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NEW TRENDS IN MARKETING:
THE IMPACT IN CONVENIENCE STORE'S ATMOSPHERE

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Abstract

The decision to apply atmospheric elements to the store environment has been implemented by many managers with favorable outcomes for the company and the clients. Despite the usual application of the traditional stimulus (e.g. color, light, music, scent) the effect of implementing new trends in marketing on the retail space remains unclear. These future trends include hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decors, retailtainment, storytelling, co-creation, reverse channels and store mood zones. The effects of these trends become even more unpredictable if these are implemented in the convenience store sector. Hence, the goal of this master's dissertation is to validate the impact of the new trends in marketing in convenience store's atmosphere to impact the Portuguese customers.

This dissertation reached the established goal through the study of the relevant literature and empirical application. Based on case studies from the literature, the research questions were formulated. These research questions consider the impact of hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decor and new products, services and retail formats on the convenience store environment. Furthermore, the empirical research included an exploratory and qualitative methodology (focus group and virtual reality).

The following results were confirmed in this study: displaying a parapharmacy showcase will increase the sales of the store (hybrid stores); an employee's positive attitude will increase the satisfaction of the experience and affect the loyalty of the customer (customer-employee interaction); selling healthy food will increase the shopping intentions; the existence of a printer/copy machine will increase the interest of going to a convenience store and a fresh and natural convenience store concept will attract more customers (new retail products, services and retail formats). Other trends such as the interactive menu screen and the revolving decor (digital signage) were considered with some potential even though the insights were not sufficient to validate the research questions. The rest of the research questions were not conclusive or rejected by the empirical findings.

Despite the shortcomings of this study, convenience store retail managers in Portugal must, therefore, understand the potential of these solutions towards convenience stores, but must also always consider the consumption habits of Portuguese consumers.

Keywords: Retail, New Trends in Marketing, Store Atmosphere, Convenience Store.

JEL classification system: M31 – Marketing; M39 - Marketing and Advertising: Other

Resumo

Estímulos sensoriais em ambiente de loja (cor, luz, música e aroma), têm sido largamente implementados por muitos gestores trazendo resultados bastante positivos tanto para as empresas como para os clientes que entram na loja. Pelo contrário se considerarmos as novas tendências de marketing estas acabam por ainda não ser muito abordadas na atmosfera de loja. Estas novas tendências incluem lojas híbridas, ecrãs interativos, novos métodos de pagamentos, relação empregado-cliente, decoração rotativa, "retailtainment", "storytelling", co-criação, canais invertidos e criação de vários ambientes em loja. O impacto destas novas tendências é ainda menos estudado no sector das lojas de conveniência. Assim sendo, o principal objetivo desta dissertação é validar o impacto destas novas tendências de marketing no contexto do ambiente das lojas de conveniência, em especial para os consumidores portugueses.

A questão de partida foi definida após um estudo intensivo da literatura científica e aplicação empírica existente sobre o tema. As questões de investigação foram definidas tendo por base estudos de caso das novas tendências existentes na literatura. As questões de investigação pretendem avaliar o impacto de algumas tendências num ambiente de loja de conveniência, tais como lojas híbridas, ecrãs interativos, novos métodos de pagamento, interação entre empregados e clientes, decoração rotativa e novos produtos, serviços e formatos de retalhos. O método adotado para responder a estas questões foi uma metodologia exploratória e qualitativa ("focus group" e experimentação de realidade virtual).

Foram aprovadas as seguintes questões de investigação: a exposição de uma vitrine de parafarmácia irá aumentar as vendas da loja (lojas híbridas); uma atitude positiva por parte dos empregados aumenta a satisfação do cliente e influencia e lealdade do mesmo (interação entre empregados e clientes); vender comida saudável numa loja de conveniência aumenta as intenções de consumo de quem visita a loja; a existência de uma máquina de fotocópias aumenta o interesse a ir a uma loja de conveniência e por fim um novo conceito de loja de conveniência com produtos frescos e naturais vai atrair mais consumidores (novos produtos, serviços e formatos de retalhos). Outras tendências de marketing apresentadas na parte empírica, como menus interativos e decoração rotativa (sinalização digital) foram consideradas com algum potencial, apesar do feedback dos participantes não ter sido totalmente conclusivo. As restantes questões de investigação do estudo foram rejeitadas ou tiveram resultados inconclusivos.

Apesar das limitações deste estudo, os gestores das cadeias de lojas de conveniência em Portugal devem capitalizar estas soluções para as suas lojas, não esquecendo os hábitos de consumo do consumidor Português.

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1. Introduction

1.1 Theme

Based on the extensive study of the relevant literature on store atmosphere, it can be observed that there is a vast of experiments on the effect of the traditional atmospheric stimulus on retail scenarios, which show the impact of these elements in consumers' emotions and responses (Verhoef *et al*., 2009). These influencing variables belong to the domain of sensory, auditory, olfactory, visual and social factors which have a direct impact on the experience and satisfaction of the customers and their perception of the image and level of the service (Groeppel-Klein, 2005; Kumar and Kim, 2014). Nonetheless, there are new trends in retailing that are still to be studied in the context of the store environment. Hence a further investigation of these trends will hence be needed.

In order to counterbalance the convenience of online consumption, there are new store concepts appearing to reinvent the offline stores as they bring an experiential level that makes them unique (Sobczyk, Lipowski and Bondos, 2016). The experiential economy leads to an outstanding customer experience (Pine and Gilmore, 1999). A retail space can activate this with some of the following trends: hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decors, retailtainment, storytelling, co-creation, reverse channels and store mood zones. Some of these trends are hedonic as their main purpose of the visit is the sense of enjoyment, while others feature a utilitarian value which ascribes higher importance to the acquisition of essential goods and/or a specific outcome (Farias, Aguiar and Melo, 2014).

Convenience stores' (c-store) characteristics are small retail spaces at convenient locations, extended hours of operation, grab-and-go foodservice, a variety of grocery assortments and other product merchandise. These stores have higher prices as a trade-off due to the advantages presented previously (Bianchi, 2009). The main convenience store targets are Millennials and balancer moms.

1.2 Research Problem

Firstly, it is important to understand that the application of atmospheric stimulus in the store ambiance favorably influences the store's objectives and keeps the company ahead of its competitors (Andajani, 2015). These traditional stimuli include external variables, general interior variables (e.g. color, lighting, music and scent), layout and design variables, decoration variables and human variables (Turley and Milliman, 2000). Studies on this topic concluded that these stimuli have favorable outcomes such as differentiating one store from the others and luring customers to a more desirable behavior - increase in the time spent inside the store, the amount of purchases, positive word-of-mouth and loyalty to the retailer (Farias, Aguiar and Melo, 2014; Olahut, El-Murad and Plaias, 2012; Puccinelli, 2009; Spence *et al.*, 2014; Turley and Milliman, 2000).

At the same time, the combination of these atmospherics can be risky and unpredictable as they might create sensory overload and congruency issues. An incongruent combination of these stimuli leads to subadditive interactions – the impact of the combined stimuli is inferior to the isolated effect of the atmospherics (Spence *et al.*, 2014).

As the new trends in marketing are not largely implemented in stores, the prior literature available is still very limited. Moreover, when considering the convenience store sector, the available scientific papers are even rarer.

The lack of literature was identified as there is almost no research that has considered hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decors and new retail products, services and retail formats applied to the convenience store business. There are only two new trends in marketing that have been tested in convenience stores: hybrid stores – Taiwanese hybrid convenience restaurant (Ming-Sung Cheng *et al.*, 2009); and interactive screens – self-service technology (Turner and Shockley, 2014).

In spite of this shortcoming, there are some business papers and magazines that show some applications of the future trends in retailing to the convenience store sector such as Store of the Future in Convenience Store News (2014); The Future of Foodservice in Convenience Store Decisions (2016); The Convenience Store of the Future in Hughes White Paper (2012) and Continuous Innovation: The Key to Retail Success by Nielsen (2014). The other trends' case studies were collected from blogs and websites showing real-life examples from convenience store chains or from other sectors of activity.

1.3 Objectives

During 2016 the Marketing Future Cast Lab was investigating New Trends in Marketing applied to store atmosphere to deliver insights to the Lab’s partner companies. To conduct these studies Professor Pedro Dionísio invited the researchers to further develop this theme. The selected partner for this project was Galp – a Portuguese oil and natural gas integrated operator which has the largest network of service stations in Portugal (Galp Energia, 2016).

The overall objective of this dissertation is to provide conclusions on the impact of store atmospherics’ inside of convenience stores. Regarding store atmospherics variables, an emphasis will be placed on new marketing trends. This is a consequence of the lack of the literature previously identified. The conclusions could be implemented in the future in a Tangerina store – Galp’s convenience store.

1.4 Structure

The first section (introduction) briefly presents the main topics and sets the key research problem to be answered on the following chapters.

In the second chapter, the literature review is presented. This review reflects a comprehension of this dissertation’s theme. The main topics are the concept, impact and main variables of store atmosphere, followed by future trends in retailing and convenience store’s definition, key benefits and new trends to apply. The research questions will be formulated based on the gaps and the real-file examples of the literature available.

The methodology will be addressed in chapter 3 through the identification of the appropriate research methods. To comprehend the impact of the new trends previously formulated, two exploratory and qualitative approaches will be used: focus group and virtual reality.

The next step is the conduction of the research and the analysis of its results which is presented in chapter 4. This analysis will include insights from the participants about the proposed solutions.

Lastly on chapter 5, the conclusions on the new trends implementation will be highlighted, managerial and theoretical implications will be given, limitations will be clarified and suggestions for future research will be outlined.

2. Literature Review

While going through the literature review, it will be highlighted the importance of traditional atmospherics and the relevance of the new trends in marketing in the context of convenience store's atmosphere. Furthermore, the examples of the new trends in marketing in real convenience stores will help to define and to justify the research questions to be applied to the ambiance of convenience stores.

2.1 Store Atmosphere

2.1.1 Concept

Store atmosphere is an effort in designing a shopping ambiance that has an emotional effect on the individuals with the purpose of increasing their likelihood of purchase (Kotler, 1973). Similarly, Farias, Aguiar and Melo (2014) define the concept of store atmosphere as the conscious design of a specific space to generate a pretended effect on customers.

Atmospherics can include both tangible and intangible features of a retail store design (Puccinelli *et al.*, 2009). In addition, a store atmospherics' stimulus can enhance the store's quality perceived by consumers, leading to higher levels of persuasion and produce behavioral responses (Foxall, 1997; Olahut, El-Murad and Plaias, 2012). The same atmospheric can have entirely opposite responses in a different group of consumers.

2.1.1.1 Atmospherics Domains

Kotler (1973) defined four main sensory channels presented in atmospheric variables: visual (sight), aural (sound), olfactory (smell) and tactile (touch). The most relevant visual dimensions are color, size, shape and brightness. Regarding the aural dimension volume, rhythm and pitch are considered relevant. The olfactory sense includes smell and freshness. Moreover, the touch dimension embraces softness, temperature and smoothness.

Turley and Milliman (2000) developed a more in-depth analysis of the experimental evidence on shopping behavior that led to five different dimensions including external variables, general interior variables, layout and design variables, decoration variables and human variables.

2.1.1.2 Multi-Sensory Environments

The store environment covers a broad range of separate and highly connected elements like lighting, sound, color, scent and window displays that affect the consumers holistically and not as individual elements (Matilla and Wirtz, 2001). Moreover, Spence *et al*. (2014: 472) affirm that "… *store atmospherics cannot really be understood on a sense-by-sense basis; environments and our perception of them are, by nature, multisensory*.".

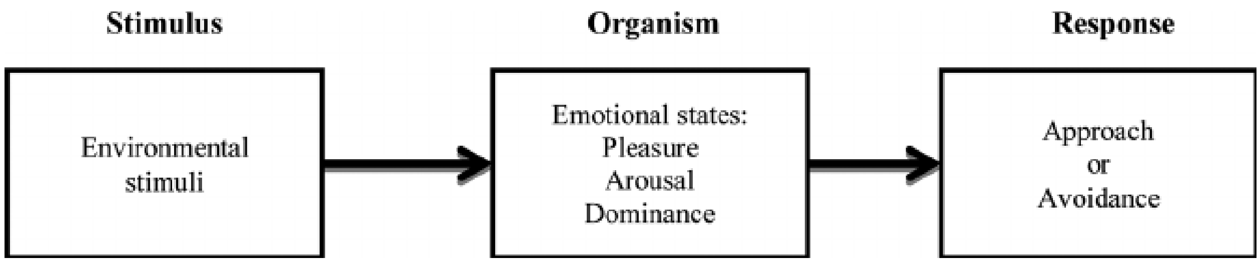
When studying the atmospherics in a holistic way, a concern about congruency arises (Mattila and Wirtz, 2001). If two or more sensory inputs are congruent, superadditive multisensory interactions are to be expected, which means that the combined response is greater than the impact of the individual signals. On the contrary, subadditive interactions will happen when incongruent sensorial cues are implemented (Spence *et al*., 2014). Another issue concerning the introduction of more sensory cues into a store atmosphere is the risk of sensory overload.

2.1.1.3 S-O-R Model

Donovan and Rossiter (1982) adapted the Mehrabian and Russell (1974) framework of the Stimulus-Organism-Response (S-O-R) model to the store atmospheric studies in the retail sector in order to explain the impact of a specific sensory cue (e.g. music, color, light and aroma) on the consumer behavior (figure 1). The retailer can produce stimuli (S) through physical and nonphysical features of a retail area to enhance customers' shopping experience. The Organism (O) is explained as the perceptual, feeling and thinking activities, intervening between the external stimuli and the final actions, reactions, or responses emitted. Cognitive and affective evaluation are two types of individuals' internal assessment. Response (R) has two outputs: either approach or avoidance behavior (Donovan and Rossiter, 1982). Approach behavior refers to the desire to maintain the presence in the store and keep shopping. On the contrary, avoidance behavior means the action of leaving the store and not coming back (Mehrabian and Russell, 1974).

Furthermore, Mehrabian and Russell (1974) concluded that the environmental stimuli influence the emotional states of people. These emotional states represented in the PAD model (P - pleasure, A – arousal and D - dominance), determine the individuals' behavior of approaching (affiliation, exploration, purchase) or avoiding (disinterest, not purchase) said environment (figure 1).

Figure 1: Stimulus – Organism – Response (S-O-R) framework



Source: Adapted from Mehrabian and Russell (1974)

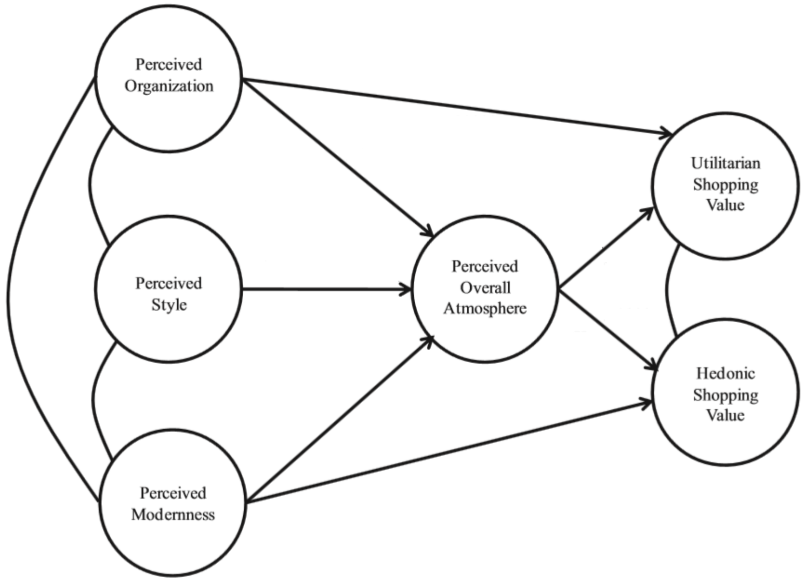
2.1.1.4 Model of Consumer's Perceptions in the Retail Atmosphere

Rayburn and Voss (2013) examined the holistic customer perceptions and impressions, given the possibility to design multi-sensory interactions in the retail atmosphere.

Instead of using pleasure–arousal–dominance emotions as in the traditional framework, Rayburn and Voss (2013) constructed the model, depicted in figure 2, which shows that the perception of the overall atmosphere (overall impression as a pleasant or unpleasant place to shop), directly influences the hedonic and utilitarian value. Additionally, perceived organization (cleanliness and orderliness of the store), perceived style (level of sophistication of the general interior's layout and design) and perceived modernness (retail atmosphere as contemporary or as ahead of its time) are the three influencing variables that impact the perceptions of the overall atmosphere - key mediating variable (figure 2).

According to Farias, Aguiar and Melo (2014), hedonic shopping value occurs when the perceptual sense of enjoyment is the main purpose of visiting a shop. This motivational orientation is focused more on the experiential level and less on buying the product. On the other side, utilitarian shopping value gives higher importance to the acquisition of essential goods and/or a specific outcome and at the same time avoids hassles or perceived effort.

Figure 2: Effects of atmospheric evaluations on hedonic and utilitarian shopping value



Source: Adapted from Rayburn and Voss (2013)

2.1.2 The Importance of Atmospherics

The outcome of the atmospherics in consumer behavior has been studied by several authors who argue that the physics and the environment play a major role in creating the retailer's image. Furthermore, it communicates the image and level of service to actual and potential visitors (Kumar and Kim, 2014). The use of lights, colors, music, aromas, touch and movements draws the attention of consumers and differentiates one store from others (Soars, 2009).

According to Groeppel-Klein (2005), research within the in-store stimuli domain has identified that the implementation of sensory cues results in customers feeling better, becoming more satisfied and showing an approaching response. In addition, positive or negative behaviors such as time spent inside the store, the amount of purchases, word-of-mouth and the loyalty to retailer and brand can be stimulated by altering the shopping environment (Bitner, 1992; Farias, Aguiar and Melo, 2014 Olahut, El-Murad and Plaias, 2012; Puccinelli, 2009; Spence *et al.*, 2014; Soars, 2009; Turley and Milliman, 2000).

Based on cognitive neuroscience and marketing research, it was concluded that multisensory atmospherics have a stronger relevance than focusing on a single sensory atmospheric cue. Moreover, the evaluation of published studies demonstrates that investing in multisensory atmospherics at the point of purchase will increase sales (Mattila and Wirtz, 2001; Spence *et al*., 2014).

2.1.3 Traditional Atmospheric Variables

With increasing competition in the retail world, it is mandatory for managers to shift from a product focus strategy to an emphasis on the customer experience. For this reason, retail managers are working on store atmosphere's influencing variables in order to create emotions. These can affect the clients as well as the employees through the design of the shop. The critical dimensions of the store atmospherics include sensory, auditory, olfactory, visual and social factors (Verhoef *et al*., 2009). In the present topic, the impact of external factors, color, lighting, music, scent and human variables in the consumer emotions and responses will be analyzed.

2.1.3.1 External Variables

Turley and Milliman (2000) considered external variables as display windows, building architecture, storefront and the adjacent area that produce stimuli into the retail atmosphere. Consumers form quick impressions about the store by the visual appeal of the storefront, window displays and overall building façade which makes them decide about entering a store or not. The same authors claim that if retail managers do not use external variables to convey approach behaviors and pleasant experiences, the inside atmosphere may not even matter.

Storefronts can have a substantial impact on the perception of a shopping environment by creating a visual impact that gets attention and benefits the store image while differentiating from other competitors (Cornelius, Natter and Faure, 2010; Pantano, 2016). The acquisition of information (promotion, image, fashion and fit) can also transmit the expectation of a further remarkable experience in the store (Oh and Petrie, 2012). The elements of the window display that have a bigger impact on consumers' attention are lights and brightness, color, price and originality/authenticity (Pantano, 2016). The author also concluded that disorganization, a limited number of products and not displaying original elements produce negative feelings in the consumer.

Pantano (2016) also suggested the integration of interactive technologies within storefronts to catch consumers' attention and provide further entertaining and informative sources. This strategy allows brick-and-mortar stores to compete with online stores' interactive and updated content.

2.1.3.2 General Interior Variables

General interior variables include atmospheric stimuli such as color, lighting, scents, sounds, temperature and wall texture (Turley and Milliman, 2000). Thus, retail managers use symbols, forms of words, objects, sounds and colors to provide meanings and stimulus inside the store.

1. <u>Color</u>

According to Olahut, El-Murad and Plaias (2012), colors can produce biological and emotional responses and draw visual attention to an environment. Therefore, retailers use colors to create a positive mood that leads to a more favorable approach behavior.

The following authors have proven in their studies about store atmospherics that the environment's color impacts human behavior (Babin *et al*., 2003; Bellizzi *et al*., 1983; Bellizzi and Hite, 1992; Crowley, 1993).

Individuals are physically attracted to warm color environments (yellow and red) which attract them to the storefront. Paradoxically, consumers found interior red retail environments to be unpleasant, negative, tense and less attractive than cool color (green and blue) retail atmospheres. Blue and green colors are associated with calm, cool and positive elements and would appear to encourage longer browsing and promote purchase intentions (Bellizi *et al*., 1983; Bellizzi and Hite, 1992). These authors concluded that warm colors should be used in storefronts, entrances and impulse behavior areas, while cool colors should be applied to product categories with higher prices and risk, which are attributed to a longer decision-making process. Bottomley and Doyle (2006) suggest that sensory and social products should adopt different coloring (red) whereas utilitarian products should feature blue elements. In addition, the use of orange with bright lights can lower the level of affect and excitement that leads to a decrease in shopping intentions. At the same time, it produces expectations of very low prices (Babin et. *al*., 2003).

Chebat and Morrin's (2007) research indicates that the color of the mall decor impacted the shoppers' perceptions about the atmosphere and the quality of the products available. The effects of the color decor schemes on consumers' perceptions are widely driven by cognitive effects since the authors did not find self-reported pleasure and arousal levels on the shoppers (affective routes).

2. Lights

The visual aspects of the store, including lighting, are the most important elements that retailers and brands want to transmit to the clients. These can influence the consumers' mood, emotional state and cognition as well as atmospheric and spatial perceptions (Evans, 2002). Based on Spence *et al*. (2014) analysis, it was concluded that changes in the overall brightness and hue of the lighting influence purchase intentions and sales.

Custers *et al*. (2010) concluded that brightness, contrast, glare and sparkle are the most important lighting elements affecting the atmosphere dimensions. The same authors also discovered that bright and peripheral lighting creates perceptual clarity. The perception of spaciousness is achieved when applying peripheral and uniform lighting. In order to generate pleasant and relaxing stimuli, retailers should use peripheral and non-uniform lighting. Additionally, Summers and Hebert (2001) found that using a brighter light makes the shoppers touch more items and spent more time looking for the products.

In a food and beverage retail environment, the brightness of lighting influenced the amount of coffee that people drank. Strong coffee lovers prefer bright lights, while weaker coffee is increasingly consumed when the lighting was dim (Gal, Wheeler and Shiv, 2007).

3. Music

The key findings from the impact of music in store atmosphere are a positive effect on sales, consumers' arousal, perceptual and actual time spent in the environment and in-store traffic flow (Milliman, 1982; Milliman, 1986; Yalch and Spangenberg, 2000; Andersson *et al*., 2012).

The rhythm of in-store background music (fast or slow) can significantly affect the pace of the in-store traffic flow of supermarket customers. When customers move more slowly through the store, they tend to buy more. On the contrary, if the shoppers move more quickly through the store, they tend to purchase less (Milliman, 1982). The retail managers should choose the rhythm of music according to the intended objectives (higher customer turnover or increase time spent in store).

In a food and beverage environment, the use of slow-rhythm music (background music) creates a more relaxing environment, which increases customers' time spent at the restaurant and their average consumption (Milliman, 1986). Yalch and Spangenberg (2000) found that people shop for a longer period when exposed to unfamiliar music, but they perceive they are shopping longer if the music is familiar.

Andersson *et al*. (2012) concluded from the experiment on an electronics retail store and supermarket that music affected the arousal level. Females preferred no-music or slow-rhythm music and the opposite is true for males. In both retail spaces, customers spend more money when there was music playing.

Concerning the auditory atmosphere, Olahut, El-Murad and Plaias (2012) concluded that music can affect the consumers' level of stimulation, mood and emotions, which makes customers perceive time is passing more slowly and finding the atmosphere more pleasant. In these situations, shoppers stay a longer time inside the store, which in most retail environments, is a positive output as the numbers of goods purchased usually increases.

Retailers are using a specific kind of music to help them convey the brand positioning inside the store. Therefore, the "right" kind of music is a powerful tool to create the appropriate impression on consumers. Audio branding can also assist to signal brand positioning inside the store environment. For instance, Citibank and American Express developed audio profiles where a basic jingle or sonic brand is used in on-hold music but also with the sound that ATM buttons produce (Spence *et al*., 2014).

The same authors refer that stores, nowadays, can even adapt their music stimuli to the shoppers' actions. Changing rooms might shift the sensorial cue to match the type of clothes that a customer is trying on: tropical music combined with the smell of coconut for a bathing suit, or wind howling for the ones experimenting a heavy jacket.

4. <u>Scent</u>

Scents appear to be applicable in two forms of consumption: product evaluation (scent products) and sale's atmosphere (ambient aroma).

Retail managers consider manipulating aroma a greater challenge than introducing other sensorial stimuli in the store atmosphere. The use of ambient aroma inside the shop has positive effects (better product evaluation) if it is pleasant and congruent with the shopping environment and brand identity (Bosmans, 2006). Comparing to the other senses, activating an olfactory cue leads to a customer's response more likely to be hedonically charged (Spence *et al*., 2014).

Guéguen and Petr (2006) reveal that pleasant scents directly affect the evaluation of a product. From their study, the authors concluded that artificial lavender aroma has a relaxing effect, which has a positive influence on the length of time spent at a restaurant. When in a relaxing mood, the customers ordered additional items including alcohol and/or coffee and thus increased the amount of time and money spent inside the restaurant. On the contrary, the lemon stimulating odor did not induce customers to stay longer and, in return, to order more items.

Trivedi (2006) presented the Samsung signature honeydew melon aroma as a successful case study. Sony also uses a subtle fragrance of vanilla and mandarin orange, which creates a relaxing atmosphere (Fetterman and O'Donell, 2006).

Regarding the olfactory studies, Farias, Aguiar and Melo (2014) concluded that atmospheric scents are used to generate emotions and memories associated with previous positive experiences with the final purpose of encouraging the purchase. If the experience has an incongruous smell with the store and products, it can negatively affect the purchase context since the triggered emotions memories will be irrelevant (Chebat and Michon, 2003).

Morrison *et al.* (2011) studied a more holistic environment by analyzing the combined effect of aroma and music. This research aimed to verify if music volume and presence or absence of a vanilla scent can impact customers' arousal and pleasure levels in a real life fashion retail setting. This model revealed that a combination of high volume music and the presence of a vanilla aroma provoked an enhancement of arousal levels, especially in young female shoppers. This congruency, in turn, results in higher levels of pleasure, which leads to an increase of customer's satisfaction and time and money spent in-store (Morrison *et al.,* 2011).

2.1.3.3 Human Variables

Human variables include customer crowding or density, privacy, customer characteristics, employee attitudes and uniforms. The topic crowding has two main components: shopper density and perceived crowding. The preponderance of work in this area has explored consumer perceptions of crowding. Most studies of this subject have found that consumer crowding has a negative influence on atmospheric perceptions (Turley and Milliman, 2000).

Argo, Dahl and Machanda (2005) mention that people are impacted by the real, implied or imagined presence or action of social presence. For this reason, the authors realized a study to understand the impact of noninteractive social presence (a mere presence) on consumers in the retail environment. There were considered two social forces: social size and proximity. The authors concluded that when the social size is more than the comfort of one person, consumers have negative emotions, due to the increasingly crowded environment. However, when social size augmented from no one to a single individual, positive emotions increased because of the satisfaction participants' need for association. The proximity of a noninteractive social presence moderates the impact of social size on emotions and brand selection as this effects can only occur when the social elements are in close proximity.

The image of the employees is a key communication tool used to transmit the brand idea and values of the firm to the consumers and can lead customers to develop an approach-behavior (Bitner, 1992; Turley e Milliman, 2000). Moreover, showing a more affective and friendly conversation has a positive effect on performance – client satisfaction and purchase levels (Sharma and Levy, 2003).

The store environment can influence customer perceptions about the credibility, persuasion and availability of salespeople. In an environment with higher prestige, the perceived credibility of the sales personnel is bigger when compared with the employees from stores with a low-cost environment (Sharma and Stafford, 2000).

2.2 New Trends in Marketing

In the following years, the physical store must counterbalance the shift to the online consumption. The brick-and-mortar store should be a complement to the e-commerce service while providing new experiences that online stores cannot translate. These experiences can include the ability to touch products, personal service and shopping as an experience and an event (Rigby, 2011). Creating an outstanding customer experience is the key to attracting customers and give them a reason to enter the store (Verhoef *et al*. 2009).

Consequently, the retail space needs to adapt to new engaging trends to keep up to date and be relevant for the customers. Hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decors, retailtainment, storytelling, co-creation, reverse channels and store mood zones are the new trends reinventing the retail business.

The creation of **hybrid stores** holds on to the expertise of creating a store within a store from a different business area. This diversity must consider the brand lifestyle and provide memorable experiences. This in-store trend allows the retail space to attract new customers, promote slow shopping, address impulse purchase all leading to the increase of sales. At the same time, it pretends to break the shopping online trend (Malin, 2014).

To get the customer's attention, **interactive screens** have been brought to the stores using the latest technology. These technological displays are a growing investment that uses self-service technology (SST) that empowers customers with the ability to obtain information, personalize and enhance traditional product offerings (Turner and Shockley, 2014). These monitors frequently have a utilitarian purpose and sometimes are more related to leisure activities. This technology can relate to other trends such as co-creation, storytelling and new payment methods. Interactive screens have a positive impact on time spent on the store and on the value of sales (Pantano, 2016).

New payment methods are used as an alternative to cash and credit card with the purpose to make the acquisition moment safer, faster and more intuitive. With the evolution of the technology, there is a convergence from physical to digital. Smartphones, smartwatches and wearables facilitate this interaction in the moment of payment (Gloor, 2014).

Customer-employee interaction is considered the key to promoting a pleasant customer experience. Frontline employees have the closest interaction with customers, which makes them a personification and representation of the brand. Thus, these workers are an effective communication tool that fulfills customers' needs, while transmitting a higher level of trust than any other media and communication methods. The purpose of this interaction is to influence customer's level of satisfaction and engagement (Cambra-Fierro, Melero-Polo and Vázquez-Carrasco, 2014). This higher level of engagement can lead to loyal customers and a positive effect on word-of-mouth (van Doorn, *et al.*, 2010).

Revolving decors are constantly changing the environment of the stores to keep them updated and trendy. The interior and exterior of these stores are treated as stage sets, as there is a lot of flexibility to swap, transfer and adapt the displays and decoration. These adaptations can address different lifestyles, personalities, and interests of the target audience that visit the store at different times of the day. It also allows the introduction of entertainment experiences into the retail environment (PSFK, 2010).

"*Retail-tainment is the concept of adding entertainment and experiences to the retail mix*" (White Hutchinson Leisure & Learning Group, 2009). In other words, **Retailtainment** brings entertainment to the retail space with the final goal of encouraging the consumer to spend. To counteract the trend of online shopping, retailers attract customers by offering them a pleasant journey that gives them a reason to enter and stay in the store. This concept appeared with the first shopping centers that presented some kind of entertainment for the visitors. In the following years, it was applied to different sectors and retail spaces (Coifman and Kennard, 2014).

This generation of consumers acquires products and services to experience the stories that best represent their own lifestyle. **Storytelling** helps to communicate a brand's value proposition and building relationship with a customer without appearing "pushy". For the story to be understandable, meaningful and memorable it must be related to the brand purpose and to the competencies embedded in the core of the company (Gilliam, Flaherty and Rayburn, 2014). In a retail setting context, empowering the sales assistants with a view to encouraging all types of conversation can be successfully done with storytelling since it provides the ability to elicit reciprocal stories and create a positive customer experience. This technique can boost brand evaluations (Lundqvist *et al*., 2012) and enhance the sentimental bond which leads to an increase in the purchase intention.

A **co-creation** environment is appropriate when consumers can have an active dialogue inside the store and co-construct customizable experiences. In co-creation, the company delivers its value proposition and stages experiences, while the customer actualizes this potential by co-producing his/her own unique value experience (Prahalad and Ramaswamy, 2004), with their inputs based on cultural background, rationale and social resources (Puccinelli *et al*., 2009).

Goods and services in **reverse channels** have the inverse flow of the traditional distribution channel. The customers can use the products that do not use anymore and move them up to the intermediaries or even the producer. This new flow fulfills the lack of engagement the customers have in the distribution process. This is also a channel used to return the goods to other consumers or beneficiaries (Savaskan and Van Wassenhove, 2006).

Creating **store mood zones** inside a retail space is a way to counter and minimize negative moods from consumers. This is possible through the creation of experiences inside the store that enhance positive moods. Using consumer insight, store mood zones can be achieved by redesigning some key zones with good retail design and music. Retailers apply distinct atmospherics in different parts of the store to appeal to individuals based on their ages and lifestyles. When customers spend more time in the store, they begin to feel tired or stressed out and look at the cheaper price. Thus creating good moods is important to make people less price sensitive (Novikova, 2015).

2.3 Convenience Stores

2.3.1 Concept

Convenience stores (c-store) are small retail spaces, offering more than 18 hours a day, a limited assortment of grocery and other products that consumers may want as a matter of convenience. The food and drinks assortment includes beverages, snacks, candies, prepared sandwiches, canned food and fast food. Customers can also find newspapers, toys, tobacco, toiletries and products for the car. To justify the value of convenience, the prices are higher at these stores than they are at supermarkets (Bianchi, 2009; Cyprus, 2016; Zairis and Evangelos, 2014).

These stores usually work as a franchise system and in many countries, residents use these stores for banking services and bill payments. King-Casey is a retail consulting, branding and design firm that has predicted the convenience store of the future. It's Principal - Howland Blackiston - said that there are three customer groups that convenience store managers must focus on in the following years: traditional convenience store users, millennials and balancer moms – adult women with children that balance professional and family life (Store of the Future, 2014). These clients usually increase their in-store average purchase, when there is a significant decrease in oil prices since they made use of more disposable income (Convenience Store Decisions, 2016a).

2.3.2 Key Benefits

The main advantages of convenience stores are its convenient locations, extended hours of operation, grab-and-go foodservice, one-stop shopping, a variety of merchandise and expedited transactions. There is a continuous effort for minimizing complexity, time and effort while maximizing efficiency and accessibility (Turner and Shockley, 2014).

2.3.3 Types of Convenience Stores

NACS (2016) has identified six formats of convenience stores: Kiosk, Mini Convenience Store, Limited Selection Convenience Store, Traditional Convenience Store, Expanded Convenience Store and Hyper Convenience Store.

Sobczyk, Lipowski and Bondos (2016) affirm that some convenience stores have a smaller range of products and are connected to gas stations or even train stations (kiosks, mini and limited selection) targeting both travelers and locals, while others are localized on the city center on busy street corners bringing a bigger assortment to address the needs of the local community (traditional and expanded). The Hyper Convenience Store has larger dimensions (similar to a supermarket) and it can include a bakery, a sit-down restaurant area or a pharmacy. This concept is more common in the USA.

2.3.4 Convenience Stores in Portugal

Convenience stores in Portugal have dimensions under 250 m². The ones localized in gas stations represent 26% of total convenience store sector in Portugal (Pereira, 2009). The 4 biggest petrol chains in Portugal (Galp, Repsol, BP and Cepsa) represent 70% of the market. The biggest player in the market is Galp with 25%-30% followed by Repsol (15%-20%), BP (10%-15%) and Cepsa (5%-10%) – (Gomes, 2015). The supermarket petrol stations (Jumbo, Intermarché, E.Leclerc and Pingo Doce – partnership with Prio) has doubled their presence in Portugal in the last 7 years, representing 22% in 2014. The supermarket gas station does not usually have a convenience store associated. Still, there is space for independent brands such as Petrin, Prio, Alves Bandeira and Cipol which represent 7%. This data considers both revenues from the fuel, complementary businesses and convenience stores (Gomes, 2015).

Moreover, on a total of 715 convenience stores associated with gas stations in Portugal, BP has 258 stores while Galp has 255 (Silva, 2015). Pereira (2009) refers that among the main petrol station chains, there are no big differences in the structures and products of the convenience stores. The assortment of the Portuguese convenience stores is similar to the previously described, with tobacco providing half the revenue stream. The same author revealed that products inside the store have bigger margins (20% to 30%) compared to the fuel ones (3% to 5%).

2.3.5 Future Trends Applied to Convenience Stores

Although previous consumers were going to the traditional convenience store/gas station to get some fuel and pick up everyday items, the customers of the future convenience store can expect a mix of a traditional convenience store and suburban strip mall. That is the prediction of King-Casey, which includes a traditional c-store zone, a pharmacy area, an interior banking zone, a car wash zone and a fuel and recharge zone. In addition, the unique essence for convenience stores is to localize and adapt to the unique characteristics of their communities (Store of the Future, 2014).

Based on Nielsen's report (2014) this sector features a lot of potential as the convenience attribute is considered the most energetic and creative example of retail modernization. The future trends that will be applied to the convenience store sector are **Hybrid Stores, Interactive Screens, New Payment Methods, Customer-Employee Interaction and Revolving Decors.** Besides these 5 new marketing trends conceptualized in the previous topic (2.2), there are **New products, Services and Retail Formats** happening in the sector that are worth being studied (2.3.5.6).

Below, it will be justified the selection of these 6 trends:

According to Hughes Network System (2012), the actual c-store visitors have a need for some complementary activities like solving their bank related issues, having meals and in some cases even meet, read and relax. Considering these studies, there is an opportunity here to study **Hybrid Stores -** expand the normal concept of a convenience store and add some services that also have a very utilitarian purpose.

Highly transactional services like convenience stores make a great fit with **Interactive Screens** because they can maximize efficiency and accessibility. These technological displays used inside the store can differentiate the store's value proposition by engaging clients in the process (Turner and Shockley, 2014).

For the next years, Nielsen (2014) highlights the convenience of self-scanning devices and check-outs as they suppress the frustration of waiting in the line and can lower the barriers to entering the store. **New Payment Methods** promotes a fast and practical experience where these new solutions can maximize the efficiency of the process, leading to an increase in customers' satisfaction in convenience stores.

As customers spent so little time inside the convenience store, frontline employees become the main element that customers interact with. The purpose of this **Customer-Employee Interaction** is to generate increased return on investment and influence customer's level of satisfaction and engagement (Cambra-Fierro, Melero-Polo and Vázquez-Carrasco, 2014). This higher level of engagement can lead to more loyal customers and has a positive effect on word-of-mouth (van Doorn, *et al*., 2010).

Revolving Decors allow convenience stores to cater their offer to the segment of customers that visit the store during specific hours of the day. The retail space can be featured with physical furniture or digital displays. The use of smart technology can help to attract customer inside the store and leverage impulse buying and move inventory while keeping the convenient aspect (Hughes Network System, 2012).

Besides the new trends in marketing that intend to engage and attract the customers, the convenience store also needs to differentiate in terms of **New Products, Services and Retail Formats**, to better fit the needs of their local communities and get in touch with the trends from other complementary businesses (Polonski, 2015).

Table 1: Store atmosphere – New Trends in Marketing to apply on the empirical study

Selected trends to study	Convenience Store examples
Hybrid Stores (2.3.5.1)	(1) Sainsbury's Convenience Store with Pharmacy (2) Taiwanese Hybrid Convenience Restaurant
Interactive Screens (2.3.5.2)	(3) Sheetz's Interactive Menu Screen (4) Speedway Loyalty Program Kiosk
New Payment Methods (2.3.5.3)	(5) Mobile Payment at the Chevron Pump* (6) Swedish Smart Convenience Store
Customer-Employee Interaction (2.3.5.4)	(7) Training and rewarding employees at Ricker's Oil
Revolving Decor (2.3.5.5)	(8) Revolving Digital Signage
New Products, Services and Retail Formats (2.3.5.6)	(9) Healthy Food, Sushi and Multi-Copy Machine (10) Fresh and Friendly Convenience Store

Source: Author's elaboration

2.3.5.1 Hybrid Stores

King-Casey consultants envision the future c-store with a convenience restaurant that considers multiple food concepts similar to a mall's food court. There is also a dining zone which includes informal seating for the customers in a hurry or for a leisure meal targeted at the balancer moms and Millennials (Store of the Future, 2014).

1. <u>Sainsbury's Convenience Store with Pharmacy</u>

The UK retailer Sainsbury's has opened in 2014 a combined convenience store with a community pharmacy inside a hospital. This new store at Guy's Hospital is suited for the patients and visitors of the hospital offering a broad range of convenience merchandise. The store is available from 7 a.m. to 11 p.m., seven days a week. Although the retailer, had experience in this sector (pharmaceutical), it was the first time it was ever developed this kind of hybrid store. Jat Sahota mentions that the new Guy's store is a new way to serve Sainsbury's customers better, providing them with a wide range of healthy products and prescriptions as well (J Sainsbury plc, 2014). This example inspired the first research question **RQ1: Displaying a parapharmacy showcase will increase the sales of the store.**

2. Taiwanese Hybrid Convenience Restaurant

Convenience stores in Taiwan are in a mature stage, claiming to have the highest convenience store density around the world. Since 2005, the main convenience store chains (7-ELEVEN, Family-Mart, Hi-Life) from Taiwan, have started to provide the first dining zones for customers to consume their purchases. These are called "hybrid convenience restaurant" and started with a few meal boxes and local Taiwanese desserts. In the following years, the national chains appeared with new meal offerings on a more regular basis to attract more loyal customers and equipped their facilities with dining furniture for customers to have their meals inside the store (Ming-Sung Cheng *et al.*, 2009). The dining layout and atmosphere in terms of sound, visuals and temperature are defined according to their target segments and it resembles a modern fast food restaurant. Nowadays, these modern convenience stores compete with traditional restaurants directly. Ming-Sung Cheng *et al.* (2009) concluded that observability, trialability and compatibility increase the acceptance of dining in hybrid convenience stores while complexity has the opposite effect.

This successful convenient restaurant raises interest to be validated on a Portuguese convenience store. In this case, two complementary research questions were formulated - **RQ2: Implementing a fast food restaurant will increase the interest of eating more frequently at a gas station; RQ3: Developing a dining area will increase the number of meals consumed inside the store.**

2.3.5.2 Interactive Screens

The relevance of this trend is mentioned by Blackinston from King-Casey who foresees that customers will drive up, park, order and pay by using a touchscreen device. The order is delivered right to the car (Store of the Future, 2014).

3. Sheetz's Interactive Menu Screen

Sheetz, Inc. is an American convenience store chain that offers pizza, wings, sandwiches, pretzels and salads that can be ordered through an interactive screen terminal. Sheetz was one of the first chains to have touchscreens at the deli counters, creating an easier and quicker order system for food and drinks (Peterson, 2014).

In 2014, Sheetz decided to improve their digital displays to give more insights to consumers about the diverse breakfast, lunch and dinner available at their convenience stores. The digital interface is remotely programmed to play interactive videos that educate and amuse consumers while showing them new items, loyalty incentives and brand information. The screens also display how to order said meals from the touchscreen terminals (Abierto Networks, 2014).

Like Peterson (2014) mentioned, these screens made ordering easier and quicker, which are valuable attributes for c-stores - **RQ4: Having an interactive screen to order the products will increase the level of satisfaction.**

4. Speedway Loyalty Program Kiosk

Speedway – the fourth largest chain of fuel/convenience merchants in the USA - is offering three unique loyalty cards for drivers to earn rewards that can be accessed via the mobile app (Polonski, 2015). For the clients that do not use the mobile app, Speedway also has a Speedy Rewards interactive screen (kiosk) at every location. Both the kiosk and application allow to view and manage points and redeem the rewards preferred by the consumer - fuel or merchandise (Gerardi, 2015).

The customer interaction with the display and the app helps to create personalized marketing promotions from the customer behavior data. Christi Frizzell manager for Speedway states that this offers a more relevant, highly personalized shopping experience, which leads the customers into buying more store merchandise than ever before (Loyaltyworks, 2015).

Based on the success of this interactive display, the following research question was formulated: **RQ5: The existence of a loyalty rewards interactive screen will increase the interest of the consumers and the products redeemed**

2.3.5.3 New Payment Methods

The Store of the Future (2014) foresees this trend with the possibility of placing an order online or via a mobile device and collecting on the drive-through snacks, food staples or fresh-made meals offered inside the store. The process is finalized with NFC mobile payment.

5. Mobile Payment at the Chevron Pump

Chevron has made a partnership with Visa to offer a new payment solution at the pump in gas stations in San Francisco and Silicon Valley. The transaction happens before filling the tank and will be made with the smartphone NFC payment including Apple Pay, Android Pay and Samsung Pay. This is a recent method which has security at the core of the purchasing experience by using a unique digital identifier that does not expose actual account details. This new program has increased the turnover of clients and therefore solidifies the company's commitment to deliver high-quality products and services in a more convenient environment (Boden, 2015).

Presenting an interactive screen inside the store to pay with NFC mobile phones will increase the efficiency of the process (RQ6) – this research question was defined because it is believed that the same positive effects can also be achieved in a Portuguese convenience store.

6. Swedish Smart Convenience Store

Convenience stores are providing in-store shopping assistant via their mobile devices. When consumers see something interesting, they open the store app and use the camera to take a picture of the product. The photo will show product descriptions, reviews and tips/tricks (Hughes Network System, 2012).

Based on this trend, Näraffär, a Swedish "smart" convenience store, developed a 24-hours store, without cashiers on duty. Customers simply swipe their smartphones to unlock the front door. After registering a credit card, the Näraffär's app also allows consumers to scan the intended items for purchase. The items available are milk, bread, sugar, canned food, snacks and diapers. Alcohol, tobacco and medicine are not available because of the risk of shoplifters (Mashable, 2016).

In this case, it will be evaluated if the Portuguese customers are interested in this kind of smart store - **RQ7: Creating a smart shop available 24H, without cashiers on duty with payments on the smartphone will attract more customers.**

2.3.5.4 Customer-Employee Interaction

C-store frontline employees that have a positive attitude and thoughtful training will not only influence the satisfaction and engagement of customers but also enhance the advantages of the other new trends in marketing (Cambra-Fierro, Melero-Polo and Vázquez-Carrasco, 2014).

7. Training and rewarding employees at Ricker’s Oil

Ricker’s Oil is a Petrol and Convenience Store chain located in Indiana - USA which is known for its clean stores, special sales, friendly stores and employees. The company works on the customers’ satisfaction by investing in a special training and a reward and recognition program for their employees (Conte, 2016).

As mentioned in the article from Retail Merchandiser (2016), Ricker’s emphasizes from the beginning the importance of making a positive and memorable experience, through its induction “WOW Experience”. This onboarding program has a selection of training videos and exercises focused on culture, people development and customer care. To provide leadership training to further develop their staff, the company also created Ricker’s Business Academy (RBA).

Karen Mitchener, the Ricker’s HR Director, believes that the key to boosting performance is to connect the employees’ rewards to the company goals. Therefore, Ricker’s Inspires Service Excellence - RISE was created, which is a points based compensation program that can bring rewards according to birthdays and holidays; superior customer service; internal process cost-reduction; and also collective payouts, that compensates the entire convenience store staff when one employee passes a mystery shop. When the goals are achieved, the employees can redeem merchandise like apparel, gifts, downloadable music and gift cards. RISE generates a supportive motivation within team members and a positive peer pressure, which lead to an improvement of 2,5% on store inspection with 27 out of 48 stores (Conte, 2014).

Based on this relevant human interaction example, the following research question will be further investigated - **RQ8: An employee’s positive attitude will increase the satisfaction of the experience and affect the loyalty of the customer.**

2.3.5.5 Revolving Decors

The Refueling and Refreshing Concept (Store of the Future, 2014) is decorated with natural materials combined with modern digital screens that serve as a revolving menu, ordering tools and entertainment throughout the store to create a visual flow and catered environment.

8. Revolving Digital Signage

The modern convenience store will invest on digital signage outside or inside the shop to increase foot traffic and to move inventory. The digital menu boards will change based on the time of day and the targeted demographic. During the morning hours, breakfast options will be shown and even special items for retirees' late morning menus will be offered. Furthermore, after-school teenagers will have targeted communication in mid-afternoon. Dynamic menu boards will anticipate traffic and optimize each selling moment for improved margins on sales and customer service (Hughes Network System, 2012).

Supported by this example, the author pretends to evaluate if **- in-store digital signage will get customer's attention and increase the impulse purchase of the advertised products (RQ9).**

2.3.5.6 New Products, Services and Retail formats

Todd Cole from King Retail Solutions states that the way to achieve the evolution of convenience stores will be finding *"… the right balance between technological innovation, a modular shopper experience, foodservice quality and variety of choices"* (Store of the Future, 2014: 124).

9. Healthy Food, Sushi and Multi-Copy Machine

Nowadays, more consumers are looking for grab-and-go or made-to-order food and freshness and quality of the prepared food is considered as especially relevant (Lofstock and Odesser-Torpey, 2016). Polonski (2015) refers that breakfast was a growth opportunity for convenience stores in 2016. For instance, co-branding food kiosk programs with Subway, Pizza Hut and Cinnabon are becoming a popular entry into the convenience business (Lofstock and Odesser-Torpey, 2016).

In the Future of Foodservice, Lofstock and Odesser-Torpey (2016) refer that retailers expect to see continued demand for healthy items in stores as grab-and-go yogurt packs, pre-cut fruit cups in single-serve packages, pasta salads and half-sized sandwiches. As so, 7-Eleven challenged Tony Horton to co-develop a line of nutritionally balanced foods and cold-pressed juices and Enmark is co-partnering with FreshOne in a similar initiative (Polonski, 2015). Tom Henken (responsible for the design of the Walmart To Go) refers that healthy, fresh meals on the go are a valuable add-on if convenience stores work as savvy neighborhood markets that listen to the local customers (Store of the Future, 2014).

Convenience stores are also betting on international food, for instance, RaceTrac's is bringing Mexican food and Sheetz has sushi. To further differentiate their service, these two entities have invested in espresso bars and frozen yogurt stations (Lofstock and Odesser-Torpey, 2016).

Copy machines can be found at 7-Eleven convenience stores in Japan. This multi-copy machine allows to copy, scan, fax and print from the digital camera or the USB drive. It also includes a service called "Seven Ticket" which sells tickets for various type of events (sports, movies, concerts, theme park). The tickets can be paid in the store or paid online and picked up at the store (Japan Monthly Web Magazine, 2013).

Based on this examples, three main opportunities were considered relevant to study: **offering packaged Sushi will attract more customers (RQ10); selling healthy food will increase the shopping intentions (RQ11) and the existence of a printer/copy machine will increase the interest of going to a convenience store (RQ12).**

10. Fresh and Friendly Convenience Store

King Retail Solutions presents the next evolution of the convenience store as a refueling and refreshing center that represents the diversity and quality of a smaller grocery with fresh food and basic offerings combined with a modern growler bar that stocks beer and wine (Store of the Future, 2014).

An example of this vision is the Corner Store Market, the new larger-format store (5,000-7,500 square feet) in San Antonio that offers free Wi-Fi, expanded seating, a new made-to-order menu (pizzas, sandwich melts, soups, salads) and an extensive grocery selection (Haar, 2016). This way, Corner Store shifted the focus from fuel to fresh and friendly. With this brand initiative, CEO Kim Lubel pretends to call more attention to the great food, beverages and service the company already offers and assumes that *"… fuel is a customer driver, but we want our stores to be the long-term customer driver."* (Business Wire, 2015). Corner Store aims to attract more millennials and women looking for on-the-go lunch options or quick dinner solutions without the hassle of navigating a big-box store.

So - **a fresh and natural convenience store concept will attract more customers (RQ13) -** is the final research question to be investigated.

2.3.6 Future Trends not Matching Convenience Stores

The experience inside convenience stores is more related to a utilitarian level than on a hedonic one. Consequently, not all of these new trends in marketing should be applied to this retail context. Considering the main characteristics of the convenience store, retailtainment, storytelling, co-creation, reverse channels and store mood zones will not be considered for the empirical study.

2.3.6.1 Retailtainment

Retailtainment focuses on an experiential and emotional connection that is counterintuitive with the fast pace and low effort that convenience stores transmit (Sobczyk, Lipowski and Bondos, 2016).

11. Disney Store

Retailtainment is clearly represented in the new Disney store opened on Oxford Street in London. This place is much more than just selling merchandise, it creates a full Disney experience with a wide range of interactive activities. For instance, children can participate in theaters with some free events throughout the day, join karaoke contests and talk with Disney Channel stars via satellite. There is also a Disney Princess Magic Mirror, where children can watch short movies from the main Disney princesses. A Disney representative, Shawn Turner, says that this new interaction with the brand brings the experience of visiting the park accessible to everyone inside the mall (White Hutchinson Leisure & Learning Group, 2009).

2.3.6.2 Storytelling

Storytelling takes advantage on a hedonic level that the convenience store does not convey as it shifts away from its key benefits (Lassk, 2000).

12. Build-A-Bear

An example of this experience is Build-A-Bear, a worldwide company that promotes the experience for kids and adults, to create their very own personalized stuffed animal. This interactive journey allows the customer to create the story around the teddy, by choosing from more than 30 animals, hundreds of outfits and accessories, the name, the sound and the stuffing. At the end, the clients leave the store with the sense of creating a "real" animal (Build-A-Bear, 2016).

2.3.6.3 Co-Creation

The usual convenience store shows a small variety of assortment, consequently, there is only a limited range of products that can be personalized and for that reason, co-creation does not feature much value for the client or the company (Turner and Shockley, 2014).

13. O bag

The O bag is a new co-creation concept that is selling handbags and shoulder bags that can be customized. Inside the store, the customer can combine varied handles and accessories according to different styles, outfits and occasions. The sophisticated look and style of the retail space, combined with the welcoming staff improves the experience of personalizing the bag (O bag.online, 2016).

2.3.6.4 Reverse Channels

Most of the products acquired inside the convenience store have only one moment of consumption. So, there is no advantage on moving those products up the value chain to be returned to other people (Zairis and Evangelos, 2014).

14. Trocathlon

Trocathlon is an event promoted twice a year by Decathlon which allows to buy and to sell used sports equipment (e.g. bicycles, water sports or winter sports). Decathlon's customers bring products that they no longer need, in order to be sold to other end-consumers. The customer decides aided by a proper technician the fair selling price of the used product. Once the equipment is sold, the customer receives a Trocathlon Card with the previously established value to be spent on a Decathlon store (Decathlon, 2016).

2.3.6.5 Store Mood Zones

There is no practical representation of store mood zones available. Furthermore, the convenience stores' reduced area features very few categories and departments, thus, it does not allow to generate different environments inside the store using the traditional atmospherics such as color, light, music and scent (Bianchi, 2009).

These elements would be interesting to evaluate if the hedonic value of store mood zones would match the essence of convenience stores. Although these traditional atmospherics are not considered relevant for the study of future trends, there are some interesting applications. About the color stimuli, the use of warm colors, such as red and yellow, can stimulate impulse behavior (Bellizzi and Hite, 1992). Some experiments could be done to test the impact of lighting in the product consumption, for instance, coffee (Gal, Wheeler and Shiv, 2007). Slow-rhythm music (background music) can also increase time spent inside a store (Milliman, 1986). In addition, developing some audio branding could favor differentiating the convenience store from another petrol chain (Spence *et al*., 2014). An alternative could be a lavender aroma which promotes a more relaxing atmosphere and increases time spent inside the store (Guéguen and Petr, 2006).

The following table includes the new trends in retailing that were not considered to be further studied in the next chapters.

Table 2: Store atmosphere – New Trends in Marketing not applied on the empirical study

Non-selected trends	Other sectors examples
Retailtainment (2.3.6.1)	(11) Disney Store
Storytelling (2.3.6.2)	(12) Build-A-Bear
Co-Creation (2.3.6.3)	(13) O bag
Reverse Channels (2.3.6.4)	(14) Trocathlon
Store Mood Zones (2.3.6.5)	--

Source: Author's elaboration

2.3.7 Research Questions

To sum up the findings from the literature review, the following research questions will be examined and will be tested in the empirical part (table 3).

Table 3: Store Atmosphere – Research questions to test in the empirical study

Store Atmosphere – Research questions to test in the empirical study			
Selected trends to study	**Examples**	**Research questions**	**Main Authors**
Hybrid Stores (2.3.5.1)	(1) Sainsbury’s Convenience Store with Pharmacy	RQ1: Displaying a parapharmacy showcase will increase the sales of the store	(J Sainsbury plc, 2014)
	(2) Taiwanese Hybrid Convenience Restaurant	RQ2: Implementing a fast food restaurant will increase the interest of eating more frequently at a gas station	(Ming-Sung Cheng et al., 2009)
		RQ3: Developing a dining area will increase the number of meals consumed inside the store	(Ming-Sung Cheng et al., 2009; Store of the Future, 2014)
Interactive Screens (2.3.5.2)	(3) Sheetz’s Interactive Menu Screen	RQ4: Having an interactive screen to order the products will increase the level of satisfaction	(Peterson, 2014; Turner and Shockley, 2014)
	(4) Speedway Loyalty Program Kiosk	RQ5: The existence of a loyalty rewards interactive screen will increase the interest of the consumers and the products redeemed	(Loyaltyworks, 2015; Polonski, 2015)
New Payment Methods (2.3.5.3)	(5) Mobile Payment at the Chevron Pump	RQ6: Presenting an interactive screen inside the store to pay with NFC mobile phones will increase the efficiency of the process	(Nielsen, 2014; Boden, 2015).
	(6) Swedish Smart Convenience Store	RQ7: Creating a smart shop available 24H, without cashiers on duty with payments on the smartphone will attract more customers	(Hughes Network System, 2012; Mashable, 2016).
Customer-Employee Interaction (2.3.5.4)	(7) Training and rewarding employees at Ricker’s Oil	RQ8: An employee’s positive attitude will increase the satisfaction of the experience and affect the loyalty of the customer	(Conte, 2016; Retail Merchandiser, 2016)
Revolving Decor (2.3.5.5)	(8) Revolving Digital Signage	RQ9: In-store digital signage will get customer’s attention and increase the impulse purchase of the advertised products	(Hughes Network System, 2012; Store of the Future, 2014)
New Products, Services and Retail Formats (2.3.5.6)	(9) Healthy Food, Sushi and Multi-Copy Machine	RQ10: Offering packaged Sushi will attract more customers	(Lofstock and Odesser-Torpey, 2016)
		RQ11: Selling healthy food will increase the shopping intentions	(Lofstock and Odesser-Torpey, 2016; Polonski, 2015; Store of the Future, 2014)
		RQ12: The existence of a printer/copy machine will increase the interest of going to a convenience store	(Japan Monthly Web Magazine, 2013)
	(10) Fresh and Friendly Convenience Store	RQ13: A fresh and natural convenience store concept will attract more customers	(Business Wire, 2015; Haar, 2016; Store of the Future, 2014)

Source: Author’s elaboration

3. Methodology

During 2016 the Marketing Future Cast Lab was investigating New Trends in Marketing applied to store atmosphere to deliver insights to the Lab's partner companies. To develop this study, the researcher was allocated to the company GALP, previously described. The company agreed with the new trends in marketing being studied and with the selected methodologies. The empirical part was co-developed with Dharmite Tushar, a student from MSc in Marketing from ISCTE-IUL.

3.1 Methods for Data Analysis

Richey and Klein (2007) stated that there are three main categories of research that can be considered: descriptive, exploratory and explanatory. As the research theme (new trends in marketing) was very futuristic and hard to conceptualize for the general population, it was selected an exploratory and qualitative methodology with a focus group and virtual reality in-store testing. These methods were used for collecting qualitative data, in order to collect general conclusions about the research questions formulated.

In this scenario, a quantitative approach was not considered because if the respondents were asked in a questionnaire about their perceptions of the new trends in retailing, they would not easily understand the trends and the conclusions would not be adequate.

3.1.1 Focus Group

The main advantage of the focus group method is the capacity to collect in-depth qualitative data about the group's perceptions, experiences, ideas and attitudes on the theme of the discussion. (Marrelli, 2008). The focus group is led by a moderator who selects a group of ideas/questions to be discussed and evaluated by the group. Moreover, the same author refers that the focus group can lead to creative ideas, new perspectives, insightful research questions and a large amount of information that is collected relatively quick and inexpensive. These outputs are harder to obtain from other empirical techniques. Focus group insights are used to form foundation to further investigations such as surveys or interviews.

The focus group session occurred in ISCTE-IUL with 9 Portuguese customers (Appendix 1). The goal of this focus group was to get the participants' opinions about the retail solutions selected from the literature review, through visual (images and videos) stimuli. Despite the small number of participants, this method allows a deep insight as a result of the interaction induced among the respondents (Marrelli, 2008).

The nine participants that were selected, had to fulfill only two requirements to participate: owning a car and had visited a Galp convenience store in the last year. The choice of this sample took into consideration all the relevant convenience stores' target consumers, from Millennials to Balancer Moms. To prevent acquaintances from influencing comments, group members were chosen with no prior association with each other (Barnett, 2002).

The participants were informed that the focus group was part of the research contributing to a Masters' Thesis. They were also told that their outputs will be considered by Galp to make decisions on their convenience stores. In the beginning, the moderator asked for permission to audio record the session to facilitate the collection of the data and the confidentiality of the responses was assured. Then, the moderator asked the participants to briefly introduce themselves, moved to some open-ended questions regarding the preferences on convenience stores and consumption habits, followed by a discussion about trends that will influence the convenience store of the future.

The trends tested in this focus group were hybrid stores, interactive screens, new payment methods, customer-employee interaction and new products, services and retail formats.

After the trends were discussed, the participants were asked to answer some questions about their demographic data, number of convenience store visits, as well as a grid to evaluate from a scale of 0 to 10 the 12 solutions according to the established criteria - usefulness, attractiveness, innovation and satisfaction (Appendix 3). At the end, gifts and special thanks for their participation were handed to the participants.

3.1.2 Virtual Reality Testing

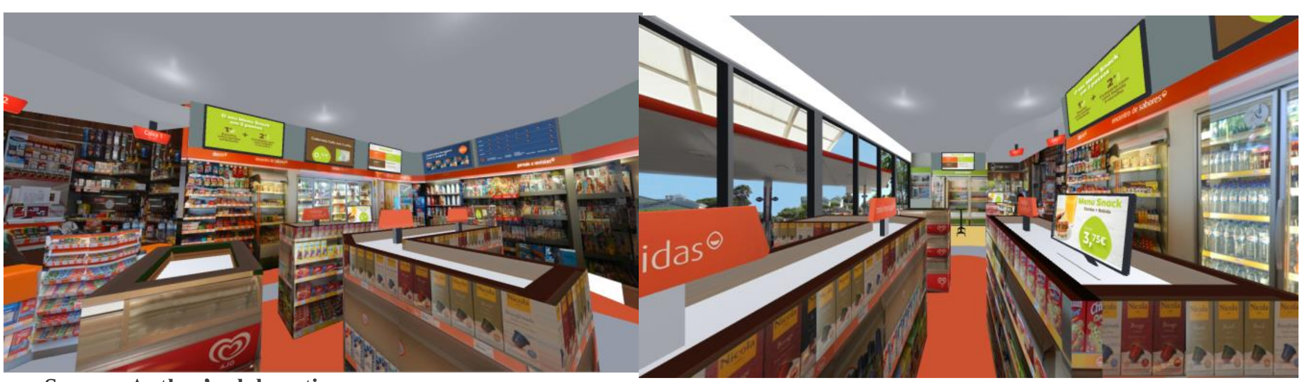
The selected methodology for revolving decor (digital signage) was the testing of 3D Virtual Reality scenario by actual clients inside the Galp store. Virtual Reality was selected to test this new communication scenario as it can be easily reconfigured to test an environment to get consumers' feedback. This way retail companies can successfully survey consumers and reduce unnecessary costs (Bigné, Llinares and Torrecilla, 2016).

The main advantage of this methodology is the possibility to measure consumer behavior in a fictional store, identifying the elements that affect the shopper's attention (Ruppert, 2011).

The main goal of this study is to understand the impact of digital promotion inside the convenience store compared to the promotion already in place. These screens change its communication along the day adapting to the type of menu more adequate to a specific meal. Moreover, it can be catered to specific targets.

After the authorization of the company (GALP), the 3D video was recorded in a Tangerina convenience store in Estoril, Cascais and the proposed new features for the store were developed by a group of architecture researchers from ISCTE-IUL which represent the ISTAR investigation lab. Two virtual environments were developed: digital screens only on the store upper level - crown molding (scenario 1); less digital communication closer to the ceiling, adding two screens on the top of the shelves in the middle of the store at the eye level and also a screen at the counter (scenario 2). In addition, the promotion materials communicate the breakfast, snack and lunch menus, coffee discounts and also car washing programs.

Figure 3: Galp's convenience store virtual environments – Scenario 1 on the left; Scenario 2 on the right



Source: Author's elaboration

This experiment happened on a Wednesday morning (27th July 2016) from 8:30 a.m. to 2:30 p.m.. During this day, the author was aided by the architect that developed the 3D model. At the end of the day, 15 randomly chosen participants (Appendix 5), tested the 3D video and were interviewed during the experience. Participants 1-5 and 10-15 tested scenario 2 and participants 5-10 tested scenario 1.

The experiment started with one of the researchers inviting the store's customers to participate. Then the other researcher presented the staff members, asked for permission to record the conversation and started the interview.

The interview included a total of 11 questions - 4 questions before the experience, 5 questions while on Virtual Reality mode (with some repeated questions) and 2 questions afterward (Appendix 6). Prior to the virtual experience, the interviewer evaluated the customers' consumption habits and the efficiency of the existing communication. After the initial questions, the participants were asked to put on the Oculus Rift headset. The experience allowed the participants to look around inside the virtual convenience store and examine the products, the shelves and the screens around them. Along the experience, the researchers keep asking questions to evaluate the perception of the digital communication stimulus inside the 3D scenario (Appendix 7). At the same time, the architect was responsible for moving the person through the store with a joystick. After the virtual reality experience, the participants were enquired about their perception on the menus advertised.

4. Analysis

According to the new trends in marketing applied to Convenience Stores, presented in chapter 2.3.5, 13 research questions were defined at the end of the literature review (table 3). These research questions reflect innovations from recent convenience stores that are worth being evaluated in Portuguese convenience stores.

The following sections will demonstrate the qualitative feedback on the proposed trends and specific solutions. The section 4.1 will contain the analysis from the focus group, while the topic 4.2 will cover the findings from the in-store virtual reality study.

4.1 Focus Group Analysis

The aim of this section is to analyze the outputs from the focus group (Appendix 2). The insights will provide conclusions concerning hybrid stores, multi-purpose interactive screens, new payment methods, interaction between clients and employees and new products, services and retail formats. The goal here is to conclude which of these new trends the consumers would like to see implemented in a convenience store, thus validating the research questions previously formulated.

Firstly, an analysis of the sample will be addressed taking into consideration the answers given in the questionnaire at the end of the focus group.

The solutions will be divided into topics according to the general themes of the focus group, facilitating the comprehension of the conclusions and interrelation between the research questions and the qualitative findings.

Before the validation of the innovations, a few questions about the convenience store consumption habits and preferences regarding gas station, car washing stations, c-store products and attributes were asked. These first questions were an initial approach to make the participants comfortable with the topic and as a consequence, promoting more insightful dialogues.

4.1.1 Sample

Nine participants were chosen to be in the focus group session, but only eight stayed until the end of the session (Appendix 1). Their ages were between 21 and 56 years old and the composition of the group accounted four men and five women. The careers of the participants included three students, three managers, two teachers and one entrepreneur. For the question *"How many times have you been to a Galp gas station in the last two years?",* the participants answered two answers below five times, two times between five and 15 times, four times between 15-25 and one respondent that she went 250 times to a Galp station.

4.1.2 Convenience Store Consumption Habits

4.1.2.1 Gas Station Preference and Products Consumed

The facilitator started the discussion by asking each individual about the gas station and convenience store preferences: *"Which gas stations do you visit more frequently? In which circumstances, do you go to a convenience store? What do you consume inside?".*

The majority of the participants prefered the low-cost gas station and chose the one closer to their residence. Another reason to select the low-cost gas station is the payment method: *"In Prio, I can pay at the pump which makes everything better and simpler*" (Secondary Education Teacher, 51 years old). When asked about Galp: "*Galp petrol station is perceived as more expensive."* (Human Resources Management Student, 23 years old).

On the contrary, the 31 years old Driving School Manager goes to Galp gas station very often to fill up the cars from the driving school. The respondent main reason was the *"higher quality gasoline. If I had a luxury car I would never go to a low-cost gas station".*

The use of discount cards (ACP, SLB, BP, Continente) also influences the choice of the gas station. The 23 years old Human Resources Management Student believes *"Galp should invest more in the Continente Loyalty Car. About the previous Galp cards, no one has ever told me how to use the points on the card. There is no brochure or information in-store about it".*

The respondents usually do not buy anything inside, due to higher prices. The 28 years old Innovation Manager told the facilitator *"I prefer to spend extra cash on gasoline. I would rather drive extra kilometers and go to a supermarket to buy the same products for a lower price"* and the 21 years old Management Student added that *"Instead of buying any products inside the store, I would rather take food from home".*

Other participants have some spot purchases such as bubble gums, water (Human Resources Management Student, 23 years old) and tobacco (Human Resources Management

Student 23 years old; COO, 56 years old). At late hours, *"I usually go to the gas station to get some ice and drinks"* (Entrepreneur, 30 years old) and when the mother brings the kids to the store they make her do impulse purchases: *"… they want sweets and gums"* (Primary Education Teacher, 51 years old).

4.1.2.2 Most Valued Attributes in a Convenience Store

From the following attributes: accessibility, convenience, fast customer service, attitude of employees, store environment, products' price and brand credibility – the moderator enquired the group about what they value higher in a convenience store. The participants said they give higher importance to a fast customer service, followed by the attitude of employees, accessibility/location and at last store environment (cleanliness of the store). This preference was also transmitted on Nielsen's (2014) report, which refers that retailers must always guarantee clean, easy-to-navigate stores and helpful and friendly employees.

4.1.2.3 Car Washing Preferences

The focus group facilitator followed the discussion to ask the preferred location to wash the participant's vehicles. As a general input, the participants preferred the self-service washing service since they find it the cheapest alternative. The place to wash the car is almost different for every participant (Cepsa, Galp, Elefante Azul, Prio, at home). The 28 years old Innovation Manager justifies going to a specific Cepsa gas station in Odivelas, *"This is the place where I get the best value for money. The water and the shampoo last longer".*

4.1.3 Hybrid Stores

The previous section made a contextualization with the convenience store theme, then the moderator explained in detail the hybrid store concept so the participants would feel contextualized and could express their feedback on the 3 solutions of this new trend in marketing.

4.1.3.1 Parapharmacy Showcase

The moderator suggested a new complementary business: *"Imagine you have some parapharmacy products inside the convenience store. What is your opinion on that?".* The stimulus shows an Asian Convenience Store with some medicines behind the counter and another example from Pingo Doce & Go parapharmacy. This trend was shown in the literature review by the example of Sainsbury's hybrid convenience store (case study (1) – 2.3.5.1; see table 3 p.31). The participants revealed that it seems convenient to find those products inside a convenience store. The 30 years old Entrepreneur transmitted *“If I really need that urgent purchase, I would even pay more for that”* and the 28 years old Innovation Manager reminded that even though it seemed nice, it would add some extra training for the employees: *“There must be always one employee with technical knowledge about the products”*.

4.1.3.2 Fast Food Court

In the following slide, there was a picture of a Subway and Naughty Chile restaurant inside a usual convenience store. Having a fast food restaurant inside a convenience store is very common in the USA but also in Taiwan (example 2 - 2.3.5.1). The discussion around this solution focused on two topics: the opinion about this hybrid business and the brands that should be associated with this concept. The opinions were divided about this innovation. The 28 years old Innovation Manager agreed with the concept, saying: *“Any food brand inside the convenience store, would be great”*, on the other side the 23 years old Human Resources Management Student referred that *“this concept is not possible to have in every store, because of its dimensions”* and the 56 years old COO also adds *“I believe this concept will not be possible at all because of the regulations”*. The favorite fast food restaurants are McDonald's, Vitaminas, Companhia das Sandes and Subway. The 28 years old Innovation Manager would like to see McDonald's connected to this concept because *“... it is the same everywhere. I do not pay anything more and the quality is always the same”*.

4.1.3.3 Dining Area with Tables and Microwaves

Connected with the previous innovation, the facilitator enquired the audience about the creation of a dining area with tables and microwaves, to eat their own meals or have some food from the store. Here two images of the convenience stores mentioned in example 2 from the section 2.3.5.1, were shown. In this scenario, the outputs were diverse. The 23 years old Human Resources Management Student mentioned that she was willing to heat up her own food there and in the following visit she maybe would like to try some pre-cooked pasta. In addition, the 56 years old COO agrees that the microwaves can be useful to warm up babies’ food. Opposing this possibility, the 28 years old Innovation Manager reveals that *“microwaves is what I less appreciate in a dining area”* and the 51 years old Secondary Education Teacher believes she would not use it, as it can have some hygiene issues.

4.1.4 Interactive Screens

In this topic the moderator started by presenting the interactive screens concept. Interactive screens can have three main purposes: to inform, to educate and to entertain. There are two types of interactive screens proposed to be implemented in the convenience store: a display to order the products from the store and a monitor that allows trading the loyalty shopping points for products.

4.1.4.1 Interactive Menu Screen

The first pair of images showed an interactive menu screen from Wawa and Sheetz (example 3 from 2.3.5.2 - see table 3 on p.31). Although interactive screens are considered a different trend from hybrid stores, this solution appears as a complement to the fast food court (4.1.3.2) and diner zone scenarios (4.1.3.3). The facilitator questioned the preferences between ordering from a normal employee or a screen inside the store that also allows personalizing the products. The main perception of this innovation was its simple, fast and efficient functionalities. Some would prefer to ask the employee (Management Student, 23 years old; Secondary Education Teacher, 51 years old) and on the contrary, the 28 years old Innovation Manager would always choose the machine as he does not want to wait in the queue and avoids the employee messing up his order. Moreover, he says *"... with the screen, I do not have to justify my choices and I do not want to have an upselling offer. At the same time, I avoid the bad mood of some employees"*.

4.1.4.2 Loyalty Rewards Interactive Screen

This display has the purpose of facilitating the process of swapping the accumulated consumption points for products or services. The projected images in the focus group replicate the Speedway Redeem Kiosk (example 4 – 2.3.5.2). This display has a utilitarian and informational aim. The feedback was positive as it avoids confusions and misjudgment but at the same time, the participants were concerned about the real utility of this tool.

4.1.5 New Payment Methods

Moving to a new section, two new payment methods using the mobile phone were proposed: a digital screen to make payments with NFC connection and a mobile commanded smart convenience store.

4.1.5.1 NFC Payment Store Display

In this first scenario, new payment methods were connected with interactive displays: *"In order to make the payment, are you willing to pay using NFC (Near Field Communication)?"*. This visual stimulus was adapted from the Chevron payment at the pump (example 5) in the topic 2.3.5.3 and implemented inside the store to make the client enter the convenience store as it could lead to some impulse purchase. In this situation, the insight is unanimous – Portuguese consumers do not feel comfortable and secure, paying with their mobile phone. The 30 years old Entrepreneur answered that if this solution considered using NFC in a debit/credit card, he would accept.

4.1.5.2 24 Hours a Day Smart Shop without Employees

This new subject was introduced by an adapted video of Näraffär (example 6 – 2.3.5.3), a Swedish "smart" convenience store that is opened 24 hours a day, without cashiers on duty. Following this video, the topic regarding smart shops was introduced and the payment with a mobile phone app was reinforced. When asked about the willingness to visit this kind of store, the respondent's feedback was not generally positive. Although this solution is perceived as very innovative, quick and easy, it arises the problems of safety *"Pay with an App makes me reluctant"*- (COO, 56 years old). Scanning the products with a mobile phone was considered a positive feature by the 28 years old Innovation Manager. As an alternative, it was mentioned by the 30 years old Entrepreneur that it would make a better fit if the payment was available with cash or credit card at the end. The 56 years old COO also added that this concept would be nice to implement in an airport store. Besides feeling uncomfortable with in-app payment, not having someone at the station is another issue that is relevant to the customers as it will be described in the next section.

4.1.6 Customer-Employee Interaction

Differently from the previous trends, the moderator did not showcase a new solution to be evaluated. Here the purpose was to understand how the interaction between customer-employee affects the satisfaction of the experience and the loyalty of the customer.

4.1.6.1 Relationship with Employees - Positive and Negative Experiences

The moderator finalized with two questions: *"Do you believe the relationship with the employees is fundamental? Do you have any particular good or bad story?"*. The stimuli were photos of employees that demonstrate a positive attitude towards the customers.

In regards to the first question, the main insight is that the presence and attitude of an employee are of major importance. The Portuguese consumers prefer to have an employee at the gas station that can help if some issue arises, even if there is little or no interaction at the moment of the visit. The human element is fundamental to keep the customer safe and comfortable. As referred in the literature review in Human Variables chapter (2.1.3.3), Argo, Dahl and Machanda (2005) concluded that having one person compared to being alone in the same shopping space increases positive emotions because there is a human need for association.

Only the 28 years old Innovation Manager disagreed saying that his experience is so practical and utilitarian that there is no necessity for employees.

Reflecting on a positive and negative story, it was much easier for the respondents to recall a bad situation than a positive one. For instance, the 56 years old COO says that a good experience happens when the employees already know the customer and greet the person by the name. An example of a bad experience happens when the customer is in a hurry and has to wait in a long queue for the only employee to serve a coffee or some pastry to other clients (Primary Education Teacher, 51 years old).

4.1.7 New Products, Services and Retail formats

Finally, the moderator moved into the last topic of innovation: new products, services and retail formats.

4.1.7.1 Ideas for New Products/Services

The moderator checked the group's opinion about new products or services that they think are missing in convenience stores. The 31 years old Driving School Manager highlighted that she would like healthier food (e.g. fruit and wholemeal bread). The 56 years old COO added that he would like to see pasteurized milk for the kids. In addition, the 30 years old Entrepreneur answered that wi-fi service, mobile phone chargers and a map to understand your current location are valuable solutions.

4.1.7.2 Sushi in Small Packs

The first solution presented to the audience was Sushi wrapped in small packs. This product appears in literature review as being a success in Sheetz portfolio (2.3.5.6 – 9; see table 3 p.31). Looking at the pictures from Sheetz's sushi package, the overall opinion was quite negative. For instance, the 30 years old Entrepreneur mentioned *"No way! Only if someone is doing it at the moment. Sushi is supposed to be fresh"*. The exception was the 23 years old Human Resources Management Student that considered buying it depending on the price and production date.

4.1.7.3 Healthy Products

The next question focused on a healthier assortment available inside the store. As stimuli, it was shown some products of 7-Eleven partnership with Tony Horton - salads, detox juices, grilled chicken sandwiches and pre-cut fruits described in the section 2.3.5.6 – case study 9. The group considered it a good idea and they preferred this solution to fast food or sushi. On the other side, they feared this alternative would be above their willingness to pay. The 31 years Driving School Manager who previously suggested some healthy products claimed: *"Health is of major importance to me. I would rather pay €2-€3 more for healthier food than the usual €5-€6 fast food menu."*.

4.1.7.4 Printer/Copy Machine

Finishing this category with a new service, the group gave insights about the usefulness of having a multi-copy machine inside the store. This solution was introduced by 7-Eleven in Japan that has this service inside their stores (2.3.5.6 – case study 9). Overall there were positive thoughts about it. This is considered a great alternative to stationary stores and it could come in handy in emergency situations. In situations with higher urgency, the participants would even pay a bit more. *"For students, this is amazing, especially with group work's deadlines. If it is available 24/7, even better. Just use a USB drive and done"* said the 56 years old COO about the multi-copy machine.

4.1.7.5 Fresh and Natural Convenience Store Concept

In a similar context, a new convenience store concept with fresh and natural products was introduced. The facilitator showed pictures of Corner Store Market presented in 2.3.5.6 – 10 and asked about the respondents' feelings about that store. Although the respondents barely discussed much this solution, they found it a very relevant concept. The general idea is that this concept could be a good alternative for a local grocery store and the respondents even considered it useful to have flowers available, as they were shown in one of the images.

4.1.8 Feedback Questionnaire Analysis

According to the questionnaire distributed at the end, although the results cannot be considered for a statistic interpretation, they can provide extra feedback about the innovations discussed (Appendix 4).

In these questionnaires, the respondents had to score the previous solutions in regards to its level of usefulness, attractiveness, innovation and satisfaction, on a scale from 0 to 10.

There are 5 solutions that were evaluated above 8 in usefulness, attractiveness and satisfaction: parapharmacy display (4.1.3.1), customer-employee interaction (4.1.6.1), healthier food (4.1.7.3), printer/copy machine (4.1.7.4) and fresh and natural convenience store (4.1.7.5). These solutions did not score as high in the innovative attribute.

The interactive menu screen (4.1.4.1) had some very positive reviews and some average opinions. Hence it has some potential but it is not completely conclusive.

Some ideas did not have very good evaluations neither were completely excluded: fast food court (4.1.3.2), dining area - tables and microwaves (4.1.3.3), loyalty rewards interactive screen (4.1.4.2), NFC payment interactive screen (4.1.5.1). These have some positive thoughts, but at the same time, the respondents were concerned with regulatory, hygiene, safety and usefulness issues.

Packaged sushi (4.1.7.2) and the smart shop (4.1.5.2) had very low classifications and were not mentioned any positive benefits. In the situation of the smart shop, it is considered too innovative for the present times and the security issues had a big influence in this output.

4.2 Virtual Reality Analysis

During the virtual reality experience, the purpose was to understand if the new digital communication screen got the participants' attention. Moreover, it was intended to comprehend if the new communication of the menus will increase the likelihood of consuming the products available at the store. The experience was made with two different scenarios: scenario 1 - digital screens only on the store upper level (crown molding) and scenario 2 – similar to the scenario 1 with an additional monitor closer to the employee at the counter and also two screens in the middle of the store.

The analysis will be divided into the following topics: efficiency of the existing communication, the impact of the digital revolving decors and evaluation of the menus.

Before validating the impact of revolving decors, it was asked some demographics and a question about consumer consumption habits. This was asked to better understand the type of client the researchers were facing.

4.2.1 Sample

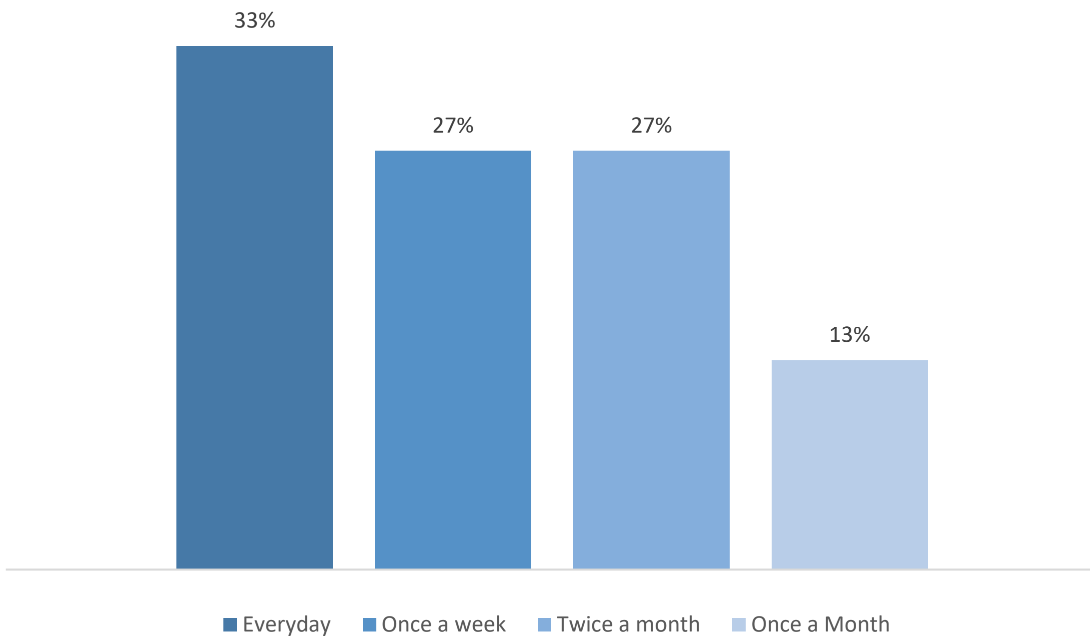
Fifteen random clients of Galp's convenience store in Estoril were invited to participate in the virtual reality experience (Appendix 5). The interviews started at 9 a.m. and until 11 a.m. 5 people were interviewed in scenario 2 (breakfast time). From 11 a.m. until 12h30 a.m. 5 more people were interviewed using the scenario 1. From 12h30 until 14h30 which corresponds to lunch and after-lunch coffee time, the last 5 experiences were made using the scenario 2.

In the beginning of the experience, three questions were asked about people's name, age and activity. Regarding the sex of the participants, 11 were males, while 4 were females. The age of the clients was divided into 4 categories: < 35 years old (4 participants); between 35 and 50 years old (5 participants); between 50 and 65 years old (4 participants) and > 65 years old (2 participants). Their activities were quite diverse, 4 participants worked in Marketing or sales and 3 were retired. The other 8 participants have activities such as pilot, student, mechanic or lawyer.

4.2.2 Customers' Consumption Habits

As this question was previously evaluated in the focus group, the purpose in this scenario was just to have a general idea of the frequency of visits to the convenience store. Furthermore, the frequency of visits can be related to the outputs from the following objectives that were tested. Considering this group of respondents, 33% participants visit the store on the daily basis, 27% enter the store weekly, while 40% come to the store twice per month or even less frequently.

Figure 4: Virtual Reality experiment - Frequency of visits to a GALP Store (%)



Source: Author's elaboration

4.2.3 Efficiency of the Existing Communication

Regarding the efficiency of the existing communication, three main tools were evaluated: the bi-weekly promotional campaigns, the digital led windows in the exterior of the store and the in-store communication of the menus. The researcher started by asking *"Do you usually pay attention to the bi-weekly promotions that Galp advertises?"*. Only 27% acknowledge this type of campaigns and from these, three of them visit the store on the daily the basis.

On regard of the communication outside the store, 80% of the interviewees have seen the led window and have very good recall of the campaigns that were transmitted. For instance, most of them talked about advertisements from Well's, washing car programs, menus, discounts and campaigns supporting football national team.

The following question focused on the contact with the menus *"Do you purchase any of the existing menus? (If yes) Which one? Which communication channel informed you about these menus?"*. In this question, 80% of the respondents knew about the menus especially for the communication inside the store. However, 47% consumes the menus, preferentially the breakfast one (40%).

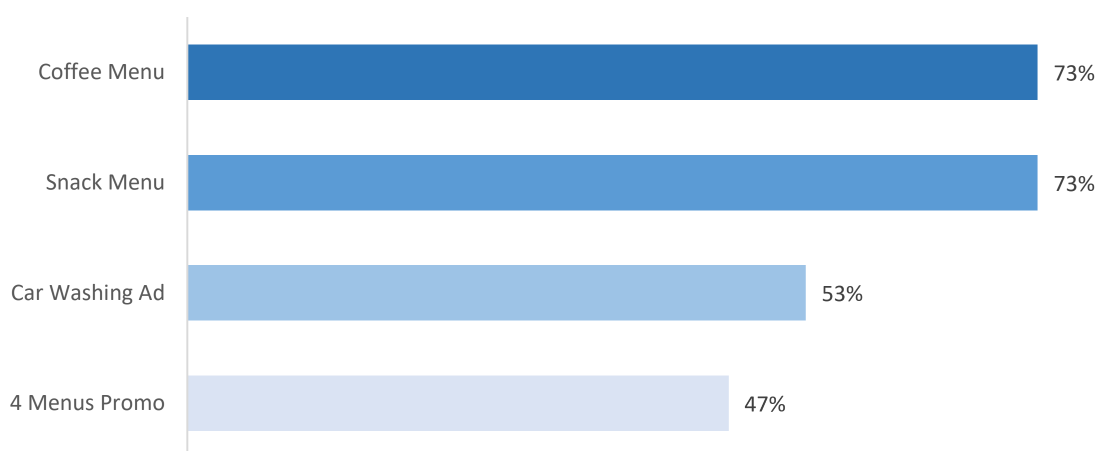
4.2.4 Impact of the Digital Revolving Decors

The participants put the Oculus Rift headset on and start to look around in the 3D virtual store. The participants walked around the scenario very slowly. The researcher asked about the differences they found in this new scenario, what catches their attention inside the store and if the person is willing to buy.

There were screens in 4 different locations: at the top of the shelves in the middle of the store; in the crown molding, which is the space at the upper level of the wall close to the ceiling; on the right side of the employee at the store counter and the last one above the refrigerator (opposite side of the entrance).

The screen at the store counter with the snack menu and the coffee menu at the crown molding had the biggest impact (73%). The screens on the crown molding on the right side of the entrance (car washing ad) and above the refrigerator (4 menus promo) got the least attention ratio, 53% and 47% respectively. Comparing the results between the two VR scenarios, no relevant conclusions were taken.

Figure 5: Virtual Reality experiment - Type of digital signage noticed (%)



Source: Author's elaboration

Besides the analysis on the type of advertisement, we can conclude that the simpler and more call to action advertising (snack and coffee menu) got higher attention from the participants. The images with more information (Car washing and 4 menus) lead to less interest by the customers, which didn't make the effort to understand the offer. Therefore, this could have negatively impacted these advertisements.

From our sample, 53% of the respondents were visually attracted and spontaneously mentioned the digital screens. The individuals that visit the store more frequently are the ones that better understood the new features in the virtual retail space. When the individuals didn't recognize any differences, the interviewer mentioned the existence of digital screens to understand which kind of communication had more impact.

At the end of the experience, it was asked to the clients *"if I gave you €5 now and according to what you saw in the video, what are you willing to buy?".* Analyzing the influence of the promotions, 40% of the clients selected products and services which were represented in the digital signage. The clients' main choices were 4 bottles of water, 3 coffees, 3 ice creams and sweets and 2 chewing gums.

4.2.5 Evaluation of the Menus

In this subject, it was investigated the perception on the existing menus and the ones that were shown in the video. The general perception on the menus was very positive and the clients considered to consume them in the near future. The breakfast and snack menu had the most positive reviews. Some clients do not consume them because they do not have that habit or it is not convenient. When enquired about the prices, more than 93% of the respondents agreed they were adequate *"The breakfast menu has a great price-quality ratio!".*

5. Conclusions, Implications, Limitations and Further Research

5.1 Conclusions

Store atmosphere has been widely studied in the literature review and the implementation of these atmospherics have been producing favorable results in the store's environment. These suggestions are major concentrated on the traditional stimulus rather than on the new trends in marketing. Therefore, these new trends have been tested to understand if they have a desirable outcome on the convenience store environment. These new trends can help to differentiate one store from another while increasing consumer's satisfaction and desirable behavior: time spent in-store, the amount purchased, word-of-mouth and loyalty to the retailer.

Regarding the convenience store sector, the available literature is limited on this topic. Most of the examples shown in the literature review and consequently on the empirical part were not retrieved from scientific studies. These were real life applications on international gas station chains or other sectors of activity. On the basis of these examples, hybrid stores, interactive screens, new payment methods, customer-employee interaction, revolving decor and new products, services and retail formats were tested regarding its impact on the store's atmosphere. The conclusions were made based on the qualitative analysis. Some of these trends were supported by the empirical findings on both the focus group (section 4.1) and virtual reality testing (section 4.2). Others were excluded because they did not fit the Portuguese consumption behavior.

In the following section, it will be addressed every research objective through a summary of the findings obtained. Conclusions will subsequently be made regarding the research questions.

5.1.1 Hybrid Stores

From the empirical analysis, the researcher can conclude that having a showcase of parapharmaceutical products is a relevant service for the convenience store clients. Having a fast food restaurant and an adjacent dining area are relatively interesting solutions but raise some concerns at the same time. For these last two innovations, there is no clear conclusion.

The RQ (research question) 1 pretends to confirm if displaying a parapharmacy showcase will increase the sales of the store. The general opinion is that this is a convenient service to find in these type of retail spaces. Health issues can be urgent to correct; thus a convenient location is an important attribute when fulfilling this need. Moreover, as an input from the focus group, the urgency of the need increases the clients' willingness to pay. Hence this research question **(RQ1) is accepted**.

Concerning the hybrid convenience restaurant, the conclusions were diverse. Some agreed with the solution and would like to have sandwiches, pasta, hamburgers and salads. The participants would prefer a partnership with a big fast-food chain (McDonald's, Vitaminas, Subway) because they consider those brands credible and trustworthy. Lofstock and Odesser-Torpey (2016) give the input that co-branding kiosks are becoming a trend in convenience stores. This solution also had some concerns about regulations and could lead to an over-crowded store. Looking at the respondent's opinions in the focus group and scores of the brief questionnaire, the conclusions were not clear. In this scenario, **RQ2 is inconclusive**.

The research question 3 considers developing a dining area (tables and microwaves) to increase the number of meals consumed inside the store. As expected, the insights were diverse. There is some potential to warm up baby food or food cooked at home and sell a juice or a coffee as a complementary product. At the same time, having microwaves in a dining area can have some hygiene issues. The participants do not like consuming store products and heating them up at the microwaves because they do not perceive the products as fresh. In the questionnaire, this solution had medium scores. This innovation would be a great complement to the previous research question, but like the previous example, **RQ3 is also inconclusive**.

5.1.2 Interactive Screens

During the focus group, it was tested the interactive menu screen as well as the screen that allows swapping the points accumulated in the loyalty card for prizes and services. The interactive menu screen is an innovation with some potential, even though it is not consensual between all the respondents. Like this investigation, Turner and Shockley (2014) studied the application of self-serving screens to convenience stores and it was not supported. On behalf of the second interactive screen, although it had some very positive reviews it is not sufficient to take any conclusion. These authors justify this finding by saying that the convenience store industry is atypical from many other industries. It is a business based on minimizing effort and time while capitalizing on accessibility and efficiency.

The interactive menu screen was selected to test if it increases the level of satisfaction. This solution is seen with a very good potential as it brings a lot of utilitarian value to the customer. While some would still prefer ordering directly with the employees, other participants would prefer to order in the screen as it is much faster, simpler and more efficient. These participants are more satisfied with this solution because they avoid employees' upselling techniques, judging their decisions and bad mood. On the other side, this innovation is linked to the fast food court and the dining area that as seen before they were not conclusive. **RQ4 has a lot of potential** but the researcher **states that research question is inconclusive**.

The interactive screen to redeem products from the loyalty card was tested regarding its influence on the clients' interest and the amount of products redeemed. The participants concluded that this screen would be useful if it clarifies the clients' offers and provides helpful information that can benefit the clients' consumption in-store. At the same time, the participants concluded that they would use it only a few times. At the moment, Galp has changed their loyalty card and is currently associated with Continente. To sum up, the number of products redeemed would probably increase. However, the increase in interest and attractiveness is not clear. So, **RQ5 is not conclusive.**

5.1.3 New Payment Methods

Two mobile payments solutions were enquired in the focus group session. The first one uses the smartphone NFC technology to make payments in an interactive screen inside the store and the second is a smart shop, without employees, that uses the smartphone in the whole purchasing process. This last one was considered not suited for the clients while using NFC payment in an interactive screen had no clear conclusion. In both scenarios, changing the proposed payment method for debit/credit card would make the solutions more acceptable.

The research question 6 pretends to validate if an interactive screen inside the store that allows paying with NFC mobile phone will increase the efficiency of the process. In this scenario, there is no possible conclusion if the process would be more efficient because the participants do not feel comfortable and safe to pay with their mobile phone. Although this payment method needs a fingerprint validation, the respondents do not see this process as safe as paying with credit card or cash. Consequently, **RQ6 is inconclusive**.

Moreover, in the research question 7, it was evaluated if the participants would like to go to a convenience store opened 24/7 and without employees. It was also investigated if these features would increase the number of visits to the store. The overall feedback was negative. This solution is too innovative for the respondents' reality. Again, the in-app payment made the clients insecure which make them avoid this method. Not having any employee to help, makes the store less supportive. The smartphone scanning mode was referred as a positive output. The low score in the questionnaire confirms that this research question will not attract more customers and **RQ7 is rejected**.

5.1.4 Customer-Employee Interaction

In this scenario, it was not presented any breakthrough innovation, but it was evaluated the impact of approachable and motivated employees like the staff in Ricker's Oil. So, regarding this new trend, the researcher formulated the following research question (8): An employee's positive attitude will increase the satisfaction of the experience and affect the loyalty of the customer.

The insights from the focus group revealed that the employee's presence at the store, positive attitude (friendliness and empathy) and speed of the customer service are very valuable in the customer's experience. The presence of a staff member keeps the customer safer and more comfortable. Reflecting on the positive stories, when the staff member solves some customer issue (e.g. doubts regarding the type of gasoline, with payment, with the car engine) that can go beyond their normal duty, improves the satisfaction with the brand and the service. When a usual client is greeted by his/her name, this creates a more sympathetic environment and makes the client go to the same gas station every week. On the contrary, slow employee service and long queues affect negatively the satisfaction of the client. Line formation and duration of the wait was studied by Chiao, Lu and Liu (2012) who concluded that this has effects on the overall service experience. When the client is anxious, bored or alone, the waiting time feels longer.

To conclude, these attributes influence the client's satisfaction and can have some impact on the customer's petrol brand choice. In addition to the most positive score of the questionnaire, **the research question 8 is accepted**.

5.1.5 Revolving Decors

The virtual reality observation complemented by the interview pretended to assess whether the revolving digital communication gets customers' attention and increases the impulse purchase of the advertised products (research question 9).

When questioned about the bi-weekly campaigns it was concluded they have low recognition and some improvement can be done in respect of the communication tools used. Regarding the menus, the communication inside the store is adequate and converts the leads into clients.

Slightly above 50% of the participants were spontaneously attracted to the digital screens and identify them as the new features depicted in the virtual environment. Moreover, the daily customers pay more attention to the environment. The screens nearby the cashier and at the crown molding in the middle of the store got the attention of more people. The researcher believes that the attention ratio could have been higher if the virtual environment had videos instead of static screens.

Concerning the type of advertisement: the simpler images got higher attention from the participants - pack of coffees and snack menu. The car washing programs and the 4 menus image did not have much influence (more complex information).

About the impact of the communication in the purchasing habits, 40% of the respondents selected a product that was promoted in the virtual scenario. The impact of the advertisements was biased because the virtual reality test was made after the clients had their purchase inside the store which diminished their food or drinking needs.

To reflect on the validation of **research question 9, this solution has some potential** as there is some attention to the digital signage communication but the researcher **cannot conclude that this research question is accepted**. If the experience was closer to the reality, the answers could lead to a better conclusion on this innovation: the participant controlling the joystick and the screen showing revolving images or a video.

5.1.6 New Products, Services and Retail formats

As an insight from focus group and the evaluative questionnaire at the end, healthy products, the printer/copy machine and fresh and natural convenience store were considered valuable propositions for the consumers. On the contrary, having sushi meals in wrapped up packages had a negative review.

Although sushi is a recent consumption trend in Portugal, distributing it in small packs is not a worthy offer. Most of the respondents usually consume sushi at restaurants, but when facing this alternative their perception was that this meal is not fresh and the quality is lower. Lofstock and Odesser-Torpey (2016) describe freshness and quality as the most valued attributes in food consumption and the perception of this solution did not follow that lead. In this way, offering packaged Sushi will not attract more customers to the convenience store and consequently, **RQ10 is rejected**.

Lofstock and Odesser-Torpey (2016) reflect that a healthy lifestyle is a trend in foodservice and has a big influence on the consumption patterns that according to the respondents fit with the convenience store area. The focus group participants perceived the healthy food assortment as an attractive factor that will increase the interest of visiting the store, thus increasing the shopping intentions. The respondents preferred this solution to a sushi meal and to a fast food menu. The consumers were willing to pay more than the normal fast food menu to have this alternative. The researcher states that the **research question RQ11 is accepted**.

On regard of a multi-copy machine implementation, it was tested if it will increase the interest of going to a convenience store (RQ12). The feedback was quite positive. Like the previous solution, this implementation will be considered a good alternative to a stationary store adding more value as a matter of convenience. In emergency situations, this would increase the number of visits to a convenience store, especially for students and during late hours. So, **RQ12 is accepted.**

The following solution is a convenience store concept with larger dimensions that includes fresh and natural products. This innovation had very positive feedback, however, during the focus group, there was not a very insightful discussion to better understand the reasons. Lofstock and Odesser-Torpey (2016) support this feedback by referring that consumers prefer fresh and natural food compared to the usual wrapped up sandwiches. The general idea is that this concept could be a good alternative for a local grocery store and thus **RQ13: A fresh and natural convenience store concept will attract more customers, is accepted**.

In these assortment innovations, there is always the concern about the possible higher prices compared to the normal supermarket. The consumers that participate in the focus group were price-sensitive and mentioned that a much higher price can diminish their positive intentions of purchasing these products in convenience stores.

Table 4: Store atmosphere – Validation of the research questions tested in the empirical study

Store Atmosphere – Validation of the research questions tested in the empirical study		
Selected trends to study	**Research questions**	**Validation**
Hybrid Stores (2.3.5.1)	RQ1: Displaying a parapharmacy showcase will increase the sales of the store	Accepted
	RQ2: Implementing a fast food restaurant will increase the interest of eating more frequently at a gas station	Inconclusive
	RQ3: Developing a dining area will increase the number of meals consumed inside the store	Inconclusive
Interactive Screens (2.3.5.2)	RQ4: Having an interactive screen to order the products will increase the level of satisfaction	Inconclusive with some potential
	RQ5: The existence of a loyalty rewards interactive screen will increase the interest of the consumers and the products redeemed	Inconclusive
New Payment Methods (2.3.5.3)	RQ6: Presenting an interactive screen inside the store to pay with NFC mobile phone will increase the efficiency of the process	Inconclusive
	RQ7: Creating a smart shop available 24H, without cashiers on duty with payments on the smartphone will attract more customers	Rejected
Customer-Employee Interaction (2.3.5.4)	RQ8: An employee's positive attitude will increase the satisfaction of the experience and affect the loyalty of the customer	Accepted
Revolving Decors (2.3.5.5)	RQ9: In-store digital signage will get customer's attention and increase the impulse purchase of the advertised products	Inconclusive with some potential
New Products, Services and Retail formats (2.3.5.6)	RQ10: Offering packaged Sushi will attract more customers	Rejected
	RQ11: Selling healthy food will increase the shopping intentions	Accepted
	RQ12: The existence of a printer/copy machine will increase the interest of going to a convenience store	Accepted
	RQ13: A fresh and natural convenience store concept will attract more customers	Accepted

Source: Author's elaboration

5.2 Managerial Implications

Considering the conclusions of this investigation there are some trends that convenience store retail managers must apply to their stores: **hybrid parapharmacy (RQ1), customer-employee interaction (RQ8), healthy food (RQ11), printer/copy machine (RQ12) and fresh and natural convenience store (RQ13)**. These solutions reflect a preference for innovation in assortment and services, which satisfies other needs that the clients have. There are two trends that were not completely accepted but have some potential if some adaptations are made to the examples showed in the empirical analysis: **interactive menu screen and revolving digital signage**.

The **parapharmacy hybrid store** follows the utilitarian and convenient value the store transmits, which is a good application of the new trends in marketing presented in the literature review. There is a match between the urgent need for medicines and the convenient location of the stores. According to the outputs of the focus group, prices can be slightly higher compared to the usual pharmacies. To provide this service, the employees must have specific knowledge in this area, hence it should be taken into consideration the increase in costs of training or recruitment.

The customer-employee interaction was considered one of the most important features. The general input is that the relationship does influence customer's satisfaction with the brand. The friendly attitude of the employees must be a priority when recruiting and training the staff members. As supported by Chiao, Lu and Liu (2012), the speed of the customer service is also very important, therefore some solutions must be considered to speed up the queues and to avoid the cafeteria service delaying the attendance of the next customer in line. To help in this scenario, some technological enhancement can be added like beacons and new payment methods.

The convenience store managers should differentiate their assortment with new **healthy products** such as salads, natural and detox juices, grilled chicken sandwiches and pre-cut fruits in packages. Like the 7-Eleven initiate, some partnership could be addressed to co-develop the healthier assortment. The choice of the brand or the famous personality must have a high credibility on the healthy lifestyle. This implementation is supported by Nielsen (2016) that says that 41% of the Portuguese respondents make their food decisions based on their healthy lifestyle and these products should be as fresh as possible.

On behalf of the **fresh and natural c-store** concept, the retailer should do a pilot testing of this concept in one of the urban convenience stores, creating the same feeling of the proximity stores. This concept is similar to a grocery store but with a bigger area to allow a more diverse assortment. Aligned with Haar's vision (2016), these stores should have the following assortment: flowers, fresh fruit, vegetables, yogurts, soup and some wraps and subs menus. This goes along with the Portuguese consumer preferences as 31% of the consumers say that natural ingredients influence their decision-making process (Nielsen, 2016) and that food freshness is considered a powerful advantage over the online alternative (Nielsen, 2014).

These solutions are only viable if the retailer can sell these new products at competitive prices. More than 50% of the Portuguese population choose their products based on accessible prices (Nielsen, 2016). As the consumers are price-sensitive, the prices should be defined slightly above the supermarket ones. To improve in know-how and price competitiveness, co-partner with a big retailer could be a solution. A great example of this association is the adaptation of Walmart to the convenience stores sector – Walmart to Go (Abcede, 2014).

About the implementation of a **multi-copy machine**, this service must have several functions such as printing, scanning and making copies. It must be very intuitive, connectable to a USB drive and available at 24 hours store. The convenience store can establish prices above the normal stationary ones.

Concerning the solutions with some potential, there were considered the interactive menu screen and the revolving decors.

The **interactive menu screen** can provide a lot of utilitarian value to the customer. However, the interactive screen placed on the fast food court and the dining area was not considered particularly interesting. Consequently, this innovation can be applied, if there is an improvement in the assortment. There is also an increase in its usefulness if the screen allows customizing the meal.

The **revolving digital signage** increases the awareness of the communication inside the store. Applying this solution at the counter and on the crown molding had some positive results. These screens should adapt to the target audience and show daily promotions because the Portuguese population really values discounts. Since 2011, the Portuguese shoppers have doubled the number of purchases with discounts (Nielsen, 2016). According to Chiao, Lu and Liu (2012), this implementation can also have the purpose to alleviate customer's feelings of boredom and irritation while waiting and to potentially encourage more positive interactions with employees.

The communication inside the digital signage must be simple and clear. This was confirmed by the analysis of virtual reality experience, where the communication of the breakfast and coffee menus was very effective. On the other side, the lunch menu did not attract many consumers because of the visuals complexity and also because the Portuguese consumers are not used to have their bigger meals inside the convenience store. One possible improvement to influence this consumption pattern would be a co-branding with a big fast food chain.

Regarding **new payment methods**, besides the usual pre-payment at the counter before filling up the tank, the consumers are willing to use other methods as long as it does not oblige them to pay with the smartphone. Studies on the perceptions of the Portuguese customers on new payment methods have concluded that self-serving check out is very accepted as 40% already uses it to reduce the time paying for their grocers. In addition, 58% would like to avoid queues if it was automatically debited the shopping amount on their personal bank account (Nielsen, 2015). Thus, there is some potential to implement this trend.

5.3 Theoretical Implications

On this topic, the main idea is to reflect how the results from this study either confirm or reject the theories presented in the literature review.

The solutions based on the new trends in marketing presented on both experiences (focus group and virtual reality) produced excitement on the participants which create a desire to go to this store, instead of another petrol chain. This supports the idea that in a world with so many overwhelming experiences, there is a need to revamp the elements of the store (Andajani, 2015).

Secondly, on behalf of Turter and Shockley (2014), the convenience stores are focused on minimizing complexity, time and effort while maximizing efficiency and accessibility, which is atypical compared to other industries. This fact goes along with most of the solutions approved (e.g. parapharmacy, photocopy machine) which were focused on this essence.

Even though convenience, low complexity and fast transactions are highly valued in this industry, there are other elements such as freshness and healthiness (Lofstock and Odesser-Torpey, 2016) that influence the food consumption in these stores. For instance, sushi in small packs was not selected due to its lack of freshness and the group found some potential on healthy food and fresh and natural products.

Although mobile payment methods are convenient and fast, they are perceived as risky and not as safe as paying by cash/credit card. Safety is a very important value when Portuguese customers make transactions. So this contradicts the trend shown on the Store of the Future (2014) magazine that depicts mobile payments as the next stage of convenience stores. In Portugal it is worthy for a Store of the Future, not a Store of Today.

Despite customer-employee interaction not being the most innovative topic, it influences the success of all the other trends. According to the theoretical research, the human variable is the main element for the in-store experience, which has a major impact on customer's satisfaction (Cambra-Fierro, Melero-Polo and Vázquez-Carrasco, 2014). The stories shared by the participants in the focus group show that a bad engagement with frontline employees leads to a negative worth-of-mouth. This conclusion agrees with the study from van Doorn, *et al.* (2010).

According to the available literature, there are hybrid restaurants already operating in Taiwanese convenience stores (Ming-Sung Cheng *et al.,* 2009). When the solution was shown in the focus group, the results were inconclusive, being highlighted some benefits and some disadvantages. The output of this research question did not fit the one on the literature review, justified by the lack of maturity of this kind of industry in Portugal.

Finally, the results from these research questions elements have implications on the theoretical literature, bringing more support to some authors and challenging others. Further considerations will be made on future research topic.

5.4 Limitations on Research

Notwithstanding the efforts to avoid biased conclusions as presented before, these methodologies were affected by some limitations. The interpretations of the outputs from the focus group and virtual reality experience must take into consideration the following shortcomings and boundaries.

Firstly, as this master thesis is studying new trends applied to the store of the future, the main limitation was the short available scientific literature about this theme. Hence part of the literature review was researched from non-scientific papers.

The virtual reality experiment had use of a random sampling method, but the focus group had not. This limits the generalizability of the study. On the other side, the choice of the participants had in consideration the main group of convenience store's users, consequently, improving the value of the study.

The span of the research was limited to the Portuguese consumers driving in Lisbon area and impact on Portuguese Convenience Stores in urban areas. This being said, the innovations approved may not be generalizable for every petrol station in every country.

5.5 Suggestions for Further Research

There were some new trends in marketing left out from testing, because they were not the main focus of this investigation. Still, when considering a future research on new trends in retailing applied to convenience stores with a different approach, these are worthy research questions to be considered in, as they were validated in the literature review.

It will also be interesting to analyze the impact of external variables in the satisfaction and the desire to get inside the store. External variables for convenience stores can include innovations at the pump, such as an NFC smartphone payment (2.3.5.3 – example 5, see table 3 at page 31) and inside the store, for instance, an interactive screen to order the products and grab them inside or at a drive-through. Furthermore, there can be an integration of an interactive monitor at the storefront to order food products from the store.

Concerning the trends already explored, some further investigation can be made on hybrid stores, interactive screens and new payment methods. On hybrid stores, some new combinations with banking, shoemaker (keys, repairing shoes and car plates) and postal services can be evaluated. For interactive screens, it can be tested some new interfaces that increase the satisfaction of the customer and leverage the sales of the store. As the new payment methods are perceived as convenient and useful, some alternatives that do not raise security concerns (e.g. smartphone payments) should be investigated.

Convenience store's omnipresence is an interesting innovation to further research, even though it does not fit perfectly with the theme of store atmosphere. As Campo and Breugelmans (2015) observed most grocery consumers are multichannel shoppers who combine the convenience benefits of online shopping with self-service advantages of offline stores. Moreover, Nielsen researchers (2014) confirm that the implementation of multichannel offline-online retailing is one of the most important and successful practices of these convenience-oriented retail innovations.

Concerning this trend, it would be interesting to study the "click and collect" process. This process consists of collecting pre-ordered baskets on spacious drive-through areas without making the clients leave their cars. Carrefour and Auchan are particularly advanced in this concept (Nielsen, 2014).

Rigby (2011) mentions on The Future of Shopping that beacons are worthy technologies that can send location-based notifications to the clients inside the store. Sobczyk, Lipowski and Bondos (2016) conclude that the customers show interest in communicating with small shops which opens new possibilities to analyze the impact of sending coupon codes, price promotions, special events and targeted offers to customers' mobile devices that check-in to stores. According to the authors, in the following years, these communication tools will be massively developed for smaller shops and this will reduce the advantage of larger stores.

Another futuristic possibility to study is the use of 3D Holograms at the pump forecourt which is presented by Michael Lawshe in his vision for the future convenience store (Store of the Future, 2014). It would be interesting to analyze the acceptance of having 3D images of a staff member that greets the clients by name, answers some general questions and takes orders of foodservice items.

To conclude this thrilling investigation, the author challenges whoever is interested in this area to further explore these new trends in marketing to build the convenience store of the future!

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Appendix

Appendix 1: Focus Group Participants List

Name	Age	Job	Sex	Qualifications	Preferred Gas Station	Visits to Galp in the last 2 years?	In Urban areas?	In the Highway?
Participant 1	28	Innovation Manager	M	Bachelor	Prio and Jumbo	10	6	4
Participant 2	51	Primary Education Teacher	F	Bachelor	Indifferent	20	7	13
Participant 3	31	Driving School Manager	F	High School	Galp	250	245	5
Participant 4	23	Management Student	F	Bachelor	Prio	20	20	0
Participant 5	56	COO	M	Master	Galp	5	4	1
Participant 6	51	Secondary Education Teacher	F	Bachelor	Prio	25	15	10
Participant 7*	21	Management Student	M	Bachelor	Prio	3	0	3
Participant 8	23	Human Resources Management Student	F	Master	Repsol and BP	12	9	3
Participant 9	30	Entrepreneur	M	Bachelor	Prio	20	5	15

* Participant 7 left the focus group before the session was over

Appendix 2: Focus Group Script

Theme	Questions	Stimulus
	1. Introduction	
Knowledge of the Participants about a Convenience Store	What do you reckon as a convenience store?	
Consumer Preferences	Indicate from the following factors, the three most important attributes that you would associate with a convenience store: Accessibility; Convenience; Service Speed; Employee's Attitude; Product Price; Store Atmosphere; Credibility of the Brand	Image (slide 3)
	What kind of people do you think visits convenience stores? (Elder; Students; Working people)	
	2. Participants Profile	
Visits to a Convenience store	How frequently do you visit a convenience store?	
	In which moments of the day do you visit it more frequently?	
	Which convenience store brands of you visit more frequently?	
	What makes you visit one petrol brand rather	

	than other?	
	What makes you visit a convenience store?	
	When do you wash your car, how do you clean it?	
	When do you prefer to visit a convenience store rather than a super or hypermarket?	
Product and Service Variety	Which products do you buy in a convenience store?	Image (slide 4)
	Are you satisfied with the existing assortment and variety of products in the current stores? Would you prefer bigger or smaller stores?	Image (slide 5)
3. New Assortment and Services		
New Products in the Store	Which new products/services would you like to see in a convenience store?	
	If it was available packed sushi in a convenience store, would you visit it more frequently? What if there were healthy food (i.e. salads, detox juices, etc)?	Image (slide 7 and 8)
	If there were a convenience store with fresh and natural products, would you go more often?	Image (slide 9)
New services	If there were a printer/copy machine, would it create value for you?	Image (slide 10)
4. Hybrid Store – Food Court		
Fresh Meals	If there was a fast food court inside the convenience store (i.e. Companhia das Sandes or Subway), would consume more often in the store?	Image (slide 12)
	Which fast food brands would you like to see associated with convenience stores?	
	How much more would you be willing to pay for fresh foods compared to packed meals?	
Dining area	If there was a space inside the store with chairs, tables and a microwave, would you eat there?	Image (slide 13)
5. Interactive Screens		
Co-creation	How satisfied would you be if you could co-created your meal?	Scale from 1 to 10 (1 Very Negative; 10 Very Positive)
	And if the co-creation was done through an interactive display? Would it increase your satisfaction level?	Image (slide 14)
New Payment Methods	And if there was an option inside the store that would let you pay through an interactive screen with your smartphone confirming the payment, would it be beneficial? Would you use it?	Image (slide 15)
	Are you aware of Apple Pay, Android Pay and Samsung Pay that use NFC technology to execute payments? Do you use them? Would you feel more secure with these new methods?	
Exchanging client card points	Evaluate from 1 to 10, how interesting would it be a functionality that would allow you to redeem your client card points for prizes from an interactive display.	Image (slide 16) Scale from 1 to 10 (1 Very Negative; 10 Very Positive)
6. Hybrid Store - Parapharmacy		

Parapharmacy	From 1 to 10 how useful would it be to have a parapharmacy in a convenience store?	Image (slide 17) Scale from 1 to 10 (1 Very Negative; 10 Very Positive)
	Would this make you go more often to a convenience store rather than an actual pharmacy or a supermarket?	
7. New Store Concept - New Payment Methods		
Smart Shop	From 1 to 10 how useful would it be to have a convenience store next to your house 24 hours open?	Video (slide 19) image (slide 20) Scale from 1 to 10 (1 Very Negative; 10 Very Positive)
	How do you feel if the shop does not have any employees?	
	Would you feel secure if all the payments were done by smartphone?	
	With this type of stores, would you buy more at late hours?	
8. Front-line Employee-Customer Interaction		
	How do you classify an employee that treats you by "Sir (Your Name)"? Would you feel more welcomed?	Image (slide 21)
	Do you link front-line employee's attitudes to a brand?	
	Describe an extraordinary attitude of an employee in a convenience store	

Appendix 3: Focus Group Final Questionnaire

The following questionnaire has the goal to collect demographic data for a Master's Thesis Dissertation study about store atmosphere, in the convenience store sector. It is guaranteed the total confidentiality of the information provided.

1. Sex

Feminine ☐

Masculine ☐

2. Age: ☐ years old

3. Marital Status

Single ☐ Divorced ☐

Married ☐ Widow(er) ☐

Other (Ex: non-married couples, separated couples):____________________________

4. What are your qualifications?

Secondary Education ☐ Master's Degree ☐

Bachelor Degree ☐ Doctoral Degree ☐

5. What is your current activity? ____

6. What is your monthly income?

a) No income ☐

b) Below 500€ ☐

c) Between 500€ and 1000€ ☐

d) Between 1000€ and 2000€ ☐

e) Between 2000€ and 3000€ ☐

f) Above 3000€ ☐

7. How many times have you been in a Galp gas station in the last 2 years? ____

7.1 How many times these gas stations were in urban areas? ____

7.2 How many times these gas stations were on the highway? ____

8. Evaluate each of the following **solution** (scoring from **0 to 10**) according to: the **level of usefulness** (does it bring any advantage or benefit?), the **level of attractiveness** (does it get you curious and interested?), the **level of innovation** (is it a creative solution?) and the **level of satisfaction** (does it give you a sense of well-being and contentment with the service and store ambiance?).

Proposed solutions	Usefulness	Attractiveness	Innovation	Satisfaction
1. Packaged sushi				
2. Healthy products				

3. Fresh and natural convenience store				
4. Printer/copy machine				
5. Fast food court				
6. Dining area (tables + microwaves)				
7. Interactive menu screen				
8. NFC payment interactive screen				
9. Loyalty card redeem points interactive screen				
10. Parapharmacy				
11. Smart Shop				
12. Customer- employee interaction				

Appendix 4: Focus Group – Evaluation of the solutions

Proposed solutions	Usefulness	Attractiveness	Innovation	Satisfaction
1. Packaged sushi	3.5	3.25	5.75	4.125
2. Healthy products	8.5	8.75	6.875	8.875
3. Fresh and natural convenience store	8.125	8.375	8	8.5
4. Printer/copy machine	8	6.5	8.125	8.375
5. Fast food court	8	8	8	8.75
6. Dining area (tables + microwaves)	6.75	6.375	3.75	5.625
7. Interactive menu screen	7.125	6.375	6.375	6.875
8. NFC payment interactive screen	8	7.125	6.5	7.25
9. Loyalty card redeem points interactive screen	6	4.625	6.375	5.125
10. Parapharmacy	7	5.875	6.875	7.75
11. Smart Shop	4.375	4	8.125	4.625

12. Customer- employee interaction	9.125	9.125	6.25	8.875

Appendix 5: Virtual Reality Participants List

Name	Age	Job	Sex
Participant 1	41	Environmental Engineer	F
Participant 2	61	Marketer	M
Participant 3	53	Salesperson	M
Participant 4	33	Salesperson	F
Participant 5	48	Professor	M
Participant 6	64	Salesperson	M
Participant 7	40	Lawyer	M
Participant 8	45	Pilot	M
Participant 9	49	Construction worker	M
Participant 10	77	Retired	M
Participant 11	20	Student	M
Participant 12	32	Air Hostess	F
Participant 13	63	Retired	M
Participant 14	69	Retired	F
Participant 15	33	Mechanic	M

Appendix 6: Virtual Reality Interview Script

Constructs	Questions
1. Before Virtual Reality Experience	
Consumer consumption habits	How frequently do you visit Tangerina convenience store?
Communication Efficiency	Do you usually pay attention to the bi-weekly promotions that Galp advertises?
	Do you purchase any of the existing menus? (If yes) Which one? Which communication channel informed you about these menus?
	Have you ever noticed the led screen outside the store? Does it get your attention spontaneously?
2. During the Virtual Reality Experience	
Stimulus captured by the client	Do you find any differences compared to the original store?
	Why have you stopped?
	Which element/feature gets your attention and why? Are you interested in buying that?
	Do you find any differences compared to the original store?
	Why have you stopped?
	Which element/feature gets your attention and why? Are you interesting in buying that?
	Do you find any differences compared to the original store?
	Why have you stopped?
	Which element/feature gets your attention and why? Are you interesting in buying that?
	Do you find any differences compared to the original store?
	Why have you stopped?
	Which element/feature gets your attention and why? Are you interesting in buying that?
Menus perception	Did you know about these menus?
	If I gave you €5 to spend at this moment and according to what you saw in the video, what would you purchase?
3. After Virtual Reality Experience	
Menus evaluation	What is your opinion about the existing menus of Tangerina store? In which circumstance would you buy them?
	Do you believe they have an adequate pricing? Would you change any product?

Appendix 7: Virtual Reality Experiments

Appendix 8: Results of the Virtual Reality Experiment

Participant	1. Frequency of visits to a GALP Store	2. Awareness of Biweekly Promotions	3. Menus Consumption			4. Digital Signage outside of the store	
			Do you consume?	If yes, which one?	If not, which would you buy?	Did you notice?	Which type of ads did you notice?
1	Twice a Month	No	No	-	Breakfast Menu	Yes	Continente, Promotions and Well's
2	Once a Week	No	Yes	Breakfast Menu	-	Yes	Continente Promotions
3	Everyday	No	Yes	Breakfast Menu	-	Yes	-
4	Everyday	No	Yes	Breakfast Menu	-	Yes	-
5	Twice a Month	No	No	-	None	No	-
6	Everyday	Yes	Yes	Snack Menu	-	Yes	Menus and Well's
7	Once a Week	No	No	-	None	Yes	Car and Trips
8	Once a Week	No	No	-	None	Yes	Menus
9	Everyday	Yes	No	-	None	No	-
10	Once a Month	No	No	-	None	No	-
11	Once a Week	No	Yes	Breakfast Menu	-	Yes	Menus and Portuguese Football team
12	Once a Month	No	No	-	None	Yes	Car Washing Service
13	Twice a Month	No	No	-	None	Yes	Discounts
14	Twice a Month	Yes	Yes	Breakfast Menu	-	Yes	-
15	Everyday	Yes	Yes	Breakfast Menu	-	Yes	-

Participant	5. Differences in VR compared to the original store	6. What did they notice in the digital signage		7. Price of the Menus	8. What would you buy with 5€ from the shop if we offered you?
		Spontaneously	With the induced help of the moderator		
1	Didn't notice the digital signage	-	Coffee Menu	Fair Prices	Breakfast Menu
2	Didn't notice the digital signage	-	Everything	Fair Prices	Water
3	Noticed the digital signage	Snack Menu and Coffee Menu	-	Fair Prices	Breakfast Menu or Tobacco
4	Noticed the digital signage	Snack Menu	-	Fair Prices	Sandwich + Soft Drink
5	Didn't notice the digital signage	-	Everything	Fair Prices	2 Coffee Menu
6	Noticed the digital signage	Everything	-	Fair Prices	Coffee Menu
7	Noticed the digital signage	Everything		Fair Prices	Tobacco
8	Didn't notice the digital signage		Car Washing Service	Fair Prices	Soft Drinks or Water
9	Didn't notice the digital signage	-	Everything	Fair Prices	Sweets
10	Didn't notice the digital signage	-	Everything	Fair Prices	Sparkling Water or Soft Drink
11	Noticed the digital signage	Coffee Menu		Fair Prices	Lunch Menu or Snack Menu
12	Noticed the digital signage	Everything		Fair Prices	Coffee, Water, Spray
13	Noticed the digital signage	Snack Menu		Expensive Prices	Magazine and Tobacco
14	Didn't notice the digital signage		Coffee Menu	Fair Prices	Magazine or Newspaper
15	Noticed the digital signage	Snack Menu		Fair Prices	Coffee Menu or Snack Menu