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How to improve the in-store customer experience in the evolving supermarket industry?

Freshmed case

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Table of content

I. Introduction :

Nowadays, the competition is fierce in the supermarket industry. The industry has witnessed a lot of new entrants with different strategies. Discounters and hard discounters have appeared, and they provide goods with a lower quality at a lower price. For the regular supermarkets, it is now more or less impossible to compete in terms of price, so different strategies have emerged. Some of the big retailers have understood the importance of the customer experience and are creating new stores where the customer experience is enhanced. In this paper, we will tackle the question: how to improve the in-store customer experience in the evolving supermarket industry?

1. What are the variables impacting the in-store customer experience in a supermarket?
2. How big players from the industry are tackling the in-store customer experience in their new shop format?

In order to find answers to our first question, we will be looking at the literature on the topic of the customer experience in the retailing industry. We have identified seven variables that are impacting the in-store customer experience. From the shelf's management to the atmospheric variables. We can't duplicate the same approach for the second question because the data collected are not old enough. We had to find information that are coming from scientific retailing revues and expert point of view in this field.

Thanks to the knowledge accumulated across these two approaches, we will have recommendation in order to upgrade the in-store customer experience of a shop.

In the second part of our master thesis, we will create a questionnaire from the knowledge that we have gathered in the theorical part. We will use this questionnaire in order to analyze the current in-store customer experience of a particular shop (Freshmed).

We will then confront the results from the questionnaires and our findings on the subjects in order to deliver managerial recommendations for this shop.

II. Customer experience

Before defining the term “customer experience” it is mandatory to explore the roots of the terms. The notion of customer experience was first introduced by Holbrook and Hirshman (1982). They pointed out that the element of pleasure, beauty, symbolic, meaning, creativity and emotion can help understanding the consumer behavior.

Consumption is not limited to the activity before or after the purchase from the experience perspective, but it also covers all activities that may affect future consumer decisions and activities (Vezina, 1999).

Arnould and Price (2002) have divided the consumption experience in four stages, namely: Pre-consumption experience, purchase experience, core consumption experience and remembered consumption experience.

The term customer experience can be defined as follow: “Customer experience is the whole events experienced by customers in the process before and after the purchase, which is personal and unique and it provides stimulation to sensory, emotional, rational and physical aspects so as to create memorable experience.” (Andajani, 2015).

The customer experience is really a broad term and englobes many possibilities for the retailers. We have decided to explore the literature in order to understand what are the variables of an in-store customer experience.

III. In-store Customer experience

Taking a step back, we ask ourselves what explains the behavior of the consumer when he is about to pick a product on a shelf.

There are three main variable that play a role in consumer behavior. There are variables coming from the shop, variables coming from the consumer himself and contextual variables (Schmitt, 2010).

For the physical part of our brand experience, we have decided to focus our research on the variables coming from the shop.

Schmitt (2010) has divided this category in two sections, the atmospheric variables and the merchandising.

Merchandising variables are everything that concern the store layout, the assortment and the shelves layout (Schmitt as cited in Wellhoff & Masson, 2003). The atmospheric variables are the light, the smells, the music and the colors (Schmitt, 2010).

These two categories are following two different psychological currents. In order, psychology of the space and the environmental psychology. The space theory current is consumer centric: it means that it focuses on studying how the consumer behaves inside the shop. The Environment theory is working the other way around, it is retailer centric, and studies how the environment is affecting the consumer.

1. Space Psychology:

The research found that the consumer is building an architect’s map of the shop in his head (Pocock, 1976). Kitchin (1994) has developed a technique to understand how the consumer finds his way in the shop afterward. He gave a white piece of paper to the customers and they were asked to draw the different elements of the shop. This technique has been used to discover that customers tend to remember the products and shelves that were at the extremity of the supermarket rather than those at the middle of the supermarket (Sommer & Aitkens, 1982).

From this current, the pathfinding theory has emerged. It is the process according to which the customer finds his way through his environment to end up at a specific destination (Arthur & Passini, 1992). It is a dynamic process, it uses the same construction of the map as the one described before. Then we have a decision phase, where the customer takes a decision relating to the itinerary that he chooses based on his mental map. In the last phases the customer actually transforms his decision in movement. It differs from the previous technique in his dynamic vision.

2. Environment psychology:

This theory studies the impact that the environment in which he evolves has on the customer (Mehrabian & Russel, 1974). This theory has led to the concept of buying experience. The S-O-R (stimulus-organism-response) paradigm was created afterwards (Donovan & Rossiter, 1982). There is a lot of stimulus inside the environment (S) which can affect the intern evaluations and the emotional state of the individuals (O), then they elaborate behavioral responses (R).

The S-O-R paradigm is mainly used to study the impact that what we call the atmosphere has on the customer (Daucé & Rieunier, 2002). The atmosphere is a sum of five characteristics which will impact the emotions and the behavior of the customer inside the shop (Donovan & Rossiter, 1982). These variables are the music (Garlin & Owen, 2006), the smells (Spangenberg, Crowley & Henderson, 1996), the brightness (Areni & Kim, 1994), the colors (Bellizzi & Hite, 1992) and the human density (Machleit, Eroglu & Mantel, 2000). These variables will be discussed later in the literature review.

We will dig a little deeper these theories in order to create a field of knowledge about the consumer experience in the retail industry.

A. Spatial planning :

First, we have to define what spatial planning is:

> Spatial planning is an active dimension of the environment which has the capacity to modify the mobility of the consumer, and thus, through the process of appropriation, the experience of the place created. The atmosphere therefore acts not only through physical stimulation but also through the structure of space. (Bonnin, 2003, p.26)

Most of the research found on that subject tend to notify that there are two main types of customers. The functional customer and the experiential customer (Antebelian, 2002).

The first customer will not go to the supermarket because he considers it to be a pleasure, but perceives it rather like a chore. The functional customer will go to the supermarket with a list of items to purchase, while the experiential customer will not plan to buy anything special.

The first customer is working in a utilitarian way; he is in the shop in order to restock his house with the same products that he typically buys. This orientation is often linked to the hypermarket format.

The experiential customer is looking for an experience when he enters the shop. He is looking for a stimulation and he wants to interact with his environment. The first source of satisfaction comes from the quality of the time he spends in the shop rather than the products that he brings home.

According to the author, the retailer can adapt his structure in order to better correspond to his customer's needs.

He can influence the flux inside the shop. For instance, he can create semi-close spaces or wide alleys. Bonnin (2002) has studied this part deeper. We will come back to this later on during our literature review.

The retailer can promote the localization inside the shop with banners indicating where you can find the different products. The retailer can also work on the layout. For example, he can create an area where you find the entire Italian product or an area where you can find different varieties of pastas.

The shop manager can create a product 's comparison sheet in order to push the customer to buy a certain product over another one. He can streamline the retail checkout for his customer.

Lastly, the retailer should maximize the time the customer spends inside the shop. He needs to stimulate the customer throughout his journey inside the shop (Hetzel, 2000). He should arouse his interest with new products, promotions or new design of the space.

Furthermore, he should really be paying attention to the negative feelings, because they can have a greater impact than the good ones (Taylor, 1994). Longer checkout lines can badly impact the shop image.

Bonnin (2002) found that two types of spaces have demonstrated their potential for influence: active entertainment space and functional space. There is another one, the passive entertainment space, which is neutral: it does not promote the development of a particular strategy.

In order to understand these types of spaces, let's introduce two concepts: the fence and the micro-event.

The fence is the degree of opening of a space on the outside. It introduces discontinuity vis- à-vis the environment in which the space is inserted. The strength of the fence is that it materializes a separation from daily rhythms and routine (Moles & Rohmer, 1982). Closed spaces promote ownership. They can be used to develop a particular activity (Gay, 1995).

Micro-events are discontinuities or ruptures introduced into space by a stimulus variation (Moles & Rohmer, 1977). The concept of micro-events is broad. It includes both the installation of a gondola and the diffusion of an ambient fragrance or the existence of an animation. It thus integrates stimuli already studied but has the advantage of taking into account spatial planning as an active dimension of the environment.

Thus, three types of spatial development have been distinguished (Moles & Rohmer, 1977). The functional space aims to optimize the use of available resources in procedures as affordable as possible (Fischer, 1981). These are open spaces: micro-events are few and predictable (Moles & Rohmer, 1982).

The active entertainment space matches to a «programmed sensualization of the environment" (Moles & Rohmer, 1977). It is an enclosed space, with many micro-events, randomly distributed. They introduce an amount of uncertainty, a "number of branch lines marked out on the path of possibilities» (Moles & Rohmer, 1982)

The passive entertainment space corresponds to a version of the active entertainment space that requires less commitment from the individuals. This is an open space (fewer borders to cross), with many micro-events that are less intense (introduced discontinuity is low) than in the case of active entertainment spaces.

Now that we understand the concepts, we can look at the result found by Bonnin (2002) on his experiment. We will focus on the two types of space that have demonstrated their potential for influence, namely the entertainment space and the functional space.

Operationally, this work establishes that the manipulation of sensory variables alone is not sufficient to create a specific shopping experience. This point will be very important in order to understand that we need to see the supermarket like a whole space.

Specifically, the partition in physical universes seems appropriate for the positioning of the brand on a playful dimension of shopping, whereas the traditional organization of grid gondolas seems preferable for positioning on a functional dimension of shopping.

Functional strategies are oriented towards problem solving (accessing to a product, finding the way into the store) in order to carry out the task in a rational and economical manner (Moles & Rohmer, 1977). This type of strategy would be characterized by an economy of behavior (Titus & Everett, 1995), with the exploration of the environment being reduced to the strictly necessary

Playful strategies (Titus & Everett, 1995) are free explorations of the environment for no immediate benefit. It is about discovering, about having fun (Moles & Rohmer, 1977). They are oriented towards play and pleasure (Titus and Everett, 1995). These strategies, characterized by more behaviors, would be less directed towards a goal. They correspond to the recreational dimension of consumption (Holt, 1995; Holbrook, 1999) and, in the case of shopping, recreational shopping and foraging (Lombart, 2003).

Alongside that view, Lombart (2003) has researched what type of environment fit the best two types of customers, namely the browser and the shopping. The browser was defined previously by Bloch and Richins (1983), “the examination of store, for recreational or informational purposes, with no intention to purchase”. Jallais, Orsony and Fady (1994) have defined the shopper as “going from store to store to buy”.

Lombart (2003) has used these two profiles in order to discover what type of environment the two types prefer. She has found that the only variable that change between these two types of customer was the complexity of the actions in front of the product. The shopper will have more complexed interaction with the product, for example he will read the label. From her research, it appears that the shopper prefers the discontinuity during his shopping experiences. This discontinuity is helping the customer to have more complex actions.

Ladwein (2003) teaches us that the path will also be influenced if the consumer has a global vision of the shop. This is where the height of the furniture will play a role.

B. Shelves Management:

Let’s now have a look on some theory on how to manage shelves.

Deng, Khan, Unnava and Lee (2016) have made a research on the effect of vertical versus horizontal display structure. They have done five different experience to get this conclusion: “we have demonstrated that when choice situations allow for multiple options or multiple variables to be selected, more variety is chosen in horizontal displays than in vertical displays”. They found out that the explanation for this is biological. Indeed “during initial scans of assortments, horizontal (vs. vertical) displays are easier to process due to a match between the binocular vision field (which is horizontal) and the dominant direction of eye movements required for processing horizontal displays”.

With this discover Deng and al. (2016) recommend us to use horizontal display when the customer faces a product category where he is more likely to buy at least two different items within the category. However, for the product category where the customer is unlikely to make a trade- off, the retailer should not use a horizontal display.

Campo, Gijsbrechts and Nisol (2000) found out that, running out of stock has a really strong negative impact on the customer. It should be taken into consideration and the retailer should not wait to run out of stock before re ordering the item. The study shows that the impact depends on the product category and the attitude the customer has towards shopping. Consumers that are doing a major shopping trip are less likely to be negatively impacted by a product missing because they have a long shopping list.

C. Merchandise Variety:

Donovan, Rossiter, Marcoolyn and Nesdale (1994) discovered that a cognitive variable such as the variety of goods leads to favorable client behaviors such as spending more cash and time than scheduled in a store, if clients are happy with the variety of goods.

Consumers prefer flexibility because the buy opportunity is often distinct from the consumption opportunity in time. Consumers have to forecast their future utilities, which is much harder than anticipating instant utilities (Kahneman & Snell, 1992).

Pan and Zinkhan (2006) established that assortment was ranked highest by customers among ten factors when they had to choose a specific retailer.

Marques, Cardoso and Palma (2013) found that the range of products provided in a store is the most influential variable for customer satisfaction.

Consumers might perceive large assortments negatively if they create frustration or an overwhelming feeling (Huffman & Kahn, 1998; Iyengar & Lepper, 2000). If customers become frustrated with the complexity of a large assortment and then direct that frustration towards the retailer, they may decide not to return to the store (Fitzsimons, Greenleaf, & Lehmann, 1997).

D. Merchandize value:

Sirohi, Mclaughlin and Wittink (1998) describe merchandise value as "what you get for what you pay", indicating that merchandise value is a compromise between money spent and the benefits offered by a supermarket. Baker, Parasuraman, Grewal and Voss (2002) point that merchandise value is the outcome of the perceived cost of merchandise, the quality of merchandise, and that merchandise value has a beneficial impact on repatronage intentions. Recently, Sivadas and Jindal (2017) also concur that merchandise value has a strong influence on customer satisfaction. Allaway, Huddleston, Whipple and Ellinger (2011) also came to the same conclusion regarding price. What is important for the customer is the price/quality ratio rather than the price on its own.

Ligas and Chaudhuri (2012) have made a whole study on the willingness to pay higher prices with a high perceived value merchandise. The results were convincing and the customer agrees to pay more for a product if he thinks that this product has a better value.

These two last points are not considered as merchandising by Wellhoff and Masson (2003) but some authors think that they are very valuable variables in the customer experience.

E. Service Quality:

In many studies, the service quality has been described as important. According to Bitner, Booms, and Mohr (1994), the quality of interpersonal communication between the client and contact staff often influences client satisfaction. Thus, employee-customer interactions that enhance relationships and staff responsiveness have resulted in increased client satisfaction (Menon & Dubé, 2000). Customer-employee interaction was discovered to influence the in-store shopping experience of a customer (Brown & Lam, 2008). For example, Pan and Zinkhan (2006) discovered that salespeople's friendliness and knowledge are important predictors of future shop patronage. Marques et al. (2013) found in their research of specialty shop clients that personnel support was the second most significant factor when clients rated their satisfaction with the environmental stimuli of the store. Allaway et al. (2011) found out that the shopping experience is enhanced if a store has a sufficient number of employees who are friendly, polite and helpful.

Furthermore, they gave us two recommendations. The first one is that personnel members need to be educated in functional product understanding, presentations and communication with clients in such a manner that favorable feelings are generated. The second one is that knowledgeable and qualified employees can lead to positive emotions, such as the pleasure and happiness experienced by clients, which in turn are important elements of the client shopping experience in the store.

"It is rather disconcerting for service management to realize that if employees are not treated appropriately, many internal marketing strategies, especially service orientation, are likely to fail and probably become a negative strategic service attribute." (Vella, Gountas & Walker, 2009, p.415). They conclude by explaining that competence and abilities are prerequisites for the flexibility of the service role by which supermarkets could better personalize their service delivery.

F. Interaction with other customers:

Tombs and McColl-Kennedy (2003) commonly mention the verbal communication between customers "takes on a supplementary or substitute role to the personal selling efforts of the service employee and may greatly impact on customer satisfaction and perceptions of service quality". Brocato, Voorhees and Baker (2012) show the importance in investigating the impact of the presence of other clients on the assessment of the in-store shopping experience of a customer is to determine what their impact is.

Pons, Giroux, Mourali and Zins (2016) indicate that other clients can contribute to an enjoyable experience, and in some cases, crowds can also activate beneficial customer experiences and generate favorable business yields in the process. If a customer feels helpful to other customers, it can contribute to greater satisfaction with their own shopping experience in the store (López-López, Ruiz-de-Maya & Warlop, 2014).

G. Atmospheric Variables

1. Human density in the shop:

First of all, let's explore what human density is, and we will then try to explain how it can have an impact on customer behavior. In the literature, there are three main concepts used to understand the customer point of view when he is in a shop. Stokols (1972) has just defined two concepts, density and crowding. Density is a quantifiable variable, the number of people in a particular space. Crowding is a subjective manner to respond to the same variable. From one customer to another, the effect of crowding will not be same.

McGrew (1970) has divided density in two, the human and spatial density. Human density represents the number of people in a defined space when spatial density represents the number of space available for a certain amount of people. Rapoport (1975) has introduced the third term, perceived density. It is a subjective variable in the middle between density and perceived crowding. He thought that density was a simple objective variable, perceived density was a subjective and neutral variable while perceived crowding was subjective and could be negative or positive depending every single customer.

Research have found that the effect of perceived crowding is variable from studies to studies. The result was dependent on what type of shop was studied. The utilitarian shop like a grocery store

(Machleit, Kellaris & Eroglu, 1994) have observed a negative impact. The more hedonic setup like a disco (Pons, Laroche & Mourali, 2006) or a restaurant (Tse, Sin & Yim, 2002) have found a positive impact of the crowding variable.

Mehta, Sharma and Swami (2012) have discovered that patronage intention and perceived crowding shops follow an inverted U-shape relationship. That means that there is an optimal level of crowd in a shop. Less people or more people is not optimal. Some authors have found some managerial implications that would help to fix this problem.

Eroglu and Machleit (1990) have found that Designing stores and architectural store characteristics can assist ease crowding feelings. Adjusting the temperature and the music can help the customer feel better.

Retailers may have additional staff and additional check-out counters to handle the large number of shoppers during peak shopping (Machleit et al., 2000; Mehta et al., 2012).

Similarly, designing the store to allow shoppers to move around and change their directions if necessary, would provide them with behavioral control to mitigate the negative effects of crowding (Li, Kim, & Lee, 2009).

Eroglu, Machleit and Chebat (2005) have studied the interaction of two variables, crowd and music. They found out that the evaluation of the shop was better under a combination of these factors. The evaluation was higher when the tempo of the music was slow within a crowded shop. In order to have a better customer experience, when the shop was not crowded the music tempo should be fast. The authors also stipulate that "Significant main effects of music tempo were found for behavioral responses such as future approach/avoidance tendency toward the store and extent of browsing behavior".

2. Music:

It is safe to say that the influence of the music on retailing was studied many times in the past. The influence varies from studies to studies depending on the environment. We will try to find some information relating to music in supermarkets in order to not be biased by the multitude of different studies.

Background music in retail establishment affects multiple shopping habits and assessments, such as the speed of in-store traffic flow and dollar sales volume (Milliman, 1982).

Music is a significant non-verbal communication that improves the atmosphere of the shop (Turley & Milliman, 2000).

Furthermore, North, Hargreaves and McKendrick (1999) indicate that music can "prime" certain product selection by encouraging clients to recall associated expertise. This extra sale could probably be an impulse purchase (Geetha, Sivakumaran, & Sharma, 2010) as well as purchasing more of the same brand or increasing the purchase range. "Music is one of the easiest ways managers can influence how their customers feel" (Hosea, 2004).

During our research on the impact of the music, we have found two opposite opinions. This might be explained because the first was studying the effect of the music on high end supermarket while the other focused on hypermarket.

For the hypermarket study, the results for the experience were pretty clear. Hynes and Menson (2016) found that that the role of background music was not useful at all because the consumer can "deconstruct the soundscape and isolate elements that provoke different emotional reactions."

Vida, Obadia and Kunz (2007) have studied the effect of background music inside high end supermarkets. They have found that the music doesn't directly correlate with the amount spent in a supermarket, but is correlated to the amount of time spent inside the shop. The time spent inside the shop was positively correlated with the amount spend. But in order to have a positive effect on the time spent, the music needs to be in line with the brand image. This is not a generality but to have an idea of their findings, when the music was fitting the brand image, the consumer spends in average 22 minutes more in the shop.

Vida, Obadia and Kunz (2007) gave three recommendations to managers in order to have a good use of music inside their supermarkets. First of all, the managers should select the music in order to match the preferences of their core clientele. They have to keep in mind that "an emotionally taxing environment can negatively impact patronage even more than price considerations" (Garlin & Owen, 2006, p. 755). Second of all, managers should pay attention not only on the music as a single variable, but they also have to be sure that all the atmospheric variables are working together in order to create a single image for the shop. Previous research has found that the mismatch of atmospheric variables can not only deteriorate the customer experience but also weaken the positive impact of all the variables taken independently. (D'Astous, 2000; Mattila & Wirtz, 2001; Beverland, Chig, Morrison, & Teriovski, 2006). Lastly, managers need to make a deep research on the music playing and not select a music based on the preferences of the workers.

Garlin & Owen (2006) have found three relationships. Firstly, if the consumer is familiar/likes the music, it has a positive impact on patronage. Secondly, a slow tempo, a low volume and a familiar song result in staying longer for the consumer in the shop. The other way around, fast tempo, high volume, and unfamiliar songs result in a longer perceived time in the shop for the customer.

Morrison, Gan, Dubellar and Oppewal (2011), have studied the interaction between the music and the scent. Previously, Mattila & Wirtz (2001) have found that "the results of this study showed that when the arousal levels of ambient scent and background music matched, consumers' evaluations of the shopping experience were enhanced". For example, they found out that "scenting the store with low arousal scent (Lavender) combined with slow tempo music led to higher evaluations than using that scent with high arousal music". (Mattila & Wirtz, 2001, p.13). It's important to specify that the consequences can be deteriorating if the scent and the music are not fitting (Matilla & Wirtz, 2001; Morrison et al., 2011).

3. Scent:

Ambient scent refers to a scent present in the environment that does not emanate from a particular object (Bone & Ellen, 1999).

Research indicates that scent is processed in a more primitive part of the brain compared to other sensory indications (Herz & Engen, 1996). Therefore, scent needs little or no cognitive effort to increase awareness, improve in-store experience and encourage beneficial shopping results (Bone & Ellen, 1999). Studies also discovered a privileged neural connection between the olfactory nerve and the emotional memory region (Herz, 2004).

Once again, some studies found results that prove that scent have an effect and some studies found that there is no reaction of the customer over a particular scent.

Spangenberg, Crowley, and Henderson (1996) found out that "The presence of an inoffensive scent in a store is an inexpensive and effective way to enhance consumer reactions to the store and its merchandise". They advise three actions to take for the managers. First, they advise managers to find a particular scent that will stick to their image; it has to be unique for their stores. Secondly, managers should choose a scent that is fitting with the type of merchandise they are selling. Lastly, executives should pay attention at the price of some scent, because some of the scents are very expensive.

Roschk, Loureiro and Breitsohl (2017) have found that scent has a stronger influence on men than on women.

"Interaction effects, whether they involve odors or any other retail variables, may produce surprising and counterintuitive findings" (Michon, Chebat & Turley, 2005, p. 5).

Teller and Dennis (2011) have conducted a study on the effect of ambient scent on customer behavior, perception and emotion. They ended up not finding a direct link between the scent and the behavior perception and emotion. They advise us to take care of what was written previously.

4. Color:

"As an atmospheric variable, color describes the visual appearance of the consumption environment" (Bellizzi, Crowley & Hasty, 1983). Crowey (1993) has divided the color scope into two categories. Colors with long wavelength, warm colors like red and orange and colors with short wavelength, cool colors such as blue or green. White is often in the neutral category but sometimes it can be classified as a cool color (Chebat & Morin, 2007). Most of the time, the study around colors is made comparing warm and cool colors inside a shop. The researcher is interested in the behavior of the customer in each environment (van Rompay, Tanja-Dijkstra, Verhoeven, & van Es, 2011). "In the context of store and service design, color is one of the most influential ambient variables" (Countryman & Jang, 2006).

Red (as opposed to blue) has been associated with higher excitement and blue (as opposed to red) has been recorded to be more relaxing and pleasant and to promote the incidence of purchases in a shopping setting (Bagchi & Cheema 2013).

Roschk and al. (2017) found out that warm colors rise the level of arousal of the customers and cool colors rise the level of satisfaction. They advise to use for example warm colors in a zone where new products are displayed. In contrast, cool colors at a holding complaints area could help moderate minds.

van Rompay and al. (2012) have studied the interaction of the spatial layout and the colors. They have observed that there are two types of clients; the task-oriented people and the recreational shoppers. They have found that for task-oriented customers, color was not significatively playing any role and they are not much influenced by all the atmospheric dimensions. However, they are influenced a lot by the special layout, they like a well-organized and spacious layout. In the other way around, the recreational shoppers are responding positively to an ambient color design. Thus, it increases the intention to explore and raises the chance for the customer to return to the store.

5. Lighting:

Mehrabian (1976) theorized that brighter light enhanced excitement and that the combination of pleasure and excitement made people respond more positively to influence. Areni and Kim (1994) discovered that under bright lighting circumstances, customers examined and handled considerably more products than under soft lighting circumstances.

"The result that lighting had a significant effect only for "eye level" merchandise suggests that patrons' visual acuity in the soft lighting condition was below the level needed to perform various search activities" (Areni & Kim, 1994, p.6).

They discovered that shoppers were affected by brighter in-store lighting to examine and handle more merchandise. The effect was stronger for the products that were at the eye-level.

It is important to underline here that these studies are 25 years old and we did not find any valuable information from studies done more recently. Some studies of the early 2000 were conducted on the effect of light but not in a pertinent way for our research.

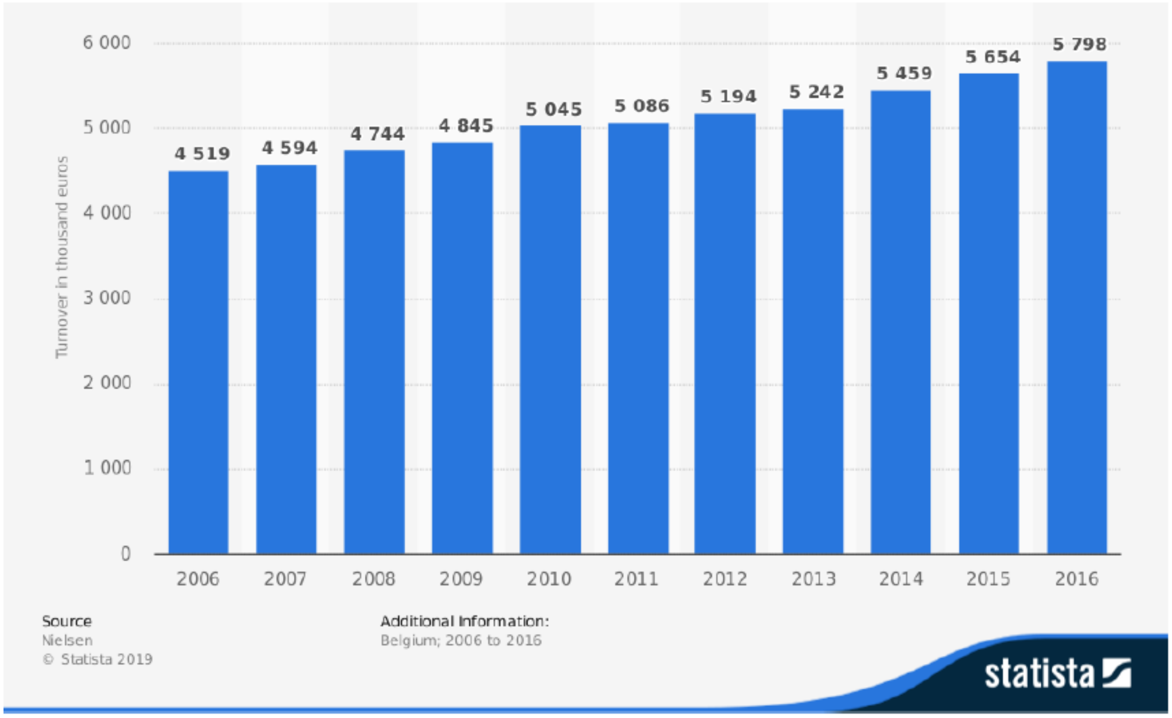
IV. New trends in the supermarket sector

Many have said that the digital will take over the world of retailing. According to a new research of PWC in 2017, “the Belgian consumers have spent 5.8 billion euros in tangible goods online. This number is still insignificant compared to the total amount of retail sales but is increasing at a rapid pace”. They have studied different categories of goods such as the clothing industry, toys, cleaning products or groceries. One of the points of the research was to understand if the consumer is actually buying the product category strictly online, strictly offline or in omnichannel way. The results were very different for each product category. For example, 21% of the consumer declare that they strictly purchase informatic goods online.

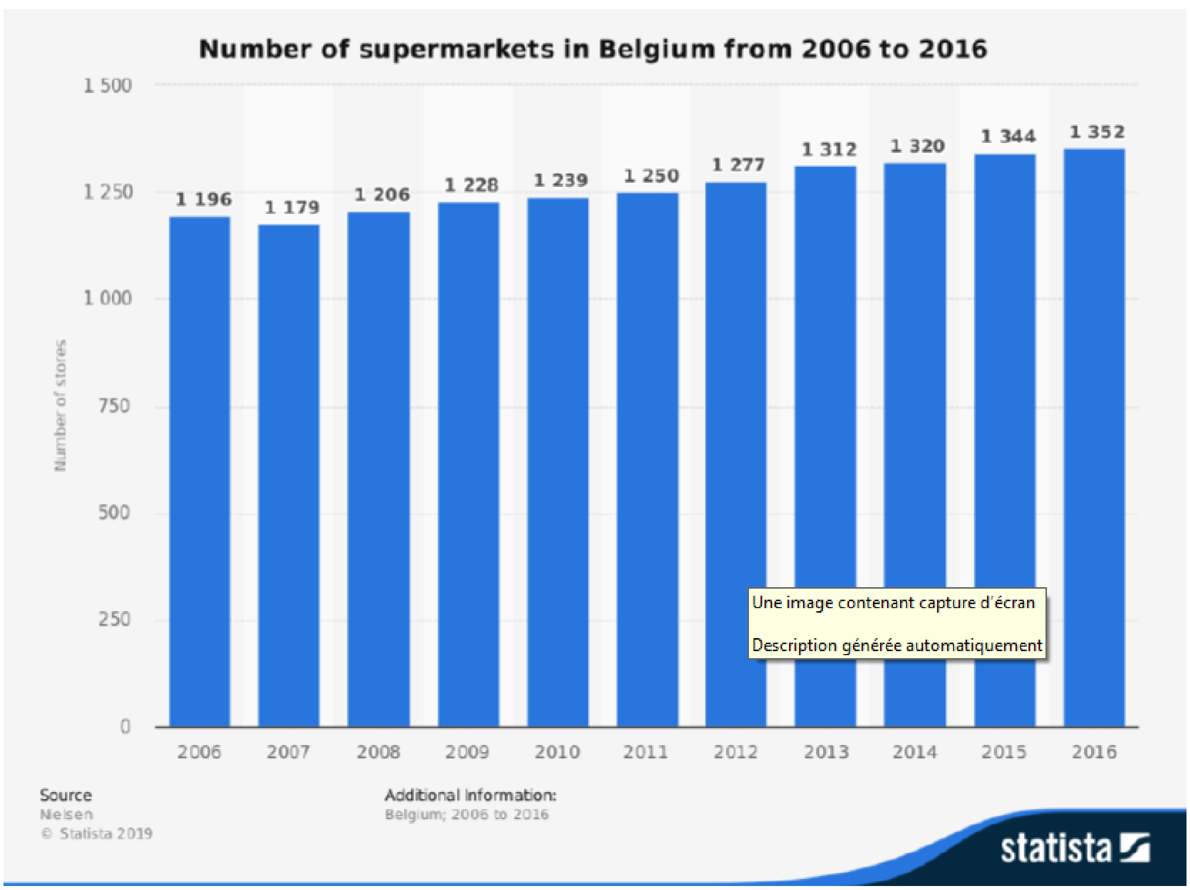
When you look at the percentages from the grocery category the results are undisputable, only 2% of the shoppers affirmed that they only shop online and 8% declare themselves as omnichannel buyers.

Nonetheless, the big companies active in the sector are evolving their format of shop. We will explore in this section what are the new trends for the consumer experience. We have discovered that the big names in the sector are not creating the same customer experience. For example, some are focusing on the technology and some others, on the human factor.

According to the Nielsen report on the grocery in Belgium, the supermarket sector is growing in Belgium, the total sector market has growth for about 2.29% per year between 2006 and 2017 (graphic 1). The number of supermarkets has increased from 1196 to 1352 during the same period (graphic 2).

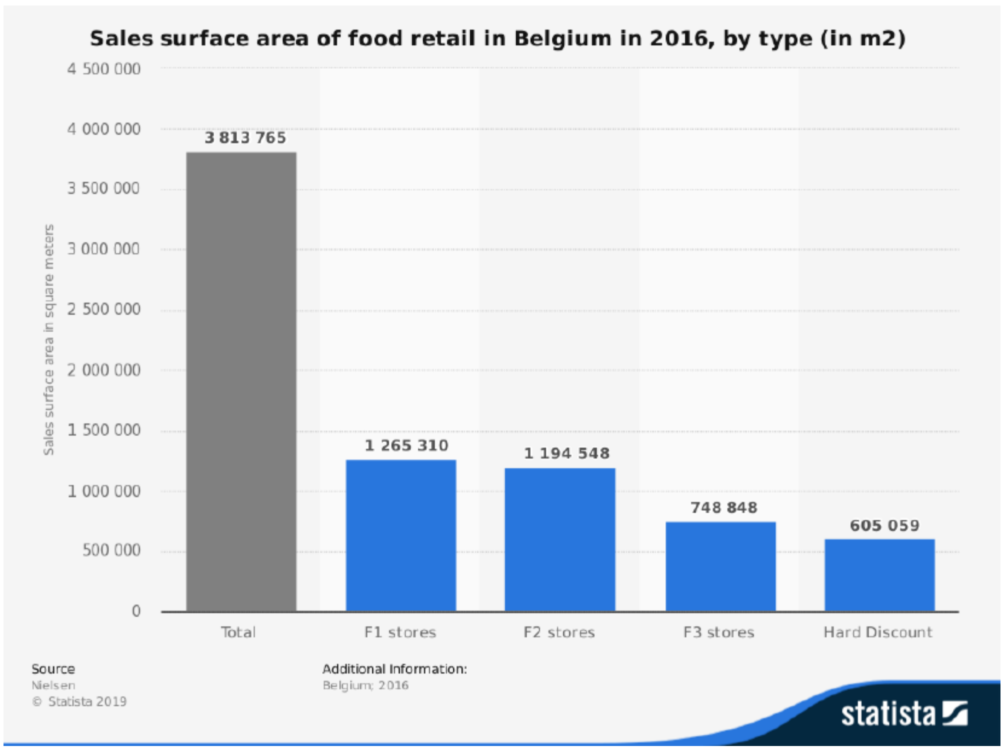


Graphic 1: Evolotion of the Belgium supermarket market between 2006 and 2016



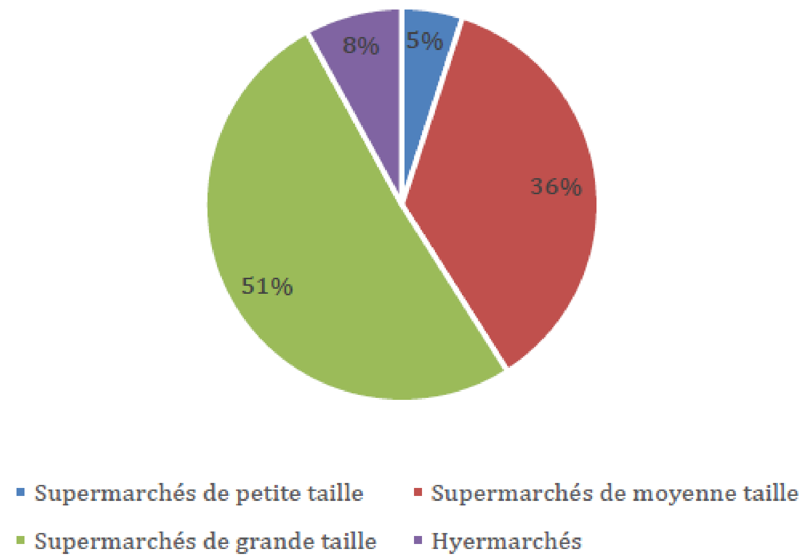
Graphic 2 : Evolution of the number of supermarkets in Belgium from 2006 to 2016

The number of discounter supermarket have reached a maximum in 2014. This number is decreasing in 2016. The market share of the discounter has reached a maximum of 16.1% in 2014. It has since decrease to 15.4% in 2016 (graphic 3). The Belgium supermarket scene is represented mainly by four type of store. The hypermarket, you can not only find food products but you can find the household appliances (F1). The large supermarkets, with over 1000 square meter of space (F2). The medium supermarket with 400 to 1000 square meter of space (F3). The last category is the supermarkets with under 400 square meters (graphic 4).



Graphic 4: Sale surface area of food retail in Belgium in 2016

However, the size in term of square meter of space for the hypermarket, the large supermarket is dominating all the other in term of market shares. They represent 51% of the overall market share despite representing only 30% of the total surface (graph 5).



Graph 5: Market share of the different type of supermarket in Belgium (2015)

A. Amazon entering the physical market

When it comes to disruption, one of the key players worldwide is Amazon. It was an earthquake for the supermarket industry when Amazon announces that they bought WholeFoods for almost 14 billion Usd. As a question of customer experience, this acquisition was not revolutionary. Amazon has not fundamentally changed the existing supermarket chain but they have brought some small changes. They have for example introduced an area, inside the shop, only accessible for Amazon premium members. This acquisition helped them study the market and find where the problems are in the industry. One of the main strengths of Amazon is their supply-chain, so they have upgraded the Whole Foods one.

Amazon has also found out that long queues affect very negatively the customer experience. They have decided to introduce a new concept of store, Amazon Go. This new format of shop is interesting because they have tackled the queue problem drastically. Indeed, in the new store you don't have cashiers. To enter the shop, you need your mobile phone. The first act is to scan a bar code on the Amazon application. You are then greeted in a new kind of shop with a lot of sensors. These sensors can track what items you pick up in your bag and directly put it on your shopping list. If you put back the item on the shelf, it will automatically remove the item from your virtual basket. This new format of store is not yet spread around the world and the shops are localized where there is a high density of working population. In fact, most of the customers just come to pick up a couple items then exit the supermarket.

According to the Wallstreet Journal, Amazon has signed multiple leases in Los Angeles, Chicago and Philadelphia in order to launch a new type of Grocery store in 2020. We still have not got much information about this new format of stores, but it seems like these new shops aren't very broad. We will have more information about the new Amazon strategy by the end of the year.

B. Coop new Italian format

Coop Italia has created a new type of supermarket where the technology is omnipresent. The new store is located in Milan, in a shopping center. The shop is approximatively a thousand square meters and is full of technology. The concept was created by a searcher from MIT, Carlo Ratti. His main inspiration comes from the fact that to him "every product has a story to tell". He thinks that the information about the products are very important. This is why he has invented a new connected mirror that is installed sideways on top of the shelves. When you look into the mirror, you will see the product and some information about it in augmented reality. If the customer still wants more information he can put his hand on top of the product and the mirror will display more data. Most of the fresh products will have a mirror on top of them but for the rest of the products there are 46 totems where you can scan the bar code to enjoy the same experience.

Besides, they are pushing the experience further with a 20 meters wide screen displaying in real time data such as "what is the best deal of the day".

They also have introduced a restoration area where the customer can eat different products from Italia.

C. Carrefour's new Waterloo shop format

Carrefour has taken a different path from Amazon and Coop. They have decided to make a supermarket where the contact with the employer will be predominant. When you enter the new shop, you are directly greeted by someone at the entrance and offering you something to eat. You have two options, you can choose to enter the food side or the non-food. Let's focus on the food side.

A new restauration space has appeared, you can now consume new fresh products inside the supermarket prepared in "The Atelier". Furthermore, Carrefour has partnered up with a coffee producer: “Rombouts”. You are now entering the Market place, a large area devoted to fresh products. The zone is surrounded by thematic stands producing fresh food in front of the customers. For example, there is a pizza kiosk preparing pizza minute. In the middle, you can find a large assortment of fresh fruits and vegetables. Between the different kiosks, there are some small shelves where you can find products from around the world. You can find the regular Carrefour stand like the fish corner, the fresh bakery or the butcher. In the market place, you will find a lot of employees that will answer your different questions. A new section with organic and bulk products has appeared.

Carrefour has human vision of the future, where the place of employees and fresh product is important.

D. Delhaize’s new Nivelles shop format

Delhaize is taking the same direction than Carrefour Belgium for the construction of the future supermarket. The idea is more or less the same, fresh products and friendly employees are omnipresent. A “fresh atelier” has emerged and proposes minute meals. They reuse products that are going to be thrown away because of the expiration date. They try to use less plastic and reduce waste. A lot of wood has appeared in order to make the shop look warmer. They have a lot of corners offering different fresh products. They also offer a lot of organic products.

The concept is more or less the same than Carrefour with their shop in Waterloo, Belgium.

E. General tendencies

Laurent Thoumine, consultant at Accenture, believes that the supermarkets of tomorrow will be much more open. He has a vision of a shop where the traditional gondolas structure will be changed to a small island type. It means that the customer will be freer inside the shop and will be able to choose his path across different desks. These desks will not only be a place where fresh food is sold but also a place where the customer will be able to eat on the spot. The technology will be present in the future shop but will not be perceptible for the customer. He believes that employees will play a major role. The role might not be the same as of today, but they will be more customer focused.

Consumer reports magazines from 2017 have identified eight characteristics of the next generation supermarket. The first point is about checkout processes, mobile phones will play a key role according to them. Not strictly for paying the goods, but also to remind you that you have forgotten an item in your shopping list for example. The second characteristic is that you will be able to order stuff online and you will have special pickup areas where somebody will deliver your order. As seen on other new projects, Consumer reports have established that the new shops will be smaller in size and fresh product will have a predominant place inside the shop. The new supermarkets will see their employees have a deep understanding of their products and will be able to guide the customer as a car salesman will help his customer chose his new car. Fresh meals prepared at the supermarket will be offered, the customer will be able to buy more and more fresh meals prepared in front of him. The structure of the supermarket will be modular, shelves could be removed in order to create a new space to organize cooking classes in the evening for example. The last characteristic is linked with the fact that this new format of shop will be smaller, not all the products available in the shop will be exposed on the shelves. New digital screens will help the client find the products he really wants inside a category.

Pierre-Nicolas Schwab, doctor in marketing, thinks that the new smart shelf invented by AWM could be a great tool for the future supermarket. This new shelf is composed with different led screens instead of the price tags and a camera. This allows the smart shelf to attract the customer's eyes with some dynamic tag.

They work with some sensors, the sensor can track the customer walking by the shelf and can adapt the screens depending on how far the customer is. There are three stages; far, medium and close. The display is evolving, going from purely decorative in order to attract the customer to displaying the price when you get really close. This will help company gather data on the products. For example, the average time the customer spends in front of the product with the good in his hand. This will help the company improve their shelf management. Furthermore, this smart shelf can also detect when a product is running off.

Jeffrey Nader, project director at API+, believes that the evolution of technology will free the employees from the repetitive tasks. The taskforce will then become "go-to experts who will guide the customers on what to buy and how to store it". He thinks that we will find some high skilled employees like dietitians or nutritionists in the shops.

V. Conclusion

Let us now look at what we have found during our literature review. Then I will compare the new trends in the industry with the theory that I have found.

Our research on special planning taught us that there are two types of customers, functional and recreational. Each type of customer has their spatial preferences. Two types of spatial setups are interesting in order to create a good plan: the active entertainment space and the functional space. In order to create those spaces, we can use fences or micro-events. Functional customers like the presentation in gondolas because it makes the movement inside the shop easier. Recreational customers prefer the creation of universes dedicated to a special category, for example an Italian area where you can only find Italian products. We have discovered that long lines at checkout are bad for the image of the supermarket and the brand.

The study of the shelf management was interesting. We have learned that vertical and horizontal assortment have a different impact on the customer. We learned that horizontal assortment is useful for a category of product where the consumer might buy at least two different products from the same category. In the other way around, vertical assortment is better when you expect your customer to only choose one product from this category.

Merchandize variety was quite interesting; the authors on the subject are unanimous. The broader the variety of products are present, the better the customer experience. It has to be said that where there are too many varieties in the same category, sometimes the customer feels lost and that can lead to a negative perception about the shop.

As for the overall level of price in the supermarket, the results were counterintuitive. Indeed, the customer does not really look at the price. The more important factor is the perceived quality/price ratio. The customer is willing to pay higher prices if the perceived quality is higher.

Service quality was one of the most important factors in order to create a nice customer experience. Our research led us to a simple conclusion, the number of employees need to be sufficient, and they should be educated on three skills. They should understand the products they are selling; they need to have good presentation skills and communication skills.

Our research on the interaction between customers have taught us that with more interaction between them, comes a better customer experience overall. If a customer helps another customer, it will increase the experience of both customers.

The human density variable was the first atmospheric variable that we have studied. It appears that the ideal crowd level follows an inverted U-shape curve. It means that the level of human density in the shop have peak level where it is no more interesting to have more people or less people in the shop. This is why you need to have a flexible number of employees that will be able to open a new cashier. We also learned that you could use the temperature and the music inside the shop to calm people. Slow tempo music is useful when the shop is crowded and fast tempo when the shop is less crowded.

The usefulness of music inside the supermarket has been discussed many times in the literature. The outcome of music is different in function of the type of supermarket that you have. For a hypermarket, the music is useless because people are not looking for an experience. For a high-end supermarket, the story is different; the music can have positive impact. However, it needs to be in line with the brand image. It should fit the preferences of the core customers and you should pay attention to the interactions with other atmospheric variables.

Scent is the third atmospheric variable reviewed in our literature. We have found that for the scent to have a good impact on the customer experience, it should follow two rules. Managers have to find a distinctive ambient smell that will be unique at the shop and this scent must be congruent with the type of merchandize that you sell. Managers should care because some scents are quite expensive.

Colors can have different effects on customer depending if the color used is classified as a warm or cold color. Warm colors are linked to excitement for the customers and the cool colors are linked to a more relaxing environment. For example, you should use red as the color of a shelf for a new product that you are launching but if you need to paint your complaint desk, you better paint it in blue. Studies show that color design is not working on task-oriented people. However, it has an impact on recreational customers.

The last variable was the level of brightness inside the shop. It has to be said here that the studies were quite old, but they show that the brighter the shop, the more people interact with products. The effect is even stronger if the product is at the eye-level.

Our analysis of the new formats of the big names in the industry led us to a conclusion. The new format of stores comes mainly with two variants. For some retailers, the customer service has been reinforced and for some it has evolved in a more technological approach. We can find a lot more of fresh products in all the new supermarkets. Let’s now look at each project.

Amazon surprised a lot of people when they announced that they will invest a lot of money in order to create some brick and mortar shops. With Amazon Go shops, they have decided to focus on how to create a supermarket very conveniently. It is very simple to operate, you scan your mobile phone then grab some products and go. They have created new shelves with sensors. Doing so, they have erased the problem of long lines in the shop. Inside the shop, the experience is particular, you cannot have any advice and there are no workers.

Coop Italia has created quite a similar experience. They focus a lot on technology with these smart mirrors. The customer will find a lot of information on the products they need with these new types of shelves. Their spatial planning is quite broad and the shelves are bottomless and you can see through them. That gives the shop a feeling of openness. The service quality has been traded against smart screens that will help you get all the data you want on a product. They are playing with lighting ambience. The supermarket is quite dark but the light puts some emphasis on the goods.

Carrefour has taken a different approach. The service is omnipresent, there are a lot of counters selling fresh products made in front of the customer. They are playing with the spatial planning, there is clear distinction between the “market” area and the rest of shop. The shelves do not exceed the eye-level, that creates an ambiance of open market and you can see across the area. The area is fragmented in a lot of micro-event and the customer is pushed to go from an event to another one. They have worked on the service quality, there is always an employee that will give you information on products. Merchandize variety was increased and we can see a lot of new ethnic food for example. Delhaize use the same formula as Carrefour for their new format of supermarket.

We can say that there are two main approaches in order to create this supermarket of the future. One focuses on the human aspect, and the other focuses on technology. For both models, the number of fresh products is vastly increasing. The gondolas have not vanished but they now leave space to living areas where you find fresh products. I can see that restoration areas are emerging in these new supermarkets. People will go to the supermarket of the future to live a complete experience from learning recipes to savor new flavors. It will no longer be a functional event but an exploratory experience.

As said in the introduction, in the practical part, we will create a survey in order to analyze the level of customer experience in an independent supermarket. The theory that we have found will help us elaborate future recommendations for this specific shop.

VI. Hypothesis

From this literature review, we have established a series of hypotheses according to the different variables that the literature has highlighted about the in-store customer experience. As a way of measuring the experience lived inside the shop by the customer of a supermarket, we have found that Van Ittersum, Wansink, Pennings and Sheehan (2013) have created a scale with 3 items in order to see if the customer of a store has been satisfied by his shopping experience. That will help us analyze the data that will be gathered with a questionnaire and we will be able to respond to the various hypotheses that we have established.

Reynolds and Harris (2009) have studied how the customers interact with the interior design. We will use their work in order to analyze the spatial planning. We have created the first hypothesis linking our control variable with the interior store design.

H1: "There is a positive relationship between the store design and a satisfying shopping experience".

Dagger and Danaher (2014) have worked on the material quality of the store. They have created a 3 items scale that we will use in order to test our second hypothesis. This variable factor is also a part of spatial planning.

H2: "There is a positive relationship between the quality of the store (store layout) and a satisfying shopping experience".

Albrecht, Hattula, and Lehmann (2017) have highlighted the importance of the shelves management in order to have a satisfying customer experience. Thus, we believe that a bad management of the shelves will lead to a worse shopping experience.

H3: "There is a negative relationship between the confusing interior store design and a satisfying shopping experience".

Dagger and Danaher (2014) have also worked on the store atmosphere. It will help us analyze most of the atmospheric variables that we have highlighted during our literature review. It's important to point out that the scent was not studied by the authors, so it will unfortunately not be featured in our practical part.

H4: "There is a positive relationship between the store atmosphere and a satisfying shopping experience".

Albrecht, Hattula, and Lehmann (2017) have also studied the impact of the crowd inside the shop. This will be the basis we will use to discuss the human density. It appears that their approach of the crowd is negative. They focused on the negative aspect of too many customers inside the store.

H5: "There is a negative relationship between the crowding in the store and a satisfying shopping experience"

Habel, Schons, Alavi, and Wieseke (2016) have created a scale in order to analyze the quality of the company's products. This will help us analyze the merchandize variety.

H6: "There is positive relationship between the product's quality and a satisfying shopping experience".

Habel and al. (2016) have studied the values of a company's product. This is going perfectly in line with our study of the merchandize value from our literature review.

H7: "There is a positive relationship between the value of the company's product and a satisfying shopping experience"

Albrecht and al. (2017) also studied the negative impact of the waiting time inside a shop. We believe that waiting time will have a negative impact on the shopping experience.

H8: "There is negative relationship between the waiting time in-store and a satisfying shopping experience".

Giebelhausen, Robinson, Sirianni, and Brady (2014) have studied the service offered by the service. This study will help us analyze the service quality of our supermarket. We believe that the employee service plays a positive role in the overall satisfaction during the shopping experience.

H9: "There is a positive relationship between the employee service and a satisfying shopping experience"

Summary Table

	Variables	Main characteristics
1.	Spatial Planning	Functional or recreation customer Active entertainment spaces Micro-events, Fences Long queues for checkup are bad Apparition of open spaces Hight of the shelves to create open spaces
2.	Merchandize Value	Merchandize variety is more important than solely the price
3.	Merchandize Variety	Important to have a broad variety Not too much variety in the same category
4.	Shelves Management	Vertical versus horizontal management Apparition of bottomless shelves
5.	Service Level	Product knowledge Communication skills Presentation skills Enough employees inside the shop
6.	Interaction with other customers	Interaction between customers increase the satisfaction of both customers
7.	Human density in the shop	Follow an inverted U-Shape Too much or not enough people is bad Flexible number of employees to manage the crowd inside the shop
8.	Scent	Find a distinctive scent for your shop Congruent with the product you are selling
9.	Music	Need to match the preferences of the core of the customers You have to pay attention at the interaction of the variables
10.	Lightning	Brightness will increase the overall time spent looking at the products Eye level brightness is very important
11.	Color	Warm versus cool colors Color scheme only useful on recreational customers
12.	Technology	Traditional customer centric approach or technological approach Self-checkout Smart mirror

VII. Practical part

For the practical part of our master thesis, we have decided to analyze an independent supermarket. Our plan is to analyze some characteristics of the supermarket through a survey directly from the customers of Freshmed. The first chapter of this section will be an introduction to the Freshmed. Then we will present how we have created the questionnaire. Then, we will look at the statistical results obtained thanks to the statistical program SPSS. The final part of this master thesis will be a comparison of the knowledge from our literature review and the results of our survey. We will then elaborate from this comparison some managerial recommendations.

A. Introduction of Freshmed.

Freshmed is a project born 8 years ago, from three brothers. The aim of this supermarket was to create a place where you would be able to buy products from many different countries. They have created a big supermarket (2500m²) with products coming from all around the world. As for a comparison, a classic Delhaize has around 8000 references and in Freshmed you can find more than 19000 products. The supermarket is located at “Rue de l’escadron 35, 1040 Etterbeek”. At first, the supermarket was named the “Garage” because the previous owner of the place was a Volvo car dealer.

This is a family project, four years after the creation of the first Freshmed, they have opened a new smaller supermarket (500m²) in Court Saint Etienne. Recently they have opened a brand-new supermarket in Brussels. This supermarket is called Great Market and is located at “Chaussée de Louvain 650, 1030 Bruxelles”. We have decided to focus our research on the older shop, as it takes time to set up a concept.

The main characteristic of this supermarket is its variety of products. As said previously, the shop is selling a bit less than 20000 different products. The shop offers products like champagne from Crimea to Japanese rice. In the shop, they have a Lebanese catering service, a butcher and a large variety of fresh fruits and vegetables.

B. Methodology

In our literature review, we have identified a series of variables that impact the customer experience inside a supermarket. We have decided to conduct a survey on the customers of the Freshmed in order to analyze the level of their customer experience. In order to create this questionnaire, we had to look at the previous literature on this subject.

The first variable study was the interior store design and layout. This variable was composed of 10 items from three different scientific articles. The store design (interior layout) was constructed by Reynolds and Harris (2009). The quality of the store was created by Dagger and al. (2014). The confusing interior layout was imagined by Albrecht and al. (2017). The combination of these 10 items will give us an idea about the spatial planning and the shelves management which has been studied in our literature review.

The second variable studied in this questionnaire was the store atmosphere. This variable was composed of 12 items from three different authors. This element was studied by Dagger and al. (2014). The crowd in the store and the waiting time has been tested in stores by Albrecht and al. (2017). Through those 12 items, we can analyze most of the atmospheric variables. The scent variable studied in the literature doesn't appear in the questionnaire because it was not possible to find any items that was verified by previous studies.

The third variable studied in this questionnaire was the quality of Freshmed products. Habel and al. (2016) have formulated 3 items in order to test the customers. This will allow us to analyze the merchandize variety in the store.

The fourth variable studied in the questionnaire was the value of the company's product. It was imagined by Habel and al. (2016). We will compare the result from those items with the variable merchandize variety that we have studied previously.

The fifth variable studied in this questionnaire was the employee report. Giebelhausen and al. (2014) has elaborated 4 items in order to analyze the view of the service by the customers. As per the other variables, we will compare the result found on these items with our knowledge developed on the service quality.

The last variable studied in the questionnaire was the satisfaction with the customer experience. Van Ittersum and al. (2013), have verified three items that help us analyze the satisfaction of the experience inside the shop. We will use this as our independent variable in order to understand if all the previous variables have an effect on the customer satisfaction with the customer experience.

This questionnaire has been done by customers inside the shop directly with an interviewer. One hundred customers have responded to the questionnaire. It took us three days to gather all of these testimonies. The first 40 questionnaires were done on the Saturday, 40 on the Sunday and 20 on the Tuesday. The days are important to highlight in order to put a limit on our result. In supermarkets, there are more customers during the weekend. This could have influenced some questions like the crowd present inside the shop or the waiting time.

The questionnaire was available in two languages, English and French. The respondent was asked before the interview what his preferred language was. Out of the hundred questionnaires, 86 were in French and 14 in English.

The main hypothesis represents correlations between the variables and the satisfaction with the customer experience. In order to analyze these correlations, we must form the variables with the data that we have. In fact, with the questionnaire, we have multiple items that represent a variable. We have to merge these items.

Firstly, we have to conduct a statistical analysis (ACP) in order to verify that the different items are all loading on the same factor. Once this is verified, we have to conduct a Cronbach alpha analysis to be sure that the level is superior or equal to 0,7. If the two previous verifications are passed, we have to do an arithmetical average of all the items in order to have the general average of the factor. We have to use this method for all the variables in order to be able to answer the hypotheses.

Once all the variables are set up, we can conduct the correlations in order to analyze the effect of the variables on the satisfaction with the customer experience. This correlation will probably be positive on some factors and negative on others.

VIII. Results

In order to be able to analyze the result from the data collected, we must conduct a principal component analysis (PCA). This statistical test will help us analyze the results from the survey. It will create factors from different variables. We will then be able to combine the variables. The second step is to operate a Cronbach alpha analysis to be sure that those new factors are statistically reliable. Once those new factors are identified, we can conduct an arithmetical average on the different items. We will then correlate the different factors with our control factor that is the "satisfaction with the shopping experience". We will use the statistical program called SPSS to analyze our database.

Firstly, we will analyze the demography characteristics of our sampling. Inside the questionnaire, we have asked some questions about the respondents, like their age or their zip code. This will give us some macroeconomic data that can be useful to know in order to upgrade the customer experience.

Secondly, we will conduct the PCA and the Cronbach alpha analysis on the new factors. During the elaboration of our questionnaire, we have used different factors from different studies. The association of these factors has never been done. We will maybe discover some new factors.

A. Demographic results:

In our questionnaire, we have integrated some demographic question, this will help us understand our sample. We asked the question of age, gender, frequency of visit and zip code. These data are interesting on their own. Mapping its customers is interesting for a company. This does not represent the population, but it is interesting to keep an eye on the demography of our sample when we analyze the data.

Let us start with the gender of our sample. The number of men is higher than the number of women. We have 53 men against 47 women (table 1).

Sexe (1=Homme)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	53	53,0	53,0	53,0
	2	47	47,0	47,0	100,0
	Total	100	100,0	100,0	

Table 1: Sex distribution in the sample

The average age of the respondent is 42 years old. The younger respondent was 13 years old and the oldest was 75 (table 2).

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	100	13	75	42,38	14,136
Valid N (listwise)	100				

Table 2: Age repartition in the sample

In our sample, we have 23 different nationalities, although most of the population was Belgian, 55 of them were (table 3). The second nationality after the Belgians was Italian. Nine of them have responded to the survey followed by seven French customers. This diversity is still impressive, 23 different nationalities over 100 customers.

Nationalité

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Algérien	1	1,0	1,0	1,0
	Arménien	1	1,0	1,0	2,0
	BE	55	55,0	55,0	57,0
	Bulgare	1	1,0	1,0	58,0
	ESP	2	2,0	2,0	60,0
	FR	7	7,0	7,0	67,0
	GE	2	2,0	2,0	69,0
	Greek	3	3,0	3,0	72,0
	Iran	1	1,0	1,0	73,0
	Irlande	1	1,0	1,0	74,0
	IT	9	9,0	9,0	83,0
	LV	1	1,0	1,0	84,0
	Polish	1	1,0	1,0	85,0
	Portugaise	1	1,0	1,0	86,0
	Roumain	1	1,0	1,0	87,0
	Russian	1	1,0	1,0	88,0
	SE	1	1,0	1,0	89,0
	Syrien	2	2,0	2,0	91,0
	Tunisien	2	2,0	2,0	93,0
	Turk	1	1,0	1,0	94,0
	UK	2	2,0	2,0	96,0
	Ukraine	1	1,0	1,0	97,0
	USA	3	3,0	3,0	100,0
	Total	100	100,0	100,0	

Table 3: Nationality distribution in the sample

Two main neighbourhoods stood up from the data, Etterbeek and Woluwe-Saint-Pierre (Table 4). Etterbeek, where the shop is accounted for 31% of the sample followed by Woluwe with 15%. The rest of the sample is spread over Brussels and 12% of the sample originates from outside of the capital city.

Code Postale

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1000	7	7,0	7,0	7,0
	1030	4	4,0	4,0	11,0
	1040	31	31,0	31,0	42,0
	1050	3	3,0	3,0	45,0
	1080	1	1,0	1,0	46,0
	1090	1	1,0	1,0	47,0
	1150	15	15,0	15,0	62,0
	1160	4	4,0	4,0	66,0
	1170	4	4,0	4,0	70,0
	1180	4	4,0	4,0	74,0
	1190	6	6,0	6,0	80,0
	1200	4	4,0	4,0	84,0
	1210	1	1,0	1,0	85,0
	1325	1	1,0	1,0	86,0
	1340	2	2,0	2,0	88,0
	1348	6	6,0	6,0	94,0
	1390	1	1,0	1,0	95,0
	1500	1	1,0	1,0	96,0
	1930	1	1,0	1,0	97,0
	1950	1	1,0	1,0	98,0
	7062	1	1,0	1,0	99,0
	7870	1	1,0	1,0	100,0
	Total	100	100,0	100,0	

Table 4: Zip code distribution in the sample

Let us look at the frequency of visit of our sample (Table 5). On our sample only 4 people were in the shop for the first time. Twenty-one of our respondents come once a month to the supermarket. Twenty-two customers usually visit the supermarket twice a month. Fifty-three customers visit the supermarket at least once a week.

Fréquence de visite

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Deux fois par mois	21	21,0	21,0	21,0
	Premiere fois	4	4,0	4,0	25,0
	Une fois par mois	22	22,0	22,0	47,0
	Une fois par semaine	53	53,0	53,0	100,0
	Total	100	100,0	100,0	

Table 5: Distribution of visit frequency

B. Factorial Analysis

We have conducted the ACP on our dataset and the result was half surprising. In the elaboration of the survey, we knew that we had 10 factors. The surprise came when we looked at the results, the third item of store design, his communality score was under 0.3. The result is that we cannot use this item in order to represent the store design in general. Then, we have conducted a Cronbach analysis on the three other items. The result was of 0.635, which means that this factor is not significative. We have decided to not use the store design factor because it is not relevant for this sample. In the limitation of our master thesis, we have elaborated a theory on why this factor failed to be significative for our sample. The second anomality came with the store atmosphere, it will be explained later on the statistical relevance chapter.

As a conclusion of this factorial analysis, we have seen that some factors are reliable as expected and some had to be changed. The factor "store design" has completely vanished, it's not reliable in our sample. For the store atmosphere, we can only statistically keep the four items. The other items must be removed from the dataset for statistical reasons. We might have found the reason of this problem and we will explain it in the limits of our master thesis. We will start by the "expected" factors for our analysis and we will end with the store atmosphere.

1. Employee Report:

We have conducted a factorial analysis in order to understand if all the items were loading on the same factor. The results show that they all load on the same factor (Appendix 2). The four items of employee report can be fusion in order to create a single variable. In order to be sure this is pertinent we have done a Cronbach alpha analysis. Here are the results:

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,828	4

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
Empl1	17,72	6,830	,621	,798
Empl2	17,69	6,883	,719	,759
Empl3	17,93	6,046	,628	,806
Empl4	17,46	7,059	,687	,773

Table 6: Employee Report Cronbach alpha

The Cronbach alpha is over 0.7, so we can conclude that the employee report variable is relevant. We can now create a single variable that is the arithmetical average of the 4 items. We will use this new variable to conduct the correlations in order to respond to our hypotheses.

2. Crowding in the store

The result was clear in the factorial analysis (Appendix 3), the variable crowding in the store can be created from the 3 items that represent it. We have done a Cronbach analysis on to be sure of the result.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,868	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
Crowd1	7,19	5,004	,825	,741
Crowd2	7,36	5,263	,870	,704
Crowd3	6,79	6,329	,575	,965

Table 7: Crowding in the store Cronbach alpha

The Cronbach alpha is superior at 0.7, so we can create a new variable from the arithmetical average of the 3 items.

3. Waiting time

The result was also clear in the factorial analysis (Appendix 4), the waiting time in the store stood up as a single variable from the data. We can combine the 3 items, to be sure we have conducted a Cronbach analysis.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,877	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
Wait1	5,35	4,755	,778	,814
Wait2	5,37	4,478	,871	,725
Wait3	6,18	5,785	,656	,916

Table 8: Waiting time Cronbach alpha

The Cronbach alpha is superior to 0.7, so we can create a new variable from the arithmetical average of the 3 items.

4. Satisfaction with shopping experience

The satisfaction is stood up in the factorial analysis as a unique factor (Appendix 5). All the items load in the same factor so we can merge them in order to create a unique variable. The Cronbach alpha was indeed high.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,922	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
Sats1	11,82	2,634	,836	,896
Sats2	11,85	2,290	,877	,857
Sats3	11,75	2,250	,823	,906

Table 9: Satisfaction with the shopping experience Cronbach alpha

5. Quality of the store

Quality of the store also stood up as a unique variable in the factorial analysis (Appendix 6). We have conducted a Cronbach alpha analysis in order to make sure that this fusion is relevant.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,882	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
QualSt1	8,61	7,392	,691	,901
QualSt2	8,94	6,077	,834	,775
QualSt3	9,23	5,613	,806	,805

Table 10: Quality of the store Cronbach alpha

Indeed, the Cronbach alpha is superior to 0.7, we can fuse the 3 items in order to create a single variable quality of the store.

6. Conflictual layout

The conflictual layout stood out of the factorial analysis as expected (Appendix 7). As for all the other expected variables we have conducted a Cronbach alpha test. The results were positive, we can use this factor in order to answer to our hypotheses.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,869	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
ConfLT1	7,29	6,733	,733	,831
ConfLT2	7,33	6,183	,820	,750
ConfLT3	7,30	6,455	,701	,863

Table 11: Conflictual layout Cronbach alpha

7. Quality of the company's product

The quality of the company's product passed the Factorial analysis (Appendix 9). All the items load on the same factor. The Cronbach alpha test is high. We use the arithmetical average of the 6 items in order to respond to our hypotheses.

Récapitulatif de traitement des observations

		N	%
Observations	Valide	100	99,0
	Exclue[a]	1	1,0
	Total	101	100,0

a. Suppression par liste basée sur toutes les variables de la procédure.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,855	3

Table 12: Quality of the company's product Cronbach alpha

8. Value of the company's product

The value of the company's product passed the factorial analysis (Appendix 10). All the items load in the same direction. The Cronbach alpha analysis will make sure we can combine all the items of this factor in a significant way.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,828	3

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
ValPr1	10,71	6,349	,586	,856
ValPr2	10,89	5,553	,746	,702
Valpr3	10,94	5,148	,734	,712

Table 13: Value of the company's product Cronbach alpha

The Cronbach alpha is superior than 0.7 which means that this scale is significative.

9. Store atmosphere

The factorial analysis shows surprising results on this supposed factor. The ACP has found two different factors for the store atmosphere. The four first items can be merged into one and the last two can be mixed up separately. The surprising results came during the Cronbach alpha test, the items one to four were significative with a score of 0.699. The items five and six were not significative with a score of 0.430. We can then create the store atmosphere factor from the four items.

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,699	4

Statistiques de total des éléments

	Moyenne de l'échelle en cas de suppression d'un élément	Variance de l'échelle en cas de suppression d'un élément	Corrélation complète des éléments corrigés	Alpha de Cronbach en cas de suppression de l'élément
Atmo1	15,22	5,769	,589	,583
Atmo2	15,59	5,295	,620	,552
Atmo3	15,66	5,802	,532	,610
Atmo4	15,75	5,523	,295	,795

Table 14: Store atmosphere Cronbach alpha

C. Correlations of factors

We are now ready to find the answer to the hypotheses. We have used the Likert scales in our questionnaires, so all the variables are ordinal. That means, we must use the Spearman correlation in order to analyze the correlation between two variables. Indeed, in our hypotheses we wanted to know if there was a relationship between the variable that we have found thanks to the literature review and the satisfaction with the shopping experience. The Spearman correlation will give us the direction of the relationship and its strength. The correlation can take values from -1 to 1, strongly negatively correlate to strongly positively correlate. We usually say that, over 0.3 in either direction means that the correlation is strong.

The H1 will not be answered in this master thesis because the statistical analysis was not reliable. We will try to find a probable explanation on why this factor was not reliable.

1. Quality of the store and the satisfaction with the shopping experience

In order to understand if there is a positive link between these two factors, we have to conduct a Spearman correlation.

Corrélations

			Quality of the store	Satifaction with the customer experience
Rho de Spearman	Quality of the store	Coefficient de corrélation	1,000	,347**
		Sig. (bilatéral)	.	,000
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	,347**	1,000
		Sig. (bilatéral)	,000	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 15: Quality of the store and the satisfaction with the shopping experience correlation matrix

This table is giving us two important pieces of information, the direction of the correlation and its intensity. We can see that the result of the correlation is positive and greater than 0.3. The correlation is significative at the level of 0.01 so we can safely say that the quality of the store strongly influences the satisfaction with the shopping experience.

2. Confusing interior design and satisfaction with the customer experience

In order to understand if there is a negative link between the confusing interior design and the satisfaction with the shopping experience, we have conducted a Spearman correlation.

Corrélations

			Confusing interior layout	Satifaction with the customer experience
Rho de Spearman	Confusing interior layout	Coefficient de corrélation	1,000	-,287**
		Sig. (bilatéral)	.	,004
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	-,287**	1,000
		Sig. (bilatéral)	,004	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 16: Confusing interior design and satisfaction with the customer experience correlation matrix

This table shows us that there is a negative correlation between these two factors. The correlation is more or less strong, we usually say that a correlation is strong when the coefficient is superior than 0.3 or inferior than -0.3. Here the correlation is of -0.287. This correlation is significative at the 0.01 level. We can safely say that a confusing interior design has a negative relationship with the satisfaction with the shopping experience.

3. Crowding in the store and satisfaction with the shopping experience

In order to understand if there is a negative link between the crowding in the store and the satisfaction with the shopping experience, we have conducted a Spearman correlation.

Corrélations

			Cowding in the store	Satifaction with the customer experience
Rho de Spearman	Cowding in the store	Coefficient de corrélation	1,000	-,073
		Sig. (bilatéral)	.	,468
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	-,073	1,000
		Sig. (bilatéral)	,468	.
		N	101	101

Table 17: Crowding in the store and satisfaction with the shopping experience correlation matrix

This table shows that the correlation is not significative at the 0.05 level used previously. That means that we cannot say statistically that a crowded store has a negative impact on the satisfaction with the shopping experience.

4. Waiting time and satisfaction with the customer experience

In order to understand if there is a negative link between the waiting time in the store and the satisfaction with the shopping experience, we have conducted a Spearman correlation.

Corrélations

			Waiting time	Satifaction with the customer experience
Rho de Spearman	Waiting time	Coefficient de corrélation	1,000	-,270**
		Sig. (bilatéral)	.	,006
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	-,270**	1,000
		Sig. (bilatéral)	,006	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 18: Waiting time and satisfaction with the customer experience correlation matrix

This table shows that there is a negative correlation between the two factors. As said previously, the correlation is quite important if the coefficient is close 0.3. the coefficient is at -0.270, so it correlates negatively. This correlation is even significative at the 0.01 level. That means, we can safely say that the waiting time is negatively impacting the satisfaction with the shopping experience.

5. Employee report and satisfaction with the shopping experience

In order to understand if there is a negative link between the employee report and the satisfaction with the shopping experience, we have conducted a Spearman correlation.

Corrélations

			Employee report	Satifaction with the customer experience
Rho de Spearman	Employee report	Coefficient de corrélation	1,000	,387**
		Sig. (bilatéral)	.	,000
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	,387**	1,000
		Sig. (bilatéral)	,000	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 19: Employee report and satisfaction with the shopping experience correlation matrix

This table shows us that there is a strong correlation between the two factors. The correlation coefficient is almost of 0.4. This correlation is even significative at the 0.01 level. We can safely say that, the employee report plays a positive role in the satisfaction with the shopping experience.

6. Quality of the company's product and satisfaction with the shopping experience

In order to understand if there is a positive relationship between the quality of the company's product and a satisfying shopping experience, we have conducted a spearman correlation.

Corrélations

			Quality of the company's product	Satifaction with the customer experience
Rho de Spearman	Quality of the company's product	Coefficient de corrélation	1,000	,313**
		Sig. (bilatéral)	.	,001
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	,313**	1,000
		Sig. (bilatéral)	,001	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 20: Quality of the company's product and satisfaction with the shopping experience correlation matrix

This table shows that the correlation between the quality of the Freshmed product's and the satisfaction with the shopping experience is strong. The correlation coefficient is at 0.313. This correlation is even statically significant at the 0.01 level. We can safely say that, the quality of the company's product has positive impact on the satisfaction with the shopping experience.

7. Value of the company's product and the satisfaction with the shopping experience

We have conducted a Spearman correlation on the value of the company's product and the satisfaction with the shopping experience in order to answer our hypothesis.

Corrélations

			Value of the company's product	Satifaction with the customer experience
Rho de Spearman	Value of the company's product	Coefficient de corrélation	1,000	,376**
		Sig. (bilatéral)	.	,000
		N	101	101
	Satifaction with the customer experience	Coefficient de corrélation	,376**	1,000
		Sig. (bilatéral)	,000	.
		N	101	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 21: Value of the company's product and the satisfaction with the shopping experience correlation matrix

This table shows that the value of the company's product is positively correlated to the satisfaction with the shopping experience. The correlation coefficient is at 0.376. This indicates that the correlation is strong and significant at the 0.01 level. We can safely say that the value of the company's product has a positive impact on the satisfaction with the shopping experience.

8. Store atmosphere and satisfaction with the shopping experience

This factor has changed with the factorial analysis. This analysis showed that only four of the 6 items were significative for this dataset. The Cronbach alpha analysis showed us that the four items of this factor were reliable. We have taken the average score of the four items and merged them into a single factor.

Corrélations

			Atmo1_2_3_4	Satifaction with the customer experience
Rho de Spearman	Atmo1_2_3_4	Coefficient de corrélation	1,000	,499**
		Sig. (bilatéral)	.	,000
		N	100	100
	Satifaction with the customer experience	Coefficient de corrélation	,499**	1,000
		Sig. (bilatéral)	,000	.
		N	100	101

**. La corrélation est significative au niveau 0.01 (bilatéral).

Table 22: Store atmosphere and satisfaction with the shopping experience correlation matrix

This table shows that there is a very strong relationship between the store atmosphere and the satisfaction with the shopping experience. The correlation coefficient is the strongest at 0.499. this correlation is even significative at the 0.01 level. We can safely say that, there is a positive relationship between the store atmosphere and the satisfaction with the shopping experience.

IX. Conclusion

To sum up, we will analyze in its globality how the Freshmed is perceived by its customers. We will then look at the average score that was given by customers for each category. Finally, we will give some advice based on what we have found in our literature review.

Let’s start with the quality of the store. Thanks to the correlation on the satisfaction with the shopping experience, we can conclude that the material quality of the shop is important for the customer. The average rating of the customer on this subject is 4.43, which means that they think that the material quality is not great. This average is not a scientific certainty, but it reflects that the material quality could be improved. Bonnin (2002) found out that the installation of banners indicating the direction of the products in a supermarket is something that the customer values. Furthermore, the manager could introduce a way to help the customer understand the difference between products from the same category. This could be even more interesting if we remember that Heitzel (2000) taught us that the more time a customer spends inside the shop the more he will likely buy more products.

We will now talk about the confusing interior design. Thanks to the correlation that has been done during our statistical study on the data, we have noticed that the confusing interior design is decreasing the customer satisfaction. The average that the customer has assigned to this question is 3.63, which means that they don’t think that the shop has a confusing interior design. But it has to be pointed out that 3.63 is close to 4 which is the neutral point. So, the shop could work on its interior layout. When we looked closely at the factor and we look independently at each item, we found out that the arrangement of the shelves is one of the problems that the shop faces for the confusing interior design. We learned that customers think that the arrangement of the shelves doesn’t make them lose their way. It means that Freshmed has an interior layout that the customer found good. As for the shelf management, Deng et al. (2016) taught us the difference between horizontal and vertical assortment. It means sorting out the category of product where the customer might take at least two items horizontally. The other way around, the product category where the customer picks a single item should be exposed vertically. This technique could help the managers have a better shelf management. We have seen that the customer values the store layout positively. The store layout score was the best in this category, thus it could be improved by the managerial team. As most of the customers are the exploratory type, Bonnin (2002) taught us that active entertainment spaces have a positive impact on this type of customers. In order to combine the two dimensions, Lombart (2003) discovered that the height of the shelves can play a major role in order to create these different spaces and will give a global vision of the shop to the customers. The new format of supermarkets has worked a lot on the shelf height, they use these characteristics in order to create open or closed spaces. The Freshmed could use this technique in order to create better spaces to ease the understanding of the layout.

The crowding factor that we have studied turn out to not be significantly correlated to the satisfaction with the shopping experience. We cannot explain opinion on the subject, but we can remember that Mehta (2014) taught us that the level of client and satisfaction follow an inverted U-shape. An empty store or a crowded one is negative for the shopping experience. There is an optimal number of customers per shop that is determined by a lot of variables.

The waiting time in the shop is negatively correlated to the satisfaction with the shopping experience. The correlation coefficient is almost at -0.3 which translate to a strong negative relationship. In our sample test, we can see that the average of the waiting time is 2.77. The customer of Freshmed does not perceive the time spent on the queues too long. However, research has been done on this topic. Eroglu et al (2005) have studied the interaction between the waiting time and the music. He found out that a slow tempo music in a crowded store has a positive impact. This could be a simple tool in order to improve the overall experience. In the new supermarket formats, the self-checkout systems have appeared in order to decrease the time people stay during the checkout. It would be interesting for Freshmed to ask customers if they would be interested in the implementation of such technologies.

Employee report is strongly correlated to the satisfaction with the customer experience. The correlation coefficient is at 0.387. Our sample shows that the average given to the employee service is the best score out of all the factors studied. With an average score of 5.95 over the four items, Freshmed customers have expressed that they strongly appreciate the service. This result is very good for Freshmed, but everything can be improved. Allaway et al. (2011) explained that the employees needed to have a good functional understanding of the products to improve the customer experience. When we look deeper at the statistics, we can see than the product knowledge is the weakest point out of the four items regarding service. Pan and Zinkhan (2006) found out that the conviviality is important for the customer experience. The conviviality item was the strongest out of the four questions of our survey. The new format of store like Carrefour emphases a lot on the service quality. The employees have been trained in order to be able to respond to any question from customers. For example, in Carrefour, you can always find a professional in any major product category such as wine. For Freshmed, it would be interesting to teach product knowledge to the employees.

We have decided to group the quality and price/quality ratio in the conclusion because these two variables are deeply linked. Our sample test shows that the Freshmed customers value the quality of the product and the quality price ratio. In our sample test, the average score for the quality factor was of 5.803 and the average score of the ratio was 5.402. Freshmed customers perceived that the quality of the products is high and Freshmed offers a good quality for its price. Sivadas and Jindal (2017) concluded that the price is not relevant for the customer, solely the price/quality ratio is relevant. Marques et al. (2013) have taught us that the variety of product is also an important factor, sadly we have not measured it during our research.

Thanks to the factorial analysis, we have learned that only four of the 6 items were significant. The four items were about the overall atmosphere and the lighting level. The two last items were precise, like the color scheme and the music played. Areni and Kim (1994), found out that bright ambient light pushes the customer to hold more products and allows them to better visualize the characteristics of this one. This could be a tool for the managers in order to improve that quality of lighting. Although the customers have scored 4.98 on average on the lightning item. One of the problems was that there was no music played in the supermarket and no color scheme, so the customer was lost at the time of responding. However, we can look at the new factor. The correlation coefficient was at 0.499. That means that there is a very strong relationship between the store atmosphere and the satisfaction with the shopping experience. The average score was 5.18. The Freshmed customers agree to say that the atmosphere is pleasing. However, we have seen that when you look precisely at each individual score, the result is not great. During the conclusion of our literature review, we have seen that all the atmospheric variables interact. It is then important to look at the overall result even when you take minor actions because sometimes you can have unexpected negative return. Nevertheless, we can give some simple recommendations. For example, Bagchi and Cheema (2013), have discovered that the warm color like red is associated with a higher excitement and cold colors like blue are associated with peacefulness. Thus, blue walls next to the cashier could lead to a more relaxing ambiance. Roschk et al. (2017) found out that warm colors should be used in order to present new products. Hosea (2004) explained that music is one of the easiest ways for the managers to influence the customer feelings. Though, Vida et al (2007) highlighted the fact that the music needs to be in line with brand image and not be chosen randomly. In the new supermarkets, we have seen that they work a lot on the general atmosphere. They have chosen to separate the shop in multiple sections with different characteristics, for example the vegetables and fruits sections are now open and with green color schemes. Creating different atmospheres on the different sections could offer new profitable opportunities for Freshmed.

X. Limitations and suggestions

One of the major limitations of this research comes from the fact that the survey was done with customers inside the shop. The customers were asked if they wanted to participate to the survey. So, the results come from customers that already like the shop. If the same survey was done on the internet, we would probably have observed different results. Furthermore, if we asked people walking past the supermarket, we will probably have gotten different results as well.

The last day of data collection, a professional translator from the European parliament came to the shop, we highlighted some minor French-English translations. The second item of the design store named in English: “the interior design of Freshmed was unpleasant” was translated in French to “La décoration intérieure du Freshmed n’est pas plaisante”. At first sight, it might seem like a good translation but when it comes to a questionnaire it could become tricky. Indeed, the English sentence is a positive form and the French sentence is negative. The correct form for unpleasant in French should be “Déplaisant”. There is another item where the translation doesn’t appear to be the same in French and in English. The item in crowding in the store: “the store was crowded with customers” and the French translation was “le magasin était rempli de clients”. The English term crowded as more a negative impact than the French term “rempli”. After some discussions we agreed that there is no special term to translate for crowded in French but there could lead to a different response between English responders and the French ones.

Another limitation needs to be mentioned. By the fact that we have asked these questions on the spot inside the shop at a specific time, some of the variables could have influenced the answers of the customers. In fact, the crowd inside the shop at 12h30 on a Saturday is completely different from the crowd on a Tuesday at 15h30. This limitation would probably be diminished if the questionnaires were sent to customers at home for example. They would probably have a different view.

For future research, it would be interesting to do the same survey online in order to see if there are any differences. Some other variables could be added in order to have a more precise survey. Some customers have highlighted the need for the merchandize variety variable. Indeed, we didn’t test this variable and it is one of the key strengths of this supermarket.

Conducting this same research on different supermarkets could be interesting. The same questionnaire but in different supermarkets, could be a good solution to compare the customer experience between shops.

It would be interesting to conduct the same survey in three months if some of the recommendations are in place so as to analyze if the theory meets the reality. Indeed, in the literature review, we have observed that we have to pay a lot of attention to the interactions between the variables. Upgrading two variables could lead to a negative output if they are not working together. Including the product variety as a factor could be interesting for future research. We have seen in the literature review that this factor is really important, but we haven't studied it in this survey.

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