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**Hybrid vs Traditional models
on Customer Experience:
an application to the Portuguese Real Estate market**

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“In a gentle way, you can shake the world”

Mahatma Gandhi

ABSTRACT

Title: Hybrid vs Traditional models on Customer Experience: an application to the Portuguese Real Estate Market

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Technology is impacting industries all over the world and the real estate industry is no exception.

This thesis aims to analyze the traditional model of real estate and the new emerging methods where several tasks are performed online (reducing the human contact) and understand the current customer experience with the goal to understand how technology can improve it.

Several research methods were used to obtain data. In terms of qualitative search, a focus group was conducted to people who already interacted with the market and 3 in-depth interviews were performed to Millennials with no experience in the real estate industry. The quantitative data was gathered through a survey conveyed to 468 valid participants. Both searches were reinforced by literature on the real estate market, the impact of technology in the industry, customer experience, brand equity and a description of the two generations under study: Millennials and Generation X.

The key findings suggest that the overall satisfaction with the mediation process regarding quickness, smoothness and the method chosen is between average and great. There is a considerable number of participants that do not perceive the need for a mediator. There is a limited knowledge of the market. The preferences in the market are not aligned as there are significant differences between sellers and buyers and between generations. To conclude, for Millennials, a hybrid model provides a better customer experience while for Generation X, a traditional model is the one with a superior level on experience.

Keywords: Real Estate; Generation X; Generation Y; Millennials; Customer Experience; Technology; Online Businesses;

RESUMO

Título: Modelo Híbrido vs tradicional relativamente à experiência do consumidor: aplicação ao mercado imobiliário Português

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A tecnologia está a ter um forte impacto nas indústrias por todo o mundo e o mercado imobiliário não é exceção.

Esta tese tem como propósito analisar o modelo imobiliário tradicional e os novos métodos onde vários passos são feitos online (reduzindo assim o contacto humano) e ainda perceber como é a experiência do consumidor e de que forma a tecnologia pode melhorá-la.

Foram usados vários métodos para obter dados. Relativamente à pesquisa qualitativa, foi realizado um “focus group” com pessoas que já interagiram no mercado e ainda 3 entrevistas foram feitas a membros da geração Y que ainda não tiveram qualquer contacto com a indústria. A pesquisa quantitativa foi recolhida através de um questionário online com um total de 468 respostas. Ambas as pesquisas foram reforçadas através de literatura relativa ao mercado imobiliário, o impacto da tecnologia nesta indústria, experiência do consumir, equidade da marca e uma descrição das gerações X e Y.

As principais conclusões sugerem que, em geral, a satisfação com o processo de mediação em termos de rapidez, tranquilidade e método escolhido para fazer a transação é entre média a excelente. Há ainda um número considerável de participantes que não vê qualquer valor acrescentado na mediação. Há um conhecimento limitado do mercado. As preferências no Mercado não estão alinhadas dado que há diferenças significativas entre vendedores e compradores e entre gerações. Para concluir, a geração Y tem uma melhor experiência num modelo híbrido enquanto que a geração X tem uma melhor experiência no modelo tradicional.

Palavras-chave: Mercado Imobiliário; Geração X; Geração Y; Millennials; Experiência do consumidor; Tecnologia; Negócios Online;

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This thesis represents the end of a chapter in my life. As humans, we are constantly learning through books, each other and our personal experiences. However, my life as a student has come to an end. It was a long journey that allowed me to grow both on a personal and professional level.

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CHAPTER 1 - INTRODUCTION

1.1 Background

Technology is impacting industries all over the world. Portugal is the 55th country of the world with the highest number of internet users (Internet Live Stats, 2016). Around 73% of the Portuguese population already uses the internet (ACEPI, 2017). Its access made available to the general public information that was previously exclusive to professionals (Baen, J. S. and R. S. Guttery, 1997). Moreover, the internet brought the possibility to buy and sell goods online (e-commerce) which facilitates the process for buyers and sellers (Arnold & Penard, 2007).

These factors combined also have an impact on the real estate market and on how things are done or can be done from now on. A traditional agency offers the following services: matches buyers and sellers, determines prices, promotes the property, manages the outflows and defines the terms of the contract (Dilek, 2014; Spulber, 1996). Nevertheless, the new emerging models all over the world provide innovative alternatives to the market, including the appearance of hybrid agencies. This type of agency offers the same services of a traditional one, associated with a saving money customer proposition, where several steps that intended human contact are being erased and substituted by virtual solutions (Morris.J, 2017).

But then again, how is the real estate market being affected by technology? First, the rise of social media. These platforms are a way of people communicating and sharing insights regarding the market and their own experience (Smith.C, 2017). Furthermore, agencies use their own websites and real estate portals to promote the houses (Dilek S., 2014). This measure allows an easier access to what it is on sale in the market without leaving the comfort of their home. In addition, nowadays it is possible to walk-through a house on the internet allowing for buyers all over the world to see potential assets without incurring in any travel costs (Crowston.K & Wigand.R, 1999).

All these advances in technology also brought the doubt regarding the need of having a mediator. There is no consensus on the matter as some see technology as an opportunity for the agents to improve and increase their efficiency and others perceive it as a threat to this profession (Sarkar et al., 1998).

On the other hand, Millennials may revolutionize the sector as the internet is their main source of information (Auby, 2008). Besides, their expectations are different from the other generations as they want to have real experiences and relations and not just a transaction (Kylie.D, 2017). Reviews and feedback are key to purchase and brands are perceived as a social representation of their values which changes the current paradigm of the market (Littman,

2008). Based on these facts, the target groups of this dissertation will be Generations X and Y as one is the generation that is currently active on the market and the other is the one that in the next years will have an influence in this industry.

1.2 Problem Statement

The thesis aims to (1) analyze the traditional model of real estate and the new emerging methods where several tasks are performed online with no physical intermediation; (2) understand the current customer experience of the consumers and how it can be maximized due to technological improvements. Based on these goals, the problem statement can be defined as: Hybrid vs traditional models on Customer Experience: an application to the real estate market in Portugal.

To achieve these objectives, the following research questions are addressed:

- RQ 1: What are the characteristics of the traditional market?
- RQ 2: Currently, are the preferences aligned in this market?
- RQ 3: How can customer experience be maximized in this market?

Considering the previous questions, several hypotheses were formulated:

H1: Buyers and Sellers have their preferences aligned	
H2: Generation X and Y have their preferences aligned	H2 ₁ : Generation X and Y have their preferences aligned as sellers
	H2 ₂ : Generation Y and Y have their preferences aligned as buyers
	H2 ₃ : There is a match between sellers and buyers within Millennials
	H2 ₄ : There is a match between sellers and buyers within Generation X
H3: To Millennials, a hybrid real estate model delivers a better customer experience than a traditional one	H3 ₁ : As sellers, a hybrid real estate model delivers a better customer experience than a traditional one
	H3 ₂ : As buyers, a hybrid real estate model delivers a better customer experience than a traditional one
H4: To Generation X, a hybrid real estate model delivers a better customer experience than a traditional one	H4 ₁ : As sellers, a hybrid real estate model delivers a better customer experience than a traditional one
	H4 ₂ : As buyers, a hybrid real estate model delivers a better customer experience than a traditional one

1.3 Relevance

Portugal is going through a digital revolution and the real estate market is now perceived as one of the most attracting industries in the country (EY Portugal, 2017). However, Portugal is still very attached to the traditional models in the industry which means that there is still a lot of room to grow and improve in this sector. New models are emerging all over the world and are changing the course of the real estate. Nonetheless, the research on the matter is still very

limited and this thesis aims to provide further conclusions on the subject in question by analyzing the current market and the consumers' predisposition to the introduction of technology in the process and understand which steps can be automated and the ones that still need human interaction. Moreover, it aims to understand how Generation Y perceives the industry so that the market can come up with a solution for the future buying and selling generation. On a short-term view, it is relevance for companies to realize how they are being perceived and to adjust for the current active generation on the market (Generation X).

1.4 Research Methods

The research on the new emerging models on the real estate market is still very limited. There is still no reliable data on the consumers' experiences with these models and their perceptions. Thus, three approaches were used: exploratory, descriptive and explanatory. As a primary qualitative search, a focus group was conducted in February of 2018 with 8 participants, all Portuguese, with ages between 23 and 55 years old. All members already interacted with the real estate market (either by renting, selling or buying a house). In addition, 3 in-depth interviews were conducted with Millennials without any experience in this market and with a limited knowledge on the subject. The goal was to understand how they would act if they had to incur in a transaction in a near future. Based on the findings of the qualitative research, an online survey was conducted to get further insights on the subject containing a sample of the generations X and Y within the Portuguese population. To complement the primary data collected, secondary data was also brought together for the literature review section.

1.5 Dissertation Outline

The following chapter presents literature review concerning the real estate market, customer experience, brand equity and a description of generations X and Y. The third section describes in detail the methodology applied including the methods that were used and how the data was collected and gathered. The fourth chapter shows the key results from the data collected, analyzes the hypothesis that were previously mentioned and provides some explanations. Finally, the last section reveals the main conclusions, indicates some study limitations and gives recommendations for future research.

CHAPTER 2 – LITERATURE REVIEW

Considering the research questions presented above, the succeeding chapter aims to get insights of the research topics including its relevancy to the current days. In order to expand the knowledge on the subject, within this section, preceding studies will be presented and critically analyzed. The first part of the literature review will be concentrated on explaining the real estate market, its failures and the new upcoming trends due to technological advances. This will be followed by the definition of key terms such as Customer Experience and Brand Equity. Then, the focus will shift to the targeted consumers: Millennials and Generation X and how they link with the topic in question.

2.1 The Real Estate Market

One possible definition for Real Estate is an outlined space by a person, within a specific geographical area, with the purpose of comprising an activity in an explicit time. Moreover, it has a space-time feature such as house per month and hotel per night and week. All these items have an equivalent financial price (Graaskamp. J, 1981). On the other hand, Residential Real Estate can be characterized as that element of advanced urban territory that is selected for housing (Hardman et al., 2008). Furthermore, intermediation plays a key role in this market and it can be described as a group/company that performs as an agent when moderating the contact between at least two parties during a process (Howell, 2006). It can also be defined as a corporate procedure that eases the opinions by bringing them together in a value chain which adds value to the transaction (Dignum, V., Tranier, J., & Dignum, F., 2010). There are three main phases within this process: the first one is the information step and although it occurs throughout the whole transaction, it is essential in this first part. Negotiation is the second phase where the conditions of the arrangement including price, date, duration are debated. It ends when a contract is signed. The process ends with the execution stage where there is a financial transaction that serves as a trade for the good in question in agreement with the formerly specified terms (Buxmann.P & Gebauer.J, 1998).

Now that the previous concepts are presented, it is important to understand the importance of an intermediary. An intermediary can be defined as a player that looks for contractors, discovers and incentive purchasers, determines prices, manages the outflows and saves archives of the dealings, defines the terms and holds inventory to offer liquidity or accessibility to the possessions and services (Dilek, 2014; Spulber, 1996). The main goal of a real estate agent is to sell for the highest value at the shortest time (Yavas & Yang, 1995) and they have nine main roles: minimize the search costs, provide confidence on the exchange, match the consumers,

collect data aiming to have a set of clients, help consumers on decisions and show their different options, find the fair value, assist on the logistic aspects, arrange the details of the agreement and function as an intermediary with the institutional organizations of trades (Dilek S., 2014). In this market, it is common to incur in exclusive dealing agreements. This dealings can be defined as the commitment to engage with only one party, excluding the possibility of having competitive firms selling the same asset (Melamed.A.D, 2006). Under this regime, the mediator has the right to receive the respective commission even if the seller finds a buyer by them self or if a contract does not go through due to the sellers' fault (Oliveira.F, 2016). It is argued that these clauses may be increase the efficiencies to the market (Melamed.A.D, 2006). Many agencies argue that exclusivity brings multiple advantages including the intermediary dedication to sell the house, time constraints as contracts usually have a duration of 6 months and the houses are sold within that period and the investment in marketing (KW Portugal, 2017). On the other hand, the seller abdicates of a larger exposure since other agencies cannot engage in the transaction (Oliveira. F, 2016).

Mediators have a positive impact on the transaction and search costs as they facilitate the process and have a privileged access to the market in question (Dilek S., 2014). However, they also have an impact on the price (Zumpano, L. V., Elder, H. W., & Baryla, E. A., 1996). They can help on determining the right price for selling but it can also occur that the sale is made for a lower value aiming to reduce the time for the transaction (Levitt & Syverson, 2008). Another study shows that intermediaries that list a property for a higher value when comparing with the competitors, the sale is made for a superior price. The reasons for these events can be related with the lack of knowledge regarding the local marketplace circumstances and the consumers' sensitiveness regarding price (Janssen, Jobson, 1980).

There are several issues and barriers that contribute for the inefficiency of the market. One of them is the uneven information that exists between buyers and sellers (Malone et al., 1987). A study that aimed to determine the impact of asymmetrical information and search on the property price shows that although buyers have diverse data sets and search costs, the value remains the same since there is a broker involved enabling to improve the efficiency of the real estate market (Turnbull & Sirmans, 1993). Studies also demonstrate that the probability of a first-time buyer or a consumer that does not live close to the area where he/she wants to purchase a property to use a broker is higher than an experienced or local buyer (Baryla, E.A., L.V. Zumpano, and H.W. Elder, 1995). Another matter is related with the coordination costs. These expenses involve the negotiation phase and the congregation of data (Malone et al., 1987). Here, is where the real estate agents provide their most value as they support all

expenses, saving time for both sides. In exchange for their services, brokers charge a fee which make them have a considerable impact in the economy (Spulber, 1996). Nevertheless, there is a continuous expansion tendency to separate the different services proposed by the brokers. Aiming to reduce their fees, there is now the possibility for the consumer to take responsibility for certain steps within the process such as listing the property and being responsible for the promotion stage (Peters, 1997).

2.1.1 The impact of Information Technology in the Real Estate Market

The progress of Information Technology (IT) facilitates the correspondence between purchasers and vendors and enables online intermediation which is increasingly becoming more common all over the world. This type of brokers can enlarge the range of sellers, diminish the search costs for purchasers, classify vendors and compare values (Arnold & Penard, 2007). Many traditional agents use these websites to promote their properties and others resort to their own certified sites (Dilek S., 2014). These facts raise the question if intermediaries are still necessary. This sight is named disintermediation (Bailey & Bakos, 1997). The term can be defined as the abolition or shift of market mediators, allowing for both parts to perform the transaction directly with each other, without an external intervenient (Wigand et al., 1997).

2.1.1.1 How the internet can lead to disintermediation

There are multiple examples of how the internet is changing the methods in this market and how it can lead to a disintermediation as the world wide web became a public domain some information that was exclusive to the professionals in this area (Baen & Guttery, 1997). First, there are now several real estate portals that admit not only professionals but also private sellers to promote their property on their own in exchange of a payment for the listing. From a buyers' perspective, the world wide web allows for anyone to find a house that fits their needs on their own through the websites previously mentioned. In addition, house visits might be reduced as technology allows for accurately show the details of the home via walk-through virtual tours, high quality and panoramic photos and other similar features allowing to filter the buyers as they can do if the house in question fits their needs without a physical visit and consequently save time. These technological characteristics also permit for long distance buyers to explore other geographical areas without incurring in traveling expenses. On the other hand, complementary industries including construction examiners, banking services and other similar businesses can now be booked online which decreases the search costs for the agency, increasing its efficiency. Finally, regarding the last step of the transaction where a contract is

signed, there are still multiple legal barriers. The issues are related with the reliability of the institutions in question and their values. (Crowston.K & Wigand.R, 1999).

2.1.1.2 Internet as an opportunity for agents

On the opposite side, there are theories that defend the internet as a new chance for the agents to innovate, be more productive and even come up with more affordable prices regarding their commission. As it was already stated, technology decreases the costs in these transactions so lower costs can lead to lower market prices which consequently can attract a larger number of consumers. The decrease on the payments might be balanced with the increase on the number of clients (Sarkar et al., 1998). It is also to understand the competitive landscape of the market to realize how the evolution of technology does not necessary lead to disintermediation. There are four outlines in the development of competition in all businesses: the first one is functionality where here the product/service itself is the key and the goal is to surpass the consumers' needs and expectations. When firms successfully achieve this step, there is a change in priorities and then the crucial point is to be reliable. Once this stage is unquestionably established, the focus shifts to convenience and finally to price (Christensen, 1997). It can be claimed that real estate is on the reliability stage which based on this theory, can have implications on the companies entering in the market with more attractive prices as this might not lead to a triumph in the marketplace. Furthermore, considering the phase of competition where this field is inserted, it is probable and even expected that sellers choose to do the transaction with a mediator as they provide confidence and capability specially to unexperienced consumers (Muhanna.W & Wolf.J, 2002).

2.1.2 The housing product

To deepen the analysis on this matter, it is also significant to comprehend the features of the housing product itself. In general, to every product, there are three main assets: search attributes which occur previously to the acquisition of the good and so direct contact is not necessary; experience characteristics which the consumer is only aware after owning the product and without incurring in any expense; credence specificities which are costly and difficult to realize even after buying for instance questions connected with the manufacturing procedures, the materials used to do it and its quality (Darby & Karni, 1973). Due to their complexity it is essential for the buyer to look for the veracity of the claims stated by the vendor. A house has all three features mentioned above and so it is not agreeable to do the entire process through e-commerce as certain characteristics need to be certified with personal contact and sometimes with specialized technicians (Muhanna.W & Wolf.J, 2002).

A home is something that a consumer might only buy once in his/her lifetime and it requires a considerable amount of money. In addition, each household is unique as there are several ways to personalize it which leads to a high level of product differentiation. All these factors combined cause an online sale improbable (Peterson et al., 1997).

2.1.3 The importance of professional photos and floorplans in an ad

There are several articles that refer the importance of having great photos when promoting a home but how is this feature affecting buyers and the market? First, it is a source of online traffic as buyers consider photos the most valuable data in a real estate website. Moreover, online real estate websites and portals are the primary foundation of research so usually, the photos are the mean to a first view of the house and what will determine if the house is worth a physical visit. In addition, it is proved that the higher the quality of the images, the higher the probability of finding a buyer for a home. From an agency perspective, by providing a great image content, it solidifies the brand image and transmits a sense of quality to the market (Denver Metro Association of Realtors, 2015).

On the other hand, floor plans are gaining importance in a real estate ad. The grounded reasons are multiple as it is a way to captivate the buyer, it allows to understand the flow of the house, it has a bigger visual impact and consequently it is easier for the buyer to imagine himself/herself in the house, being more memorable (Floor Plan for Real Estate, 2017).

2.1.4 The Real Estate Market in Portugal

First, it is important to have a notion on how Portugal is being perceived on a global image. The country is going through a digital revolution that impacts all types of industries even the most traditional ones.

Currently, 73% of the Portuguese population is already uses the internet and the estimation is that in 2025, that percentage will increase to 91%. However, out of the 73%, only 36% of them do online shopping and half of these do it in international websites. It is predicted that in 2025, 59% of the population will be using e-commerce (ACEPI, 2017).

Furthermore, Portugal guaranteed the 25th position on the global total volume of investment with a total value of 2.1 thousand million euros in transactions which represented a growth of 61% when comparing with the previous year (Crushman & Wakefield, 2018). In addition, real estate is perceived as one of the most appealing industries to either new and reputable investors (EY Portugal, 2017). Lisbon has entered into the Emerging Trends Europe top 10 based on its recuperated market and the potential that it still has to continue to develop (PWC, 2017). During 2017, there was a significative increase on the volume and on the prices of sales, mostly in the

residential sector (Deloitte, 2017). Statistics also show that more than 80% of the houses in Portugal were sold in less than six months and 55,6% of those transactions had a value up until 175.000 euros (APEMIP, 2018). Concerning the typology of the houses, around 61% were homes with one or two bedrooms and only 31% had three bedrooms (Público, 2018).

To conclude, it is believed that in the future, the demand and the foreign investment will be variables that will have a significative impact on this sector (Deloitte, 2017).

2.2 What is Customer Experience and how it influences Brand Equity and Purchase Intention

2.2.1 Customer Experience

Customer Experience (CE) can be defined on a more formal or practical way and within these two different perspectives, there are multiple forms to do it. For instance, it be an inner and personal answer that consumers have to any interaction with a brand (Meyer & Schwager, 2007). Similarly, CE can be stated as the retained impressions that consumers keep after being in touch with a company's goods, services or industries (Carbone & Haeckel, 1994). Based on these, it is possible to affirm that these responses are not verbalized by the consumer (Rose, S., Hair, N., & Clark, M., 2011). On the other hand, it can be stated that the consumers' perspective has rational, intellectual and affective components that combined create their experience (Frow & Payne, 2007). The emotional element can set in motion long-term relations which consequently can be reflected in customer loyalty (Edvardsson, 2005). The evolution of technology also allows consumers to have internet experiences. So, Online Customer Experience (OCE) is the overall experience considering there was an intermediary (the internet) mixed with the concrete contact on the online platform (Nysveen & Pedersen, 2004). Another view explores this concept more on the consumer-company viewpoint and examines several components including computer skills and level of care, among other factors that will influence the experience on the platform (Novak et al., 2000). One more perspective relates this type of practice to the performance of the website and its functionalities (Christodoulides et al., 2006). Nevertheless, these last views fail on one aspect: they do not consider the affective personal element of OCE (Hair et al., 2009). As it was already mentioned, these affective aspects are key to create lasting relationships with consumers (Edvardsson, 2005). Thus, they should be taken into consideration when analyzing customer experience.

Now that the concepts are presented, it is crucial to make a distinction of offline and online customer experience. One of the biggest variances occurs with the level of physical interactions as through e-commerce it does not happen at all. One more dissimilarity arises on the way the

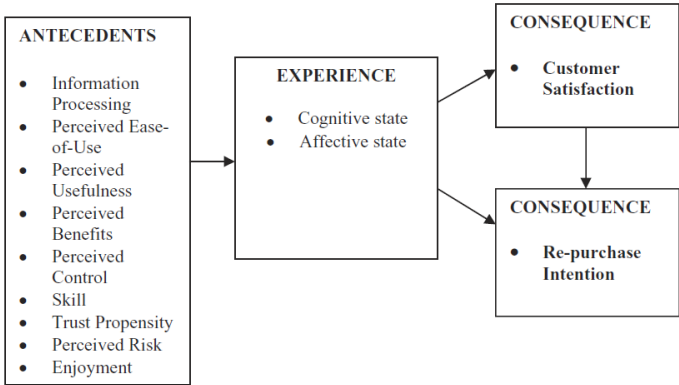
information is transmitted where in this field the online experience has advantage due to the possibility of giving larges amount of useful content. On e-commerce there is no time constraints, however the traditional market is restricted to the opening hours of the location in question which lead to another difference on the two involvements. Lastly, the way a brand shows itself is more limited in an online environment (Rose, S., Hair, N., & Clark, M., 2011). The table below summarizes these alterations.

	Offline context	Online context
Personal contact	High to medium	Low
Information provision	Varies in intensity over different media	Intensive
Time Period for interactions	Dictated by the organization	Dictated by the consumer.
Brand presentation	Range of tangible devices used to present the brand	Anytime, anywhere Audio-visual

Table 1: Offline vs online interactions. Source: International Journal of Management Reviews

It is now key to realize the consequences of these encounters with a brand. The image below demonstrates a framework for the matter in question.

Figure 1: Customer Experience Framework



As one can see there are multiple stimulus that lead to the involvement itself, yet there are only two main consequences of OCE: Customer Satisfaction (CS) and Re-purchase intention (RI). The first concept is the consequence of the continuous result of CE (Kim, 2004; Meyer & Schwager, 2007). Studies demonstrate a positive relation between these two variables as when one increases, the other goes in the same direction and vice-versa (Janda & Ybarra, 2005). Then again, RI is the continuous practice to use an online platform to purchase from a specific company. In this case, there are also evidences of a positive connection between CS, OCS and RI (Khalifa & Liu, 2007).

2.2.1.1 Describing online stores and the impact on customer experience

The quality of the service provided, the alleged value and customer satisfaction are considered precedents of commitment to a certain brand in an online environment (Shemwell et al., 1998). Having this in mind, it is important to understand e-commerce and its specificities, so that CE can be maximized and consequently increase the level of loyalty in an online brand.

There are four main groups concerning online stores characteristics: the first one is merchandise and includes features as diversity and product data (Jarvenpaa & Todd, 1997). This category is crucial as it is believed that the focus of an online shop is to diminish the search costs of its customers (Bakos, 1997) by giving the necessary information about the goods and their correspondent prices. As the level of detail of the data increases, the consumers' decision-making process will be improved as well as their experience (Peterson et al., 1997). The key is to have personalized information aiming to match the consumer's wants and needs (Park, C., & Kim, Y., 2003). Therefore, a superior level of CS is achieved (Peterson et al., 1997) and lead to a purchase behavior and a higher level of commitment that can be interpreted as loyalty (Park, C., & Kim, Y., 2003). The next set is related with customer service and promotion which includes the frequently asked questions (FAQ) area, info about returning policies and home delivery, loyalty programs and events (Park, C., & Kim, Y., 2003). A better experience is obtained when companies provide cautious, nonstop and valuable communication through different channels, both online and offline (Lohse & Spiller, 1998). Navigation and convenience is the following cluster and comprises the layout of the website, if the platform is user friendly, among other specificities. (Park, C., & Kim, Y., 2003). The combination of those factors will have an impact on the CE (Griffith, 2001) as a faster, easy and organized website will increase its level (Szymanski & Hise, 2000). To conclude, the last category covers the security issues. Although online stores assure the protection of their clients' data and the safety of the transactions made, most customers still feel insecure when they have to give their personal and financial data due to the lack of specificity on how they protect it. This last point can have a significative impact on CE. Consequently, conquering the trust of consumers regarding this matter should be one of the main priorities for this sector (Park, C., & Kim, Y., 2003).

2.2.2 Brand Equity

Brand equity is essential in marketing (Ambler 2003) as it enables to create a personal relation with the consumers which can lead to a long-term pattern of purchasing behavior (Capron & Hulland, 1999). First, it is important to understand what purchase intention is. Studies state this concept as the individual predisposition to buy something from a brand (Park, J., 2002). The

buying behavior allows to infer conclusions regarding the level of loyalty towards a good or service (Rezvani.S et al., 2012). Other theories accept as true that this notion is influenced by demographic features and other attitudinal variables (Lu,M., 2007). Brand Equity has a positive impact on purchase intention, consumer preferences and perceptions, price variations, among other factors (Rezvani.S et al., 2012). Considering the specific purpose of this thesis, the focus will be on consumer-based brand equity (CBBE).

2.2.2.1 Consumer-based Brand Equity

This view of Brand Equity is based on cognitive psychology with emphasis on memory structure. The two views that will further explored will be Keller's and Aaker's perspectives (Rezvani.S et al., 2012). One recognizes as the main variables influencing CBBE: brand awareness and the correspondent associations, the level of loyalty and perceived quality (Aaker, 1991). The other observes it exclusively from a psychological viewpoint as it analyzes the reaction of the consumers to the marketing implemented by the brand (Keller, 1993). The value increases in proportion with the positiveness of the consumer's reactions. Throughout the decision-making process, there are several times where individuals provide responses to the marketing stimulus: preference, choice intents and real choice. To this author, brand knowledge is a crucial element prior to CBBE. He defines it as a combination of different associations, stored in memory, related to a brand and can be disintegrated into brand awareness and brand image. The goal is to have unique associations since that will increase the power of the company (Keller, 1993).

Now that it is clear what is CBBE and its composition, it is time to understand how to measure it. There are two main methods: directly and indirectly. The indirect techniques aim to analyze the probable sources of Consumer-based brand equity by evaluating the levels of brand knowledge. The direct ones try to determine the effect of brand knowledge on the consumers' reactions about the marketing strategy. To be effective, both strategies should be used simultaneously (Keller, 1993). The table below summarizes what type of measures are used on the indirect method and what is the goal of each one of them.

Measurement of Brand Knowledge Constructs Related to Customer-Based Brand Equity ^a		
Construct	Measure(s)	Purpose of Measure(s)
Brand Awareness		
Recall	Correct identification of brand given product category or some other type of probe as cue	Capture "top-of-mind" accessibility of brand in memory
Recognition	Correct discrimination of brand as having been previously seen or heard	Capture potential retrievability or availability of brand in memory
Brand Image		
<i>Characteristics of brand associations</i>		
Type	Free association tasks, projective techniques, depth interviews	Provide insight into nature of brand associations
Favorability	Ratings of evaluations of associations	Assess key dimension producing differential consumer response
Strength	Ratings of beliefs of association	Assess key dimension producing differential consumer response
<i>Relationships among brand associations</i>		
Uniqueness	Compare characteristics of associations with those of competitors (indirect measure) Ask consumers what they consider to be the unique aspects of the brand (direct measure)	Provide insight into the extent to which brand associations are not shared with other brands; assess key dimension producing differential consumer response
Congruence	Compare patterns of associations across consumers (indirect measure) Ask consumers conditional expectations about associations (direct measure)	Provide insight into the extent to which brand associations are shared, affecting their favorability, strength, or uniqueness
Leverage	Compare characteristics of secondary associations with those for a primary brand association (indirect measure) Ask consumers directly what inferences they would make about the brand based on the primary brand association (direct measure)	Provide insight into the extent to which brand associations to a particular person, place, event, company, product class, etc. are linked to other associations, producing secondary associations for the brand

Figure 2: Customer-based Brand Equity Measurement

2.3 The targeted consumers: Generation X and Millennials

This section will focus on describing a general profile and some shopping behaviors of both Generation X and Millennials. The choice of these two age groups is related with the fact that Generation X is the one that is currently active in the real estate market and Millennials represent the future for this industry.

The individuals that were born between 1980 and 2000 are named Millennials or Generation Y (Richard K. Miller and Associates, 2011). Although there is not a complete agreement concerning the period in question, this will be the years used for this thesis. Furthermore, people born between 1961 and 1980 are designated as Generation X (Greenberg, 2011).

It is argued if Millennials should be analyzed as a whole (Foscht et al., 2009). Further segmentation is suggested in accordance to life-stage events, for example university students can be a set as a segment of the Millennials generation (Beard, 2003).

Generation X is using the influence of internet to customize and humanize several things. It is the generation that made the internet something common on the daily lives of millions of consumers. This age group prefers to communicate through email or online devices and get unsatisfied when a service does not give that option (Reisenwitz & Iyer, 2009). On the other hand, Millennials are natural when it comes to using the internet and the devices that came with it as they use it since they were little children and grew up in a constant contact with technology (Tyler, 2008; Auby, 2008). Furthermore, this group is known for their ability to multitask

(Reisenwitz & Iyer, 2009) and responsible for the fact that internet consumption surpassed television (Barnikel, 2005).

Concerning the professional lives of these age groups, generation X have an entrepreneurial spirit and are extremely independent, always searching for new opportunities and experiences. In addition, they aim to have an impact on the company's mission and appreciate to have a work-life equilibrium (Beutell & Wittig-Berman, 2008). This last aspect is shared between the two age groups in question. Generation Y is more practical, their concerns are related with wages and other benefits that can come with the job. Stability and job satisfaction are also key ("Focused on the Future", 2008). Success is a priority and if to conquer this goal they will need to shift to another company, they will do it without blinking ("How Millennial Staff", 2009). A significant difference between the two is the fact that Millennials need guidance and mentoring (Dolezalek, 2007).

Both Generation X and Y tend to avoid risks which goes against their work behavior due to their propensity to shift from job to job. The discrepancy here is on how they react to risk as Xers have a lot of trust issues and are extremely skeptical. Millennials are most often sure of their choices (Beaton, 2008).

A commonality shared between generations X and Y is the lack of customer loyalty and that can be justified by the fact that they are constantly in contact with store discounts instead of company advertisement. Moreover, even when there is loyalty, it has a short duration (Reisenwitz & Iyer, 2009).

Millennials are considered less cynical and seem to have a more positive and idealistic attitude with strong principles regarding tradition (Hymowitz, 2007). Although they have zero tolerance for negative brand experiences, they care about style, like to be in accordance with the tendencies and are brand-conscious ("Young Compulsive Shoppers", 2009), valuing more these features than the price itself. More than brand designations, these consumers want that what they wear and use to be a social representation of their values and beliefs (Beirne & Howe, 2008) which is something they share within their private social circle (Edelman, 2010). Social Networks are powerful in this market as most of this age group is willing to try a new product or service if a friend or someone within his/her circle recommends it (Littman, 2008). These facts can lead to a shift on how companies present themselves as genuine marketing and ethical values are crucial to establish a connection and possibly a long-term relation with these consumers (Strategy One, 2010). They are also known for spending more when comparing with the previous generations and to care about earth issues so their preference leans towards environmentally-friendly companies (BrandAmplitude, 2009).

Concerning house purchasing habits these two generations are extremely different. Generation X looks for family houses located close to their job or their children's school. Generation Y search for smaller houses, with less bedrooms. However, the predisposition of this last generation to buy is bigger than the other age group. Millennials are less resistant to changing homes, being more price sensitive. They consider the different alternatives when faced with an increase in price while Generation X prefers to pay more to maintain their stability (National Association of Realtors, 2017).

2.4 Conclusions and research hypotheses

To conclude, the real estate market is going through a digital revolution and in Portugal, it is seen as one of the most attractive sectors. Nevertheless, there are limited studies to the impact of technology in the real industry and how that can affect consumer experience. As it was mentioned within this chapter, there are already some studies on how the internet can potentiate the mediation process, however no significant conclusions can be taken regarding the customer experience in this new environment. Consequently, this creates an opportunity to explore and get new insights on the matter. The studies analyzed also demonstrated that online customer experience differs from the traditional one which leads to the question: how is the consumer better off?

Millennials are the generation that is now starting to engage in this market and as one can see, they differ from previous generations on multiple aspects and that will be reflected across the different industries, including in the real estate market as they use the internet as their main source for information (Barnikel, 2005). Considering this information, another hypothesis was created: Millennials are more open to adopt a more hybrid model. In another perspective, Generation X is an age group with high levels of internet interaction and that wishes to communicate through email and online devices (Reisenwitz & Iyer, 2009). This leads to another hypothesis: Generation X is more open to adopt a more hybrid model. Since both generations show indications of being open to technology a third proposition was formulated: Both generations are open to a more hybrid model.

Lastly, considering the data on how these generations behave and the fact that the market is still very traditional, a final hypothesis was framed: There are gaps between the market offer and the consumers wants and needs.

CHAPTER 3 – METHODOLOGY

3.1 Research Approach and Design

There are three most frequently stated research tactics in the research approaches’ literatures: exploratory, descriptive and explanatory (Saunders, Lewis, & Thornhil, 2009). The first one is mainly applied to uncleared subjects with the goal to understand and get more information on that specific topic (Malhotra, 2006). It is common to use focus groups as a method to obtain the data needed (Saunders et. al, 2009). The second type of research set as an objective to describe things such as market characteristics. Here, the issue is clearly identified and there is a necessity for itemized data. It is commonly used for researches concerning the size of a marketplace and the consumers’ profile and purchasing power (Malhotra, 2006). It can be inserted within an exploratory method (Saunders et al., 2009). Finally, the third one its applied when the researcher wants to find if there is a relation between at least two variables by doing experiments. The explanatory tactic requires a strategic and organized design (Malhotra, 2006).

The purpose of this thesis is to get new insights on the new emerging models in the real estate market and how the customer experience is affected by these changes. The three approaches were used throughout this dissertation. The framework bellow shows the methods used for each approach.

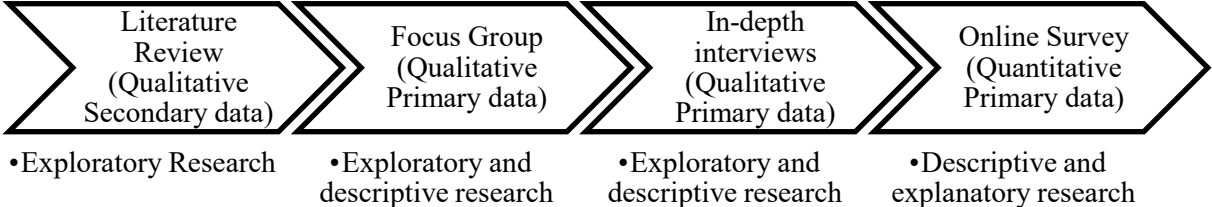


Figure 3: Methodology Framework

3.2 Literature Review (Qualitative Secondary data)

The first research approach was applied in the Literature Review section. Its purpose in a dissertation was to provide insights on what was already studied regarding the topic in question, the methods they used, the conclusions each author reached and to understand what it is still not clear within the subject of the research. The sources were all reputable articles from scientific journals and online information that supplemented the studies. The qualitative secondary data has 3 key concepts in its core: the real estate market, customer experience and brand equity.

3.3 Focus Group (Exploratory and Descriptive Research)

As it was already stated, focus groups are common method to use in an exploratory approach. This tactic does not intent scientific acquaintance. It is only to understand how a consumer perceives a concept, get new insights on a concrete subject through common thoughts and explanations (Calder.B.J, 2013).

A focus group has a perfect fit with the theme of these dissertation as it is key to understand how consumers perceive the real estate market and get insights on the different aspects of these new technological models. Therefore, a focus group was conducted in February of 2018 with 8 Portuguese citizens and ages between 23 and 55 years old. All members already interacted with the real estate market (either by renting, selling or buying a house). The focus group session was divided in four main parts: (1) warm-up; (2) Real estate personal experience; (3) Market knowledge and perceptions; (4) The introduction of technological features in the real estate process – the full guide and the essential conclusions for each section are described in the appendix section (Appendix 1). Moreover, the key insights of this exploratory and descriptive research will be analyzed in the next chapter.

3.4 In-depth interviews (Exploratory and Descriptive Research)

To further complement the qualitative research, 3 in-depth interviews were made to Millennials with no experience in the real estate market. The interview's drive was to understand how this generation sees this industry, how they think the process occurs and their willingness to adopt a more hybrid model. Thus, the interviews were semi-structured and had three main sections: (1) Real estate expectations and perceptions; (2) Market Knowledge; (3) Technological elements in the real estate process – likes and dislikes. The complete guidelines and its analysis can be found in the appendix 2. This topic will be further developed in the following topic.

3.5 Online Survey (Descriptive and Explanatory Research)

Based on the literature view and the qualitative research (focus group and in-depth interviews), a structured online survey was created on the Qualtrics platform. This method allows for a larger number of responses. Furthermore, the level of convenience to answer this survey is high due to its online characteristics. Nevertheless, there are some limitations such as the possibility for inaccurate answers and the non-representativeness of the population under study (Malhotra, 2006). The instruments used throughout the questionnaire will be presented below.

3.5.1 Population of the study

The population of study can be set as the Portuguese individuals that belong to generation X or Y (born between 1961 and 2000), of all genders and with or without experience in the real estate market.

3.5.2 Sample of study

Considering the whole Portuguese population (around 10 million citizens) and assuming a confidence level of 95%, the sample collected should have at least about 384 respondents (Saunders et al., 2009). A non-probabilistic convenience sample (which implies that the individuals selected answer the survey due to their accessibility and proximity to the investigator) with 468 participants was collected.

3.5.3 The survey

As it was already mentioned, the method selected for the quantitative research was an online questionnaire, made and shared through the Qualtrics platform. Before the divulgation phase, several tests were done to see if any problem occurred and eliminate them. The form was open on the 12th of May 2018 and closed on the 18th of May 2018. The distribution channels used were: social networks including Facebook, LinkedIn and WhatsApp and email.

The survey was divided into 5 parts: (1) previous experience in the real estate market – here the respondent had to state what kind of interaction he/she incurred and answer questions regarding that experience; (2) real estate market knowledge and perceptions – in this section the consumer had to evaluate the level of brand awareness of the different real estate brands, rank the probability of using each brand, if there was a brand they would not hire for sure and the level of agreement with different statements concerning agents and the real estate process; (3) How the consumer would act if they had a house for sale – state the value of different complementary services, the probability of hiring each service, how they would proceed, the perceptions of a more hybrid process and how it would affect their experience; (4) How the consumer would act if they had to buy a house – how much they value different features when searching for a house, their preferences on intermediation, how they would proceed and how the experience is affected by the introduction of technological steps in the process; (5) Demographics – questions concerning the age, profession, civil status, income and academic habilitations. About the survey flow, if the respondent did not have any experience in this market, he/was redirected to section 2 to continue the survey. From part 2 to 3, there was a split. On a random base, the consumer was shown either unit 3 or unit 4, never both. Then, all participants had to answer the

last group. For this analysis, it was not made any distinction among the traditional models, being all treated as one (Appendix 3).

3.5.4 The Measures

Aiming to find the correct measures for this academic paper, an analysis on previous research on the matter was conducted and then adapted to this purpose.

A considerable amount of questions was evaluated based on a Likert rating scale, where the intervenient had to state their level of agreement with different statements (Malhotra, 2006). It was used a five-point scale where each number represented a different level of concordance: 1 – Strongly Disagree, 2- Somewhat Disagree, 3 – Neither agree or disagree, 4 – Somewhat Agree and 5- Strongly agree.

Furthermore, there was also a question where the respondent had to rank brands according to his/her preference where the ones at the top represented his/her first preferences and the ones at the bottom the least preferred.

On other questions, the participants were asked to indicate the level of awareness of a brand using a scale from 0 to 100 where the higher the number, the higher the level of knowledge. These last two scales are often used in studies concerning brand equity.

CHAPTER 4 - RESULT ANALYSIS

4.1 Qualitative Research

4.1.1 Focus Group

The table below presents a summary of the essential conclusions to be taken from the session.

Warm-up	Break the ice activity: individuals presented themselves: name, age and occupation
Previous Experience	<p>3 distinctive groups: (some participants had more than 1 experience)</p> <p>1st group:</p> <ul style="list-style-type: none"> • The search process was mostly online • There were transactions with and without intermediation • There is no significant advantage in going to an agency • Problem: no answer from ads • Overall: smooth process <p>2nd group:</p> <ul style="list-style-type: none"> • no intermediation due to the high commission charged • there is also the belief that efficiency increases when there is an agent in the process <p>3rd group:</p> <ul style="list-style-type: none"> • majority bought a house without a mediator. • Do not feel the need • Preference in negotiating directly with the buyer
Market knowledge and perception	<ul style="list-style-type: none"> • Recognition of local and international agencies; • No clear tendency towards a brand; • Brand image is not clear regarding Era and Remax as both had positive and negative comments; • Problems in the industry: lack of transparency in the process, high prices, agents' lack of knowledge, bad price-quality relation and communication issues; • What to expect from agencies: professionalism, helpful, truthful, communicative and aware of the details of the properties they sell.
Introduction of technological features	<ul style="list-style-type: none"> • Searching and bureaucratic phases are the most demanding, so here is where the agent can bring value by maximizing the clients' effort; • There is a need to physically visit the house; • However, consumers would enjoy reserving and/or make an offer through an online channel; • Video-calls were perceived as a good alternative to personal meetings; • Online transactions are more convenient; • An online questionnaire was also suggested with the goal to control the reliability of potential buyers; • Virtual tours were also highly valued since it can filter the curious buyers from the ones who have a real interest and allow long-distance visits which is beneficial for both (buyers and sellers).

4.1.2 Qualitative Research – In-depth interviews

To complement the qualitative analysis, 3 in-depth interviews were conducted to Millennials with ages between 20 and 24 years old.

The goal was to understand how a person that never interacted with the real estate market, perceives it. In the appendices, a detailed description of each interview can be found. Below, are the main conclusions taken:

This group of Millennials do not have a clear idea on what is the role of an agent and what to expect from agencies. They only know the major brands and that is due to the publicity that is made through the different media channels. So, the brand image is neutral.

If they would need to incur in a transaction, the probability of going to an agency is high since their knowledge on the subject is limited. For these participants, the value provided by the mediator is high throughout the entire process as safety increases due to the interminence of an agent.

The most suitable way to interact with an agent would be by phone, email or video call as they do not want to waste time on physical meetings when there is a possibility to solve an issue through the via previously mentioned.

They want to minimize the house viewings as they are aware that sometimes photos can deceive. Having this in mind, any technological improvement that could be implemented, would be valued by this group.

4.1.3 Qualitative Analysis key insights

From this analysis, several insights were taken to the quantitative research. First, there are several reasons that can lead an individual to use a mediator: inexperience in the process, safety issues and commodity. Moreover, there are also barriers to the use of a mediator including the value of the commission and lack of transparency and necessity. This led to the conclusion that there are market gaps as some consumers do not perceive the value of an agent. Based on the previous experience analysis, it is also clear that there is an average level of satisfaction which indicates that there are aspects within the process that need improvements.

Furthermore, the brands included on the survey to test brand awareness, image and preferences were based on the answers of this qualitative research. The studies above also helped on getting understandings regarding the consumers' preferences. For the quantitative analysis, several statements were included based on the information above: "Real Estate Agencies provide all the information needed"; "If I had to incur in a transaction I would hire an agency"; "There are significant advantages in using an agency"; "Agents have the necessary knowledge to answer

all my questions”; “Agencies are the most comfort way to do a transaction”; “Agents, on a general view, are competent”.

The different stages where physical contact between the agent and the individuals were also tested further to infer which steps can be automatized or eliminated aiming for a direct contact between sellers and buyers. So, several phrases from the group above were collected: “To personally interact with my agent is important”; “Being able to intervene in the process is important to me”; “I like to deal directly with the owner”; “I like to negotiate directly with the owner”; “The legal support provided by the agency adds value to the transaction”; “I like to be involved in the process”; “ I want the agency to negotiate in my behalf”; “ I want the agency to show the house for me”.

The remain questions of the questionnaire were based on the secondary data placed together and presented in the Literature Review section.

4.2 Quantitative Research – Online Survey

Grounded on the key conclusions of the qualitative research and the literature review insights, an online survey was conducted between the 12th and the 18th of May 2018.

The analysis of the survey will be divided as the following: first, there will be a characterization of the sample concerning social demographic variables, the experience in the industry, market knowledge and perceptions and the specificities of the two sub-groups created: sellers and buyers. To conclude the chapter, the several hypotheses will be tested.

Considering the sample size (> 30 respondents), it is assumed that it follows a normal distribution.

4.2.1. Sample Characterization

The survey had a total of 468 respondents. However, 40 respondents quit after the first section of the questionnaire. So, for the third, fourth and fifth sections, it was only obtained 428 answers. Out of those 428, 53,5% are women and 46,5% are men. In terms of age, 57% are Millennials and 43% are members of generation X. Concerning the current occupation, around 54% of the sample is employed, followed by a 29% of students. The majority of the sample (52,8%) has a bachelor’s degree. The percentage of people with a masters’ and a high school degree is similar (19,2% and 22% correspondently). Regarding the social status, most participants are single (61,2%). The percentage of married people is also relevant (29%). Finally, the elements with a monthly net income of <500€ and between 500€ and 1000€ is the same (27,1%). From 2000€ onwards, the percentage is residual. This data was obtained through a descriptive analysis.

4.2.2 Research Questions Analysis

4.2.2.1 RQ 1: What are the characteristics of the traditional market?

The characterization of the traditional market is going to be based on several elements: (1) previous experience in the market and overall satisfaction with the process; (2) market knowledge; (3) market perceptions; (4) sellers' characterization; (5) buyers' characterization. Then, final conclusions will be presented to answer this research question.

4.2.2.1.1 Previous Experience in the Real Estate Market

Out of the 468 respondents, 32,5% never interacted with this industry. Within these 32,5%, 88% are Millennials which is not a surprise since, for this study, Millennials are perceived as the next generation to enter the market while Generation X is the active one.

So, 67,5% already made some type of transaction in this market. Out of this group, 35,6% rented a house to live and 32,2% bought a house. It is important to refer that some consumers incurred in more than one transaction. In addition, the percentage of individuals that bought a house with and without intermediation is the same (50%). Most respondents that sold a property, did it with an agency (67,3%). On the other hand, most landlords chose to rent by themselves (63,2%) and the same occurred with the participants that rented a house to live (63,6%). To conclude, 24% rented a place through an online platform such as Uniplaces and Airbnb.

When asked about the reasons why they chose to use an agency, the most relevant characteristic was commodity (32,4%), followed by the lack of experience in the transaction (27,5%) and security issues (16,9%). In contrast, when questioned about the reasons to not hire an agent, the great majority stated that it did not feel the need (60%). The value of the commission was also a valid reason for the choice (22%). Based on a scale from 1 to 5 where 1 represented an awful experience and 5 an amazing one, the overall experience of the consumers had a mean of 3,99 with a standard deviation of 0,95. The general experience was obtained based on three variables: quickness of the process, smoothness and the way the participant proceeded. A reliability test was conducted to ensure that the measures were consistent, having a Cronbach's alpha of 0,784. To be reliable, the alpha needs to be higher than 0,5. There is no discrepancy between the overall experience mean and the ones of the criteria used (Appendix 4).

4.2.2.1.2 Market knowledge

To understand the level of knowledge and the perceptions that these consumers have of the market, a set of questions was made. First, the respondents were asked about the level of familiarity with this industry on a scale from 0 to 100 where 0 meant "not at all familiar" and

100 “totally familiar”. The average answer was around 45 which indicates a medium level of knowledge of the market. Using the previous scale, from multiple brands, Remax was the one with the highest level of brand awareness with a mean around 54, followed by Era and Century 21 with means of 46 and 38 respectively. Even the brand that has the highest mean, does not present a high value which indicates a considerable unawareness of real estate brands. By the same order, these brands were rated in accordance with the probability of being hired by the individuals. Nevertheless, when inquired about the exclusion of any brand of future transactions, most responses specified that they would not automatically exclude any brand from their decision making (80,3%). Thus, from the remaining percentage, Porta da Frente had the highest percentage (23,5%). Remax was the second on this list (21,4%) and Era came in third (19,4%). Century 21 had the lowest percentage in this group (8,1%). Moreover, 96% out of the 19,7%, chose more than one brand. This data demonstrates that although Remax and Era have the top values regarding brand awareness and probability of use, they also have issues on their brand image.

4.2.2.1.3 Market Perceptions

Targeting to analyze the current perceptions, a set of statements was presented where the participants had to rate their level of agreement using a scale from 1 to 5 as presented in the methodology section. A Principal Component Analysis was conducted. The purpose of this test relates to finding a connection between the elements and determine the contribution level of each variable to the factor (Field, 2005). First, 5 different components were extracted, with a level of explanation of 57%. Then, three criteria were considered: (1) loadings inferior to 0,5; (2) loadings superior to 0,5 in more than one question and (3) Consistency level. Based on these principals, 3 statements were removed. The final principal component analysis had 6 factors with a total level of explanation of 66,3% (Appendix 5).

The table below presents the different factors chosen as criteria to evaluate the customers' perceptions, its level of explanation and the correspondent reliability level and mean. The KMO Measure of Sampling Adequacy indicates a great reliability for the sample (0,824) as the value is between 0,8 and 0,9 (Hutcheson and Sofroniou, 1999). Furthermore, the Bartlett's Test of Sphericity, presents a sig. of 0.000 which is lower than 0,05, confirming the adequacy of the factorability in the correlation matrix.

Factors	Reliability level	Mean
Agencies Service Quality	0,8	3,39
Agency Hiring level	0,8	3,49
Disposable Information	0,7	2,99
Efficiency	0,5	3,65
Agency Reliability	0,5	3,8
Satisfaction level	0,3	2,56

One can see that the agency reliability component is the one with the highest mean and consequently the element with better perception (3,8). This is followed by the efficiency factor (3,65). In contrast, the satisfaction level is low (2,56).

The participants were also questioned regarding their willingness to sign a contract with an exclusivity clause. A definition of the term was provided. The conclusion to be taken is that consumers do not like this feature in the contract (1,8 out of 5), even if that implies a discount on the original fee (without exclusivity) as the mean continues to be low (2,5/5).

Finally, 91,75% of the respondents stated that before hiring an agency, they would look for feedback. From this group, 63,48% are Millennials. Furthermore, 57,22% mentioned that they would not hire an agency that had bad reviews. Out of those 57,22%, 58,56% belong to generation Y. Yet, the scenario changes if the recommendation came from a friend. In this case, 73,71% would look for further information among other friends before making a final decision (62,23% of this cluster are Millennials) and 13,92% would search for more information online (77,78% belong to generation Y).

Between section 2 and section 3 the survey was split and consequently the participants were presented with either topic 3 or topic 4. Below is a description of the individuals that answered as sellers and the ones that interpreted a buyer's position.

4.2.2.1.4 Sellers' characterization and analysis

The 3rd section of the survey was only answered by 206 respondents. In its composition has 56,3% Millennials and 43,7% belong to Generation X. The large majority already incurred in a transaction in this market (68,9%). When asked about the probability of hiring an agency and selling by themselves on a scale from 1 to 5 where 1 stands for extremely unlikely and 5 extremely likely, the means presented were similar (3,19 and 3,08 respectively), both with a standard deviation of 1,4.

The sellers' preferences concerning a mediation process were evaluated through a Principal Component Analysis. From this test, two factors emerged: support in the process and house

visits & negotiation. These two elements combined have a total level of explanation of 69,85%. The KMO Measure of Sampling Adequacy indicates a great reliability for the sample (0,829). In addition, the Bartlett's Test of Sphericity, presents a sig. of 0.000 (<0,05). The support in the process is considerably valued by the consumer as the average of this factor is 3,6. On the other hand, the second factor has a medium level of appreciation (2,87/5).

Finally, to determine the key aspects affecting the customer experience during a market transaction, another Principal Component Analysis was made. Initially, the test was performed with 7 seven variables. Yet, one of them was removed since it did not have a loading superior to 0,5 in any component. Then, a second test was conducted where 2 features were extracted: Information Quality and Interaction in the Process. One variable was saturated on both characteristics, the decision of where the variable belonged to was based on the reliability test. Combined, the two features describe 67,55%. The KMO Measure of Sampling Adequacy indicates a good reliability for the sample (0,766) as the value is between 0,7 and 0,8 (Hutcheson and Sofroniou, 1999). The Bartlett's Test of Sphericity presents a sig. of 0.000 (<0,05). The Information Quality component highly affects experience since its mean presents a value of 4,1 out of 5. Nonetheless, the interaction in the process has an average weight on experience ($\mu=3,56$) (Appendix 6).

Then, two T-tests were conducted to infer if there were significative differences on the two generations regarding preferences and customer experience. Concerning preferences, since the p value for both components is superior to 0,05, it was concluded that there are no significative differences among the two age groups. Relating to customer experience, the same conclusions were obtained. However, although the means on interaction in the process are not statistically different, Millennials give greater value to the interaction in the process factor.

4.2.2.1.5 Buyers' characterization and analysis

The 4th topic of the questionnaire was answered by 222 participants. There were more members of Generation Y than Generation X (57,6% and 42,4% respectively). Most consumers have an experience in this industry by now (67%).

Furthermore, the likelihood of a buyer to search for a house by themselves is the most probable option (3,6/5). Yet, there is still an average probability of asking an agency for help (3,2/5).

To conclude, with the goal to understand the buyers' preferences related to the steps of a market transaction, a Principal Component Analysis test was conducted. Three main factors were extracted: (1) Support in the process; (2) Interaction with the owner and (3) House Perception based on the brand with a total level of explanation of 66,14%. The KMO Measure of Sampling

Adequacy indicates a normal reliability for the sample (0,665) as the value is between 0,5 and 0,7 (Hutcheson and Sofroniou, 1999). Furthermore, the Bartlett's Test of Sphericity, presents a sig. of 0.000. The interaction with the owner is the most appreciated element in this process with a mean of 4 out of 5. The support in the process is also valued (3,7/5). The third factor determines the impact of having a brand representing the house on the consumers' perception of the property for sale. Based on the data obtained, it is possible to conclude that the brand is not a determinant issue (3,36/5) (Appendix 7). To determine if there are significant differences on the preferences between generations, a T-test was applied. On the interaction with the owner factor, there are significant discrepancies ($p < 0,05$). Millennials have a higher preference to interact with the owner. On the components (1) and (3) there are no statistical differences between the two age groups.

4.2.2.2 RQ 2: Are the preferences aligned?

To analyze this research question three main services were considered: (1) Professional photos; (2) Virtual Tour; (3) Floorplan. For sellers, the production of a market-price study was also evaluated.

4.2.2.2.1 Sellers: importance vs probability analysis

To answer this question, several tests were conducted: first, an analysis of the sellers' point of view was made through a correlation test between the importance they give to four different variables: (1) professional photos; (2) Market price study; (3) Virtual Tour and (4) Floorplan of the house. The Spearman correlation test indicated that there is a significant correlation between the importance given to the services above and the probability of hiring them. This correlation is positive and has a moderate intensity for all variables as the values are between 0,4 and 0,69. Then, a T-test was performed to measure the differences in the means between importance and the declared probability of hiring each service.

	Importance Means	Probability Means	Correlations	p
Professional photos	4,32	3,03	0,487	0,00
Market price study	4,26	3,53	0,497	0,00
Virtual Tour	3,64	2,57	0,591	0,00
Floorplan	4,20	3,62	0,591	0,00

One can see that the means on the importance are higher than the probability of hiring these services to all variables and the differences among them are all statistically significant. The most appreciated variable is Professional Photos. Nevertheless, Market Price Study and Floor Plan are also extremely valued. Virtual Tour is the one with the lowest level of importance and, in accordance, has also the lowest mean on the probability measure. Surprisingly, although Professional photos has the highest mean on importance, Floor plan has the highest probability, followed by Market Price Study. These inconsistent results lead to two conclusions: (1) although they value all features, their predisposition to spend money with them is lower to all variables; (2) A highest level of importance does not imply a higher probability of purchase as less importance features had highest means on willingness to buy.

4.2.2.2.2 Buyers and Sellers comparison

The buyers were presented with the same set of options except the “market-price study” variable since it does not fit in the purchase process. They had to evaluate the importance of these features when searching for a house. Another T-test was made to infer how the buyers and the sellers’ point of view emerge and diverge. The table below presents the results:

	Type of consumer	N	Means	t	p
Professional Photos	1 Seller	206	4,32	-3,667	,000
	2 Buyer	224	4,62		
Virtual Tour	1 Seller	206	3,64	-,318	,751
	2 Buyer	224	3,68		
Floorplan	1 Seller	206	4,20	1,242	,215
	2 Buyer	224	4,08		

The test displays that the only variable where there is a significative difference between means is on the “professional photos” variable since $p < 0,05$ and consequently H_0 is rejected. In this case, the buyer gives a higher value to this feature than the seller which represents a gap between the two groups. On the other two topics the valuation is pretty much the same meaning that their preferences are aligned.

H1 is rejected since there are differences in the buyers and sellers’ preferences

4.2.2.2.3 Sellers' preferences between generations

It is now important to analyzed how this group behaves on the different generations under study.

	Type of consumer	Means	p
Professional Photos	Millennials	4,43	,557
	Generation X	4,19	
Virtual Tour	Millennials	3,53	,045
	Generation X	3,81	
Floor Plan	Millennials	4,31	,963
	Generation X	4,02	

The board directly above Millennials give a higher level of importance to professional photos and floorplan than Generation X. Thus, this last age group perceives virtual tour with a greater value than generation Y and there is a statistical difference between generations among the sellers for the different services ($0,045 < 0,05$).

H₂₁ is rejected since as sellers the two generations have different preferences

4.2.2.2.4 Buyers' preferences between generations

The same analysis was performed for the buyers. As the table underneath demonstrates, Millennials have lower valuations for virtual tour and floorplan than Generation X. The means on the importance regarding professional photos is similar between the two generations. Nonetheless, for this last feature, there are statistical differences among the two age groups ($0,019 < 0,05$). For the other two characteristics there are no significant differences.

	Type of consumer	Means	p
Professional Photos	Millennials	4,66	,019
	Generation X	4,57	
Virtual Tour	Millennials	3,63	,388
	Generation X	3,91	
Floor Plan	Millennials	4,03	,583
	Generation X	4,20	

H₂ is rejected since as buyers the two generations have different preferences

4.2.2.3 RQ 3: How can customer experience be maximized in this market?

To find a response to this research question, four variables were created:

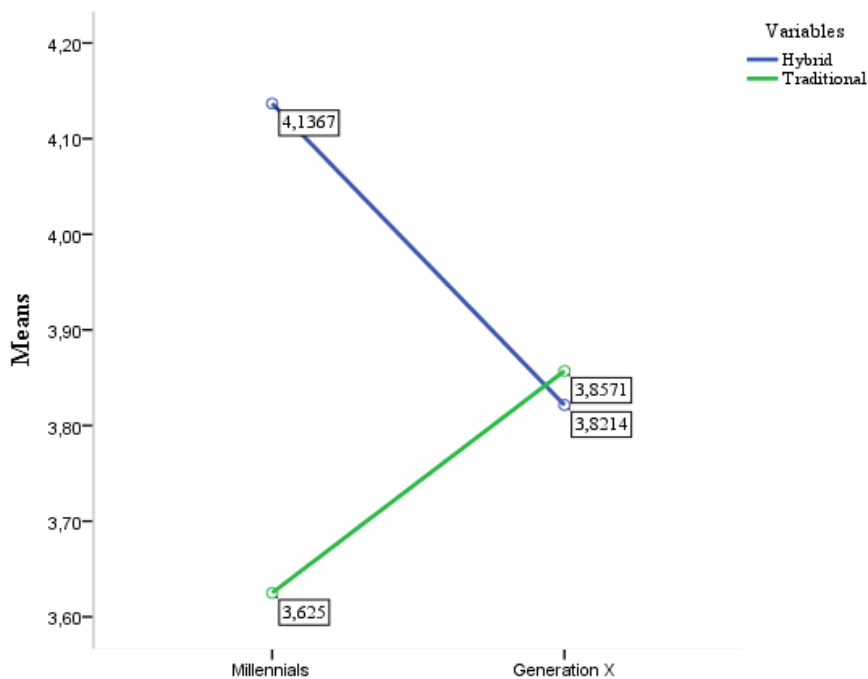
Variables created	Criteria used
Traditional Model Sellers	I want to personally meet my agent
	The house visits should be made by the agent
	The agency should be present when the final contract is signed
	To personally interact with my agent is important
Hybrid Model Sellers	Being able to intervene in the process by doing the house visits is important to me
	It is important to me to personally meet the people that are going to buy my house
Traditional Model Buyers	I want an agent to show me the house
	The agency should be present when the final contract is signed
Hybrid Model Buyers	I want to personally interact with the owners
	I want to negotiate directly with the owners
	Meeting the owners is important to me
	I want to be involved in the process

The items inside each variable were considered determinant factors to define each model, being a representation of what they stand for. The internal consistency of each variable was tested and they all have a Cronbac alpha superior to 0,5 (Appendix 8).

Then, two Mixed ANOVA tests were performed: one for the buyers and one for the sellers. In these tests, the variables above were tested for the two generations under study: Millennials and Generation X.

4.2.2.3.1 Mixed ANOVA Buyers

First, the ANOVA for this group showed that there is a correlation between buyers and generation ($p = 0,00 < 0,05$). Then, the test confirmed that there are differences between generations on the two models (Appendix 9a). Furthermore, within the Millennials generation, there are statistical discrepancies on the two models while among Generation X that does not occur (Appendix 9b).



The Millennials preference for a traditional model is average (3,6/5). On the opposite, the tendency towards a more traditional model in Generation X is higher (3,9/5). The same occurs on the hybrid model as Generation Y has a clear predilection for a more hybrid model (4,1/5) while the other age group is not convinced by the changes in the transaction process (3,8/5). Another relevant aspect to emphasized is the fact that within the Millennials generation, there is a gap between the two variables, from 3,6 to 4,1. This enables to conclude that a more hybrid model has features that are in accordance to the preferences of these consumers. As stated on chapter two, preferences determine the choice towards a service or product which will then be reflected in an experience and consequently on the satisfaction level. Thus, Millennials believe that a hybrid model will be able to provide them a better experience.

On the other hand, on Generation X there is no significant difference between the two variables which implies that their preferences are not substantially affected. Therefore, their experience remains almost the same.

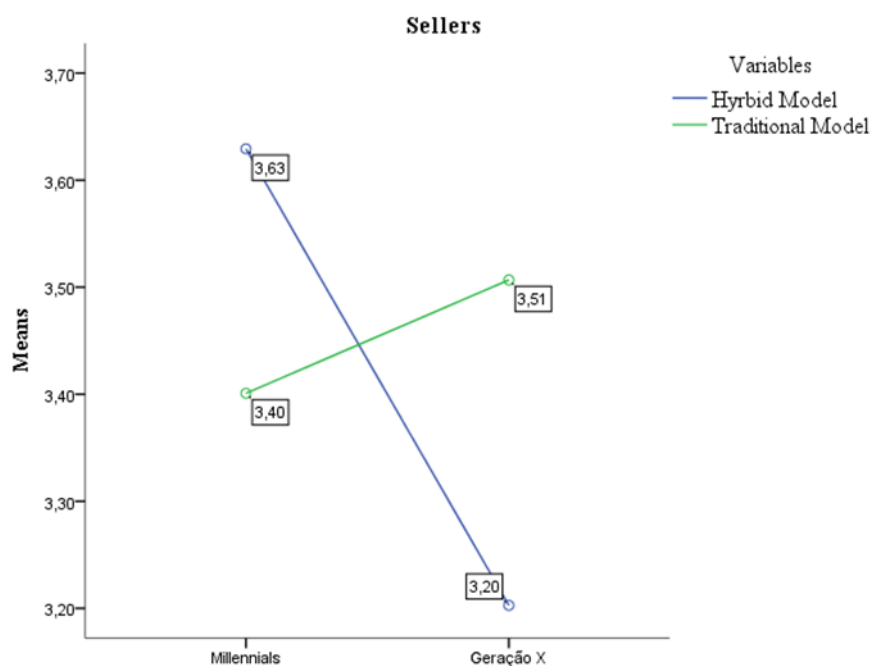
H3₁ is not rejected since, as sellers, a hybrid real estate model delivers a better customer experience than a traditional one

H4₁ is rejected since, as sellers, a hybrid real estate model does not deliver a better customer experience than a traditional one

4.2.2.3.2 Mixed ANOVA Sellers

As previously referred the same test was applied for the sellers group. First, it was confirmed that there is an interaction between generation and the type of model as the significance level is equal to 0,04 ($<0,05$ which implies a rejection of H_0).

The analysis demonstrated that there are differences between generations on both models (Appendix 10a). Moreover, on the hybrid model there are statistical differences between generations. However, on the traditional one there are no statistical differences among the two age groups (Appendix 10b).



Looking to the hybrid model in the graph, Millennials are clearly the ones that are more predisposed to change as they present a mean of 3,63 out of 5 while Generation X has a value of 3,2. Still, this last age group presents a higher preference for the traditional model than Generation Y.

When comparing the two alternative variables in the same age group, one can notice that Millennials have a higher preference for the hybrid model and Generation X for the traditional model.

Generation X have better perceptions on the elements that constitute the traditional model, observing more benefits in this option. Nevertheless, Millennials consider a hybrid model a better choice for them as it gives them more benefits which is translated on a better perception. As stated in the Literature Review section, perceptions and benefits are antecedents of experience. Based on this information, it is possible to infer that Millennials believe that a hybrid model will provide them a better experience and Generation X has the same belief towards the traditional model.

Furthermore, sellers were interrogated regarding the quality associated to a more hybrid model when compared to the traditional one. 39,7% of Millennials considered that the hybrid model has a superior quality and 31% believes that the quality is the same. Nonetheless, 37,8% of Generation X stated that the quality is similar on the two models but 35,1% associates it to an inferior level of quality. This data is consistent with the results above as quality has an influence on perception.

H3₂ is not rejected since, as buyers, a hybrid real estate model delivers a better customer experience than a traditional one

H4₂ is rejected since, as buyers, a hybrid real estate model does not deliver a better customer experience than a traditional one

CHAPTER 5 - CONCLUSIONS

The analyses performed in the previous chapters allowed to infer several conclusions on the research topic.

First, regarding the key characteristics of the traditional market it can be concluded that the overall satisfaction regarding quickness, smoothness and the method chosen to do the transaction is between average and great ($\mu=3,99$; $\sigma=0,95$). Moreover, most Millennials in the sample did not interact in the market. As sellers, there is a tendency to have an intermediary in the process, however many landlords prefer to rent without any mediator. The most common reasons to hire an agency are related to commodity, lack of experience and security issues. Studies already had proof that inexperienced buyers have a higher probability of using an agency. In addition, the role of an intermediary relates with minimizing the search costs and safety which are partially translated on the justifications provided. In contrast, a significant percentage of the sample did not feel the need to have an intermediary which can be pointed out as a market failure towards agencies as consumers cannot perceive their added value.

It is also important to denote the limited knowledge of this sample towards the market. Then, when evaluating the brand equity of several brands, it was settled that even the ones with the highest level of brand awareness, didn't present greater values on this attribute. Concerning the brand image, there was contradicted information on the brands with higher brand awareness (some consumers stated those brands as their first pick when choosing an agency while others would automatically exclude them from their decision-making process). One surprising result occurred with "Porta da Frente" brand as although it presented a low awareness value, it was the most denoted brand in a negative way when evaluating brand image. This might indicate that the fewer people that know the brand, do not have a positive image. Brand Equity has as impact on purchase intention and preferences, the two elements evaluated are constitutes of Brand Equity. Then, considering the values presented on these two features, it is possible to conclude that none of these brands has a high level of Brand Equity.

When determining the perceptions on the different aspects of real estate, the variable "Disposable Information" had a low value which indicates that the agencies are not giving the consumers the information they require. The crucial features of an e-commerce store were analyzed in the Literature Review section where it was mentioned that the higher the detail of the data, the higher the experience. It is extremely important to have a match between the information available and the information provided (Peterson et al., 1997). This way, a higher customer satisfaction will be achieved. Currently, the overall satisfaction level in this market is

low. As analyzed in the literature review section, customer satisfaction is a consequence of experience which indicates that the overall experience is not good either. Consumers have strong beliefs concerning an exclusivity clause in the mediation contract. Even if there is a discount in the commission, they prefer not to sign it. The previous points further support the view that real estate needs to innovate.

The customers in this market highly value reviews as almost all of them look up for feedback before hiring an agency and strongly appreciate if the opinion in question is from a close person to them. Although both generations value feedback, Millennials gave a strong appraisal to this aspect which agrees with the literature previously presented on the topic.

The sellers in this sample value the support in the process (steps that include the search and the bureaucratic phases) more than the house visits and negotiation. Again, this data further supports the literature review as due to technology there are now steps that consumers do not feel that a mediator brings extra value to the process. On the buyers' side, there is a clear preference to deal directly with the owner. Moreover, the fact that the house is being promoted by an agent does not have a meaningful impact on the perception of the house.

The survey also allowed to infer that the market is not aligned since there are gaps between buyers and sellers and between generations. Within the sellers group, there are two key conclusions: (1) the importance given to a feature is different from the willingness to spend money with them; (2) a higher level of importance does not imply a higher probability of hiring that service. Still on this group, Generation X provides great importance to virtual tour. About the differences between buyers and sellers, buyers provide greater value to professional photos. Among the buyers, Millennials give a higher rank to professional photos. As mentioned in the literature review, generation Y is different from generation X in multiple aspects and that is reflected on their market preferences as well.

On a final note, Millennials a hybrid model provides a better customer experience both as seller and buyer. In this model, the consumers are more involved in the process and it is easier to share their experience as they were part of it and had an influence on how things were done. These characteristics are in accordance to what was mentioned regarding this generation since Millennials are strongly dependent of social networks and really care about what a brand stands for. Generation X prefers a traditional model both as buyer and seller. The fact that this generation is extremely skeptical contributes to this measure. They are more closed to innovation as it can fail and requires a higher level of risk as some tasks previously performed by the agent are now done by the individual.

5.1 Limitations and Future Research

This dissertation brought several insights to the theme in question. However, there were several limitations throughout.

As it was demonstrated in the analysis of the questionnaire, the respondents have limited knowledge of the real estate market and how the procedures are done which will influence the responses. Moreover, 32,5% never made a transaction which negatively contributes to the study.

Considering the time constraints, the sample size obtained is acceptable. However, it is not representativeness of the Portuguese Population due to several factors: only two generations were studied, the data obtained is influenced by the network of the researcher and in terms of size, it needed to be bigger.

On the other hand, this study was focused on emerging models that are not being implemented in Portugal. This fact is a barrier to the analysis since for the Portuguese market this is can only be perceived as hypothetical and not something that it is now being done by multiple countries across the world.

The study also emphasized features that are not common to real estate promotion nowadays such as the virtual tour service. The valuation of this type of service might not be correct due to several reasons: (1) the survey was only made by Portuguese people. One of the main advantages of virtual tour is the possibility to visit a house without incurring in travel expenses. In this case, since the area was limited, this feature was not widely tested; (2) Virtual tour is not a common feature used in this market, so consumers might not feel the need as the current process does not provide it. They see as crucial the features they get in touch with when incurring in a transaction.

Finally, this dissertation considered all the traditional models as one variable which is not accurate since different brands have different models.

Regarding future research, a deeper analysis on the features that consumers like and dislike of each traditional model should be made in order to get more meaningful insights on what needs to be adapted and what should remain the same. Furthermore, a larger and non-bias sample should be obtained. Since Portugal is trending worldwide in this market, it would be interesting to understand how the foreign individuals perceive the Portuguese real estate market and if the value the same things.

CHAPTER 6 - APPENDICES

6.1 Focus Group Guide and Analysis

Guide:

1. Warm- up (5 mins)

- Introduction
- Presentation of the participants: name, age, field of study, etc.

Presentation of the theme

2. Previous experience (15 mins)

- Search process
- Analysis of if there was intermediation or not
- Reasons for the choice
- Obstacles
- Overall experience

3. Market Knowledge and perceptions (15 mins)

- What are the brands they know? (characteristics, strong and weak points, preference)
- Perceptions on the different brands (attractiveness, visibility, accessibility, communication channels)
- Preferences: what are the preferences?
 - Relationship price-quality
 - Similarities and differences among brands

4. Introduction of technological features (25 mins)

- Introduce the concept of hybrid agency
 - Understand which steps can be automated
 - Understand the reasons for choosing an online option or a traditional option
 - Advantages and disadvantages perceived
 - Fit between the concept and the market
 - Quality comparison with the traditional agencies
 - Further suggestions

5. End of the session and thank you

Analysis:

1. Warm-up

The session initiated with the individuals presenting themselves by mentioning their name, age and profession aiming to break the ice.

2. Real Estate personal experience

The conversation then shifted to the experience each consumer had in the real estate industry. When understand the kind of interaction that each member had, it is possible to distinguish three different groups as 3 out of the 8 participants rented a house aiming to live in there, 3 of them rented a home they own, and 4 participants bought a house. It is important to mention that some of the intervenient had more than one experience in this market.

Concerning the ones who rented a house to live, one of the consumers went through two different kind of experiences as one had intermediation since the owner lived abroad. The other

house she rented was negotiated directly with the landlord. Another member mentioned that the house was found through social media and then negotiated directly with the proprietor and the third one stated that the landlord chose to use an intermediary. One common aspect within these group was that all of them searched for a property online. Two of them mentioned that they did not perceive any significant advantage to go to an agency in order to find help in this search process. In addition, it was also stated that it was common to not have an answer from ads which was an issue during the process. Overall, the rest of the process was smooth.

Regarding the group that rented their own home, two of them declared they do not use intermediation to do it and the justification is related to the high prices charged by the agencies. The other one uses an intermediary because it does not have the time to show the house and believes the agency is more efficient in finding the right people for the house.

Finally, 3 out of the 4 people that bought a house did not use an agent in the transaction. The ones that did not had it also said they did not feel the need. On the other hand, the one whose house had an agent also stated that he would prefer to negotiate directly with the buyer, mostly because he believes he would get a better price since the landlord would not have to pay the agency the respective commission.

3. Market knowledge and perceptions

As all members already had an interaction in this market, they all knew many real estate brands, some with international presence including Era e Remax and even some local agencies. When asked about the general perception of those brands and their preferences, none of the consumers showed a clear tendency towards one brand. Moreover, there was no consensus within the same brand, especially Remax and Era as some participants had a positive brand image and others perceived on a negative way.

The major problems in this industry identified were: the lack of transparency in the process, the high prices, lack of knowledge on the house and its surroundings, bad price-quality relation and communication.

Finally, the last important aspect to refer related to what consumers expect from agencies and mediators. The most denoted characteristics were: professional, truthful, helpful, with sufficient knowledge and communicative. Due to the different experiences, some consumers emphasized some aspects while others focused on more practical elements such as finding a house that fit the consumers' needs.

4. Introduction of technological features in the real estate process

Aiming to approach how technology could improve the customer experience, the participants were asked to describe their ideal model for transactions. One common aspect that all members agreed on was that the searching and the bureaucratic phases were the most demanding and where the agent can really have an extra value by minimizing the clients' effort. Another shared interest was the need to physically visit the house. However, it was also specified the desire to have the possibility to reserve a house online and made an offer through online devices after visiting the property. Moreover, video calls were also perceived as a good alternative to personal meetings. It allowed to have a considerable level of interaction without incurring in transportation costs. Moreover, online interactions were considered to be more convenient. An online questionnaire was also suggested with the goal to control the reliability of potential buyers.

Furthermore, on a quality perspective, virtual tours were also highly valued as it would save time by filtering the buyers that were only curious and the ones that have a real interest on the property, being beneficial for both (buyer and seller).

6.2 In-depth interviews guide and analysis

Guide:

1. What are the services offered by a real estate agency?
2. What do you expect from a real estate agency?
3. What are the major problems of intermediation? And the advantages?
4. Traditional mediation substitutes: Is there any alternatives that you are aware of?
5. What brands do you know?
6. What is your perception of those brands? Do you have any preference?
7. If you had to incur in a transaction, would you hire an agency, or would you try to do it by yourself? Why?

Introduce the concept of hybrid agency.

- a. What steps would you like to see automatized? Why? Why not?
- b. What are the advantages and disadvantages?
- c. In terms of quality, how would you evaluate it in comparison with the traditional agencies?
- d. Is there any further suggestion that you would like to do?

Thank you!

Analysis:

Name	Real Estate Expectations and Perceptions	Market Knowledge	Technological elements in the process
Sofia Fernandes 23 years old	<ol style="list-style-type: none"> 1. Services offered <ul style="list-style-type: none"> • As a buyer: Show options of houses; clarify our doubts; • Seller: promote the home; show the house 2. Expectations: To be professional and quick 3. Problems and advantages <ul style="list-style-type: none"> • Problems: prices • Advantages: support provided 	<ol style="list-style-type: none"> 4. Alternatives: real estate portals 5. Brands: Remax, Era 6. Perception: Neutral but heard that Remax has good statistics regarding sales 7. Transaction options: Hire an agency due to inexperience and lack of knowledge 	<ol style="list-style-type: none"> a. Cut meeting the consultant, he/she just needs to be efficient and tell when there are people interested in the property; call when a house that fits the needs appears. b. Advantages: direct contact; unique experience; disadvantages: more tasks to perform; implies sales skills; c. Different, cannot compare d. No

<p>José Maria Athayde 22 years old</p>	<ol style="list-style-type: none"> 1. Services offered <ul style="list-style-type: none"> • As a buyer: Show options of houses; get the best price • Seller: expose the house; get the best price 2. Expectations: To be professional and honest 3. Problems and advantages <ul style="list-style-type: none"> • Problems: prices; trust • Advantages: commodity 	<ol style="list-style-type: none"> 4. Alternatives: real estate portals 5. Brands: Remax, Century 21 6. Perception: Neutral 7. Transaction options: Hire an agency due to inexperience and lack of knowledge 	<ol style="list-style-type: none"> a. Measures that allow to save time: personal meetings that can be done by phone; b. Advantages: quicker process; innovative; disadvantages: implies knowledge of the process c. Don't know how the current quality of the service is so he cannot compare d. No
<p>Tamara Mangericão 24 years old</p>	<ol style="list-style-type: none"> 1. Services offered <ul style="list-style-type: none"> • As a buyer: search for me; negotiate for me; • Seller: get the best price; negotiate for me; promote; 2. Expectations: quick and effective 3. Problems and advantages <ul style="list-style-type: none"> • Problems: prices; efficiency • Advantages: support provided; 	<ol style="list-style-type: none"> 4. Alternatives: real estate portals 5. Brands: Remax, Century 21, Era 6. Perception: Does not like Remax because it accepts any type of house – bad quality 7. Transaction options: Would search first how the process goes and then, if not confident in her skills to do it alone, she would hire an agency due to inexperience and lack of knowledge 	<ol style="list-style-type: none"> 8. Measures that allow to save time: personal meetings that can be done by phone; virtual tour to minimize visits; the photos sometimes are deceiving 9. Advantages: interaction; appealing to engage; disadvantages: none 10. Don't know how the current quality of the service is so he cannot compare 11. No

6.3 Survey

Q1 Have you ever interacted in the real estate market? (Select one or more options)

- Yes, I sold a house
- Yes, I bought a house
- Yes, I rented a home
- Yes, I rented a home to live
- No

Q2 Select every sentence that applies to your experience

- I sold a house through an agency
- I sold a house by myself
- I tried to sell alone but then hired an agency
- I bought a house and negotiated directly with the owner
- I bought a house through an agency
- I rented a house through an agency
- I rented a house by my own means
- I negotiated the home I rented directly with the owner
- I sold my house online
- I rented a home online (Airbnb, Uniplaces, etc).

Q3 What reason(s) led you to choose a mediator

- Commodity
- Service Quality
- Inexperience in the process
- Security issues
- Price-quality relation
- Other _____

Q4 What reason(s) led you to not choose a mediator

- commission
- Ethical values of agents
- Lack of transparency in the process
- Service Quality
- Didn't feel the need
- Other _____

Q5 Please classify, on a scale from 1 to 5 your experience, where 1 represents an awful experience and 5 an amazing one (if you had more than 1, classify the last one)

- Everything went smoothly**
- It was a fast process**
- I would do it again the same way**

Q6 What is your knowledge of the real estate market? (0 represents – I am not familiar at all, 100 – I have a deep knowledge of the market)

0 10 20 30 40 50 60 70 80 90 100

Knowledge of the real estate market

Q7 Please classify the following brands relatively to your knowledge of each one of them (0 represents – I am not familiar at all, 100 – I have a deep knowledge of the market)

0 10 20 30 40 50 60 70 80 90 100

Remax ()



Era ()



Century 21 ()



Home Lovers ()



KW Portugal ()



Porta da Frente ()



Q8 Now, rank the following brands in accordance with the probability of hiring them in a future transaction

_____ Remax (1)

_____ Era (2)

_____ Century 21 (3)

_____ Home Lovers (4)

_____ KW Portugal (5)

_____ Porta da Frente (6)

Q9 Is there any brand that you wouldn't use in a future transaction? (You can choose more than one option)

Remax (1)

- Era (2)
- Century 21 (3)
- Home Lovers (4)
- KW Portugal (5)
- Porta da Frente (6)
- Não existe nenhuma marca que exclua automaticamente (7)

Q10 Before hiring na agency, would you look for reviews?

- Yes
- No

Q11 If you found negative comments of an agency, would you automatically exclude it from your decision making?

- Yes
- No

Q12 If you found negative comments of an agency but a friend recommended you that brand. What would you do?

- Hire the agency
- Didn't hire the agency
- I would search for more information through other friends/family
- I would look for more information online before making a decision

Q13 Now please state the level of agreement with the following statements:

	Strongly Disagree	Somewhat Disagree	Neither agree disagree or	Somewhat Agree	Strongly Agree
The real estate agency's websites provide me with all the information I need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
From the information available online, it is clear what services agencies offer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently, if I had to do a transaction, I would hire an agency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are significant advantages in using a mediator	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust in the real estate agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agents are able to answer all my questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nowadays, there are already substitutes to the traditional agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently, the market is able to satisfy my wants and needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The most comfort way to do a transaction is through an agency	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agents, in general, are competent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The main focus of an agent is to sell a home in the shortest time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The main focus of an agent is to sell a home for the highest price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Agencies do a good job matching buyers and sellers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agencies do a good job finding houses that fit the consumers' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mediation process is faster if there is an agency involved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To hire an agency, I need to identify with their values	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The agency must have a good reputation in order for me to hire it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am open to new experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The real estate market needs innovation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service is more important than the brand behind it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 A exclusivity clause states that, during the time of the contract, the sale is exclusive to one agency and even if the client gets a buyer by their own means, it is obliged to pay the commission charged by the agency.

Not at all Unlikely Maybe Likely Extremely likely

1 2 3 4 5

How willing would you be to sign a contract with an exclusivity clause?



How willing would you be to sign a contract with an exclusivity clause if the same implied a discount on the fee charged?



End of Block: Block 1

Now assume you have a house for sale and answer the following questions in accordance.



Q15 Classify the importance of the following services: (1 – not important at all; 5 – extremely important)

Professional photos	★	★	★	★	★
Maket-value study	★	★	★	★	★
Virtual Tour	★	★	★	★	★
Floor plan	★	★	★	★	★

Q16 What is the probability of hiring each one of these services? (1 – Extremely unlikely; 5 – Extremely likely)

Professional photos	★	★	★	★	★
Maket-value study	★	★	★	★	★
Virtual Tour	★	★	★	★	★
Floor plan	★	★	★	★	★

Q17 What is the probability of incurring in these actions:

	1	2	3	4	5
Hiring an agency					
Sell by yourself (without intermediaries)					
List independently on a real estate portal (Imovirtual, Olx, Idealista,etc)					

Q18 Now imagine a real estate agency that offers the same services of a traditional one but it does not provide physical interaction. In Exchange, video-calls, emails and calls are the means of communication. In terms of quality, how do you perceive this service comparing to the traditional offer?

- Inferior
- Equal
- Superior

Q19 State the level of agreement with the following sentences:

	Not important at all	Relatively important	Neither agree or disagree	Very important	Extremely important
I want to personally meet my agent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to promote my property	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to manage the contacts and schedule the visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to do the visits for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to negotiate the price in my behalf	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to provide me legal support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I want the agency to be present when the final contract is signed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 State from 1 to 5, how would your experience be maximized

	Not at all important	Relatively important	Indifferent	Very important	Extremely important
Having a website with clear information would improve my experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To personally meet the people that are going to buy my house is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
To personally interact with my agent is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Not having any type of intervention in the process is very comforting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being able to intervene in the process is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of the ad regarding the information available is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The quality of the photos in the ad are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Now assume you want to buy a house and answer the following questions accordingly.

Q21 When you see an ad, how important are the following features? (1 – not important at all; 5 – extremely important)

Good photos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Virtual tour	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Floor plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Detailed description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q22 When searching for a house, what is the probability of incurring in each situation?

	1	2	3	4	5
Going to an agency					
Search for houses that are not promoted by agencies					
Search by yourself in the different real estate portals (Idealista, Olx, Imovirtual, etc)					

Q23 Please state the level of agreement with the following sentences

	Totally disagree	Partially disagree	Neither agree or disagree	Partially agree	Completely agree
I like when an agent shows the property	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to have direct interaction with the owner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to negotiate directly with the owner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to have legal support	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to have the agent present when signing the contract	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It's important to me to meet the owners	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The higher my involvement in the process, the better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The fact that a house is being promoted by an agency gives me safety	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The house perception is affected by the brand that represents the house	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Start of Block: Block 4

Q24 Gender

- Female
- Male
- Prefer not to say

Q25 Generation

- Millennials (Born between 1980 -2000)
- Generation X (Born between 1960-1979)

Q26 Civil Status

- Single
- Married
- Divorced
- Widow

Q27 Academic Habilitations

- 9th grade
- High school degree
- Bachelor's degree
- Master's degree
- Phd
- Other _____

Q28 Occupation

- Employed
- Unemployed
- Part-time worker
- Student

Both worker and student

Retired

Q29 Monthly personal net income

< 500 €

500 € - 1000€

1001 € - 1500€

1501€- 2000€

2001 € - 2500€

2501€ - 3000€

3001 € - 3500 €

> 3500 €

End of Block: Block 4

6.4 Question 5 – Survey

Variable	Cronbac h's Alpha	μ	σ
Everything went smoothly	0,778	4,17	0,91
It was a fast process	0,636	3,86	1,24
I would do it again the same way	0,681	3,93	1,23

6.5 Principal Component Analysis -Preferences

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin	Measure of	,824
Sampling Adequacy.		
Bartlett's Test of	Approx. Chi-Square	2391,406
Sphericity	df	136
	Sig.	,000

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	4,872	28,662	28,662	4,872	28,662	28,662	3,380	19,885
2	1,774	10,434	39,096	1,774	10,434	39,096	2,027	11,923	31,808
3	1,480	8,706	47,802	1,480	8,706	47,802	1,684	9,903	41,711
4	1,160	6,824	54,626	1,160	6,824	54,626	1,572	9,245	50,955
5	1,032	6,068	60,694	1,032	6,068	60,694	1,415	8,322	59,278
6	,950	5,591	66,284	,950	5,591	66,284	1,191	7,007	66,284

Extraction Method: Principal Component Analysis.

Rotated Component Matrix ^a						
	Component					
	1	2	3	4	5	6
Agencies do a good job finding houses that fit the consumers' needs	,769	,141	,116	-,016	,101	,042
Agents, in general, are competent	,753	,177	,000	-,026	,061	,100
Agencies do a good job matching buyers and sellers	,737	,118	,268	,171	,039	,024
Agents are able to answer all my questions	,656	,304	,090	-,124	,050	,119
I trust in the real estate agencies	,624	,540	-,010	-,030	-,003	,078
The mediation process is faster if there is an agency involved	,509	,386	,137	,079	,202	,038
Nowadays, there are already substitutes to the traditional agencies	,491	-,302	,055	,454	-,167	-,029
Currently, if I had to do a transaction, I would hire an agency	,271	,815	,107	,020	-,002	,089
There are significant advantages in using a mediator	,340	,749	,264	,030	,010	-,059
From the information available online, it is clear what services agencies offer	,163	,103	,830	,117	-,002	-,008
The real estate agency's websites provide me with all the information I need	,135	,192	,776	,117	,041	,214
The main focus of an agent is to sell a home in the shortest time	-,037	-,002	-,001	,768	,176	,115
The main focus of an agent is to sell a home for the highest price	-,003	,090	,249	,763	-,004	-,142
To hire an agency, I need to identify with their values	,021	,116	-,149	,116	,812	,085
The agency must have a good reputation in order for me to hire it	,201	-,104	,244	,017	,759	-,197
The real estate market needs innovation	,008	,078	-,226	,222	,208	-,746
Currently, the market is able to satisfy my wants and needs	,286	,163	-,022	,217	,130	,681

Alphas:

Factor 1:

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
I trust in the real estate agencies	20,46	13,808	,632	,779
Agents are able to answer all my questions	20,54	13,782	,593	,786
Nowadays, there are already substitutes to the traditional agencies	20,32	16,400	,218	,849
Agents, in general, are competent	20,36	14,022	,653	,777
Agencies do a good job matching buyers and sellers	20,29	13,819	,673	,773
Agencies do a good job finding houses that fit the consumers' needs	20,16	14,046	,661	,776
The mediation process is faster if there is an agency involved	20,34	14,537	,522	,799

	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Correlation	0,666	0,540	0,381	0,345	0,160
Spearman-Brown Coefficient	0,800	0,701	0,552	0,513	0,276
Guttman-Split-Half Coefficient	0,798	0,699	0,551	0,512	0,270

6.6 Principal Component Analysis - Experience

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	2,901	48,347	48,347	2,901	48,347	48,347	2,378	39,639
2	1,152	19,205	67,552	1,152	19,205	67,552	1,675	27,913	67,552
3	,667	11,117	78,669						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a		
	Component	
	1	2
The quality of the photos in the ad are important to me	,894	-,004
The quality of the ad regarding the information available is important to me	,847	,170
Having a website with clear information would improve my experience	,743	,275
To personally interact with my agent is important to me	,525	,473
To personally meet the people that are going to buy my house is important to me	,162	,835
Being able to intervene in the process is important to me	,090	,806
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization. ^a		
a. Rotation converged in 3 iterations.		

Reliability:

Reliability Statistics

Cronbach's	
Alpha	N of Items
,791	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Having a website with clear information would improve my experience	12,03	5,613	,613	,732
The quality of the ad regarding the information available is important to me	12,11	5,699	,678	,704
The quality of the photos in the ad are important to me	12,08	5,714	,660	,712
To personally interact with my agent is important to me	12,42	5,656	,481	,809

Factor 2

Reliability Statistics

Cronbach's	
Alpha	N of Items
,642	3

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
To personally interact with my agent is important to me	6,89	3,902	,400	,613
To personally meet the people that are going to buy my house is important to me	7,15	2,991	,531	,427
Being able to intervene in the process is important to me	7,32	3,928	,437	,567

6.7 Principal Component Analysis - Buyers

Total Variance Explained									
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
	1	2,688	29,871	29,871	2,688	29,871	29,871	2,554	28,374
2	2,186	24,293	54,164	2,186	24,293	54,164	2,320	25,775	54,150
3	1,078	11,973	66,137	1,078	11,973	66,137	1,079	11,987	66,137
4	,776	8,624	74,761						

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

	Component		
	1	2	3
I like to have the agent present when signing the contract	,856	-,037	,147
I like to have legal support	,772	,024	-,008
I like when an agent shows the property	,743	-,098	-,245
The fact that a house is being promoted by an agency gives me safety	,724	,007	,119
I like to have direct interaction with the owner	-,109	,824	-,087
I like to negotiate directly with the owner	-,303	,778	,059
It's important to me to meet the owners	,065	,719	,181
The higher my involvement in the process, the better	,195	,711	-,158
The house perception is affected by the brand that represents the house	,050	-,012	,956

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.^a

a. Rotation converged in 3 iterations.

	Reliability
Factor 1	0,784
Factor 2	0,785

6.8 Internal Consistency

Model	Reliability
Traditional Model Sellers	0,787
Hybrid Model Sellers	0,613
Traditional Model Buyers	0,695
Hybrid Model Buyers	0,785

6.9 a) Mixed ANOVA Buyers Models

	Generations		Significance level
	Hybrid	Millennials	Generation X
Generation X		Millennials	0,03
Traditional	Millennials	Generation X	0,465
	Generation X	Millennials	0,465

6.9 b) Mixed ANOVA Buyers Generation

	Models		Significance level
Millennials	Hybrid	Traditional	0,046
	Traditional	Hybrid	0,046
Generation X	Hybrid	Traditional	0,034
	Traditional	Hybrid	0,034

6.10 a) ANOVA Sellers Generations

	Models		Significance level
Millennials	Hybrid	Traditional	0,00
	Traditional	Hybrid	0,00
Generation X	Hybrid	Traditional	0,769
	Traditional	Hybrid	0,769

6.10 b) ANOVA Sellers Models

	Generations		Significance level
Hybrid	Millennials	Generation X	0,03
	Generation X	Millennials	0,03
Traditional	Millennials	Generation X	0,039
	Generation X	Millennials	0,039

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