, aproximadamente? | **How many times do you visit it, approximately?**

- ◯ Nunca | **Never**
- ◯ 1 vez por semana | **Once a week**
- ◯ 2 a 3 vezes por semana | **2 to 3 times a week**
- ◯ 4 a 5 vezes por semana | **4 to 5 times a week**
- ◯ Todos os dias | **Everyday**

Porque motivo não visitas o site leroymerlin.pt? | **Why don't you visit the site leroymerlin.pt?**

- ◯ Não tenho tempo | **I don't have time**
- ◯ Não gosto de utilizar o site | **I don't like to use it**
- ◯ Não sinto necessidade de utilizar | **I don't need to use it**
- ◯ Outro | **Other**

A seguinte imagem representa um dos modelos de Kiosks utilizados nas lojas LEROY MERLIN. Estes Kiosks são uma estrutura branca com um ecrã interativo inserido, em que os clientes e colaboradores têm a possibilidade de utilizar para fazer pesquisas, consultar artigos e fazer as suas compras enquanto estão em loja. | **The following image represents one of the Kiosk models used in LEROY MERLIN stores. These Kiosks are a white structure with an interactive screen inserted, which customers and employees have the possibility to use to do research, consult articles and make their purchases while they are in store.**


LEROY MERLIN

# KIOSKS

Sabes o que são os Kiosks? | **Do you know what is a Kiosk?**

- ○ Sim | **Yes**
- ○ Não | **No**

Para ti, quais são os principais objetivos dos Kiosks? | **In your perspective, what are the main purposes of Kiosks?**

- ○ Aumento do long tail em loja | **Increase the long-tail in the store**
- ○ Ferramenta de apoio à venda integrada no gesto | **Sales support tool**
- ○ Possibilidade do cliente fazer o seu projeto em autonomia | **Possibility of doing the projects in autonomy**
- ○ Redução de filas de espera | **Reduction the long queues**
- ○ Melhoria na experiência em loja | **Improve the store experience**
- ○ Compra de produtos diretamente | **Purchase the products directly**
- ○ Outro | **Other**

O que achas da localização em loja dos nossos Kiosks? Numa escala de 1 a 7, em que 1-Péssima e 7-Excelente. | What do you think about the Kiosks location in our stores? On a scale of 1 to 7, where 1-Poor and 7-Excellent.

- ○ 1 - Péssima | **1- Poor**
- ○ 2 - Muito má | **2- Very bad**
- ○ 3 - Má | **3- Bad**
- ○ 4 - Razoável | 4 - **Reasonable**
- ○ 5 - Boa | **5 - Good**
- ○ 6 - Muito boa | **6 – Very Good**
- ○ 7 - Excelente | **7 – Excellent**

Que localização sugeres e porquê? | **What location do you suggest and why?**

Costumas utilizar os Kiosks durante o dia de trabalho? | **Do you use Kiosks during your workdays?**

- ○ Sim | **Yes**
- ○ Não | **No**

# KIOSKS

Porque razão não utilizas? | **Why don't you use it?**

- ◯ Não tenho nenhum na minha loja | **I don't have any in my store**
- ◯ Não acrescenta valor à venda | **It doesn't add value to the selling process**
- ◯ Prefiro utilizar outros recursos | **I prefer to use another resources**
- ◯ Não tenho nenhum próximo da minha secção | **I don't have any close to my section**
- ◯ Não sei utilizar | **I don't know how to use it**
- ◯ Outro | **Other**

Se sim, com que finalidade utilizas os Kiosks? (Podes escolher várias opções) | **If so, for what purpose do you use Kiosks? (You can choose several options)**

- ◯ Consulta de produtos | **Products consultation**
- ◯ Consulta de catálogos | **Catalogs consultation**
- ◯ Consulta de preços | **Prices consultation**
- ◯ Consulta de stock | **Stock consultation**
- ◯ Consulta Campanhas | **Campaigns consultation**
- ◯ Serviços em loja | **In-store services**
- ◯ Consultar Workshops | **Workshops consultation**
- ◯ Consulta de horários | **Schedules Consultation**
- ◯ Pesquisa | **Research**
- ◯ Comparar produtos | **Comparation of products**
- ◯ Consultar Reviews de produtos | **Consultation products reviews**
- ◯ Ferramenta de apoio à venda | **Sales support tool**
- ◯ Incentivo de compra para os clientes | **Purchase incentive**
- ◯ Outro | **Other**

LEROY MERLIN

# KIOSKS

Pensando na tua perspetiva de colaborador, qual destas funcionalidades consideras mais relevante nos Kiosks? Numa escala de 1 a 7, em que 1-Extremamente irrelevante e 7-Extremamente relevante. | **Thinking about your perspective as a collaborator, which of these features do you consider most relevant in Kiosks? On a scale of 1 to 7, where 1-Extremely irrelevant and 7-Extremely relevant.**

- Consulta de produtos | **Products consultation**
- Consulta de catálogos | **Catalogs consultation**
- Consulta de preços | **Prices consultation**
- Consulta de stock | **Stock consultation**
- Consulta de Campanhas em vigor | **Campaigns consultation**
- Serviços em loja | **In-store services**
- Consulta de Workshops | **Workshops consultation**
- Consulta de Horários | **Schedules Consultation**
- Pesquisa| **Research**
- Comparar produtos | **Comparation of products**
- Consultar Reviews de produtos | **Consultation products reviews**
- Ferramenta de apoio à venda | **Sales support tool**
- Incentivo de compra para os clientes | **Purchase incentive**

Pensando como cliente e pondo-te no seu lugar, qual destas funcionalidades consideras mais relevante nos Kiosks? Numa escala de 1 a 7, em que 1-Extremamente irrelevante e 7-Extremamente relevante. | **Thinking about your perspective as a client, which of these features do you consider most relevant in Kiosks? On a scale of 1 to 7, where 1-Extremely irrelevant and 7-Extremely relevant.**

- Consulta de produtos | **Products consultation**
- Consulta de catálogos | **Catalogs consultation**
- Consulta de preços | **Prices consultation**
- Consulta de stock | **Stock consultation**
- Consulta de Campanhas em vigor | **Campaigns consultation**
- Serviços em loja | **In-store services**
- Consulta de Workshops | **Workshops consultation**
- Consulta de Horários | **Schedules Consultation**
- Pesquisa| **Research**
- Comparar produtos | **Comparation of products**
- Consultar Reviews de produtos | **Consultation products reviews**
- Ferramenta de apoio à venda | **Sales support tool**
- Incentivo de compra para os clientes | **Purchase incentive**

Consideras os nossos Kiosks intuitivos? Considera como intuitivo o facto de ser evidente e/ou imediato a utilização dos Kiosks. Numa escala de 1 a 7, em que 1-Nada intuitivos e 7-Extremamente intuitivos. | **Do you find our Kiosks**

# KIOSKS

- Comparador de produtos num menu exclusivo para os Kiosks | **Product comparator in an exclusive menu for Kiosks**
- Log In facilitado ( Exemplo: através de uma App, sem necessidade de inserir dados no Kiosk e ter maior privacidade) | **Easy Log In**
- Localizador de Produtos/Secções na loja (Exemplo: haver a possibilidade do cliente pesquisar por um artigo ou secção e o Kiosk indicar o caminho em loja a percorrer para encontrar o que pretende, como um "GPS") | **Product and section locator**
- Fazer o Cartão da Casa de forma rápida | **Make the House Card quickly**
- Consultar pontos no Cartão da Casa | **Consultation of the points of the House Card**

O que melhorarias nos Kiosks? (Podes escolher várias opções) | **What would you improve on Kiosks? (You can choose several options)**

- ○ Interface (ícones, menus e caixas de diálogo no ecrã, layout,etc.) | **Inferface**
- ○ Rapidez | **Speed**
- ○ Pesquisa | **Search**
- ○ Log in
- ○ Privacidade | **Privacy**
- ○ Navegação | **Navigation**
- ○ Qualidade do dispositivo/Ergonomia | **Device quality / Ergonomics**
- ○ Localização em loja | **In-store location**
- ○ Parte visual (ecrã, estrutura, software, etc.) | **Visual aspect**
- ○ Serviço de apoio | **Support service**
- ○ Outro | **Other**

Tens mais alguma sugestão ou comentário que queiras deixar relativamente aos Kiosks? | **Do you have any other suggestions or comments you want to leave regarding the Kiosks?**

# KIOSKS

**intuitive? It considers as intuitive the fact that the use of Kiosks is evident and / or immediate. On a scale of 1 to 7, where 1-Nothing intuitive and 7-Extremely intuitive.**

- 1 - Nada intuitivos | **1 – Nothing intuitive**
- 2 - Muito pouco intuitivos | **2 - Very little intuitive**
- 3 - Pouco intuitivos | **3 – Not very intuitive**
- 4 - Razoavelmente intuitivos | **4 – Reasonably intuitive**
- 5 - Intuitivos | **5 - Intuitive**
- 6 - Muito intuitivos | **6 – Very intuitive**
- 7 - Extremamente intuitivos | **7 – Extremely intuitive**

Como avalias os seguintes aspetos dos Kiosks? Numa escala de 1 a 7, em que 1-Péssimo e 7-Excelente.| **How do you evaluate the following aspects of Kiosks? On a scale of 1 to 7, where 1-Poor and 7-Excellent.**

- Interface (ícones, menus e caixas de diálogo no ecrã, layout,etc.) | **Interface**
- Rapidez | **Speed**
- Pesquisa | **Search**
- Log in
- Privacidade | **Privacy**
- Navegação | **Navigation**
- Qualidade do dispositivo/Ergonomia | **Device quality / Ergonomics**
- Localização | **Localization**
- Parte visual | **Visual aspect**
- Serviço de apoio | **Support service**

Considerando que estas seriam novas **funcionalidade** do Kiosk, classifica por grau de importância. Numa escala de 1 a 7, em que 1-Nada importante e 7-Extremamente importante. | **Considering that these would be new features of the Kiosk, it ranks by degree of importance. On a scale of 1 to 7, where 1-Nothing important and 7-Extremely important.**

- Terminal de multibanco direto no Kiosk | **Terminal de multibanco direto no Kiosk**
- Seguimento do estado de senhas (Para serviços, Atendimento projeto, etc.) | **Ticket status tracking (For services, project assistance, etc.)**
- Consulta da Meteorologia | **Weather Consultation**
- Existência de conteúdos adaptados a cada loja (Workshops, Eventos, Principais informações) | **Existence of content adapted to each store (Workshops, Events, Main information)**
- Consulta do preço dos artigos por sistema de Scan | **Consultation of the price of the articles by Scan system**
- Localização de serviços de loja (Apoio ao cliente, Wc´s, Pós venda, Bar,etc) | **In-store services locator**
- Ver disponibilidade de serviços (Exemplo: numa página dedicada só a serviços, ser possível simular o preço de aluguer de carrinhas conforme os Km's e fazer a marcação direta) | **See availability of services**
- Promoções exclusivas (Exemplos: 10% desconto em cartão na sua primeira compra, serviço de entrega gratuito na 1ª compra, etc.) | **Exclusive promotions**
- Calculadora de quantidades/preços num menu exclusivo para os Kiosks (Exemplo: Calcular nº de rolos de papel de parede necessários para uma determinada área) | **Quantity / price calculator in an exclusive menu for Kiosks**

LEROY MERLIN

KIOSKS

Qual é o teu género? | **What is your gender?**

- Masculino | **Male**
- Feminino | **Female**

Qual é a tua idade? | **How old are you?**

- <18
- 18-24
- 25-34
- 35-44
- 45-54
- >54

Qual é o teu nível médio de escolaridade? | **What is your average level of education?**

- Nenhum | **None**
- Ensino básico 1º ciclo (atual 4º ano/ antiga instrução primária/4ª classe) | **Basic education 1st cycle**
- Ensino básico 2º ciclo (atual 6º ano/ antigo ciclo preparatório) | **Basic education 2nd cycle**
- Ensino básico 3º ciclo (atual 9º ano / antigo 5º liceal) | **Basic education 3rd cycle**
- Ensino secundário (atual 12º ano/ antigo 7º liceal /ano propedêutico) | **Secondary education**
- Ensino pós-secundário (Cursos de especialização tecnológica não superior) | **Post-secondary education**
- Curso técnico superior profissional | **Professional higher technical course**
- Bacharelato (inclui antigos cursos médios) | **Bachelor's Degree**
- Licenciatura | **Bachelor's Degree**
- Mestrado | **Master**
- Doutoramento | **PhD**

Source: Own Elaboration (2020)

## Appendix C: Questionnaire 2 - Customers' questionnaire about Kiosks

# KIOSKS

**Kiosks's Experience - Clients LEROY MERLIN**

Os Kiosks são uma estrutura com um ecrã interativo, em que os clientes e colaboradores têm a oportunidade de fazer as suas pesquisas e compras online, enquanto estão em loja. Utilizou um dos nossos Kiosks recentemente? Gostaríamos de saber como correu a sua experiência, de forma a otimizá-la e torná-la ainda melhor! O presente questionário servirá para melhorar a experiência dos nosos Kiosks. Este terá a duração de, aproximadamente, 7 minutos. | **Kiosks are a structure with an interactive screen, where customers and employees have the opportunity to do their research and shopping online, while they are in store. Did you use one of our Kiosks recently? We would like to know how your experience went, in order to optimize it and make it even better! This questionnaire will serve to improve the experience of our Kiosks. This will last approximately 7 minutes.**

Costuma visitar as lojas LEROY MERLIN? | **Do you usually visit LEROY MERLIN stores?**

- Sim | **Yes**
- Não | **No**

Quais são as lojas que mais frequenta?

- ALBUFEIRA
- ALFRAGIDE
- ALMADA
- AMADORA
- AVEIRO
- BRAGA
- CALDAS DA RAINHA
- COIMBRA
- GAIA
- GONDOMAR
- GUIMARÃES
- LEIRIA
- LOULÉ
- MAIA
- MATOSINHOS
- MONTIJO
- OEIRAS
- PORTIMÃO
- SANTARÉM
- SINTRA
- TORRES VEDRAS
- AKI ALVERCA
- AKI BARREIRO
- AKI CASCAIS
- AKI CASTELO BRANCO
- AKI COLOMBO
- AKI ERMESINDE
- AKI ÉVORA
- AKI FIGUEIRA DA FOZ
- AKI FUNCHAL
- AKI GUARDA
- AKI LOURES
- AKI LOURESHOPPING
- AKI MAFRA
- AKI PALÁCIO DO GELO
- AKI PARQUE DAS NAÇÕES
- AKI PENAFIEL
- AKI PONTA DELGADA
- AKI PORTO
- AKI SACAVÉM
- AKI SETÚBAL
- AKI TORRES NOVAS
- AKI TELHEIRAS
- AKI VIANA DO CASTELO
- AKI VISEU

Porque razão? (Pode escolher várias opções) | **For what reason? (You can choose several options)**

- Proximidade | **Proximity**
- Tamanho da loja | **Store Size**

# KIOSKS

- Disponibilidade de produtos | **Product availability**
- Melhor serviço | **The best services**
- Melhor oferta | **The best product offer**
- Melhor experiência de loja | **The best store experience**
- Simpatia dos colaboradores | **Friendliness of employees**
- Outro | **Other**

Costuma visitar o site leroymerlin.pt? | **Do you usually visit the website leroymerlin.pt?**

- Sim | **Yes**
- Não | **No**

Porque motivo não visita o site leroymerlin.pt? (Pode escolher várias opções) | **Why not visit leroymerlin.pt? (You can choose several options)**

- Prefiro comprar diretamente na loja | **I prefer to buy directly in the physical store**
- Não gosto de comprar online | **I don't like to buy the products online**
- Tenho necessidade de tocar ou ver os produtos pessoalmente | **I need to touch or see the products in person**
- Não gosto do site da LEROY MERLIN | **I don't like it**
- Outro | **Other**

Quantas vezes o visitas, aproximadamente? | **How many times do you visit it, approximately?**

- 1 vez por mês | **once a month**
- 2 a 3 vezes por mês | **2 to 3 times a month**
- 4 a 5 vezes por mês | **4 to 5 times a month**
- Todos as semanas | **Every week**
- Todos os dias | **Everyday**

# KIOSKS

Ordene os meios que mais utiliza para navegar no site, normalmente. Numa escala de 1 a 4, em que 1-Meio mais utilizado e 4-Meio menos utilizado. | **Order the devices you use most to browse the site, normally. On a scale of 1 to 4, where 1-Medium is most used and 4-Medium is least used.**

- Computador | **Computer**
- Smartphone
- Tablet
- Kiosks

Prefere comprar os seus produtos LEROY MERLIN nas lojas físicas ou no site leroymerlin.pt? | **Do you prefer to buy your LEROY MERLIN products on the physical stores or on the site leroymerlin.pt?**

○ Loja física | **Physical store**

○ Site

A seguinte imagem representa um dos modelos de **Kiosks** utilizados nas lojas LEROY MERLIN. Estes **Kiosks** são uma estrutura branca com um ecrã interativo inserido, em que os clientes e colaboradores têm a possibilidade de utilizar para fazer pesquisas, consultar artigos e fazer as suas compras enquanto estão em loja. | **The following image represents one of the Kiosk models used in LEROY MERLIN stores. These Kiosks are a white structure with an interactive screen inserted, which customers and employees have the possibility to use to do research, consult articles and make their purchases while they are in store.**

Sabe o que são os Kiosks? | **Do you know what is a Kiosk?**

○ Sim | **Yes**

○ Não | **No**

Com que frequência utiliza os nossos Kiosks, considerando as suas visitas à loja? Numa escala de 1 a 7, em que 1-Nunca e 7-Sempre. | **How often do you use our Kiosks, considering your visits to the store? On a scale of 1 to 7, where 1-Never and 7-Always.**

○ 1 - Nunca | 1- Never

○ 2 - Muito Raramente | 2 – Very rarely

○ 3 - Raramente | 3 - Rarely

○ 4 - Às vezes | 4 - Sometimes

○ 5 - Algumas vezes | 5 – More than sometimes

○ 6 - Muitas vezes | 6 - Often

○ 7 - Sempre | 7 - Always

LEROY MERLIN

# KIOSKS

Porque razão não utilizas mais? (Pode escolher várias opções) | **Why don't you use it ? (You can choose several options)**

- Nunca vi nenhum na minha loja | **I never saw any in store**
- Prefiro pedir auxilio aos colaboradores | **I prefer to ask employees**
- Não sei utilizar | **I don't know how to use it**
- Não sei para que servem | **I don't know its purpose**
- Não considero que me acrescente valor | **I don't think it adds value to me**
- Não tem funções que me agradem | **I don't like the functions available**
- Outro | **Other**

Como é que chegou até aos nossos Kiosks? (Pode escolher várias opções) | **How you find the Kiosks in store? (You can choose several options)**

- Comunicação em loja | **In-store communication**
- Aconselhamento dos colaboradores | **Collaborators advice**
- No seu percurso em loja | **On the customer journey in-store**
- Recomendação | **Recomendation**
- Estavam destacados em termos de localização | **It was highlighted in terms of location**
- Publicidade | **Publicity**
- Viu nas nossas redes sociais | **I saw on social media**
- Viu no nosso site | **I saw in the website**
- Viu em alguma noticia **I saw some new about it**
- Outro | **Other**

Onde estão localizados os Kiosks que utilizou? | **Where are the Kiosks you used located?**

- Entrada da loja | **Entrance of store**
- Corredores principais | **Main corridors**
- Numa secção específica | **In a specific section**
- Outro, onde? | **Other, where?**

# KIOSKS

O que acha da localização em loja dos nossos Kiosks? Numa escala de 1 a 7, em que 1-Péssima e 7-Excelente. | What do you think about the Kiosks location in our stores? On a scale of 1 to 7, where 1-Poor and 7-Excellent.

- 1 - Péssima | **1- Poor**
- 2 - Muito má | **2- Very bad**
- 3 - Má | **3- Bad**
- 4 - Razoável | 4 - **Reasonable**
- 5 - Boa | **5 - Good**
- 6 - Muito boa | **6 – Very Good**
- 7 - Excelente | 7 – **Excellent**

Que localização sugere e porquê? | **What location do you suggest and why?**

Com que finalidade utilizou os nossos Kiosks? (Podes escolher várias opções) | **If so, for what purpose did you use Kiosks? (You can choose several options)**

- Consulta de produtos | **Products consultation**
- Consulta de catálogos | **Catalogs consultation**
- Consulta de preços | **Prices consultation**
- Consulta de stock | **Stock consultation**
- Consulta Campanhas | **Campaigns consultation**
- Serviços em loja | **In-store services**
- Consultar Workshops | **Workshops consultation**
- Consulta de horários | **Schedules Consultation**
- Pesquisa | **Research**
- Comparar produtos | **Comparation of products**
- Consultar Reviews de produtos | **Consultation products reviews**
- Ferramenta de apoio à venda | **Sales support tool**
- Comprar os produtos diretamente | **Purchase the products directly**
- Outro | **Other**

# KIOSKS

Qual destas funcionalidades considera mais relevante nos Kiosks? Numa escala de 1 a 7, em que 1-Extremamente irrelevante e 7-Extremamente relevante. |
**Which of these features do you consider most relevant in Kiosks? On a scale of 1 to 7, where 1-Extremely irrelevant and 7-Extremely relevant.**

- Consulta de produtos | **Products consultation**
- Consulta de catálogos | **Catalogs consultation**
- Consulta de preços | **Prices consultation**
- Consulta de stock | **Stock consultation**
- Consulta de Campanhas em vigor | **Campaigns consultation**
- Serviços em loja | **In-store services**
- Consulta de Workshops | **Workshops consultation**
- Consulta de Horários | **Schedules Consultation**
- Pesquisa| **Research**
- Comparar produtos | **Comparation of products**
- Consultar Reviews de produtos | **Consultation products reviews**
- Ferramenta de apoio à venda | **Sales support tool**
- Comprar os produtos diretamente | **Purchase the products directly**

Considera os Kiosks intuitivos? Considere como intuitivo o facto de ser evidente e/ou imediato a utilização dos Kiosks. Numa escala de 1 a 7, em que 1-Nada intuitivos e 7-Extremamente intuitivos. | **Do you find Kiosks ituitive? It considers as intuitive the fact that the use of Kiosks is evident and / or immediate. On a scale of 1 to 7, where 1-Nothing intuitive and 7-Extremely intuitive.**

○ 1 - Nada intuitivos | **1 – Nothing intuitive**

○ 2 - Muito pouco intuitivos | **2 - Very little intuitive**

○ 3 - Pouco intuitivos | **3 – Not very intuitive**

○ 4 - Razoavelmente intuitivos | **4 – Reasonably intuitive**

○ 5 - Intuitivos | **5 - Intuitive**

○ 6 - Muito intuitivos | **6 – Very intuitive**

○ 7 - Extremamente intuitivos | **7 – Extremely intuitive**

Como avalia os seguintes aspetos dos Kiosks? Numa escala de 1 a 7, em que 1-Péssimo e 7-Excelente.| **How do you evaluate the following aspects of Kiosks? On a scale of 1 to 7, where 1-Poor and 7-Excellent.**

- Interface (ícones, menus e caixas de diálogo no ecrã, layout,etc.) | **Interface**
- Rapidez | **Speed**
- Pesquisa | **Search**
- Log in
- Privacidade | **Privacy**
- Navegação | **Navigation**
- Qualidade do dispositivo/Ergonomia | **Device quality / Ergonomics**
- Localização | **Localization**
- Parte visual | **Visual aspect**
- Serviço de apoio | **Support service**

LEROY MERLIN

# KIOSKS

Considera que os Kiosks impactam positivamente a sua experiência em loja? | **Do you consider that Kiosks impacts positively your in-store experience?**

- Sim | **Yes**
- Não | **No**

Se não, porque motivo? | **If not, why?**

- Prefiro pedir auxilio aos colaboradores | **I prefer to ask employees**
- Não sei como os utilizar | **I don't know how to use it**
- Não acho que as funções existentes impactam a minha experiência | **I don't think its fuctions are usefull**
- Não me despertam interesse | **The Kiosks doesn't have importance to me**
- Não são visualmente atrativos | **It isn't visual attractive**
- Outro, qual? | **Another motive**

Como avalia a experiência nos Kiosks como parte da sua experiência de compra nas lojas LEROY MERLIN? Numa escala de 1 a 7, em que 1-Nada impactante e 7-Extremamente impactante. |
**How do you rate the Kiosk experience as part of your shopping experience at LEROY MERLIN stores? On a scale of 1 to 7, where 1-Nothing impactful and 7-Extremely impactful.**

- 1 - Nada impactante | **1-Nothing impactful**
- 2 - Muito pouco impactante | **2- Very little impactful**
- 3 - Pouco impactante | **3- Not very impactful**
- 4 - Moderadamente impactante | **4- Reasonably impactful**
- 5 - Impactante | **5 - Impactful**
- 6 - Muito impactante | **6 – Very impactful**
- 7 - Extremamente impactante | **7-Extremely impactful**

# KIOSKS

Considerando que estas seriam novas **funcionalidade** do Kiosk, classifique por grau de importância. Numa escala de 1 a 7, em que 1-Nada importante e 7-Extremamente importante. | **Considering that these would be new features of the Kiosk, it ranks by degree of importance. On a scale of 1 to 7, where 1-Nothing important and 7-Extremely important.**

- Terminal de multibanco direto no Kiosk | **Terminal de multibanco direto no Kiosk**
- Seguimento do estado de senhas (Para serviços, Atendimento projeto, etc.) | **Ticket status tracking (For services, project assistance, etc.)**
- Consulta da Meteorologia | **Weather Consultation**
- Existência de conteúdos adaptados a cada loja (Workshops, Eventos, Principais informações) | **Existence of content adapted to each store (Workshops, Events, Main information)**
- Consulta do preço dos artigos por sistema de Scan | **Consultation of the price of the articles by Scan system**
- Localização de serviços de loja (Apoio ao cliente, Wc´s, Pós venda, Bar,etc) | **In-store services locator**
- Ver disponibilidade de serviços (Exemplo: numa página dedicada só a serviços, ser possível simular o preço de aluguer de carrinhas conforme os Km's e fazer a marcação direta) | **See availability of services**
- Promoções exclusivas (Exemplos: 10% desconto em cartão na sua primeira compra, serviço de entrega gratuito na 1ª compra, etc.) | **Exclusive promotions**
- Calculadora de quantidades/preços num menu exclusivo para os Kiosks (Exemplo: Calcular nº de rolos de papel de parede necessários para uma determinada área) | **Quantity / price calculator in an exclusive menu for Kiosks**
- Comparador de produtos num menu exclusivo para os Kiosks | **Product comparator in an exclusive menu for Kiosks**
- Log In facilitado ( Exemplo: através de uma App, sem necessidade de inserir dados no Kiosk e ter maior privacidade) | **Easy Log In**
- Localizador de Produtos/Secções na loja (Exemplo: haver a possibilidade do cliente pesquisar por um artigo ou secção e o Kiosk indicar o caminho em loja a percorrer para encontrar o que pretende, como um "GPS") | **Product and section locator**
- Fazer o Cartão da Casa de forma rápida | **Make the House Card quickly**
- Consultar pontos no Cartão da Casa | **Consultation of the points of the House Card**

Voltaria a utilizar os nossos Kiosks no futuro? Numa escala de 1 a 7, em que 1-Impossível e 7-De certeza. | **Would you use our Kiosks again in the future? On a scale of 1 to 7, where 1-Impossible and 7-Certainly.**

○ 1 - Impossível | **1 - Impossible**

○ 2 - Muito improvável | **2 – Very unlikely**

○ 3 - Improvável | **3 - Improbable**

○ 4 - Nem improvável, nem provável | **4 - Neither improbable nor probable**

○ 5 - Provável | **5- Probable**

○ 6 - Muito Provável | **6 – Very Likely**

○ 7 - De certeza | **7 - Certainly**

LEROY MERLIN

# KIOSKS

Recomendaria os Kiosks a um amigo? Numa escala de 1 a 7, em que 1-Impossível e 7-De certeza. | **Would you recommend the Kiosks to a friend? On a scale of 1 to 7, where 1-Impossible and 7-Certainly.**

- 1 - Impossível | **1 - Impossible**
- 2 - Muito improvável | **2 – Very unlikely**
- 3 - Improvável | **3 - Improbable**
- 4 - Nem improvável, nem provável | **4 - Neither improbable nor probable**
- 5 - Provável | **5- Probable**
- 6 - Muito Provável | **6 – Very Likely**
- 7 - De certeza | **7 - Certainly**

O que melhoraria nos nossos Kiosks? (Pode escolher várias opções) | **What would you improve on Kiosks? (You can choose several options)**

- Interface (ícones, menus e caixas de diálogo no ecrã, layout,etc.) | **Inferface**
- Rapidez | **Speed**
- Pesquisa | **Search**
- Log in
- Privacidade | **Privacy**
- Navegação | **Navigation**
- Qualidade do dispositivo/Ergonomia | **Device quality / Ergonomics**
- Localização em loja | **In-store location**
- Parte visual (ecrã, estrutura, software, etc.) | **Visual aspect**
- Serviço de apoio | **Support service**
- Outro | **Other**

Tem mais alguma sugestão de funcionalidade ou comentário que queira deixar relativamente aos Kiosks? | **Do you have any other suggestions or comments you want to leave regarding the Kiosks?**

Qual é o seu género? | **What is your gender?**

- Masculino | **Male**
- Feminino | **Female**

LEROY MERLIN

# KIOSKS

Qual é a sua idade? | **How old are you?**

- <18
- 18-24
- 25-34
- 35-44
- 45-54
- >54

Qual é o seu nível médio de escolaridade? | **What is your average level of education?**

- Nenhum | **None**
- Ensino básico 1º ciclo (atual 4º ano/ antiga instrução primária/4ª classe) | **Basic education 1st cycle**
- Ensino básico 2º ciclo (atual 6º ano/ antigo ciclo preparatório) | **Basic education 2nd cycle**
- Ensino básico 3º ciclo (atual 9º ano / antigo 5º liceal) | **Basic education 3rd cycle**
- Ensino secundário (atual 12º ano/ antigo 7º liceal /ano propedêutico) | **Secondary education**
- Ensino pós-secundário (Cursos de especialização tecnológica não superior) | **Post-secondary education**
- Curso técnico superior profissional | **Professional higher technical course**
- Bacharelato (inclui antigos cursos médios) | **Bachelor's Degree**
- Licenciatura | **Bachelor's Degree**
- Mestrado | **Master**
- Doutoramento | **PhD**

Vive em que zona do país? | **Do you live in which country zone?**

- Norte | **North**
- Centro | **Center**
- Sul | **South**

Source: Own Elaboration (2020)

## 3. Pedagogical Note

### *3.1. Target of the case*

This case study is planned to consider some possible target audiences.

It was developed mainly for bachelor and master students inside marketing or management areas that aims to develop their knowledge about new trends in marketing and retail atmosphere, with the purpose of learning more about the benefits of investing in this area and also to develop academic projects and researches.

From an academic perspective, it is envisioned for all professors and students enrolled in Marketing, Management and Marketing Management courses, more specifically, when studying Retail Marketing or New Trends in Marketing. In other wise, from a professional perspective, it might be used for Retail Managers, more specifically, for the stores' managers or *Phygital* segment, who want to shape their businesses, using their physical stores and new technologies. It's also going to be useful for Leroy Merlin, the company where the present pedagogical case is based, for current projects regarding *Phygital*, Store Atmosphere and Kiosks, and also for future research.

### *3.2. Pedagogical Objectives*

The main purpose of this pedagogical case is to understand the impact and the importance of the new trends, more properly the interactive screens on the store atmosphere in big retail companies.

Since the fact that customers are increasingly demanding and looking for an in-store experience and the retail sector has been growing is relevant to understanding which strategies and trends could be applied in stores 'atmosphere, in order to create more awareness and have a positive impact on the customer journey.

So, taking this in consideration, this case study was developed with the following educational objectives:

- Understand the DIY and Home Improvement Market and the company which the present case is taking in consideration, Leroy Merlin
- Understand the importance of store atmosphere
- Understand the impact of new retail trends in-store context
- Understand the concepts used in this pedagogical case
- Develop capabilities of problem solving and critical and strategic spirit
- Given the opportunity to students perceive the importance of a store experience to customers
- Research relevant information, by using articles, books, news, online information and other sources of information

## 4. Literature Review

### *4.1. The importance of having a Retail Customer Experience*

Consumers are more demanding and complex, and the market is reaching high levels of competitiveness (Farias, Aguiar & Melo, 2014). Therefore, creating a unique and superior shopping experience seems to be the top priority for 72% of the businesses, according to a study conducted by Forrester (2016). However, it wasn't always viewed that way.

Before 80's buyers were thought to be exclusively rational beings, who used logical processes to manage the information available, attributing a utilitarian value to the action of purchase (Schmitt, 1999), resulting from some type of conscious pursuit – utilitarian perspective (Babin, Darden & Griffin, 1994). After that, researches showed that the non-rational factors, such as hedonism, fantasies, feelings, fun (Holbrook & Hirschman, 1982), consumption rituals (Rook, 1985) and moods of consumers (Hill & Gardner, 1987) also exerted a strong influence on buying behavior. In the 80's, these findings revolutionized the way of seeing the consumers, indicating the existence of experimental aspects in consumption, opening a new perspective – hedonic perspective - of consumer behavior. This perspective indicates that hedonic value is more subjective, personal and emotional than its utilitarian counterpart and results more from fun and playfulness than from task completion (Holbrook & Hirschman, 1982).

In fact, creating a customer experience occurs when the company has the intention of creating one, rising in engagement with customers (Hultén, 2011) as it involves the customer's cognitive, affective, emotional, social and physical responses to the retailer (Verhoef *et al.*, 2009). It could be created not only by those elements which retailer can control, like the service interface, retail atmosphere, assortment and price, but also by elements that are subjective and are also those which are outside of the retailer's control, such as influence of others and purpose of shopping (Verhoef *et al.*, 2009). The last elements are explained by the fact that customer experience includes pre-purchase information search, acquisition, consumption and after-sales phases of the experience (Neslin *et al.,* 2006) - the phases of customer journey, which aren't restricted only by the interaction of customers with the store.

Therefore, retail experience has typically focused on store atmospherics and the impact of multi-sensory aspects, such as scents, music, tactile input, color and other sensory stimulus on customers' affective responses to a retailer. If these variables are managed correctly and in an innovative way, it will originate an extraordinary customer experience, which consists of what is memorable and that can lead to a purchase behavior (Farias, Aguiar & Melo, 2014). In order to do that, it's critical to recognize that creating a unique store atmosphere is represented psychologically by consumers in terms of two major emotional states, pleasure and arousal, and these two emotional states are significant mediators of intended shopping behaviors within the store, which in turn drives the consumer to show approach or avoidance behavior, translated in purchases or not (Donovan & Rossiter, 1982).

Furthermore, having a distinctive and strong customer satisfaction should be the focal point of business activities, which is based on the explicit assumption that satisfied customers repurchase more and therefore are more profitable (Turey & Milliman, 2000), comparing to those who do not (Pantano & Naccarato, 2010) and also has a higher customer loyalty (Mascarenhas, Kesavan & Bernacchi, 2006), providing an enormous economic value for firms.

Considering these, many companies are searching for how to design shopping experiences that enhance the enjoyment during customer shopping (Lemon & Verhoef, 2016) and many retailers believe that technology can boost customer experience (Flavián, Ibánez-Sánchez & Orús, 2018). Moreover, some companies have moved from the traditional retail atmosphere to digital solutions at the point of sales (Capgemini Research Institute, 2019), reshaping its strategies (Flavián, Ibánez-Sánchez & Orús, 2018), since the way retailers manage store atmosphere has a significant impact on consumer behaviour, and consequently on their shopping experience (Rayburn & Voss, 2013).

### *4.2. Retail Customer Journey*

Understanding customer experience and the customer journey over time is critical for firms, since customer experience is like a customer's journey with a firm over time during the purchase cycle across multiple touch points, in different channels and media (Lemon & Verhoef, 2016). Furthermore, touch point is the "*customer contact point or a medium through which the firm and the customer interact*" (Neslin *et al.,* 2006, p.96), direct or indirectly. Moreover, the current complexity of touch points and the entire customer journey have become a huge challenge for companies, since different touch points go from traditional earned media to the store itself (Baxendale, Macdonald & Wilson, 2015) and due to all this range of channels, the retailers should ensure the thematic cohesion, consistency, and context sensitivity of the touch points (Kuehnl, Jozic, & Homburg, 2019). The in-store touch points establish the store's ambient elements, design, and social factors (Baker *et al*., 2002), but similar elements should appear on the retailer's website, app, shipping or packaging materials, and other retailer-controlled touchpoints, as social media (Roggeveen *et at.*, 2020).

Researchers have pinpointed customer journeys as a new source of customer value in the twenty-first century (Kuehnl, Jozic & Homburg, 2019). So, Apple, Nike, Coca-Cola, and Amazon.com represented the top four brands in the context of strong customer journey, while different telecommunication and financial service providers were the most frequently cited brands with weak customer journey.

The authors Lemon and Verhoef (2016) divided the customer experience process flows into three main phases: Pre-purchase, Purchase and Post-purchase, being an interactive and dynamic process.

The first stage, Pre-purchase, is characterized by the need recognition, search and consideration, which includes all aspects of the customer's interaction with the brand, category and environment before the purchase transaction, such as the past experiences, like previous purchases, as well as external factors. This phase starts when the customer realizes the need/goal of the purchase, search and consideration (Lemon & Verhoel, 2016). Nowadays, retailers are investing so much on its websites, since customers increasingly started their searches online. However, technology in-store could also impact the collection of information, facility of imagination, selection, advice and customization in this pre-transaction phase (Hoyer *et al*., 2020).

Then, the second stage is the Purchase, which covers all customer interactions with the brand and its environment during the purchase action itself and it includes the behaviors of choice, ordering, and payment (Lemon & Verhoel, 2016). It could happen online, on online platforms, which grew 17% in 2018 (CTT, 2019) and could also occur offline, on the physical stores where the technological devices could impact the automation of the transactions, augment beyond physical and negotiate on the transactions (Hoyer *et al*., 2020).

Finally, comes the last stage, post-purchase, which embraces behaviors such as usage and consumption, post-purchase engagement, and service requests (Lemon & Verhoel, 2016). This stage could extend temporally from the purchase to the end of the customer's life, becoming crucial to create engagement with the brand and, above all, define the continuity or discontinuity of their journey, by building customer loyalty or not. The new technologies in stores could impact this final stage by enabling, maintaining and servicing, upgrading and enriching consumption and giving feedback and recommendations to the customers (Hoyer *et al.*, 2020). For example. retailers can provide social feedback by listing consumer reviews or ratings on shelf tags (Grewal *et al*., 2020) or in the Kiosks.

The difficulty of the process is to create an effective customer journey for attaining customer loyalty. The main challenge for companies is to realize that it's not a single touch point but the effective design of multiple ones into meaning customer journeys. On the other side, they need to identify the right touch points to reach customers in each phase, in order to allocate more time and money to developing those single touchpoints that provide high sensory simulation to attain a positive brand experience and a relevant relationship with the company (Kuehnl, Jozic & Homburg, 2019).

However, according to Becker and Jaakkola (2020) it is imperative to realize that customer responses to touch points also depends on customer situational and sociocultural factors, since customers in different situations, with different resources, will react to stimuli in diverse ways. Moreover, contextual factors may also influence on the outcomes of a touch point, such as the degree to which a reaction leads to satisfaction and loyalty. So, it become urge to firms conduct studies about its customers to learn about them and use that information as a basis to target and design different journeys for distinct customer types and situations. Therefore, if a company are capable to do this, it would establish a close relationship with its customers, they will develop emotions, which will make them more influenced by less rational stimulus, becoming less price sensitive by these emotional effects. However, the quality of the products and services continues to be a strong issue which retailers must control, by asking for feedback in the retail moment, online or offline, through reviews or ratings (Blut, Teller & Floh, 2018).

Summing up, customer journey is a source for companies to deliver added value to customers and consequently create competitive advantage (Edelman & Singer, 2015). However, since today's markets are "multitouch" and multichannel in nature with new types of stimuli emerging every day, organizations need to understand a wide-ranging of touch points within and outside firm control, both in offline and online settings (Bolton *et al.*, 2018). Regarding the offline, the in-store experience is part of the customer journey (Lemon & Verhoef, 2016) and technologies can serve as important touch points to customers. So, the next step is how to enhance and use this tool, in a store context, creating the best impact possible for customers – their loyalty to the brand (Grewal *et al.,* 2019).

### *4.3. How to construct a good Store Atmosphere*

According to Kotler (1973), one of the keys to achieve a customer and to transform his journey is using the store atmosphere as a marketing tool, as it's written in his article titled "*Atmospherics as a Marketing Tool*". Over the years, retailers started to understand the importance of manage its stores to succeed, having in mind that there is no ideal model of store atmosphere to be followed by them and that the elements which they could control are usually those related to the customer' senses, regarding the store atmosphere, like the amount of light, the colors on the walls and the kind of music played (Farias, Aguiar & Melo, 2014), which might be useful in influencing shoppers' emotions and purchase behavior through retail store atmosphere (Helmefalk & Hultén, 2017).

In addition, it was shown that consumers responding positively will want to spend more time in the environment, want to look around, interact with other individuals present and it's possible to clearly state that "*variations of atmospheric variables affect the amount of money people spend and the number of items they purchase*" (Turey & Milliman, 2000, p.209). It was supported by other researchers, made by Rayburn and Voss (2013), who found that 63% of consumers consider store atmosphere a reason to spend more time in the store and 45% responded they spent more money as a result. Regarding that, it becomes relevant to define what is store atmosphere.

#### *4.3.1. The conceptualization of Atmospherics*

Since the last few years, the concept of atmosphere has been studied by a lot of researchers, but the pioneer of this research was Kotler, who defined atmospherics as the "*conscious designing of a space to create certain effects in buyers. More specifically, atmospherics is the effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability"* (Kotler, 1973, p.50). In other words, the store should be designed with the specific purpose of creating a planned effect in buyers or potential buyers.

Therefore, consumers want more than just attributes and the product itself, they want to be "*entertained, stimulated, emotionally affected and creatively challenged*" (Schmitt, 1999, p. 29 in Farias, Aguiar & Melo, 2014) and for that reason, retailers design their shops so that customers be attracted, locate, merchandise easily, motivate, unplanned purchases, and offer a satisfying shopping experience (Levy & Weitz, 2009).

Recently, and after some researches, *"atmosphere in marketing is a term used to describe the conscious design area in order to create effect on consumers"* (Farias, Aguiar & Melo, 2014, p. 88), which leads to a positive behavioral shopping response. In literature, different authors agree that "*atmosphere is apprehended through the senses*" (Kotler, 1973, p.50), which in other words means that atmosphere is also perceived as the quality of the surrounding space, by people's senses. Thus, the customers can be manipulated by the involved atmosphere to generate certain responses on them, as it will be analyzed further.

### *4.3.2. The four main senses*

According to Kotler (1973), the main sensory channels to create atmosphere and which will be analyzed in this study are four: visual (color, brightness, size and shapes), aural (volume and pitch), olfactory (smell and freshness) and tactile (softness, smoothness and temperature).

It has been shown that there is a significant relationship between a manipulated store environment and shopping behavior and studies have confirmed that shoppers react to different types of stimuli (Turley & Milliman, 2000). The literature classifies stimuli, suggested for application in a retail atmosphere, based on signals, atmospheric conditions, spatial layout, and functionality, as well as exterior, interior, design, decoration and place of purchase, according to Berman and Evans (1995). Moreover, Rayburn and Voss (2013) included one more category, the Human variables. These cues seldom interact in isolation, but in interplay with each other, the surrounding settings, products, people and other latent variables (Helmefalk & Hultén, 2017) and people's thoughts and behaviours are affected involuntarily by sensory experience (Baek, Choo & Lee, 2018). The next section will go deep how marketers and retailers can stimulate each sense at their stores.

#### *4.3.2.1. Visual*

According to Hecht and Reiner (2009), for retailers, vision is unarguably the most dominant of all senses and this sense could be captured by the colors, brightness, size and shapes (Kotler, 1973). Other authors added that space design, place of merchandise, furniture, and decoration variables are also relevant (Helmefalk & Hultén, 2017).

Regarding the brightness it has been argued that the intensity, measured in lumens and wavelengths of light, which includes the color, has impact on consumer time spent examining products in-store (Summers & Hebert, 2001) and also on shopper approach behavior, in-store congruency, expectations, price and brand perceptions in retail settings (Bellizzi & Hite, 1992), since it produce different biological, emotional and attention reactions to a product (Farias, Aguiar & Melo, 2014).

In a study realized by Bellizzi and Hite (1992) in which they verified the effects of red and blue (opposite colors) in shopping related. They tested red lights which were perceived as negative and intense by customers and on the other hand, the blue ones were identified as calm, cool and positive. In addition, warm colors also seem to be more preferred in attracting potential customers closer to windows. However, warm colors result in higher arousal than cool colors, but also in less satisfaction according to Roschk, Loureiro and Breitsohl (2017). Thus, retailers should use colors capable of creating a mood state and which attracts customers for product purchase.

Regarding the interactive screens, Roggeveen, Grewal, Townsend and Krishnan (2015) found that showing a product in a dynamic way, compared to static old versions, visual format enhanced information vividness, which increased preference for the displayed product. Furthermore, in-store technology infusions may be more useful with hedonic purchases, since imagery can encourage choices of hedonic products, by heightening the vividness of their hedonic attributes.

Kiosks are a practical example of an interactive screen, increasingly used by retailers, like Leroy Merlin (Leroy Merlin, 2020), Decathlon and McDonalds for many purposes, as to illustrate its products differently or just as a way to create a visual place of merchandise with a large screen format. Thus, retail managers should focus upon what kind of visual or non-visual sensory congruent cues could be added into the store atmosphere to enhance a positive shopping experience (Helmefalk & Hultén, 2017).

#### *4.3.2.2.Tactile*

The hands are identified as the *"principal source of input to the touch perceptual system"* in humans (Peck and Childers, 2003, p.35), so touching objects, people or products enables the sense of touch, the largest sensory organ of the body, to incorporate physical contact through the skin into the shopping experience. Furthermore, Kotler (1973) studied that tactile are influenced by softness, smoothness and temperature and other authors added three more characteristics: the texture, weight and hardness (King, Block & Hadi, 2013).

Actually, customers have the possibility to shop online without touching the products, which sometimes could mean that there is no purchase decision at all (Hultén, 2013), since some studies evidence that if shoppers are not allowed to touch products in order to evaluate and test them, they become frustrated and annoyed (Peck & Childers, 2003). Consequently, the stores which allow consumers to physically inspect products by picking them up and touching them are preferred (Krishna & Morrin, 2008), which is the case of physical stores, as Leroy Merlin.

Research on tactile stimulation indicates the positive benefits of touch (Spence *et al*., 2014). As technology is evolving it is possible to move consumers physically away from the touch-based display screens or embed them in a virtual world where an avatar is "touching" the product for them (Grewal *et al.,* 2019). Therefore, point-of-purchase displays are an example of a good communication tool which retailers should start to study the benefits of implementation, since it encourages touch and enables shoppers to interact with products. Kiosks are a display designed for customers to interactively touch products and to encourage them to test it in a dynamic mode. It is also important to note that human touch is also critical for customers (Capgemini Research Institute, 2019) and, therefore, Kiosks must always be accompanied by the assistance of collaborators. This way, this device and its impact will be explored further.

#### *4.3.2.3. Aural*

In a retail context, music has impact on emotions, consumers cognitions, purchase behavior (Helmfalk & Hultén, 2017), increase the time to buy and hold (Milliman, 1982) and decrease the perception of buying time and waiting (Grewal, Nordfält & Roggeveena, 2017). This sensory is influenced by volume and pitch (Kotler, 1973) and it was analyzed that playing the appropriate background music can help retailers develop a desirable atmosphere, which contributes to the image of the store and consumer choice (Farias, Aguiar & Melo, 2014).

Other researchers in this area have shown that consumers of different ages react differently to music in retail environments (Yalch & Spangenberg, 1990). Consequently, brands should have this in consideration and adapt its atmosphere to its customers, in order to make them feel good, since other researches showed that it can influence behavior even when consumers are not consciously aware of it (Milliman, 1982). Therefore, if companies start to invest in this kind of area and play on the "right kind" of music, it will have a significant impact on a variety of behaviors including sales, arousal, perceptions of and actual time spent in the environment, in-store traffic of visual stimuli in the retail store (Turley & Milliman, 2000).

#### *4.3.2.4. Olfactory*

According to Kotler (1973), the olfactory sense in atmospherics is composed by smell and freshness and the implementation at a store should be carefully thought of by retailers since it should be congruent with the store design, product categories as well as the targeted consumers. Otherwise, it can impact the shopping experience negatively, inviting bad memories when the consumer is exposed to that specific smell (Farias, Aguiar & Melo, 2014). Therefore, according to Baker, Grewal and Parasuraman (1994) in Rayburn and Voss (2013), individual characteristics such as age, income, gender and culture can be determinant of how people associate quality and atmospheric elements.

Furthermore, once retailers perceive the power of olfactory stimulus it will turn into a competitive advantage thought this variable, since a scent used in the store can recall a relevant memory to the shopper (Farias, Aguiar & Melo, 2014), meaning that a store that presents smells which are pleasant is better evaluated by the consumer and creates an emotional bound with him (Morrin & Ratneshwar, 2000 in Helmefalk & Hultén, 2017).

### *4.4. Future Trends in Shopping Experience*

Since some years ago, "*consumer is not viewed only as final user, but also an expert who needs to operate with interactive systems and products easily"* (Pantano & Servidio, 2012, p.284). The authors also defend that the increasing competition in the retail sector forces marketers to design and create more appealing stores, by capitalizing the recent advances in information and communication technologies, with the commitment of extend the use of these ones as innovative and more efficient marketing channel. The use of these innovations intends to help customers make a good purchase decision, feel less time pressure, increase their satisfaction and pleasure, feel more engaged and make efficient and quick purchases (Grewal, Nordfält & Roggeveena, 2017).

As the Microsoft Digital Trends report indicated in 2015, nearly 50 percent of consumers were more likely to engage with digital experiences that offered seamless integration with their physical world (Forbes, 2018), which means that brands needs to match the physical and the digital world, creating a new concept - *Phygital* - adopting new interactive tools at the physical stores. Therefore, by creating a more immersive experience, retailers can drive people to their stores and ensure they leave not just with products but also memories, as a study of Retail Trends of 2019, made by KPMG (2019), indicated.

However, it's imperative to considerate the existence of *Digital natives* who grew up with constant online access, which contrast with older shoppers, who might still prefer traditional face-to-face interactions with staff members. Thus, the choice of interaction is important, so customers should be able to select the channel and the method of interacting with the retailer, as well as the time. Moreover, it's imperative to notice that any technology in-store should extend the customer experience and not be a new barrier for people less familiar with it and should also complement but not replace the store team. The motivation to use online or offline channels could also be influenced by the type of shopping - utilitarian or hedonic- which should be considered by retailers too (Piotrowicz & Cuthbertson, 2014).

Summing up, in a connected world, retailers will be successful with hybrid delivery systems in which consumers can use a range of interface technologies across multiple channels (Ramaswamy & Ozcan, 2019). So, they need to evaluate which technologies best enhance both operational efficiency and customer experience, since many technologies that were the delighters of yesterday have become the satisfiers of today (Grewal *et al.,* 2019).

There are some innovative technologies and concepts that are expected to be implemented in current days and also in the future which can impact store atmosphere and make customers spend more time or money in a store, such as the *Hybrid Stores, Store Mood Zones, Retailtainment, New payment methods, Virtual Reality, Augmented Reality, Mixed Reality, Artificial Intelligence* (Hoyer *et al.*, 2020), *Storytelling, Co-creation and Interactive Screens* (Priporas, Stylos & Fotiadis, 2017). These emerging technologies will produce new value to customers (Rangaswamy *et al.,* 2020), and successful retailers should be strategic, in order to boost this value by continually and carefully shaping the technology-based interactions in a customer-centric basis, by integrating all the sales channels and using its stores as a place to provide a personal experience that attracts customers, regardless of the channel used, building an omnichannel.

### *4.5. Smart Stores*

A recent study made by Capgemini Research Institute (2019) - global leader in consulting, technology services and digital transformation, which was recently ranked top one in the world for the quality of its research by independent analysts, interviewed in October and November 2019 about 5110 consumers across North America, Europe and Asia, and also 500 senior executives at the director level. Besides that, its researches indicated that today, consumers increasingly expect that efficiency and engaging online experience to be replicated in-store, by creating a complete and powerful omnichannel (Capgemini Research Institute, 2019), since the future of physical stores will be based on the creation of totally personalized experiences, which will be focused on service, by adapting it to consumer trends and technology (BCG, 2015), since the customers will probably undergo radically new in store experiences owing to new technologies (Hoyer *et al.*, 2020).

Moreover, nearly half of them assert they would shift purchases from a non-automated store to a store with automated technologies if they have a constructive experience there (Capgemini Research Institute, 2019), meanwhile companies must reflect on the process of selling the products, more than focus on the product itself. Otherwise, it will just be a standard, tangible product, with no consumer involvement, that will not be able to answer to the changing consumer´s needs (Vargo & Lusch, 2004). This means that it is imperative for retailers to consider an automation strategy in order to achieve customers' needs. However, just 40% of them consider it (Capgemini Research Institute, 2019).

The digital influence has an impact on the most varied retail categories, and it is important in several key moments in the customer's journey. Considering the Home Improvement Retail category, it was proven that the key moments in the customer's journey in which digital plays an outsized role on the shopper's journey are the stages of browse and research, select and validate and purchase and pay (Capgemini Research Institute, 2019). Thus, retailers should take this data into account, in order to implement actions that automate these processes, in order to impact the path of their customers (Deloitte Digital, 2019).

There exists some types of technologies which could be applied, such as robots, sensors, cameras, electronic shelf labels, digital signage and also self-service technologies, interactive screens, informative touch points, digital signature and apps for smartphones or virtual reality technologies (Priporas, Stylos & Fotiadis, 2017),which could have a positive and measurable impact on the customer experience, by helpings customers with questions regarding product information, payments, delivery problems, and others. Additionally, "*many technologies that were the delighters of yesterday have become the satisfiers of today. For example, today's customers assume an integrated omni-channel experience* *where they can order online and pick up in the store and another satisfier of today is having free Wi-Fi in the store"* (Grewal *et al.,* 2019, p.96).

Amazon Go is one of the best examples of digital, smart and automized store where consumers could enter, check out their products and pay at a self-service counter, since it are provided with in-store cameras which detect unusual activity and the store has help buttons in case of assistance needed and also allow consumers to simply pick up items without needing to stop at the check-out (Grewal *et al.,* 2019). It is a good example of a recognized company that started its activity only online and although the number of online shopping has been strongly increasing in the past few years, Amazon decided to create a physical store retailing, with the purpose of adapt and reinvent the ways of selling to better connect with consumers (Priporas, Stylos & Fotiadis, 2017).

This study also proved that these types of automated options could also solve some of the major pain points for customers as long queues in payment, products without stock in-store, difficulties in locating products, lack of product' information and don't finding employee assistance (Capgemini Research Institute, 2019). For instance, if automation helped consumers find products more easily, or if they could pay more quickly, 61% of them said that they would visit stores more often. Therefore, if consumers had a positive experience with in-store automation, 46% would shift their online purchases from digitally focused retailers to retailers with stores that use automation technology (Capgemini Research Institute, 2019).

Nowadays, 45% of Home Improvement retailers already consider smart stores as a strategy for their companies, however just 21% of their stores are automatic. Thus, it's expected to increase to 36% by 2022. In order to do that, and regarding the customers opinion, retailers must ensure that their improvements will really increase customers' experience and not just save costs. Adding to this, they also should guarantee the security and privacy of their consumers.

Finally, people and the "human touch" are irreplaceable, consequently companies must understand and deal with that. So, it's important to create options and automated systems where collaborators could help customers, if they ask for that. If retailers take this in consideration, "*automation will be a driver not just to improve the efficiency of stores, but also to augment the customer experience"* (Capgemini Research Institute, 2019, p.10) – which is the main purpose of retailers.

### *4.5.1. Advantages and Disadvantages of Smart Stores in Retail*

As Deloitte Digital (2019) indicated automation could be a driver not just to improve the efficiency of stores, but also to augment the customer experience. So, smart stores, which use in-store technologies, could improve the quality of customer engagement and might also help create a similar experience to online, for example, eliminating checkout queues and offering personal recommendations. In other wise, "*consumers' perceptions about complexity and risk associated with the technological innovations under consideration may lead to dissatisfaction and steer consumers away from adopting and using* *technological innovations"* (Adapa *et al.,* 2019, p.2) Consequently, before implement some technology in-store, its necessary to understand which pros and cons it could drives into stores.

Smart stores could bring into customers a perceived usefulness, perceived enjoyment, attitudes about control and convenience, perceptions about personalized services, cost efficiency (Walter *et al*., 2012), also quality and functionality (Gao & Bai, 2014) and novelty and new stimuli (Wells *et al.,* 2010). Moreover, customers are more likely to be receptive to new technology if they perceive it to contain superior features and functions, meaning that their gains from the use of the technology have to be higher than their efforts and vice versa (Evanschitzky *et al*., 2015). In contrast, they resist the acceptance of new technology if it is perceived as not offering superior functions and benefits (Roy *et al.,* 2018). Therefore, it could provide operational and transactional efficiency, like payment plans, price guarantees or easy return methods (Jeng, 2017). For instance, some customers prefer self-checkouts because of the perceived speed of the transaction (Zhu *et al.,* 2013), reflected in timesaving and convenience (Wang *et al*., 2015).

The new technologies will influence how consumers search for products and brands, evaluate alternatives, make choices, and consume products or brands as well as improve the process of customer relationship management (Libai *et al*., 2020). So, considering retailers' perspective, it's an opportunity to collect more data and utilize that data to provide further information (Hoyer *et al*., 2020) to know their customers, understand the context, such as the time and the place of the customer, identify when a customer needs help or an incentive to purchase and respond proactively using smart functions, as interactive screens, robots and wi-fi foot-traffic, for instance (Adapa *et al.,* 2019).

One of the main purposes of retailers is to engage their customers, with the main purpose of creating a strong customer loyalty. Thus, store loyalty is an important mediator in helping consumers feel more confident about smart stores. If consumers have a favorable impression of a retail store regarding to its products, services and also retail technologies, their favorable impression will influence their future attitudes (Yoon & Park, 2018), like shopping in the future (Adapa *et al.,* 2019), which might indicate a customer loyalty to a brand. Consequently, since inside the store's consumers are surrounded by merchandising, retailers have to be creative, in order to find ways to make products and specific services to stand out (Grewal, Nordfält & Roggeveena, 2017).

In other perspective, the use of smart retail technologies may lead to job losses, fewer staff and poor service outcomes (Otekhile & Zeleny, 2016) if retailers don't ensure the maintenance of the quality of their services continuing investing on their employees' skills, who are able to provide support for the use of this kind of technologies and who are adequately trained to help customers with lower levels of innovativeness. Taking in consideration the last topic, there are a high percentage of customers who may find it difficult to learn how to use and manage mobile apps (Inman & Nikolova, 2017). Therefore, these kinds of perceptions about complexity and the risks associated with technology, may lead to dissatisfaction and bullock consumers away from adopting and using retail technological innovations (Adapa *et al*., 2019).

In order to create a higher perceived shopping value through smart stores, retailers must understand and invest on the different type of customers they have, with a high and low desire for human interaction, who may be hesitant to spend too much time learning a new technology, be anxious or have concerns about using that (Bulmer *et al*., 2018). Thus, collaborative technological features such as shared website navigation and voice chat features allow consumers to feel the presence of others when shopping online (Zhu *et al*., 2013), since a human being does not need to be physically present for a person to experience a sense of social presence (Dahl, Manchanda & Argo, 2001).

Therefore, having a higher perceived shopping value from customers regarding this type of technology, it would lead into retail store loyalty and more intentions to use this type of stores, which will impact positively the visits, brand equity and revenues of the company, as it's explained in the Figure 20.

### *4.6. Interactive Screens*

The digital transformation is making the retailers adopt smart stores which are able to create a new and easier user's interfaces for an intuitive user's learning process. Thus, the interactive screens are an example of a tool which could be applied to satisfy consumer's requirements and make the products displaying more evocative, with results on both the effectiveness of the mediated message and the cognitive response (Pantano & Servidio, 2012).

As Ramaswamy and Ozcan (2019) studied, products on display are not presented as mere commodities with exchange, or use, value but as artifacts intrinsically worthy of playful interaction and enjoyment with full mind-body engagement. However, for many years, the information and product advertisements were only presented using print ads and posters. Regarding the necessity of engaging customers and since they are much more related with technology, it created interactive and dynamic displays, which is "*an interactive system or computer program, designed to involve the user in the exchange of information, which involves communication between people*" ("Interactive", 2019).

This technological tool is ideal for many purposes, such as advertising, retail merchandising, point-of-sale promotions, presentation content of websites, images and videos, discussing ideas in a dynamic way, presenting information or even just creating a point of difference between the competitors. It could also be used for scanning the barcodes of accessories in the store, get reviews, ratings and product specs and pay for purchases as a self-checkout service (Ramaswamy & Ozcan, 2019). Customers may interact with the screen merely by touching on it to make decisions, providing a faster and intuitive interface for users, which could simplify customer interactions and transactions.

#### *4.6.1. Interactive Screens in store atmosphere as a Marketing Tool*

In the last years, the impact of digital displays in stores has been studied and it was showed that it provides helpful information, creates a modern image, increases shopping enjoyment (Newman, Dennis, & Zaman, 2006), increase unplanned behavior during less planned shopping trips (Nordfalt, 2009) and positively impacts shoppers' approach behaviors, such as the frequency of visits, likelihood of revisiting soon, and time spending in the store, doing a boost in the customer experience (Dennis *et al.*, 2014).

A studied conducted by Roggeveen, Nordfält and Grewal (2015) indicated that the digital displays are increasingly prevalent in the large retail chains, since it generally aiming to enhance the in-store environment, the amount of the sales receipts, time spent in the store and the number of products purchased. Additionally, the authors suggested that digital displays must provide relevant content that makes it worthwhile for customers to disrupt their planned shopping path, such as price promotions, which impact more effectively the purchases. Moreover, the context and quality of exposure is also necessary to consider, since it varies in the audience need state, traffic speed and direction, message frequency and duration (Burke, 2009 in Roggeveen, Nordfält & Grewal, 2015).

Finally, retailers must identify their target and then understand exactly how the displays will affect their bottom lines before they could make informed decisions about whether to invest in digital display technology for their stores, since there exist several types of interactive screens which are being used in-store and the most usual actually are the Self-service in-store Kiosks, Smart Mirrors, Vending Machines and Smartphones, Tablets and Computers (Piotrowicz & Cuthbertson, 2014).

Some researchers showed that differences across devices, such as screen size, resolution, and interactivity, can affect how consumers respond to marketing content, indicating that interfaces can shape consumer reactions to identical content (McLean, Al-Nabhani & Wilson, 2018). For that reason, retailers have to ensure that the location and the size of these technological devices is fully integrated in the shop layout and the audio and video contents are appropriated.

#### *4.6.2. History of Kiosks*

In this new Marketing era, the Kiosks that people know are mostly interactive and digital. However, it is important to understand briefly how and why it appear and the changes it suffered till these actual versions. The term “Kiosk” derives from the French term "*kiosque*" which, in turn, derived from Persian "*koushk*" and Turkish "*kiouhk*" (“Kiosk”, 2020) and it born in the 13th century as a pavilion usually having its roof supported by pillars with screened or totally open walls, used by some Asian countries and southeast of Europe, incorporating many elements of Islamic architecture.

Some centuries later, around the year 1620, the Kiosks arrived in Europe, more specifically in France for use as bandstands, for music, or small garden pavilions. Subsequent, they became small boutiques where it was possible to buy flowers, tobacco, newspapers and soft drinks, which spread faster throughout the rest of Europe and arriving in Portugal a few years later, mainly as a way of decorating the streets (Bony, Silva & Carvalho, 2004) and in the following years it started to be used as a meeting place dedicated to port workers who used the moments before or after work and on weekends, to visit the Kiosks on family outings (Bony, Silva & Carvalho, 2004).

Nowadays, Kiosks are defined as "*a small building where things such as sweets, drinks, or newspapers are sold, often through an open window, or where you can buy tickets or get information*" ("Kiosk", 2020), since it have become a chosen place to drink hot chocolate and wine, fizzy drinks, water mixtures, bottled beer and ice cream, becoming a huge success that lasts in time. Thus, currently, it continues to have a street vendor with a great prominence in Portugal, mainly in the cities of Porto and Lisbon, as a social place and as a street commerce.

Considering the fact that customers have become more digital, the increased deployment of new technologies such as smart mobile devices and social networks and the growing importance of in-store technological solutions create new opportunities and challenges for retailers (Piotrowicz & Cuthbertson, 2014), thus Interactive Kiosks emerged to please that.

#### *4.6.2.1.Interactive Kiosks*

The Interactive Kiosks born in the last century, just a few years ago, being a recent technology, placed in public areas or exhibitions and increasingly being used to disseminate, access, process and collect information or perform transactions, financial or non-financial (Tung & Tan, 1998). It is defined as a "*computer station set up in a public space for public usage, used in different industries in different situations, and the system itself uses different kinds of technology, like the touchscreen interface to obtain input directly and faster from users*" ("Interactive Kiosk", 2020).

According to Acante (2020), a company which has been supplying Interactive Kiosks and Touch Screens for over 10 years across the UK, Europe and Worldwide, the first interactive Kiosk born in 1939 and was the pay-per-page Xerox machine. Some years later, in the 1960s, there were a few Kiosks installed in the United States that allowed users to perform certain financial transactions and first Kiosk as a cash machine was installed in London in 1967, but in 1972 the first automated teller machine (ATM), as it's recognized today, was put into use (Acante, 2020).

In 1970, IBM partnered with American Airlines and American Express to create and trial the world's first self-service airline ticket vending Kiosk (Acante, 2020). Moreover, these early Kiosks had very simple touch screen interfaces in which customers selected options by touching one of a number of buttons, and thereby navigated their way through the limited number of screens available for display (Rowley & Slack, 2002). Seven years later, the first self-service interactive Kiosk – the "*Plato Hotline*"- was created at the University of Illinois at Urbana-Champaign by Murray Lappe, to provide information to university students about courses, bus schedules, on-campus events and more, which has an enormous usability by the students, approximating 30.000 people that used the Kiosk in the first six week (Tung & Tan, 1998).

In 1985, eight years after the introduction of the “Plato Hotline”, the first network of interactive Kiosks was developed by the vice president of Florsheim Shoe Company, which grew to over 600 Kiosks available on his stores, connected via dial-up, and allowed customers to search for shoes in other stores if they weren’t in stock at the store the customer was in, pay directly there and have their purchase shipped directly to their house (Acante, 2020). After this moment, the Kiosk’s usage grew exponentially and into many different areas of business and in 1991 it also started to be used commercially for locating missing children, to rent videos, print airline boarding passes, provide information at museums, parks and historical sites, purchase and print movie tickets, order at restaurants, check-in hospital patients and pay for goods at supermarkets (Acante, 2020). However, this Kiosks was projected with simple interfaces, designed specifically to allow customers to conduct a simple transaction, such as placing an order or locating a specific item of information, such as a recipe or a repayment rate for a mortgage (Rowley & Slack, 2003).

By 2000, companies were seeing so many advantages of self-service technology, around 15% of organizations, including Pfizer, Dell, and Hewlett-Packard, had implemented a self-service solution and people started to use the internet to interact with each other and with information, so Kiosks became a way to improve user experience with self-service solutions (Mewherter, 2017) and in 2007, the United States’ Virginia State Parks installed 31 interactive kiosks throughout their parks to provide visitors with information and maps. This was the first expansive, state-wide interactive kiosk program in the US and was launched by Imperial Multimedia.

Actually, the Interactive Kiosks are used for many purposes since companies started to verify the powerful impact that it could have on their businesses, so it is used in a larger range of different type of business ideas, like retail, tourism, education, restaurants, postal services, entertainment, healthcare and government agencies (Tung & Tan, 1998). Thus, there exists different types of Interactive Kiosks (Orencia, 2017), such as:

*Informational Kiosk or Public Access Kiosks* - It is located in the entrances of public thoroughfares, shopping malls, airports, railways stations and other locations with density of people as a substitute for, or to complement, customer service through a human service agent. It is also focused on shopping-related transactions, and informational devices (Rowley & Slack, 2002). One of the biggest retail centers in the world – Dubai Mall, in Dubai – is equipped with Informational Kiosks, mainly used for informational questions or to look for a specific store and the way to get there, called Interactive Wayfinding Kiosks (Figure 21), which could be possible by using sensors or Bluetooth devices such as beacons (Shankar *et al*., 2016).

*Product Promotion Kiosk* - This type of Kiosk is a way of showing products and promotions in an interactive form. Adidas are an example of a love brand which uses in-store kiosks to enrich the in-store experience, being a way to encourage customers to stay longer there, create an engagement with the brand and make them aware of new products, ranges and promotions. It does it by showing some videos of sponsored football players like Messi, which people could download and buy the selected products they want (De Kare-Silver, 2014).

*Self-service Kiosk* - A Self-service Kiosk is used for paying bills and doing another task without staff assistance, used as self-ticketing at movie houses, self-ordering at restaurants, and self-check in at the airport. Cinemas NOS (2020) introduced Kiosks in all cinemas to purchase tickets and menus and collect tickets reserved or purchased online, being a 100% self-service service and McDonald's is also a good example, which made its customer experience faster, more effective and interactive using Self-service Kiosks. Some retailers, like Leroy Merlin and Decathlon uses this type of Kiosks directly on their physical stores as a way of showing, comparing and order directly its products by its customers, by integrating the latest advances in touchscreen point of sale and digital printing in our Self-service Kiosks, according to Retail Technology Innovation Hub (2019).

*Vending Kiosk* - A Vending Kiosk is a point of sale of products as an interactive vending machine. An excellent example of this was Foot Locker flagship store in New York's Times Square ("Foot Locker's in store 3D virtual shoe customization", 2013), that introduce an interactive touch-screen kiosk that allows shoppers to design everything from laces and logos to fabric and heel phrases, featuring various color combinations, giving shoppers the opportunity to touch, feel and see the real-life product while they design their custom sneakers.

Although there exist Kiosks that were created just for one type of functionality, there are also Kiosks that try to be more complete and offer a total experience to customers. For example, these devices could be Informational but with the opportunity of purchasing products directly – Self-service Kiosk – being able to help customers in different moments of their journey. At this moment, brands like Adidas, McDonalds, Sephora, H&M (Grewal *et al.,* 2019) are recognized from its investments on interactive kiosks at its stores as a way of creating an interactive customer experience and more engagement with its customers, transforming into a competitive advantage.

### *4.6.3. In-store Kiosks*

Retailers are trying to establish relationships with their clients by matching offline and online channels, so In-store Kiosks was created for that purpose. According to Ingram (2017), this in-store device is an interactive screen which started to be essentially used to visit the store website and look for products and prices, where the customers can list recipe ideas, deal promotions, scan prices and other types of information. So, they could review the deals and recipes, in order to find ones that meet their needs (Ingram, 2017).

The Kiosks are also used as a point of purchase, where customers could not only look for the products, but also have the chance to scan it, order it and pay it directly at the machine, without waiting times. So, the Kiosks has the purpose of being convenient for customers and convenience signifies the reduced time and effort consumers must exert to buy or use products and services, due to the assistance of technology (Berry, Seiders & Grewal, 2002). Moreover, technologies with high levels of convenience and social presence will help consumers perceive product and service benefits, stimulate their touching and trial, and increase preferences and purchase likelihood (Grewal *et al.,* 2019). It's also important to note that social presence does not mean that another person must be physically present. So, social presence may be felt with interactions with the machine itself (Dahl, Manchanda & Argo, 2001).

As Grewal, Noble, Roggeveen and Nordfalt (2019) studied, customers desire a convenient, easy, frictionless experience, as well as the desire for social presence allows retailers to experiment and test new technologies which will enhance the customer experience in the store on these dimensions. Furthermore, this device enables consumers to explore, shop, and evaluate their experiences in ways that did not exist previously, in a store environment.

The software installed in that kind of device is also able to allow employees to capture insights from the experience in interactional creation of individuals. This includes companies offering customer support through customer's experience after purchase (Ramaswamy & Ozcan, 2019) and getting feedback from the usage of the Kiosks.

The impact of this type of interactive screen is being studied as its negative effects. One of the possible negative issues is the privacy policies, because the same personal data could be stored at the machine and the following users may have access to that kind of personal information, such as address or payment card details (Esmark, Noble & Breazeale, 2017). In other perspective, the growing prevalence of consumer-facing technologies in retail stores likely is appreciated by some consumers, but others have negative reactions (Mick & Fournier, 1998 in Grewal *et al.,* 2019) that inhibit their use. In fact, in some situations, technology can function as a barrier to the customer experience (Giebelhausen, Robinson, Sirianni & Brady, 2014).

In other wise, it could be a strong point of purchase and a different way to engage with customers in a store environment. Some researches demonstrated that 49% of shoppers worldwide shop online via desktop, whereas 51% shop via smartphones and 9% shop via tablets (Grewal *et al.,* 2019). It means it's critical for retailers to measure and understand the impact of their media touchpoints on the customer journey, in order to optimize their media, both for relevance to the consumer and lifetime value for the brand. Therefore, according to Google, in order to succeed brands must deliver experiences that are fast and frictionless, meaning that it's time to invest in mobile experiences as well as a machine learning and automation strategy, as in-store Kiosks. Machine learning may help brands understand and predict intent in ways that simply aren't possible manually (Think with Google, 2018).

If stores create a well-defined strategy, is it possible that Kiosks will also become one of the most used screen types and which will be the impact of it on in-store customer experience?

## 5. Methodology

As it was stated in the beginning of this research, the main goal of this study is to understand the impact of Interactive Screens - one of the new and future trends in retail - on the store atmosphere of Leroy Merlin stores. Considering the fact that this master thesis will be done in a Pedagogical Case format, the research problematic is going to be analyzed by the combination of quantitative and qualitative data, both supported by marketing tools and literature review.

Primarily, it's necessary to conduct a rigorous Secondary Research concerning the market, competition, the company analysis and history, business idea, the importance of its stores and also the investments on *Phygital* strategies. Secondly, the literature review will support the principal topics of the case: Retail Customer Experience, Customer Journey, Store Atmosphere, Future Trends in shopping experience, Smart Stores and Interactive Screens.

In order to provide accurate information, it's also going to conduct interviews with managers and collaborators and also surveys to the target group of Leroy Merlin Kiosk's users (Appendix C – Questionnaire 2) and also to some collaborators (Appendix C – Questionnaire 1) which use these devices in their work daily life. It will also use data from the physical store's observation of the appearance and decoration.

The quantitative data it's so important to understand the practical results of the project and support the more theoretical information. So, this type of information will be collected from database of the company the numbers of interactions, visualizations (Tables 2, 3, 4, 5, 6 and 7) and purchases in Kiosks and other topics since the beginning of the implementation of Interactive Screens in some stores. If it's possible to state a relation between the use of Kiosks and the satisfaction of customers regarding the store atmosphere and their experience in-store, it will be had in consideration.

Finally, the animation questions regarding an external analysis of the company and also the questions concerning the plan of actions to increase the impact of the Kiosks on the store atmosphere will be used to create a valuable resolution proposal. Additionally, for the case resolution it's asked for a SWOT analysis and Positioning that will allow greater identifying and understanding how Leroy Merlin' could use its strengths to take advantage of its opportunities to avoid potential threats and exploit its opportunities to overcome weaknesses, considering its positioning on the market.

### *5.3. Animation Plan*

| Session | Objectives | Action Plan | Duration |
|---|---|---|---|
| First session | • Introduction of the case<br>• Develop students' interest on the case<br>• Create a participative lesson<br>• Create work groups | • Distribution of the case<br>• Resume of the case<br>• Make some animation questions<br>• Introduction of DIY and Home Improvement Market<br>• Discussion of impact of COVID<br>• Explanation of Store Atmosphere' concept<br>• Ask for examples of companies which had to adapt its strategies in pandemic context | 90' |
| Out of the session | • Case Analysis, in work group<br>• Elaboration of resolution proposal of questions 1,2 and 3 | • Case' reading and diagnosis<br>• Analysis of the Market, Competitors and Target<br>• SWOT analysis of the brand<br>• Brand Positioning | 120' |
| Second session | • Correction of the questions 1,2 and 3<br>• Clarification of doubts<br>• Introduction of the questions 4,5 and 6<br>• Alert for additional search need | • Discussion of the questions 1,2 and 3<br>• Discussion of Leroy Merlin' current situation in Portugal<br>• Discuss the best ideas regarding the dynamic SWOT in work groups, as if it were a debate | 90' |
| Out of the session | • Elaboration of resolution proposal of questions 4,5 and 6<br>• Extra searching | • Analysis of all the practical and theoretical case information<br>• Additional research for ideas which companies implemented during COVID<br>• Questions resolution and preparation of presentation slides | 240' |
| Third session | • Presentation of case study, answering to all the questions<br>• Case' conclusions and doubts 'clarification | • Group presentation of the case, in 15 minutes<br>• Discussion of the last questions, mainly<br>• Questions and general class discussion<br>• Final considerations and suggestions by the teacher, based on the groups case resolution | 90'+ 90' (180') |

Source: Own elaboration (2020)

### *5.4. Animation Questions*

- When you want to buy home improvement and DIY products in Portugal, where do you go?
- Do you consider Leroy Merlin a recognized brand in Portugal? Why?
- When you go to a physical store, what is the main factor that attracts you to buy a product?
- What are the main problems that you find when you go into a physical store?
- What kind of strategies can brands adapt to differentiate themselves from its competitors?
- Do you prefer to buy online or offline (in-store)? Why?
- What are the senses that you feel that most influence your consumption decisions?
- Do you think that the new trends in retail, like interactive screens, improve your in-store experience?

## 6. Case study resolution proposal

**1. Describe the current DIY and Home Improvement in Portugal and based on the pandemic context, identify the main reasons for the importance of the new trends in retail applied in store. Do you consider it is a good time for companies to apply them? Explain and give real examples that are not mentioned in the case.**

The ADEO group's sales volume has been growing since the last years and actually the group is the leader on the Portuguese and European DIY market and the third in the world (ADEO, 2019), even in 2007 when the economic crisis occurred, since it created a scenario which has made people look for more cost-effective solutions for their homes and creating an interest for the DIY and Home Improvement stores (Keiningham, Aksoy, Williams & Buoye, 2015), like Leroy Merlin.

Considering the Portuguese scenario, the DYE and Home Improvement market is growing every year and the ADEO group is the Portuguese market leader, which wants to continue to invest heavily on the transformation of its stores and also on the Digital and Supply Chain (Leroy Merlin, 2020).

In the last months of 2020, a global coronavirus pandemic has spread all over the world and the economists believe it will have severe negative impacts on the global economy. Thus, it is vital that retailers create well-defined strategies in order to adapt to the new reality and take advantage of this problem to distinguish themselves from competitors and create competitive advantages.

At this time, many shoppers have been left "looking for projects" to tackle at home, since they now find themselves working from home feel that they finally have the time to dedicate to projects to complete their homes, so the Home Improvement sector appears to be on solid ground as the coronavirus roils much of the retail business (Cain, 2020). This and the fact of people are searching for new home solutions, made the term "DIY" grown exponentially since March (Leroy Merlin, 2020), when the virus arrived to the most of countries around the world, which caused companies in this sector of DIY and Home improvement to start receiving more traffic to their online platforms and physical stores, meaning that sales in the sector had not felt directly the negative impact of the crisis ahead.

Therefore, it could be explained by a growth in demand for items online, in which 9.7% was in Home and Garden and 7.7% in Home Appliances and Furniture then it is also known that the number of online transactions grew by 120% in Home Furniture and DIY, having been the fastest growing segment in the world (We are social & Hootsuite, 2020), – which is very positive for ADEO group in times of global economic crisis. So, consequently retailers must invest quickly in their online platforms, in logistics centers and in the creation of free delivery campaigns, for example. Leroy Merlin saw its online sales growing 400% from March 2020 to July 2020 (Leroy Merlin, 2020), since society were confined to their homes and the company took advantage of that fact to make its online platform more dynamic, offering more promotions and campaigns, like free delivery ones and also more digital, actual and efficient store concepts (Leroy Merlin, 2020).

Additionally, considering the COVID-19, the Portuguese government defined that Home Improvement stores would not close, since it sells products of necessity like staple products, as electricity, construction and plumbing ones which are essential for an emergency. Thus, the stores remained open registered a high volume of sales and also had a larger number of visits, assuming great importance for consumers, even in confinement time, since people being at home wants to take their time renovating and decorating their homes and also because the works continue and professional customers continue to pick up the necessary materials (Coentrão, 2020).

For this reason, the Portuguese retail companies are still investing on its physical stores, since it is proved that 30% of customers aged 16-64y started to know new brands using in-store displays and promotions (We are social & Hootsuite, 2020), for example, and in the case of Leroy Merlin Portugal its physical stores continue to represent the majority of store sales, which signified 98,6% of Leroy Merlin total Revenues in 2019 (Leroy Merlin, 2020).

Therefore, this pandemic meant that several companies had to make their stores more digital, to better respond to our needs for people in pandemic conditions. So, more than ever, DIY and Home Improvement are investing and applying the new technological trends of retail on its physical stores.

Some of the major technological trends in retail are the Interactive screens, Hybrid Stores, Store Mood Zones, Retailtainment, New payment methods, Virtual Reality, Augmented reality, Storytelling and Co-creation, which are incorporated in order to create smart stores with immersive experiences which drives people to their stores and makes they live with experiences and memories (KPMG, 2019). It also makes them feel in a real home, their dream home, and considering this pandemic times, it makes them feel more secure as well, which is one of the factors that most affects stores that are open, where it has to have much tighter security conditions, such as wearing masks, disinfecting hands and controlling the number of people inside stores.

These trends help customers to make good purchase decisions, feel less time pressure, increase their satisfaction and pleasure, feel more engaged and make efficient and quick purchases (Grewal, Nordfält & Roggeveena, 2017). However, at this pandemic time, it also could help retailers create new ways of showing, delivering and selling its products. So, the new payment methods assumed a great importance during this time, since due to the virus being able to pass through physical contact, companies feel the need to create more digital and flexible payment methods (KPMG, 2020) which do not involve direct contact between customers and employees.

For the same purpose of maintaining security, Interactive Screens can also take on great importance so that people can get to know the products in the store, buy them online while in the physical store or consult some information, without having direct contact with employees. However, it must be ensured that it is sanitized and disinfected whenever it is used. Some companies like Asianda (2020), also decided to create Interactive screens provided with a Hand Sanitizer Signage Display and also Face

Recognition Thermometer, in order to ensure all the safety recommendations at this time, assuming a strong importance and being a model, most likely, to be invested by companies in the near future.

Many companies have been using Augmented Reality as a tool to combat Covid-19. Since people must maintain a safe distance between them, Google for example launched an app that, through augmented reality, measures the safety distance of people, in this case two meters. In addition to serving for use while walking on the street (Época Negócios, 2020), the program can also be used to maintain social distance in restaurants, parks and stores that are open, such as those for DIY and Home Improvement. Moreover, the Virtual Reality technology is also helpful in context to mitigate effects of COVID-19, since it started to be used to reduce the face to face interaction of doctors with the infected COVID-19 patients, through medical training and patient treatment, for example. Using live video streaming, it helps to improve surveillance systems on the ongoing situation (Singh *et al.*, 2020).

**2. Starting with the contextualization of the case and the current strategy of Leroy Merlin, develop a SWOT analysis based on it. How can the company use its strengths to take advantage of its opportunities to avoid potential threats and exploit its opportunities to overcome weaknesses?**

| Strengths | Weaknesses |
|---|---|
| • What makes LEROY MERLIN a good brand? | • What company sees as a way to improve? |
| S1: Strong autonomy. | W1: Dependence of External Partners to Execute the Offered Services |
| S2: Huge portfolio, with more than 130.000 references of products and services to all types of customers. | W2: Training and development of employees. |
| S3: Specialized collaborators. | W3: Logistic and stock problems associated, which impacts the online and offline selling platforms. |
| S4: Brand Heritage and recognition in the market. | W4: Interactive Screens as Kiosks which has too basic functions. |
| S5: ADEO European Leadership. | W5: Company for a long time in the "offline" market, which has not yet completely taken the leap to digital. |
| S6: Portuguese market leader, being the number one in the mind of customers when thinks in DIY. | |
| • What do others see as a strength of LEROY MERLIN? | • What customers need the brand to change? |
| S7: Different size stores with a clean layout. | W6: Long queues in payment. |
| S8: Always seeking innovation, through investments on customer experience, digital and technology. | W7: Big stores where is difficult to find all the products. |
| S9: Different Customer Types. | W8: Small stores where doesn't exist all the product ranges. |
| S10: Strong distribution in Portugal, with the major number of DIY stores. | W9: Having the complete stock in all store formats. |
| • Why are physical stores still important? | |
| S11: Physical stores represent most stores sales: 98,6% of Leroy Merlin total Revenues in 2019. | |
| S12: Leroy Merlin is investing on smart stores, having Kiosks in almost all stores. | |

| Opportunities | Threats |
|---|---|
| • What market opportunities could brand take advantage of? | • What market problems could have a negative impact on the company? |
| O1: 30% of customers aged 16-64y started to know new brands using in-store displays and promotions. | T1: Safety issues caused by COVID-19. |
| O2: 80% of Portuguese people searched for products online and 74% purchase online. | T2: Effects of Covid-19. |
| O3: People needs to see and touch the products physically. | T3: Economic crisis in the world, including Portugal. |
| O4: 82% of all DIYers are likely to explore products in the physical store. | T4: Deterioration of working conditions in the Portuguese retail sector. |
| O5: The Online Sector is growing. | T5: Changing Laws. |
| O6: Attracting and Retaining Millennial Customer. | |
| O7: Market Coverage: new Areas and Customers. | • What is the importance of competitors? |
| O8: DIY and Home improvement market is growing every year | T6: High competitiveness. |
| • What COVID-19 created as an opportunity? | T7: Competitors which practice lower prices. |
| O8: Economic crisis created a scenario which has made people look for more DIY solution. | T8: Entrance of relevant players in the European / Portuguese market. |
| O10: Growth in demand for online items: 9.7% in Home & Garden and 7.7% in Home Appliances & Furniture. | |
| • Which trends could brand take advantage of? | |
| O11: Smart stores. | |
| O12: Interactive Screens as a fully immersive trend. | |
| O13: Use of Cutting-edge Technology. | |

**Dynamic SWOT**

<table>
<tr><th></th><th>Opportunities</th><th>Threats</th></tr>
<tr><td>Strengths</td><td>- S2|O12: Take advantage of the fact that it has such a wide range of products to dynamically display it in all store formats, through Interactive Screens.<br>-S6|O8: Use the fact of being the Portuguese DIY market leader, to create strong customer experiences and adapted solutions for COVID-19, since customers are searching for more DIY solutions.<br>-S11|O4: Since the physical stores represent the majority of brand 'sales, it should focus on its physical stores because 82% of all DIYers are likely to explore products in the physical store.<br>-S8|O5: Use the fact of always seeking innovation, through investments on customer experience, digital and technology to also invest on the online selling platform, called PDH, since the online sector is growing.<br>-S9|O1: Since Leroy Merlin has different customer types, use in store displays to reach more people, since 30% of customers aged 16-64y started to know new brands using in-store displays and promotions.<br>-S12|O6: Use the fact of Leroy Merlin being investing on smart stores to attract and retain millennial customers.</td><td>- S12|T7: Use the fact of being investing in smart stores, to create a point of differentiation between the competitors, adding value to the customer experience to fight to the lower prices of the competition.<br>- S12|T1: Use the fact of being investing in smart stores in order to create technological and smart devices which are able to meet new security needs, such as Kiosks with hand sanitizer where people can consult their products in the store, safely and without having to contact employees.<br>- S4|T3: Make advantage of the brand heritage and recognition to help people and associations in need by donating materials and creating special campaigns.<br>-S3|T6: Take advantage of the fact that it is a company with specialized collaborators, to invest even more in its training and distinguish itself from all the competition.</td></tr>
<tr><td>Weaknesses</td><td>-O13|W3: Use cutting-edge technology to improve the logistic platforms and solve the stock problems.<br>-O12|W4: Make advantage of Interactive Screens being a fully immersive trend to reformulate the actual Kiosks of Leroy Merlin, introducing new functionalities.<br>-O11|W6+W7+W8+W9: Use the fact of smart stores being a trend that solve a lot of problems, to improve physical stores into more Phygital, in order to solve some problems, like long queues, difficult to find products and stock problems.</td><td>- W5|T2: Take the step to digital, by investing on the online selling platform, calling PDH, in order to avoid the negative consequences of COVID-19, in which some people must stay at home and can't go to the physical stores.<br>-W1|T1: Stop relying so much on external partners, creating new services supported only by internal employees and thus ensuring greater security conditions, which do not depend on other external entities.</td></tr>
</table>

**3. Explain how Leroy Merlin could use its differentiation factors to overcome this pandemic context which has challenged the market. Develop strategic actions to attract and retain the Portuguese shoppers.**

**Segmentation**

For choosing correct segmentation criteria, it must be relevant, measurable and with operative value (Lendrevie *et al.*, 2015). For segment Leroy Merlin' customers, it will be applied geographic, demographic, physiographic and behavioral criteria.

**Geographic: Location**

Leroy Merlin is a French company which is present in 4 continents around the world, with more than 850 stores. In Portugal, it is present in almost all cities, with more than 48 stores, including the islands. The company has the goal of being closer to its customers, so it has a larger distribution, being searched for people and companies from more industrial to more rural ones. However, the location of the stores is mainly on industrial zones.

**Demographic: Gender, Age, Income, Occupation and Industry**

There exist two different types of customers, the particular ones (B2C) and the professional ones (B2B). They have different characteristics, ages, incomes, occupations, motivations, needs and social classes. Thus, it is possible to identify some groups of customers that, typically have the same set of characteristics before, during and after interaction with the business and its employees and who practice the same occupation or works in the same industry: Professional customers, Project customers, DIY customers, Garden customers and Undifferentiated Customers. Thus, the DIY customers represent most of them, 36%. Considering the B2B targeting, there are both small and big companies. Since Leroy Merlin is located in different types of cities and sells a larger range of products, it is also searched from a different companies' types, which could work also in retail industry, construction, engineer, catering, hospitality and many other types of activity.

Considering the data retrieved from the accessibility to the official website and Kiosks in 2019, it is possible to state that the major percentage of customers that accessed was from female gender (56,3%) and most of them are aging between 35-44y (26,5%) and 25-34y (25%). However, doesn't exist a specific range of customer 'ages or incomes, since DIY and Home Improvement market is so varied, with products, services and prices for all types of ages, genders and social classes or incomes.

**Psychographic: Lifestyle and Behavioral: Occasion, Usage and Problems Solved**

The major of B2C customers are DIY customers, which has the hobby of searching for solutions for their homes and which likes to create their own pieces of bricolage.

Regarding the B2B customers, are usually architects, engineers and designers or contractors, who are searching for inspiration and products for their works and projects.

The customers who visit this type of stores, both B2C and B2B, are searching from products to solve some problem at their homes, create some project at their home (big or small), searching for some service, or even for some inspiration or advices from collaborators. On the other hand, since the stores have specialized employees in the various Do-It-Yourself areas, there are those who look for the stores to clarify any doubts and ask employees for advice.

**Targeting**

Leroy Merlin is present in a larger market with customers of all social classes, ages and cities. Thus, there exists two main segments in the market - B2C (Particular Customers) and B2B (Professional Customers) and both are:

- People that loves DIY;
- Concern about quality products and huge portfolio of products;
- Interested on the different services available and specialized collaborators.

**Positioning**

**Unique selling proposition:** Leroy Merlin has the unique selling proposition of "*Help each client create his dream home!"* (Leroy Merlin, 2020), by offering a huge portfolio of products with the best quality and with the help of specialized collaborators, having a strong presence in the world.

**Consumer Insight:** Leroy Merlin is viewed as a recognized brand with a huge portfolio of quality products for all needs.

**Points of Difference:** Larger range of products**;** Products with high quality**;** Strong distribution**;** Huge range of personalized services**;** Recognition in the market**;** Always searching for innovation.

In this pandemic time, since some people were confined to being at home, many of them started to search for DIY solutions for their homes, as can be seen in the Figure 4, where the peak of research was in April, coinciding with the time when Portugal was in confinement (Google Trends, 2020). Thus, people started to take advantage of their free time to renovate their home, which made most of the companies of the DIY and Home Improvement market in Portugal had not felt the negative effects of this economic crisis very much, since it also sells staple products that are essential in this pandemic time. However, this type of companies also had to adapt its strategies and its stores, since the new legal and security issues and also due to the increase in this type of products, which caused orders to skyrocket, causing retailers to also adapt their logistics.

Since Leroy Merlin is a recognized brand in the market, when Portuguese people thinks on DIY and Home Improvement stores, they immediately think on Leroy Merlin or AKI, which now are also Leroy Merlin, thus it is a brand which are present on Portuguese people minds by the larger range of quality products. So, regarding this pandemic Leroy Merlin saw its physical stores being increasingly sought after, as well as its online stores that saw its visits and sales grow exponentially. Consequently, it is the perfect time to adapt its strategies and use the fact of being a company which is always searching for innovation to use these innovative factors to apply at its both physical and digital stores, and to the logistic systems as well.

On the physical stores, the company could take advantage of having a very extensive range of products, so that it could show it in a more digital and quick way, without people having to contact employees directly with employees, through Interactive Screens, for example. On these screens, people also can compare and buy products directly, safely and quickly. Leroy Merlin might also apply Interactive Screens with Hand Sanitizer Signage Display and also Face Recognition Thermometer, to ensure the people disinfection.

On the online platforms, companies could develop more promotional campaigns and also free delivery campaigns to take advantage of the fact that people are at home and that does not prevent them from buying the products. Thus, offering more discounts or safe delivery of products at home, makes people feel confident and encouraged to buy online.

Since the company is also recognized by its huge portfolio of personalized services, it’s the time to adapt it, in order to ensure all the security measures. For that reason, Leroy Merlin decided to create support services at a distance, with the purpose of making people feel secure in their purchase, with the virtual accompaniment of a specialized employee. This is an area to invest in order to have an even stronger position in the market, adapting to each customer's needs. Based on this, the brand is prepared to create new personalized distance services.

**4.Taking into consideration the fact that e-commerce is increasing, mainly during this pandemic context, and the current generations prefer to shop online instead of a physical store, do you think that the store atmosphere is outdated, considering the Leroy Merlin business? Base your answer within the four human senses - vision, touch, smell and hearing - mentioning which ones makes sense to be developed or adapted and in what in-store Kiosks may impact and why.**

The Portuguese retailers are investing on technological factors, especially on their e-commerce platforms, since 80% of Portuguese people search for products online and 74% purchase online (We are social & Hootsuite, 2020). Therefore, in this pandemic context, Leroy Merlin’s online sales have been growing very favorably in about 400%, which represents a super important milestone in the company's e-commerce (Leroy Merlin 2020). However, the stores remained open registered a high volume of sales and visits (Coentrão, 2020) and, in the case of Leroy Merlin Portugal its physical stores continue to represent the majority of store sales, which signified 98,6% of Leroy Merlin total Revenues in 2019 (Leroy Merlin, 2020), although the online sales are growing so much and so fast.

For that reason, it is important to note that even if the online stores are growing and people are becoming more digital, physical stores will continue to be a major investment and will have a great weight on sales, since regarding the type of products that company offers it is very important for customers since they could see, touch, understand how to do their projects and interact with specialized employees, which is critical and valuable for customer's purchase intentions. Moreover, 50% of Leroy Merlin 'target are 35-55 years old and 36% are more than 55 years old (Leroy Merlin, 2020), which means that they are not a digital generation and typically they prefer to do their purchases at the physical stores.

Therefore, the percentage of the purchases of decoration and furniture products in-store, with direct influence from digital media is growing and represents 58% of the total revenues (Deloitte Digital, 2018) and if consumers had a positive experience with in-store technologies, 46% of them would shift their online purchases from digitally focused retailers to retailers with stores that use automation technology (Capgemini Research Institute, 2019). Consequently, the idea is to take the best part both from e-commerce experience and physical retail stores, since consumers could interact in both environments indiscriminately and it could be complementary to each other, meaning that, at least in this type of business, physical stores are not outdated.

Considering these, many companies are searching for how to design shopping experiences that enhance the enjoyment during customer shopping (Lemon & Verhoef, 2016) and many retailers believe that technology can boost customer experience (Flavián, Ibánez-Sánchez & Orús, 2018), meaning that some companies have moved from the traditional retail atmosphere to digital solutions at the point of sales (Capgemini Research Institute, 2019).

Leroy Merlin invests heavily in its physical stores, in order to create a comfortable and appealing environment for all its customers and visitors, by stimulating customer 'senses: visual, aural, olfactory and tactile (Kotler, 1973). In this way, all stores are "clean" spaces, with green and white colors, identical to the brand logo, with neutral natural light and with decorative spaces that lead the customer to dream, since the company believes that the future of its stores will pass a lot through the creation of inspiring environments, in order to construct an interactive store experience and design environments that interact with their senses, more specifically with the visual and touch.

Consequently, Leroy Merlin is also investing in technologies at its physical stores, like Kiosks, as a way to help customers on their shopping experience, creating a visual and touchable involvement with a big and interactive screen and also a point of difference compared to its competitors.

Regarding the visual aspects, according to Hecht and Reiner (2009), for retailers, vision is unarguably the most dominant of all senses and this sense could be captured by the colors, brightness, size, shapes (Kotler, 1973) and the space design, place of merchandise, furniture, and decoration variables are also relevant (Helmefalk & Hultén, 2017).

Regarding the Interactive Screens, Roggeveen, Grewal, Townsend and Krishnan (2015) found that showing a product in a dynamic way, compared to static old versions, visual format enhanced information vividness, which increased preference for the displayed product. Furthermore, in-store technology infusions may be more useful with hedonic purchases, since imagery can encourage choices of hedonic products, by heightening the vividness of their hedonic attributes. Kiosks are an Interactive Screen, increasingly used by retailers to illustrate its products differently or just as a way to create a visual place of merchandise with a large screen format.

The hands are identified as the *"principal source of input to the touch perceptual system"* in humans (Peck and Childers, 2003, p.35), so touching objects, people or products enables the sense of touch to incorporate physical contact through the skin into the shopping experience. Actually, customers have the possibility to shop online without touching the products, which sometimes could mean that there is no purchase decision at all (Hultén, 2013), since some studies evidence that if shoppers are not allowed to touch products in order to evaluate and test them, they become frustrated and annoyed (Peck & Childers, 2003). Consequently, the stores which allow consumers to physically inspect products by picking them up and touching them are preferred (Krishna & Morrin, 2008), such as Leroy Merlin.

As technology is evolving it is possible to move consumers physically away from the touch-based display screens or embed them in a virtual world where an avatar is "touching" the product for them (Grewal *et al.,* 2019), being a good communication tool which retailers should start to study the benefits of implementation, since it encourages touch and enable shoppers to interact with products. Kiosks are a display designed for customers to interactively touch products and to encourage them to test it in a dynamic mode.

In this pandemic context, in which people have their tact conditioned, since viruses spread through physical contact, retailers must seek new solutions. Bearing in mind that visits to Leroy Merlin stores were maintained and, in some cases, even increased, adding to the fact that people feel the need to see the products in person, Kiosks may be a good solution. If it is possible to ensure the correct hygiene of the Kiosks, customers have the possibility to compare products, place orders and pay them directly, without having to have contact with employees, ensuring greater security and having a complete and more digital store experience.

**5. Considering this pandemic time caused by COVID-19, how can Kiosks impact stores and make people choose to shop there instead of buying online? Explain why and give 3 grounded ideas.**

In times of pandemic, some people avoid leaving home and others have started to order their products online. However, as can be seen, Leroy Merlin's store sales continue to represent the majority (Leroy Merlin, 2020), since customers need to touch and see the products in person, although online sales are growing so fast. In this way, retailers are expected to further streamline their stores to keep their old and growing businesses, giving them the advantages of buying in-store versus buying online and their gains from the use of the technology have to be higher than their efforts and vice versa (Evanschitzky *et al.*, 2015).

Having this in mind, Interactive Screens, more specifically Kiosks, can play a fundamental role in transforming and improving the experience of consumers in stores, especially with regard to consumer safety and autonomy - key factors in times of pandemic. Thus, it may be used for:

- Exclusive in-store promotions on items purchased directly from Kiosks. This type of promotions can involve direct discount on items, free home delivery of the first purchase made at the Kiosks or the offer of a discount voucher on the first purchase made directly at the Kiosks.
- Existence of a direct payment terminal in the Kiosks, since people like to feel safe and are saving time on their purchases (Wang *et al.*, 2015). So, instead of having to enter their card details, Kiosks now have a much easier payment method, making the purchase process more efficient. In this way, people also no longer have to pay for their orders and purchases in cash or have direct contact with employees, which makes the experience much safer in the context of COVID. It is also important to have contactless payment methods, by adopting touchless transaction technologies (see Figure 22).
- Existence of a disinfection and temperature measurement system in Kiosks, in order to makes it easy for employees and visitors to keep their hands clean to prevent the spread of COVID-19, since some diseases, namely COVID-19, are transmitted by physical contact and Kiosks are an Interactive Screen, in which people must use touch to interact. As it would be an innovative system, it would most likely attract many people to the stores to test it, however, it would have many associated development costs (see Figure 22).

**6. "*Consumers increasingly expect that efficiency and engaging online experience to be replicated in-store*" (Capgimini, 2020). Regarding the major pain points that occur at the physical stores and which affects the customer journey, explain the importance and the impact that Interactive Screens may have on it, regarding the Smart Stores concept.**

In this new era, consumers increasingly expect that efficiency and engaging online experience to be replicated in-store, by creating a complete and powerful omnichannel (Capgemini Research Institute, 2019), since the future of physical stores will be based on the creation of totally personalized experiences, which will be focused on service, by adapting it to consumer trends and technology (BCG, 2015).

Moreover, nearly half of them assert they would shift purchases from a non-automated store to a store with automated technologies if they have a constructive experience there (Capgemini Research Institute, 2019). Thus, retailers should reflect and reformulate the process of selling the products, more than focus on the product itself, otherwise it will just be a standard, tangible product, with no consumer involvement, that will not be able to answer to the changing consumer´s needs (Vargo & Lusch, 2004). This means that it is imperative for retailers to consider an automation strategy in order to achieve and anticipate customers' needs (Capgemini Research Institute, 2019).

Considering the Home Improvement Retail category, it was proven that the key moments in the customer's journey in which digital plays an outsized role on the shopper's journey are the stages of browse and research, select and validate and purchase and pay (Capgemini Research Institute, 2019). Moreover, there exists some types of technologies which could be applied, such as Interactive Screens, which could have a positive and measurable impact on the customer experience, by helping customers with questions regarding product information, payments, delivery problems, and others.

Therefore, these automated devices, as Kiosks, could also solve or have a positive impact on some of the major pain points for customers as long queues in payment, products without stock in-store, difficulties in locating products, lack of product' information and don't find employee assistance (Capgemini Research Institute, 2019), since there exists some types of Kiosks - Informational Kiosk or Public Access Kiosks, Product Promotion Kiosk, Self-service Kiosk and Vending Kiosk - which could be used for different purposes, as it could be possible to analyze:

- *Long queues in payment* – One of the major pain points which makes people give up on their in-store purchases is the fact that there are long lines for payment. One of the measures that some retailers like McDonalds or NOS implemented in their stores was the use of Self-service Kiosks. This type of Kiosks has as main objective, as the name indicates, of people being able to make their purchases, including the payment of them, without the assistance of a collaborator and only by using the Kiosk. Bearing in mind that this is a problem that affects so many consumers, it is important that companies create this type of strategy, not with the aim of reducing costs as employees, but as a way to improve the customer experience. It is also relevant to note that customers must have the choice of using the Kiosks or having direct contact with an employee, in order to make them feel as safe and confident as possible. Consequently, Kiosks will provide operational and transactional efficiency (Jeng, 2017), since some customers prefer self-checkouts because of the perceived speed of the transaction (Zhu *et al.,* 2013), resulting in a timesaving and convenience (Wang *et al*., 2015).
- *Products without stock in-store* – One of the main goals of Kiosks is the possibility of showing in an interactive all the range of products available, since, in some cases, there are smaller stores where it is not possible to have a full stock of products available or, in many cases, they are out of stock and customers need to see it anyway. Thus, Vending Kiosks or Self-service Kiosks are widely used as a long-tail device, increasingly used by collaborators as a sales support tool and also by customers who

want to see all the products available while shopping in-store. Thus, both collaborators and customers could easily consult the stock available in the store and, if it does not exist, order directly at Kiosks.

- *Difficulties in locating products* - Often, especially when dealing with large stores, with a wide variety of products or / and the customer does not have enough knowledge about the location of the products, he ends up feeling lost and abandons the purchase decision. For example, in large shopping centers such as the Dubai Mall, in Dubai, one of the largest shopping centers in the world, there are Informational Kiosks that help people find the store or product they are looking for, being very intuitive and easy. People just enter the name of the store or the type of product and the Kiosk draws a route to the location, as if it were a GPS, solving this problem (Figure 21)
- *Lack of product' information* - There are some market segments, such as the DIY and Home Improvement market, where people when it comes to products for large projects and with a high financing, need as much information as possible to understand if it is the right product for their needs and if it is worth investing in it, around another. Product labels and packaging usually have the most relevant information; however, they are not always intuitive, and it is not always easy to compare with other products. In this way, Kiosks may have a fundamental role in exposing the product in a more dynamic way, like using 360 degrees exposition with possibility of rotating in all directions, with images of the product in use and with the possibility of being able to compare it with others, in a more simple and interactive way.
- *Don't find employee assistance* - Many times, customers look for employees and do not find them or, in most cases, they are busy serving other customers. Although human contact is not yet directly comparable to that of a machine, all types of Kiosk - Informational, Product Promotion, Self-service and Vending ones - can be used to help customers with any queries. For example, many times customers just want to know where a product is and Informational Kiosks can help them any time they just want to know it and also may help them, in order to compare two or more products. Although people and the "human touch" are irreplaceable, companies must understand and deal with that, by creating options and automated systems where collaborators could help customers, if they ask for that, online – directly on Kiosks or physically. So, even in Kiosks, if people have any doubts, there should always be a collaborator to assist them and remote assistance to resolve any small issue.

In order to make this automation device as a tool that really helps and solve these problems, retailers have to ensure that their improvements will really increase customers' experience and not just save costs (Deloitte Digital, 2019) and also that their gains from the use of the technology have to be higher than their efforts and vice versa (Evanschitzky *et al.*, 2015). Therefore, they also must guarantee the security and privacy of their consumers, especially in times of pandemic.

**7.Considering the data available on this case study, how do you evaluate the impact of Interactive Screens at Leroy Merlin? Does it impact positively or negatively? Base your answer**

**on the theoretical framework "*The impact of Smart Retail Technologies*" (Figure 20) and the feedback obtained from the clients and collaborators, do you think that Kiosks should be reformulated? What will be the next steps? Explain and describe your ideas.**

One of the main goals of retailers is to engage their customers, with the main purpose of creating a strong customer loyalty, since if consumers have a favorable impression of a retail store regarding to its products, services and also retail technologies, their favorable impression will influence their future attitudes (Yoon & Park, 2018), like shopping in the future (Adapa *et al*., 2019), which might indicate a customer loyalty to a brand. Thus, the main purpose of Smart Retail technologies is to create a Retail Store Loyalty, which is mirrored on the Intentions to use the Smart Retail Technology, which means the desire to use the device again, to recommend it and the positive impact it would have in the visits, brand equity and revenues of the company.

Furthermore, in order to create a Retail Store Loyalty and more intentions to visit this type of stores, the customers need to have a higher Perceived Shopping Value through this kind of technologies, meaning that customers are more likely to be receptive to new technology if they perceive it to contain superior features and functions, meaning that their gains from the use of the technology have to be higher than their efforts and vice versa (Evanschitzky *et al*., 2015). So, retailers should ensure that these technologies offer superior functions and benefits (Roy *et al.,* 2018), quality of the maintenance and employees able to support and help customers with lower levels of innovativeness (Otekhile & Zeleny, 2016) to avoid the perceptions about complexity and risks associated with technologies (Adapa *et al*., 2019).

Considering that Kiosks are a Smart Retail Technology, it was designed to be a driver not just to improve the efficiency of stores, but also to augment the customer experience and improve the quality of customer engagement. Thus, nothing better than knowing the opinion of employees and customers to understand the real impact of the Leroy Merlin' Kiosks.

Almost all collaborators who participated on the questionnaire, about 94,3% knows what a Kiosk is, however 5,7% don't, which is a warning factor for the company, even they are a low percentage. Regarding the clients who participated on this study, 71,7% of them know what a Kiosk is, however there exist a larger percentage who don't (28,3%), since they prefer to ask employees for help (38,6%), never seen one in their store (15,9%) or don't think it adds value to them (15,9%). This means that the company should redesign a communication strategy in order to promote these devices in stores, reformulate some locations in stores according to the store' format (Proxi, MSB and GSB) , add new functions and train employees so they can have a complete knowledge of Kiosks, so that they can assist customers whenever necessary, because 30,2 % of clients never used it, 32,6% very rarely and 18,6% rarely. Regarding the use of Kiosks from collaborators, 79% of collaborators don't usually use Kiosks during its workdays mainly because of issues such as maintenance or speed issues, which affects the perceived complexity, risks and advantages associated with Smart Retail Technologies. Furthermore, the participants who used the Kiosks, both collaborators and clients, used and gave more importance mainly to four functionalities: Product consultation, Prices consultation, Sales support tool and Research.

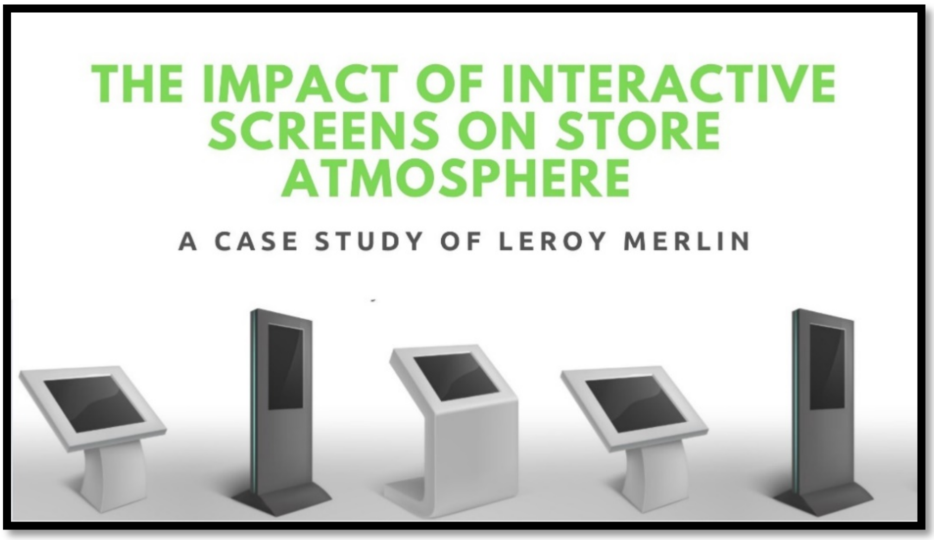
Considering factors such as Interface, Speed, Search, Log in Privacy, Navigation, Device quality / Ergonomics, Location, Visual aspect and Support service, the ones that are better evaluated by both are the research, visual aspect, interface and location. On the other side, the ones worse evaluated are the log in, speed and privacy. Moreover, the factors that collaborators and clients would improve on Kiosks would be the speed, navigation, location and privacy.

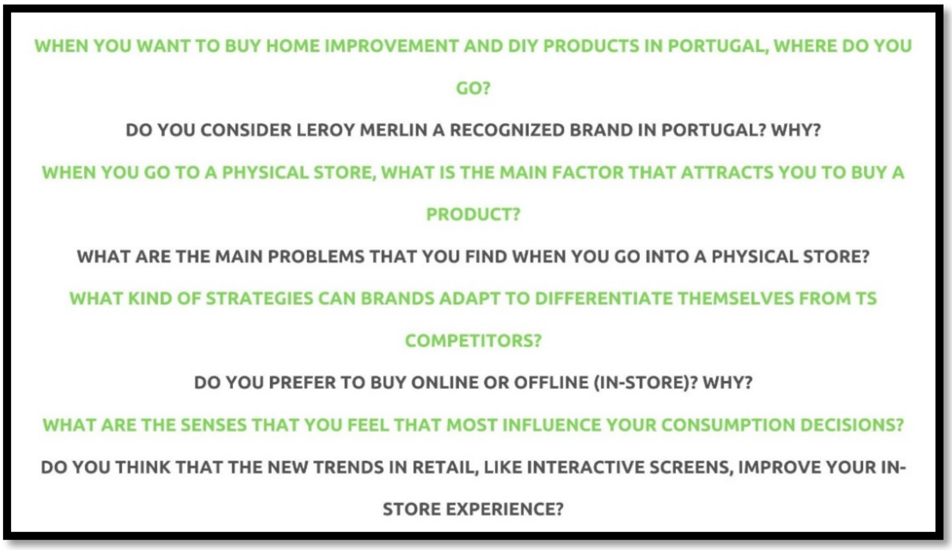
Although the Kiosks have some issues to solve or improve, as its possible to state regarding the feedback from collaborators and clients, most of the clients (65,1%) answered that Kiosks impacted positively their in-store experience, which means that they have a positive perceived shopping value through this type of smart retails technologies. Additionally, in order to evaluate the customer satisfaction and loyalty with Kiosks, most of them (76,8%) would use the Kiosks in the future and 48,8% of them would recommend the Kiosks to a friend, which reveals intentions to use this type of smart retail technology in the future, a signal of Retail store loyalty.

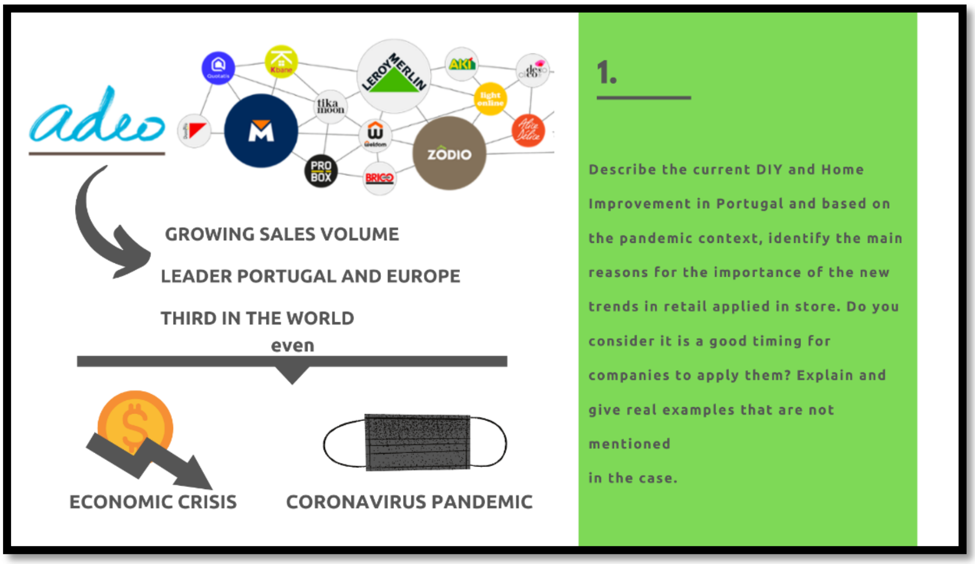
Finally, taking in consideration the feedbacks obtained from the clients and collaborators and the main goal of Kiosks of impacting the store atmosphere and constructing a retail store loyalty, even the general feedback is positive, Kiosks should be reformulated, by adding new functionalities that both clients and collaborators would like to have: Direct ATM terminal at Kiosk, Consultation of the price of the articles per Scan system, Quantity / price calculator in an exclusive menu for Kiosks, See availability of services, Product comparator in an exclusive menu for Kiosks, Easy Log In, Products / Sections Locator in the store, Make the House Card quickly and Consult points on the House Card.

In order to make sure that these new functionalities are impacting positively the Kiosks and that Kiosks are at its best performance, it is necessary to use metrics that could evaluate and monitor its performance, using Key Performance Indicators (KPI's) as Foot traffic, by the number of Views and Interactions, Sales volume, by the number and the value of the direct purchases from Kiosks, Customers retention, by the level of engagement with customers and controlled by the NPS (Net Promoter Score) and the Customer Satisfaction Barometer, Conversion rates and Speed of the transactions.

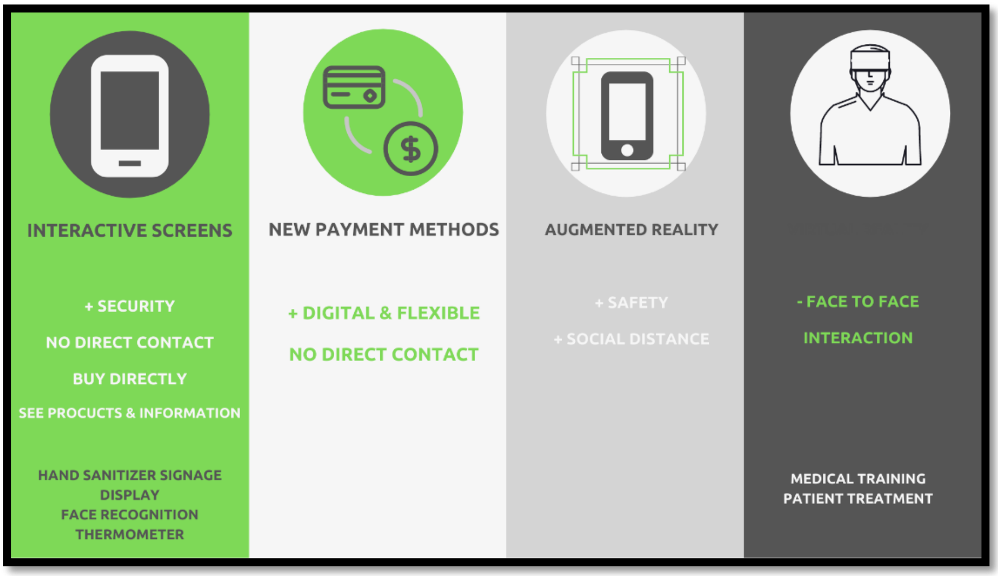
## 7. Case Study resolution presentation



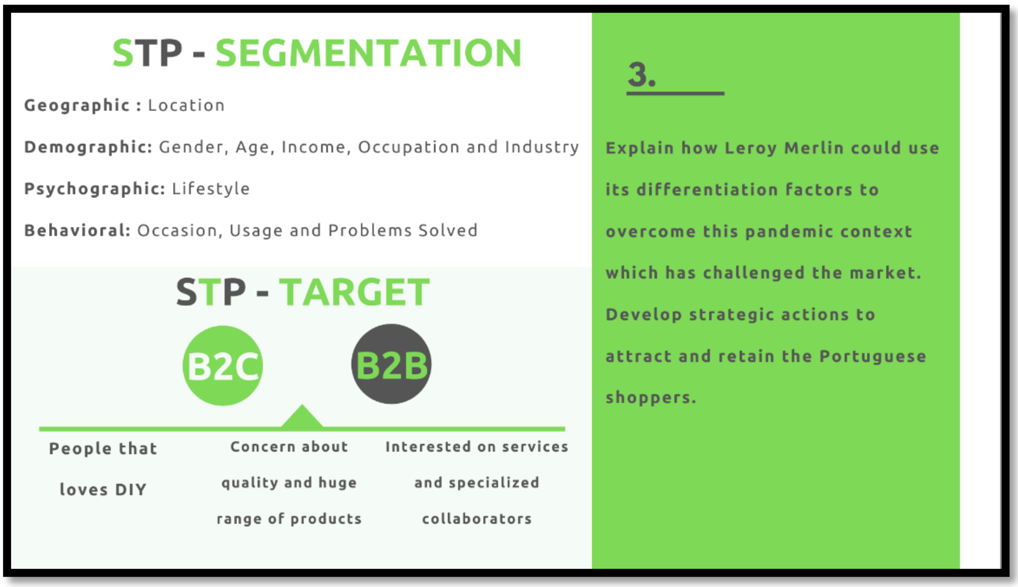

NEGATIVE IMPACTS ON GLOBAL ECONOMY
MORE TIME AT HOME
LOOKING FOR CHEAPER PROJECTS AT HOME
SEARCHING FOR DIY SOLUTIONS
+ 120% ONLINE TRANSACTIONS ON DIY AND HOME FURNITURE
+ 400% ONLINE SALES DURING THE PANDEMIC IN LEROY MERLIN PORTUGAL
+ NUMBER OF VISITS AND VOLUME OF SALES IN PHYSICAL STORES
solution:
MAKE STORES MORE DIGITAL
APPLYING NEW TECHNOLOGICAL TRENDS


INTERACTIVE SCREENS
+ SECURITY
NO DIRECT CONTACT
BUY DIRECTLY
SEE PROCUCTS & INFORMATION
HAND SANITIZER SIGNAGE
DISPLAY
FACE RECOGNITION
THERMOMETER
NEW PAYMENT METHODS
+ DIGITAL & FLEXIBLE
NO DIRECT CONTACT
AUGMENTED REALITY
+ SAFETY
+ SOCIAL DISTANCE
- FACE TO FACE
INTERACTION
MEDICAL TRAINING
PATIENT TREATMENT


2.
Starting with the contextualization of the case and the current strategy
of Leroy Merlin, develop a SWOT analysis based on it. How can the company use its strengths to take advantage of its opportunities to avoid potential threats and exploit its opportunities to overcome weaknesses?
STRENGHTS
Autonomy
Huge portfolio
specialized collaborators
Recognition
Portuguese Leadership
Different store's types
Innovation
Strong distribution
98,6% of sales are from physical
Investing on smart stores
WEAKNESSES
Dependence external partners
Training employees
Logistics and stock issues
Kiosks with basic functions
Not 100% digital
Long queus in payment
Small stores with less products
OPPORTUNITIES
80% portuguese people searched online and
74% purchase online
Needs to touch and see products physically
82% DIYers explore products physically
Growing of online
Attractions millennials
Market coverage
Market is growing
People looking for DIY solutions
Growth of DIY items online
Smart stores
Interactive Screens
Technology
THREATS
Safety issue
COVID-19
Economic crisis
Changing laws
High competetiveness
Competitors with lower prices
Entrance of relevant players in
Portuguese and European Market


STRENGHTS + OPPORTUNITIES
• Take advantage of the fact that it has such a wide range of products to dynamically display it in all store formats, through Interactive Screens.
• Use the fact of being the Portuguese DIY market leader, to create strong customer experiences and adapted solutions for COVID-19, since customers are searching for more DIY solutions.
• Since the physical stores represent the majority of brand 'sales, it should focus on its physical stores because 82% of all DIYers are likely to explore products in the physical store.
• Use the fact of always seeking innovation, through investments on customer experience, digital and technology to also invest on the online selling platform, called PDH, since the online sector is growing.
• Since Leroy Merlin has different customer types, use in store displays to reach more people, since 30% of customers aged 16-64y started to know new brands using in-store displays and promotions.
• Use the fact of Leroy Merlin being investing on smart stores to attract and retain millennial customers.
STRENGHTS + THREATS
• Use the fact of being investing in smart stores, to create a point of differentiation between the competitors, adding value to the customer experience to fight to the lower prices of the competition.
• Use the fact of being investing in smart stores in order to create technological and smart devices which are able to meet new security needs, such as Kiosks with hand sanitizer where people can consult their products in the store, safely and without having to contact employees.
• Make advantage of the brand heritage and recognition to help people and associations in need by donating materials and creating special campaigns.
• Take advantage of the fact that it is a company with specialized collaborators, to invest even more in its training and distinguish itself from all the competition.


WEAKNESSES+ OPPORTUNITIES
• Use cutting-edge technology to improve the logistic platforms and solve the stock problems.
• Make advantage of Interactive Screens being a fully immersive trend to reformulate the actual Kiosks of Leroy Merlin, introducing new functionalities.
• Use the fact of smart stores being a trend that solve a lot of problems, to improve physical stores into more Phygital, in order to solve some problems, like long queues, difficult to find products and also stock problems.
WEAKNESSES + THREATS
• Take the step to digital, by investing on the online selling platform, calling PDH, in order to avoid the negative consequences of COVID-19, in which some people must stay at home and can't go to the physical stores.
• Stop relying so much on external partners, creating new services supported only by internal employees and thus ensuring greater security conditions, which do not depend on other external entities.


STP - SEGMENTATION
Geographic : Location
Demographic: Gender, Age, Income, Occupation and Industry
Psychographic: Lifestyle
Behavioral: Occasion, Usage and Problems Solved
STP - TARGET
B2C
B2B
People that loves DIY
Concern about quality and huge range of products
Interested on services and specialized collaborators
3.
Explain how Leroy Merlin could use its differentiation factors to overcome this pandemic context which has challenged the market. Develop strategic actions to attract and retain the Portuguese shoppers.

# STP - POSITIONING

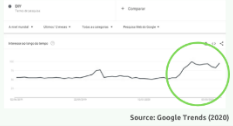
**Unique selling proposition :** "*Help each client to create his dream home!*"

**Consumer Insight:** Recognized brand with a huge portfolio of quality products

**Points of difference:** Large range products, Quality, Strong distribution, Personalized Services, Brand Recognition, Searching for innovation

## CORONAVIRUS PANDEMIC

Figure 4 - Growth of the world "DIY", between June 2019 and May 2020



Source: Google Trends (2020)

Increas

FREE TIME
RENOVATE HOME
SEARCHING FOR STAPLE PRODUCTS
1ST DIY COMPANY IN PORTUGUESE MINDS

PHYSICAL STORES
- Show products in a digital and quick way
- Interactive Screens: see, compare, buy products directly and safety, by applying Hand Sanitizer and Thermometer

ONLINE STORES
- Promotional and delivery campaigns
- Personalized selling and support services

PHYSICAL STORES

ONLINE STORES

## 4.

Taking into consideration the fact of ecommerce is increasing, mainly during this pandemic context, and the current generations prefer to shop online instead of a physical store, do you think that the store atmosphere is outdated, considering the Leroy Merlin business? Base your answer within the four human senses - vision, touch, smell and hearing- mention which ones makes sense to be developed or adapted and in what in-store Kiosks may impact and why.

- 80% Portuguese people search for products online
- 74% purchase online
- LEROY MERLIN online sales grew 400% in the pandemic time

- Physical stores registered high volume of sales
- Represents 98,6% of Leroy Merlin total revenues in 2019

MAJOR INVESTMENT AND BUSINESS CORE

PHYGITAL

"*If consumers had a positive experience with in-store technologies, 46% of them would shift their online purchases from digitally focused retailers to retailers with stores that use automation technology*" (Capgemini Research Institute, 2019)

SMART STORES
Best part from both
Complementary to each other
Automation Technology

CUSTOMER EXPERIENCE

## CUSTOMER EXPERIENCE

AT LEROY MERLIN PHYSICAL STORES, CUSTOMERS WANT TO : See, Touch, Understand how to do their projects and Interact with specialized employees, which is critical and valuable for customer's purchase intentions.

STIMULATE CUSTOMERS' SENSES — construct an interactive store experience

The most dominant of all senses

LEROY MERLIN: "clean spaces", green and white colors, neutral light, decorative and inspiring spaces

Principal source of input
If shoppers are not allowed to touch products to evaluate and test them, they become frustrated
Stores which allow consumers to physically inspect products are preferred

INTERACTIVE SCREENS: IN-STORE KIOSKS
- Visual and touchable involvement
- Point of different between competitors
- Show products in a dynamic way
- Vividness
- Useful with hedonic products
- Visual place os merchandise
- Encourages touch
- Interaction with products
- Test products in a dynamic mode

CORONAVIRUS PANDEMIC

Tact conditioned because of the way the virus is transmitted
Visits in store were maintained or even increased
People need to see products in person

ONE OF THE POSSIBLE SOLUTIONS : KIOSKS

If ensure the correct hygiene of the Kiosks, it is possible to:
- Compare products
- Place orders and Pay them directly, without having to have contact with employees
- Ensure greater security
- Complete and more digital store experience

CORONAVIRUS PANDEMIC

SAFETY AND AUTONOMY

EXCLUSIVE IN-STORE PROMOTIONS on purchases made in Kiosks : direct discounts free delivery or discount voucher on the first purchase.

DIRECT PAYMENT TERMINAL in Kiosks with contactless payment methods with no direct contact with employees.

DISINFECTION AND TEMPERATURE MEASURAMENT SYSTEM in Kiosks in order to collaborators and visitors keep their hands clean before and after touch in Kiosks.

**5.**

Considering this pandemic time caused by COVID-19, how can Kiosks impact stores and make people choose to shop there instead of buying online? Explain why and give 3 grounded ideas.

**6.**

*"Consumers increasingly expect that efficiency and engaging online experience to be replicated in-store."*
(Capgimini, 2020)

Regarding the major pain points that occurs at the physical stores and which affects the customer journey, explain the importance and the impact that Interactive Screens may have on it, regarding the Smart Stores concept.

Major pain points for customers, in physical stores:

1. Long queues in payment
2. Products without stock
3. Difficulty in location products
4. Lack of product' information
5. Don't find employee assistant

1.LONG QUEUES IN PAYMENT

Self-service Kiosks : direct payment without collaborators assistance needed ,
Vantages : Operational and transations efficiency, self-checkout, speed, time-saving and convinience

2.PRODUCTS WITHOUT STOCK

Vending and Self-service Kiosks : long-tail devices, sales support tool and possible to see the availability of products and order directly
Vantages : easy and fast consultation of stocks

General note : it is mandatory the choice of using Kiosks or having direct contact with employees and it also has to guarantee the security and privacy of customers.

3.DIFFICULTY IN LOCATION PRODUCTS

Informational Kiosks : Locate the products or sectors by use an internal GPS which may be connected with the mobile phone
Vantages : Intuitiveness, easy, possibility to connect with the phone, innovation

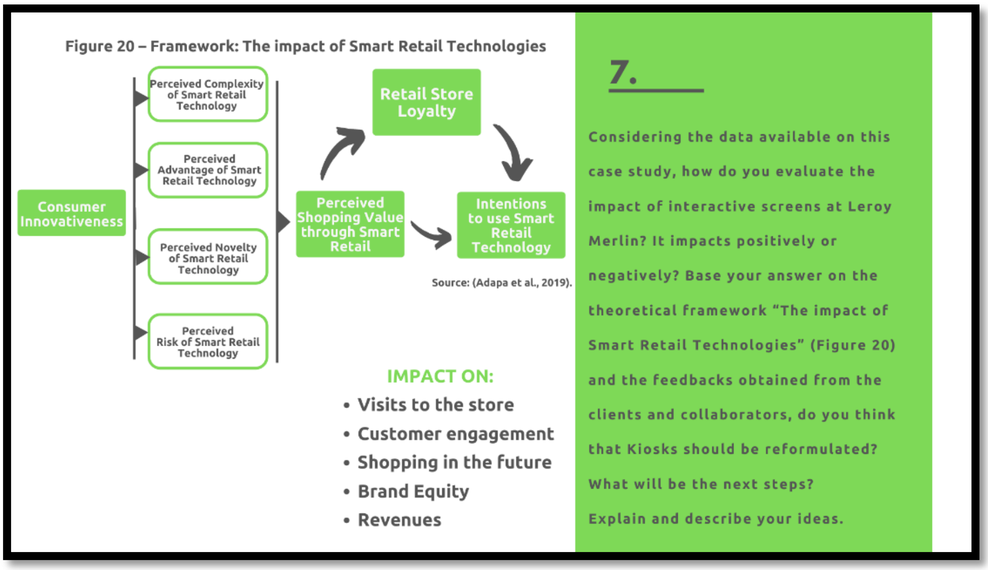
4.LACK OF PRODUCT' INFORMATION

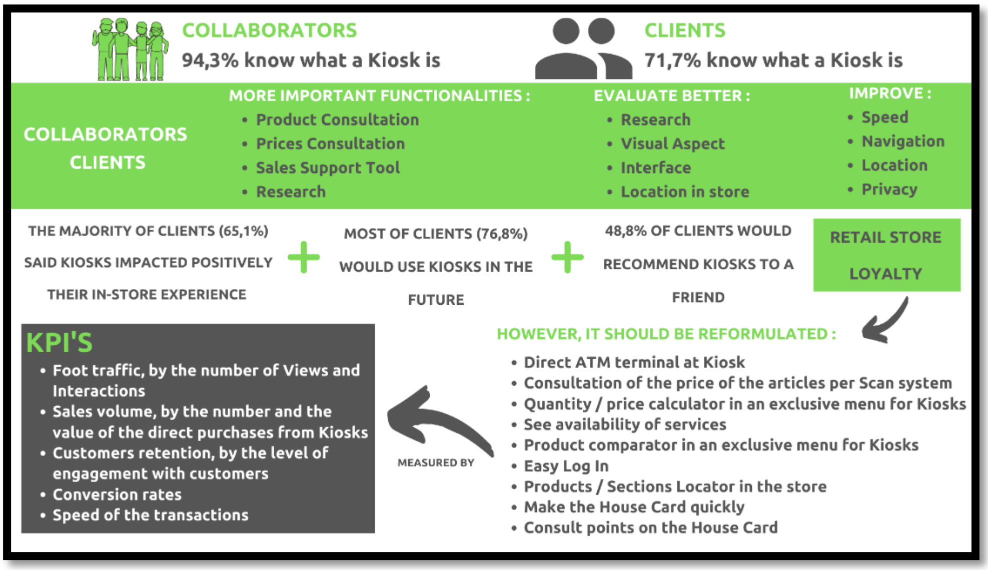
Product Promotion, Vending and Self-service Kiosks : Search and visualize all the products available, even doesn't exist at store, in a dynamic and detailed way like using 360 degrees exposition with possibility of rotating in all directions, with images of the product in use and with the possibility of being able to compare it with others
Vantages : Personalization, interactivity and innovation

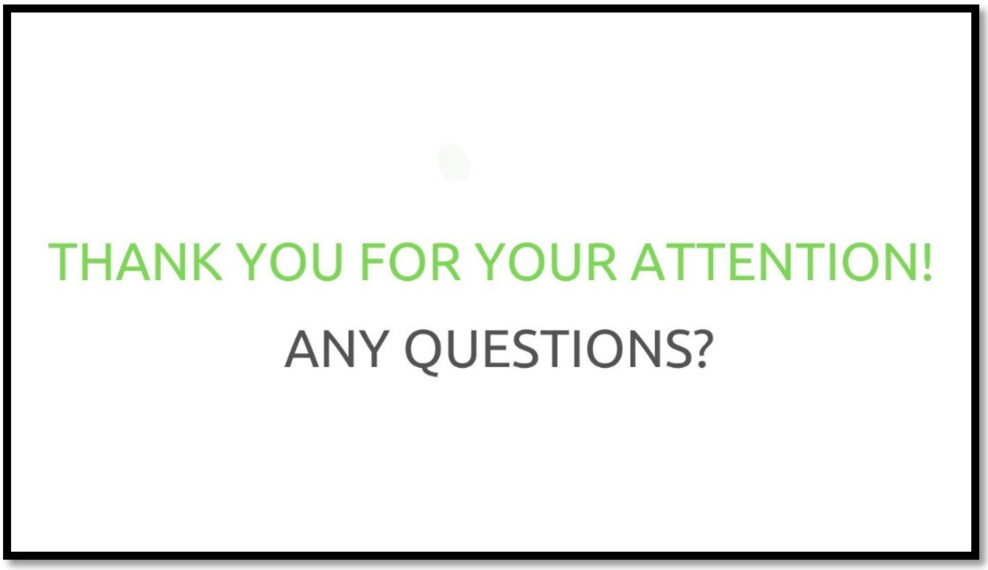
5.DON'T FIND EMPLOYEE ASSISTANT

Informational, Product Promotion, Vending and Self-service Kiosks : Help customers with any query remotely
Vantages : Speed, time-saving and convinience

General note : it is mandatory the choice of using Kiosks or having direct contact with employees and also has to guarantee the security and privacy of customers.




Source: Own Elaboration (2020)

## 8. Conclusion

The market is changing and customers too, which means that it becomes imperative that companies recreate and reformulate its strategies and businesses, in order to adapt to the new digital world and to this pandemic time, which changed the way companies think in its ideas.

Although this virus has caused an economic crisis worldwide, the results of which are not yet fully known, since the virus is still active in many countries, such as Portugal, this caused many retailers to adapt quickly. This is the case of Leroy Merlin, a company of great renown in the market, leader in Portugal and present on 4 continents, which had to quickly take advantage of the fact that it is an innovative company, to invest heavily in digital and supply.

Digital is growing more and more, especially in this context of pandemic. However, for companies like Leroy Merlin, physical stores continue to represent more than 98% of their sales, being their core business. This can be justified by the fact that people need to see and touch the products personally to buy them. Thus, it is essential to invest in the store atmosphere, using the new market trends, in order to make it increasingly technological and adapted to the new needs of consumers and with the goal of creating a better customer experience, since it is not just about selling products and services to clients, it is about constructing value for both parts to make the experience much more valuable and memorable.

Although Leroy Merlin already has Interactive Screens - one of the new market trends – at its physical stores and even reformulated them a few months ago, it is important to understand if it is on its best performance, positively impacting the store atmosphere. In this case, considering the feedback from customers and employees, it is known that Kiosks have a positive impact on the experience of consumers in the store, mainly in the consultation of products and prices, as a sales support tool and research. However, there exist gaps which the company should improve the *speed, navigation, location* and *privacy.*

Now is the ideal time for the company to further distinguish itself from its competitors in the market and make its stores truly as Smart Stores, adapted to the new needs of its customers and employees, which are its true focus. Thus, the company will create an even greater impact on the consumers' experience in its stores and will improve the sales experience of its employees. Furthermore, it is essential that there exist a continuous training of employees and that customers always have the possibility to ask for help, since the human touch is irreplaceable.

### *8.3. Limitation and future implications*

This case study, although it managed to answer the question raised in the present case study - The Impact of Interactive Screens on Store Atmosphere - in a quantitative and qualitative way, had some limitations. So, the results and conclusions should be interpreted according to some specific limitation. The major limitation of this research is the fact that we are in a pandemic era caused by Coronavirus, which meant that the questionnaires had to be done online and, therefore, it was more difficult to get answers from customers of different stores, since it is necessary to avoid trips to stores so as not to spread the virus. In view of this fact, people are also more reluctant to collaborate with this type of study. Consequently, the sample used is not representative since 60 clients as participants may be not enough to understand the customer's behaviors and opinions and for future researches, a larger and diversified sample must be considered. However, the 526 answers from employees are a significant number and they are the people who know the customers better. Therefore, the results obtained could depend of demographic factors as age, gender, own technology readiness, level of experience with technology of the respondents and type of function in the company.

Additionally, it was not possible to obtain more detailed and objective information on the DIY and Home Improvement market, since it is a transparent market, which does not publish this information. Therefore, doesn’t exist much articles about Interactive Screens or Kiosks published, which meant that most of the information used was based on other types of bibliographic sources, such as news or studies.

Finally, there exists potential downsides of these new technologies for consumers, which includes loss of control, privacy concerns, job losses, poor service outcomes (Otekhile & Zeleny, 2016), distraction point, and the danger of overreliance and dependence on and addiction to these technologies (Inman & Nikolova, 2017; Ng & Wakenshaw, 2017). Thus, it is important for future research to address these dark sides of new technologies and what would be the effects of this subject on other market types with different size.

## 9. Bibliography

Acante. 2020. A Journey Through the History of the Interactive Kiosk. Retrieved from https://www.acante.co.uk/journey-history-interactive-kiosk/. Accessed in May 2020.

Adapa, S., Fazal-e-Hasan, S.M., Makam, S.B., Azeem, M.M., & Mortimer, G. 2019. Examining the antecedents and consequences of perceived shopping value through smart retail technology. ***Journal of Retailing and Consumer Services***. 1-9.

ADEO. 2020. Retrieved https://www.adeo.com/pt-pt/adeo/chiffres-cles. Accessed in December 2019.

Almeida, G. 2020. SIC leads audiences in 2019 with an average share of 19.2%. Retrieved from https://www.jornaldenegocios.pt/empresas/detalhe/sic-lidera-audiencias-em-2019-com-um-share-medio-de-192. Accessed in January 2020.

Amazon. 2019. Retrieved from https://www.aboutamazon.com. Accessed in December 2019.

Associação Portuguesa de Empresas de Distribuição. 2019. APED. Retalho cresceu 3,4% em 2018. Retrieved from: http://aped.pt/pt/arquivo-de-noticias/retalho-cresceu-34-em-2018. Accessed in October 2019.

Atmar, H., Begley, S., Fuerst, J., Rickert, S., Slelatt, R., & Gi, M. T. P. 2020. McKinsey & Company. The next Normal: Retail M&A and Partnerships after COVID-19. Retrieved from: https://www.mckinsey.com/business-functions/m-and-a/our-insights/the-next-normal-retail-m-and-a-and-partnerships-after-covid-19. Accessed in May 2020.

Babin, B. J., Darden, W. R., & Griffin, M. 1994. Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. ***Journal of Consumer Research,*** 20(4), 644.

Baek, E., Choo, H. J., & Lee, S. H. 2018. Using warmth as the visual design of a store: intimacy, relational needs, and approach intentions**.** ***Journal Business Research***, 88: 91-101.

Baker, J.A., Grewal, D., & Parasuraman, A.1994. The influence of store environment on quality inferences and store image. ***Journal of the Academy of Marketing,*** 22, 328–339.

Baker, J., Parasuraman, A., Grewal, D., & Voss, G.V. 2002. The Influence of Multiple Store Environment Cues on Perceived Merchandise Value and Patronage Intentions. ***Journal of Marketing***, 66 (2), 120–41.

Baxendale, S., Macdonald, E. K., & Wilson, H. N. 2015. The impact of different touchpoints on brand consideration. ***Journal of Retailing***, 99 (1): 235-253.

BCG. 2015. Retail 2020: Retrospect, Reinvent, Rewrite. Retrieved from http://image-src.bcg.com/Retail-2020-Feb-2015-India_tcm21-28775.pdf. Accessed in June 2020.

Becker, L., Jaakkola, E. 2020. Customer experience: fundamental premises and implications for research. ***Journal of the Academic of Marketing Science***, 48, 630–648.

Bellizzi, J. A., & Hite, R. E. 1992. Environmental color, consumer feeling, and purchase likehood. ***Psychology and Marketing,*** 347-363.

Berman, B., & Evans, J. R. 1995. Retail Management: A Strategic Approach. Upper Saddle River.

Berry, L. L., Seiders, K., & Grewal, D. 2002. Understanding service convenience. ***Journal of Marketing,*** 66, 1–17.

Blut, M., Teller, C., & Floh, A. 2018. Testing Retail Marketing-Mix Effects on Patronage: A Meta-Analysis. ***Journal of Retailing,*** 94(2), 113–135.

Brico Depôt. 2020. Retrieved from https://www.bricodepot.pt/quem-somos#brico-depot. Accessed in January 2020.

Brico Marchê. 2020. Retrieved from https://www.bricomarche.pt/quem-somos. Accessed in January 2020.

Bolton, R. N., McColl-Kennedy, J. R., Cheung, L., Gallan, A., Orsingher, C., Witell, L., & Zaki, M. 2018. Customer experience challenges: bringing together digital, physical and social realms. ***Journal of Service Management***, 29(5), 776–808.

Bony, C., Silva, A., & Carvalho, G. 2004. An history about Kiosks. Barcarena: Arte Mágica.

Bulmer, S., Elms, J., Moore, S. 2018. Exploring the adoption of self-service checkouts and the associated social obligations of shopping practices. ***Journal of Retailing and Consumer Services***. 42,107–116.

Burke, R. 2009. Behavioral Effects of Digital Signage. ***Journal of Advertising Research***, 180.

Cain, A. 2020. Business Insider. Inside the home improvement sector: Shoppers flock to Lowe's and Home Depot thanks to stay-at-home orders, spring weather. Retrieved from https://www.businessinsider.com/home-depot-lowes-coronavirus-spending-stay-at-home improvement-2020-5. Accessed in May 2020.

Capgemini Research Institute. 2019. Smart Stores – Rebooting the retail store through in-store automation. 3-25.

Centers for Disease Control and Prevention. 2020. What you should know about COVID-19 to protect yourself and others. Retrieved from https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet.pdf. Accessed in September 2020.

Cinemas NOS. 2020. Kiosks. Retrieved from https://cinemas.nos.pt/Pages/kiosks.aspx. Accessed in June 2020.

Coentrão, A. 2020. PÚBLICO. Construction workers continue to work, many of them unprotected. Retrieved from https://www.publico.pt/2020/04/14/local/noticia/trabalhadores-construcao-continuam-laborar-desprotegidos-1912299. Accessed in June 2020.

Commercial display on the video wall, digital signage and hand sanitizer digital display-Asianda. (2020). Retrieved from https://www.asianda.cn. Accessed in July 2020.

Consumer Guidance Institute Portugal. 2019. Turnover of the largest DIY Retailers in Portugal. Retrieved from https://www.osmelhoreshoje.pt/consumer-infos/volume-de-negocios-dos-maiores-retalhistas-de-bricolage-em-portugal/. Accessed in June 2020.

CTT. 2019. E-Commerce grows 17% to five billion euros. CTT e-Commerce Report 2019. Retrieved from: https://www.ctt.pt/grupo-ctt/media/noticias/e-commerce-cresce-17-para-cinco-mil-milhoes-de-euros-ctt-e-commerce-report-2019. Accessed in December 2019.

Dahl, D. W., Manchanda, R. V., & Argo, J. J. 2001. Embarrassment in consumer purchase: The roles of social presence and purchase familiarity. ***Journal of Consumer Research***, 28, 473–481.

Dayton, E. 2020. Big Commerce. Amazon Statistics You Should Know: Opportunities to Make the Most of America's Top Online Marketplace. Retrieved from https://www.bigcommerce.com/blog/amazon-statistics/. Accessed in June 2020.

De Kare-Silver, M. 2014. *E-shock 2020*. Palgrave Macmillan. 102

Deloitte Digital. 2018. The customer journey of Leroy Merlin' customers. 8-107

Dennis, C., Brakus, J. J., Gupta, S., & Alamanos, E. 2014. The effect of digital signage on shoppers' behavior: the role of the evoked experience. ***Journal of Business Research,*** 67 (11): 2250-2257.

Donovan, R. J., & Rossiter, J. R. 1982. Store atmosphere: an environmental psychology approach. ***Journal of Retailing***, 58(1), 34–57.

Edelman, D., & Singer, M. 2015. Mckinsey & Company. The new consumer decision journey. Retrieved from: https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/the-new-consumer-decision-journey#. Accessed in January 2020.

Esmark, C., Noble, S. M., & Breazeale, M. 2017. I'll be watching you: Shoppers' reactions to perceptions of being watched by employees. ***Journal of Retailing,*** 93, 336–349.

Época Negócios. 2020. Google launches augmented reality tool to calculate distance between people and help combat covid-19. Retrieved from https://epocanegocios.globo.com/Tecnologia/noticia/2020/05/google-lanca-ferramenta-de-realidade-aumentada-para-calcular-distancia-entre-pessoas-e-ajudar-no-combate-covid-19.html. Accessed in July 2020.

European Commission. 2019. Communication: Data protection rules as a trust-enabler in the EU and beyond – taking stock. (COM/2019/374). Brussels: European Commission.

Evanschitzky, H., Iyer, G.R., Pillai, K.G., Kenning, P., & Schütte, R. 2015. Consumer trial, continuous use, and economic benefits of a retail service innovation: the case of the personal shopping assistant. ***Journal of Product Innovation Management.*** 32 (3), 459–475.

Expresso. 2020. Covid-19. Portuguese buy and spend more on the internet. Retrieved from https://expresso.pt/coronavirus/2020-04-16-Covid-19.-Portugueses-compram-e-gastam-mais-na-internet. Accessed in June 2020.

Farias, A. S., Aguiar, E. A., & Melo, F. V. 2014. Store Atmospherics and Experiential Marketing: A Conceptual Framework and Research Propositions for an Extraordinary Customer Experience. ***International Business Research***, 87-96.

Flavián, C., Ibánez-Sánchez, S., & Orús, C. 2018. The impact of virtual, augmented and mixed reality technologies on the customer experience. ***Journal of Business Research***, 100, 1-4.

Foot Locker's in store 3D virtual shoe customization. 2013. Retrieved from http://www.retail-innovation.com/foot-lockers-in-store-3d-virtual-shoe-customisation. Accessed in May 2020.

Forrester Research. 2016. Forrester. Retrieved from: https://go.forrester.com/press-newsroom/72-of-businesses-name-improving-customer-experience-their-top-priority/. Accessed in October 2019

Gao, L., & Bai, X. 2014. A unified perspective on the factors influencing consumer acceptance of internet of things technology. Journal of Marketing and Logistics. 26 (2), 211–231.

Giebelhausen, M., Robinson, S. G., Sirianni, N., & Brady, M. 2014. Touch vs. tech: When technology functions as a barrier or a benefit to service encounters. ***Journal of Marketing,*** 78, 113–124.

Google Trends. 2020. DIY. Retrieved from https://trends.google.com/trends/explore?geo=PT&q=diy. Accessed in May 2020.

Grewal, D., Nordfält, J., & Roggeveen, A. L. 2017. The future of retailing. ***Journal of Retailing,*** 1-6.

Grewal, D., Noble, S. M., Roggeveen, A. L., & Nordfalt, J. 2019. The future of in-store technology. ***Journal of the Academy of Marketing Science,*** 93, 1-6

Hecht, D., & Reiner, M. 2009. Sensory dominance in combinations of audio, visual and haptic stimuli. Exp. Brain Res. 193 (2), 307–314.

Helmefalk, M., & Hultén, B. 2017. Multi-sensory congruent cues in designing retail store atmosphere: effects on shoppers' emotions and purchase behavior. ***Journal of Retailing and Consumer Services,*** 38: 1-11.

Hill, R., & Gardner, M .1987. The Buying Process: Effects of and on Consumer Mood States. ***Association for Consumer Research***, 408-410.

Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. ***Journal of Consumer Research.*** 9, 132–40.

Conway, J. 2019. Home Improvement. Retrieved from https://www.statista.com/topics/1732/home-improvement/. Accessed in January 2020.

Hoyer, W.D., Kroschke, M., Schmitt, B., Kraume, K., & Shankar, V. 2020. Transforming the Customer Experience Through New Technologies. ***Journal of Interactive Marketing***, 51, 57-71

Hultén, B. 2011. Sensory marketing: The multi-sensory brand-experience concept. In B. Hultén, ***European Business Review***, vol. 3: 256-273.

Hultén, B. 2013. Sensory cues as in-store innovations: Their impact on shopper approaches and touch behaviour. ***Journal of Innovation Management***, pp.17-37.

IKEA. 2020. Retrieved from https://www.ikea.com/pt/en/this-is-ikea/about-us/about-ikea-portugal-pub3c09f721. Accessed in January 2020.

Duffin, E. 2020. Impact of the coronavirus pandemic on the global economy. Retrieved from https://www.statista.com/topics/6139/covid-19-impact-on-the-global-economy/. Accessed in May 2020

Ingram, B. 2017. Kiosks continue to get innovative. Retrieved from: https://progressivegrocer.com/kiosks-continue-getinnovative. Accessed in January 2020.

Inman, J. J., & Nikolova, H. 2017. Shopper-facing retail technology: A retailer adoption decision framework incorporating shopper attitudes and privacy concerns. ***Journal of Retailing***, 93(1), 7–28.

Insightdiy. 2020. FEDIYMA Report: Global DIY Market Worth 594Bn. Retrieved from https://www.insightdiy.co.uk/news/fediyma-report-global-diy-market-worth-594bn/7723.htm. Accessed in July 2020.

Interactive. 2019. Cambridge Dictionary. Retrieved from: https://dictionary.cambridge.org/dictionary/english/interactive.

Interactive Kiosk. 2020. Techopedia. Retrieved from: https://www.techopedia.com/definition/4612/interactive-kiosk-.

Jaffery, R. 2018. Forbes. Learn How A 'Phygital' Strategy Can Help Grow Your Business. Retrieved from: https://www.forbes.com/sites/sap/2018/08/13/learn-how-a-phygital-strategy-can-help-grow-your-business/#43c5705d770a. Accessed in October 2019.

Jeng, S.P. 2017. Increasing customer purchase intention through product return policies: the pivotal impacts of retailer brand familiarity and product categories. ***Journal of Retailing and Consumer Services***. 39, 182–189.

Keiningham, T., Aksoy, L., Williams, L., & Buoye, A. 2015. ***The Wallet Allocation Rule***. Wiley.

King, D., Block, L., & Hadi, R. 2013. Mental Thermoregulation: Affective and Cognitive Pathways For Non-Physical Temperature Regulation*.* ***Association for Consumer Research****, 27*-30.

Kiosk. 2020. Lexico by Oxford. Retrieved from https://www.lexico.com/en/definition/kiosk. Accessed in May 2020.

Kiosk. 2020. Cambridge Dictionary. Retrieved from https://dictionary.cambridge.org/dictionary/english/kiosk. Accessed in May 2020.

Krishna, A., & Morrin, M. 2008. Does touch affect taste? The perceptual transfer of product container haptic cues. ***Journal of Consumer Research***, 34(6), 807-818.

KPMG. 2019. KPMG International Cooperative. Retail trends 2019. Retrieved from: https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/02/global-retail-trends-2019-web.pdf. Accessed in September 2019.

KPMG. 2020. KPMG International Cooperative. COVID-19 accelerating four key fundamental retail trends, finds KPMG report. Retrieved from https://home.kpmg/cn/en/home/news-media/press-releases/2020/05/covid-19-accelerating-four-key-fundamental-retail-trends.html. Accessed in July 200.

Kotler, P. 1973. Atmospherics as a Marketing Tool. ***Journal of Retailing***, 48-64.

Kuehnl, C., Jozic, D., & Homburg, C. 2019. Effective customer journey design: consumers' conception, measurement, and consequences. ***Journal of the Academy of Marketing Science.*** 47 (3), 551 – 568.

Sabanoglu, T. 2018. Leading DIY retailers by number of stores in Portugal 2010-2016. Retrieved from https://www.statista.com/statistics/454032/leading-diy-retailers-by-number-of-stores-in-portugal/. Accessed in May 2020.

Lemon, K. N., & Verhoef, P. C. 2016. Understanding costumer experience througout the customer journey. ***Journal of Marketing***, 80 (6), 69-96.

Lendrevie, J., Lévy, J., Dionísio, P. & Rodrigues, J. V. 2015. Mercator da língua portuguesa. Paris: D. Quixote.

Levy, M. & Weitz, B.A. 2009. Retailing Management 7th ed., Boston, USA: Irwin.

Libai, B., Bart, Y., Gensler, S., Hofacker, C., Kaplan, A., & Kötterheinrich, K. 2020. Brave new world? On AI and the management of customer relationships. ***Journal of Interactive Marketing***, 51, 44–56.

Mascarenhas, A., Kesavan, R., & Bernacchi, M. 2006. Lasting customer loyalty: A total customer experience approach. ***Journal of Consumer Marketing***, 23(7): 287-405.

MaxMat. 2020. Retrieved from https://www.maxmat.pt/pt/empresa/?id=20. Accessed in January 2020.

McLean, G., Al-Nabhani, K., & Wilson, A. 2018. Developing a mobile applications customer experience model (MACE)- implications for retailers. ***Journal of Business Research,*** 85, 325–336.

Mewherter, S. 2017. Meridian Kiosks. The Evolution of Self-Service Kiosks. Retrieved from https://www.meridiankiosks.com/evolution-of-the-self-service-kiosks/. Accessed in May 2020.

Mick, D. G., & Fournier, S. 1998. Paradoxes of technology: Consumer cognizance, emotions, and coping strategies. ***Journal of Consumer Research,*** 25, 123–143.

Milliman, R. E. 1982. Using background music to affect the behavior of supermarket shoppers**.** ***Journal of Marketing***, 46(3), 86–91.

Mordor Intelligence. 2020. DIY Home Improvement Market - Growth, Trends, and Forecast (2020 - 2025). Retrieved from https://www.mordorintelligence.com/industry-reports/diy-home-improvement-market. Accessed in June 2020.

Morrin, M., & Ratneshwar, S. 2000. The impact of ambient scent on evaluation, attention, and memory for familiar and unfamiliar brands. ***Journal of Business Research***. 49 (2), 157–165.

Neslin, A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M., Thomas, J., & Verhoef, P. 2006. Challenges and opportunities in multichannel customer management. ***Journal of Service Research***, 9(2): 95-112.

Newman, A., Dennis C., & Zaman, S. 2006. Marketing Images and Consumers' Experiences in Selling Environments. ***Marketing Management Journal***, 515–99.

Nordfält, J. 2009. Unplanned Grocery Purchases: The Influence of the Shopping-Trip Type Revisited. ***Journal of Consumer Behaviour,*** 8 (1),1–13.

Orencia, A. 2017. Fit Small Business. What is a Kiosk? – Definition, Examples, and More. Retrieved from https://fitsmallbusiness.com/what-is-a-kiosk-examples/. Accessed in May 2020.

Otekhile, C.A., & Zeleny, M. 2016. Self-service technologies: a cause of unemployment. ***International Journal of Entrepreneurial Knowledge.*** 4 (1), 60–71.

Pantano, E., & Naccarato, G. 2010. Entertainment in retailing: the influence of advanced technologies. ***Journal of Retailing and Consumer Services***, 17 (3): 200-204.

Pantano, E., & Servidio, R. 2012. Modeling innovative points of sales through virtual and immersive technologies. ***Journal of Retailing and Consumer Services***.

Peck, J., & Childers, T. L. 2003. To have and to hold: the influence of haptic information on product judgments. ***Journal of Marketing,*** 67(2), 35-48.

Petri, A. 2020. The New York Times. D.I.Y. Coronavirus Solutions Are Gaining Steam. Retrieved from https://www.nytimes.com/2020/03/31/science/coronavirus-masks-equipment-crowdsource.html. Accessed in May 2020.

Piotrowicz, W., & Cuthbertson, R. 2014. Introduction to the special issue information technology in retail: Toward omnichannel retailing. ***International Journal of Electronic Commerce,*** 18(4), 5–16.

Priporas, C. V., Stylos, N., & Fotiadis, A. K. 2017. Generation Z consumers' expectations of interactions in smart retailing: A future agenda**. *Computers in Human Behavior***, 77, 374–381.

Público. 2019. Público. Portugal grows above the EU average in retail sales in July. Retrieved from https://www.publico.pt/2019/09/04/economia/noticia/portugal-cresce-acima-media-ue-vendas-retalho-1885494. Accessed in June 2020.

Pulidindi, K., Pandey, H. 2019. Home Improvement Market. Global Market Insights. Retrieved from https://www.gminsights.com/toc/detail/home-improvement-market. Accessed in June 2020.

Ramaswamy, V., & Ozcan, K. 2019. Digitalized Interactive Platforms: Turning Goods and Services into Retail Co-Creation Experiences. ***NIM Marketing Intelligence Review***, *11*(1), 18–23.

Rangaswamy, A., Moch, N., Felten, C., van Bruggen, G., Wieringa, J. E., & Wirtz, J. 2020. The role of marketing in digital business platforms. ***Journal of Interactive Marketing***, 51, 72–90.

Rayburn, S. W., & Voss, K. E. 2013. A model of consumer's retail atmosphere perceptions. ***Journal of Retailing and Consumer Services,*** 400-407.

Retail Technology Innovation Hub. 2019. Decathlon deploys Bulldog Kiosks digital tech. Retrieved from https://retailtechinnovationhub.com/home/2019/9/23/decathlon-deploys-bulldog-kiosks. Accessed in June 2020

Roggeveen, A. L., Grewal, D., Townsend, C., & Krishnan, R. 2015. The impact of dynamic presentation format on consumer preferences for hedonic products and services. ***Journal of Marketing,*** 79, 34–49.

Roggeveen, A. L., Grewal, D., & Schweiger, E.B. 2020. The DAST Framework for Retail Atmospherics: The Impact of In- and Out-of-Store Retail Journey Touchpoints on the Customer Experience. ***Journal of Retailing***, 96, 128-137.

Roggeveen, A. L., Nordfält, J., & Grewal, D. 2015. Do Digital Displays Enhance Sales? Role of Retail Format and Message Content. ***Journal of Retailing,*** 92(1), 122–131.

Rook, D. W. 1985. The ritual dimension of consumer behavior. ***Journal of Consumer Behavior***, 12(3), 251–264.

Roschk, H., Loureiro, S.M.C, & Breitsohl, J. 2017. Calibrating 30 Years of Experimental Research: A Meta-Analysis of the Atmospheric Effects of Music, Scent, and Color. ***Journal of Retailing***, 93 (2), 228–40.

Rowley, J., & Slack, F. 2002. Kiosks 21: a new role for information kiosks?. ***International Journal of Information Management***, 22, 67–83

Rowley, J., & Slack, F. 2003. Kiosks in retailing: The quiet revolution. ***International Journal of Retail & Distribution Management***, 31(6), 329-339.

Roy, S.K., Balaji, M.S., Quazi, A., & Quaddus, M. 2018. Predictors of customer acceptance of and resistance to smart technologies in the retail sector. ***Journal Retailing and Consumer Services.*** 42, 147–160.

Shankar, V., Inman, J. J., Mantrala, M., Kelley, E., & Rizley, R. 2011. Innovations in shopper marketing: current insights and future research issues. ***Journal of Retailing***, 87 (1), 29-42.

Shankar, V., Kleijnen, M., Ramanathan, S., Rizley, R., Holland, S., & Morrissey,S. 2016. Mobile shopper marketing: Key issues, current insights, and future research avenues. ***Journal of Interactive Marketing***, 34, 37–48.

Schaverien, A. 2018. Forbes. Five Reasons Why Amazon Is Moving Into Bricks-And-Mortar Retail. Retrieved from https://www.forbes.com/sites/annaschaverien/2018/12/29/amazon-online-offline-store-retail/#6e18a8985128. Accessed in January 2020.

Schmitt, B. H. 1999. Experiential marketing: How to get customers to sense, feel, think, act, and relate to your Company Brands. New York: Free Pass.

Singh, R., P., Javaid, M., Kataria, R., Tyagi, M., Haleem, A., & Suman, R. 2020. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. Retrieved from https://www.sciencedirect.com/science/article/pii/S1871402120301302. Accessed in July 2020.

Souidena, N., & Ladharia, R. 2018. New trends in retailing and services. ***Journal of Retailing and Consumer Services***, 50, 1-3.

Spence, C., Puccinelli, N. M., Grewal, D., & Roggeveen, A. L. 2014. Store atmospherics: A multisensory perspective. ***Psychology and Marketing,*** 31, 472–488.

Summers, T.A., Hebert, P.R. 2001. Shedding some light on store atmospherics: influence of illumination on consumer behavior. ***Journal of Business Research.*** 54 (2), 145–150.

Real GDP Growth Rate. 2020. Retrieved from https://www.pordata.pt/Portugal/Taxa+de+crescimento+real+do+PIB-2298. Accessed in January 2020.

Think with Google. 2018. Search behavior has changed the path to purchase. Retrieved from https://www.thinkwithgoogle.com/feature/path-to-purchase-search-behavior/. Accessed in May 2020.

Tung, L. L., & Tan, J., H. 1998. A model for the classification of information kiosks. ***International Journal of Information Management.*** 18 (4), 250-264.

Turley, L.W., & Milliman, R.E. 2000. Atmospheric effects on shopping behavior. ***Journal of Business Research,*** 49 (2), 193–211.

Vargo, S. L., & Lusch, R. F. 2004. Evolving to a New Dominant Logic for Marketing. ***Journal of Marketing***, *68*(1), 1–17.

Varzim, T. 2018. 10 years later, Portuguese economy overcomes the crisis*.* ***Jornal De Negócios.*** Retrieved from https://www.jornaldenegocios.pt/economia/conjuntura/detalhe/10-anos-depois-economia-portuguesa-supera-a-crise. Accessed in January 2020.

Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. 2009. Customer Experience Creation: Determinants, Dynamics and Management Strategies. ***Journal of Retailing***, 85(1), 31-41

Walter, F.E., Battiston, S., Yildrim, M., & Schweitzer, F. 2012. Moving Recommender Systems from On-Line Commerce to Retail Stores. ***Information Systems EBusiness Management***. 367–393.

Wang, R.J.-H., Malthouse, E.C., & Krishnamurthi, L. 2015. On the go: how mobile shopping affects customer purchase behavior. ***Journal Retailing.*** 91 (2), 217–234.

We are social, & Hootsuite, 2020. Digital 2020 - Global Digital Yearbook (January 2020). Retrieved from https://www.slideshare.net/DataReportal/digital-2020-global-digital-yearbook-january-2020-v01. Accessed in July 2020.

We are social, & Hootsuite, 2020. Digital 2020 - Portugal (January 2020). Retrieved from https://www.slideshare.net/DataReportal/digital-2020-portugal-january-2020-v01. Accessed in July 2020.

We are social, & Hootsuite, 2020. Digital 2020 - April Global Statshot Report (April 2020). Retrieved from https://www.slideshare.net/DataReportal/digital-2020-april-global-statshot-report-april-2020-v01. Accessed in July 2020.

Wells, J.D., Campbell, D.E., Valacich, J.S., & Featherman, M. 2010. The effect of perceived novelty on the adoption of information technology innovations: a risk/reward perspective. ***Journal of the Decisions Science Institute***. 41 (4), 813–843.

Yalch, R., & Spangenberg, E. 1990. Effects of Store Music on Shopping Behavior. ***Journal of Consumer Marketing*** .7. 55–63.

Yoon, S., & Park, J.E. 2018. Tests of in-store experience and socially embedded measures aspredictors of retail store loyalty. ***Journal of Retailing and Consumer Services.*** 45, 111–119.

Zhu, Z., Nakata, C., Sivakumar, K., & Grewal, D. 2013. Fix it or leave it? Customer recovery from self-service technology failures. ***Journal of Retailing***. 89 (1), 15–29.