Real Estate Brokers in *Premium* Segment - Marketing and Communication through Technologies

Teresa Florentino
Escola Superior de Actividades
Imobiliárias, Lisboa, Portugal
terflor@gmail.pt

Joaquim A. Casaca
IADE-U Instituto de Arte, Design e
Empresa – Universitário, Lisboa,
Portugal
joaquim.casaca@iade.pt

Abstract

The main purpose of this article is to know how Real Estate (RE) Brokers providing Premium products and services are managing their technology. It is done by comparing a RE premium company with a traditional one. It is studied the technology management inside these enterprises and how they incorporate new technologies. Recently in Portugal, there has been a substantial investment on Real Estate Premium segment due Golden Visa. As there are very few articles on this topic the significance of this one lies in the fact of the importance of technology and information in RE Brokers. This research is not enough, should be extended to more cases and compared, when possible, with other segments, situations and other countries.

Paper type – Research paper. Case Study

Keywords: Mobile Technologies, Social Networking, APPs, ICT, Real Estate Brokers Premium Segment, Marketing.

1 Introduction

The housing market had been growing in the 80s and 90s but it begins to decline in Portugal since the beginning of XXI century, as sustained by statistic values in Census 2011, (INE 2012)¹ and with more evidence due the recent economic decline. The construction is almost at a standstill, and most of Real Estate companies took over the rent activities. However, there seems to be a niche for the purchase of property that is not affected by the economic situation, the premium segment.

In Portugal, there are a few national investors in luxury Real Estate but, since the creation of the Golden Visa, there are more and more foreigners buying luxury Real Estate, these investors spending substantial amounts of money can also warrant a Golden Visa.

By studying this target and in particular two specific cases of Real Estate in this segment, Sotheby's and Engel & Völkers, this article aims to understand how these companies use their technologies to provide the best services to their customers. In this article, we aim to understand how the different technologies are used in this target group and we also want to know if new technologies improve business and customer's services.

There seems to be evidences that the premium market is very sensitive to new technologies and is already incorporating them into their way of doing business, not seeing it as modernity but as useful tools and means to reach customers, keep them satisfied and get profits in business. In a world of

¹ INE (2012) Evolução do Parque Habitacional em Portugal 2001 – 2011. Edition 2012 EPHPT_2001_2011.

billions it is important to be in touch with news technologies but in this study, it is also important to know what benefits they can bring for business.

2 Review of Literature

In the world of Real Estate industry the word of marketing is historically related with having a property flyer, postcards and a Web site to market a project or property for sale, lease or rent. Today many potential buyers and renters are extremely discerning. The modern consumer is an expert in information and technology and knows how to validate information online. They can be sceptical of advertising and bombarded with information and advertisements all day long and so, realtors have to be aware of this situation and must have proper tools and means to provide the best services and do not disturb their clients in this world of information.

The Internet age has been a time of changing in the way people communicate and do business. Real Estate firms are not immune to these technological changes. In recent years the marketing mix has evolved to include multiple listing service, databases and the Internet. Today there are new mobile technologies and applications (Apps), we are using blogs, Social Networking, Smartphones, Tablet computers, QR codes, and GPS technology, among others, that are changing the way brokers communicate with clients, (Goodwin and Stetelman, 2013), do marketing activities and run business.

Nowadays, Real Estate reality for those in the competitive world of luxury, the way of doing business has changed. No more confidential consultations, private viewings, and private phone discussions for connecting with clients. Real Estate professionals are seeing more of their clients utilizing the Internet to conduct their own home searches and occasionally find homes for themselves. Although online searches by clients, by their own, the knowledge of Real Estate professionals may not be replace and representatives are incorporating technology rather than view it as a supplement to the way they already do business.

The luxury market, like other markets, is being affected by budgetary constraints and even the most prestigious Real Estate luxury, like Faith Hope Consolo, who oversees the retail operations of New York City-based Prudential Douglas Elliman Real Estate's 50 offices around the United States, has worked extensively with luxury retailers such as Cartier, Versace, Giorgio Armani, Salvatore Ferragamo, Judith Leiber and Baccarat in 2009 indicated some savings strategies including sales offline, using the telephone and the Internet as a means of increasing sales in the luxury market (Chain Store Ag, 2009). From time to time complexity and economic problems arrive, now, the realty has not changed and the issues are the same, it is necessary to moderate expenses and use technologies efficiently.

In technologies point of view, and considering the current mobile technologies, cloud computing, social networking, Global Positioning Systems (GPS), Quick Response code (QR code), Augmented Reality (AR) among other more traditional applications and sources of information all of them seem to contribute to the dynamic of Real Estate business. Several Real Estate brokers are using these technologies incorporating them within their tools.

It is intended to know the contribution of Information and Communication Technologies (ICT) in general and on Digital Marketing in particular, in terms of the Promotion, or in Relationship Marketing. Finally and most important, we want to know if there is added value when these elements and techniques are used. According to the collection of data and information on two of the most important Real Estate Brokers that work in the Premium segment in Portugal, some highlights and some conclusions can be found about the way of how technologies have influence on business and in Digital Marketing, but mainly, how these technologies can have a global positive return for those enterprises.

The reviewing literature on Real Estate and the latest technologies are scarce and very rare at scientific level. There are some magazines and industry reports but there is a great difficulty in obtaining information in this area of study.

3 Some factors that can boost Premium Segment

Business for premium enterprises can be described differently from other business in this area. We will report the specifications of the enterprises studied here, the special way to deal with clients, in a different way form others on traditional market. The main target is without doubt the client, but the new technology can make difference and give customers a more comfortable, knowledge, and broad information through several means like smartphones, tablets or personal computers and the huge amount of new applications that these technologies can bring.

3.1 Investing in new and high technology

According to the report by Cushman & Wakefield the real estate market begins to recover in Portugal and in last year of 2013, investment has increased 198 %, to 322 million Euros. From January to December were traded in Portugal a total of 322 million Euros in commercial real estate assets, triple the volume registered in 2012, and almost double the 167 million Euros transacted in 2011.

The overall volume of investment in the real estate sector amounted to 859 billion Euros in 2013, an increase of 22.6 % compared to 2012, this being the highest since 2007. Asia led in terms of turnover due to growth markets such as China, Japan and Australia. Europe - Middle East and Africa, the United Kingdom and Germany were the main determinants of growth2.

Companies in RE premium market have capability to be different and to make difference because they have means to do the best choice, get the new technologies and knowledge, and so, do the best choice for their clients. They have the power to understand their clients and see the best suitable choice of technologies for them at a high level of confidence, high quality and value.

3.2 Golden Visa

According to the Association of Real Estate Companies and Professionals of Portugal (APEMIP), it predicts that in 2014, the government can raise 600 million Euros in Golden Visas, doubling the value of Golden Visa Investment in the current year. Until today, 542 visas were granted, representing a total investment of 300 million Euros.

In Portugal, in April 2014, statistics of Golden Visa investment and other data from Foreigner and Frontiers Services, SEF (2014) said that 430.603.744 Euros was achieved by purchasing a Real Estate Property through Golden Residence Permit Programme (ARI) from 08th October 2012 to 31st March 2014. For these cases property acquisitions have five rules: minimum investment of 500.000 Euros, purchase of one or multiple properties; all property types qualify; possibility of co-ownership; freedom to use, rent or lease.

3.3 Environment

The good weather, both weather conditions and social environment, strategic geographic position and the low cost of products and services make also Portugal a very attractive country to invest and to settle down. Lisbon, its surroundings and Algarve are the main places that investors aim to be.

_

² Jornal de Notícias, 04-04-2014

There are luxury villages, apartments, farms and an historical quantity of properties that are emeralds of architecture and history.

4 Technologies in Real Estate

Beyond the relevance of technologies, Real Estate tools can make agents look technologically savvy to their clients and this sector must understand what kind of tools behind email and cell phones can boost the sector and add value to their clients. Real Estate firms are not immune to these technological changes.

Making use of technology, marketing mix as evolved to include multiple listing service (MLS) databases and the Internet. "Today there are new mobile technologies and applications using blogs, social networking, smartphones, tablet computers, QR codes, and GPS technology that are changing the way brokers communicate with clients and market Real Estate", (Goodwin and Stetelman, 2013).

3D modelling is also used in Real Estate revealing each day a more detailed and realistic way to see properties and environment and nowadays, Augmented Reality (AR) starts to appear in Real Estate sector to improve information about properties, in a very delighted way, with deep detailed visual information about properties.

For Real Estate brokers it is imperative to understand how to use more effectively Information Systems and Information Technologies (IS/IT) to understand where people get Real Estate information, how they use that information, and what old sources of information are no longer relevant. Such information allows the broker to most effectively utilize the marketing budget for each listed property, (Goodwin and Stetelman, 2013) and also to better understand client's property significance and wishes.

Regarding REALTOR® (2013) report the three most valuable technology tools in responses were:

- Real Estate software for forms and contracts such as DocuSign, ZipForms, DotLoop, and FormSimplicity;
- Software and desktop tools such as Visual Tour, Adobe Acrobat, and AppFolio (property management software new this year);
- Mobile apps such as Dropbox, e-Key apps, Evernote (new this year), Google Maps;
- Electronic tablets (iPad, Kurio);
- Databases and property listing sites such as local MLSs, Realist (public records database), Trulia, Zillow and REALTOR.com®:
- CRM solutions like Top Producer and e-Edge (Keller Williams);
- Social media sites like Facebook and Twitter.

4.1 General characterization of technologies in USA

The USA has the tradition of statistics and studies and for RE, the REALTOR association has been detailing information that can be a mark or a standard for other studies.

The report of REALTOR® (2013) summarizes "some USA findings collected in January 2013 among sales agents, associate brokers, brokers, broker-owners, and managers regarding REALTORS practices in 2012. These groups account for 1.139 completed surveys". This report highlights that topped list of most valuable tools in 2012 were:

- Forms software,
- Mobile apps,
- Electronic tablets,
- Property databases,

CRM solutions.

Although one-third does not plan to purchase any of the listed tools mentioned here, Apple iPads are still the technology that probably will be purchased in the next 12 months also revealing they spent more on technology for their businesses in 2012 than in 2010.

REALTORS dedicate these investments on:

- Software.
- Databases.
- CRM solutions.

Now dominated by Apple, 92% of respondents use smartphones in their businesses.

- Spend a median 44% of their time corresponding with and doing work for their clients on mobile devices.
- 42% spend more than half their work time on mobile devices.
- The vast majority (94%) of respondents communicate with clients using a mobile device.
- Over half take/post photos (60%) and read/consume news (59%).
- Use of Desktops/Laptops is most often (83% rank this #1) to access their local or state association websites.
- They cite smartphones second most often (55% rank #2) and tablets third (60% rank #3).
- 89% of all respondents use social media in some way,
 - o 80% use it for their Real Estate business.
 - o Facebook and LinkedIn continue to be the social media tools that respondents use most, although use of both has decreased somewhat since 2011.

The 20% of all REALTORS® who do not use social media for their Real Estate business were asked what their reasons were for this. The reasons cited most often were:

- Concern about security/don't trust it,
- Too busy/don't have time,
- Don't know how,
- Don't see the value/ROI,
- Prefer personal contact.

REALTORS® who do use social media in their businesses cite the following reasons for doing so most often:

- Visibility/Exposure/Marketing,
- Free advertising,
- Easy communication/allows them to stay in touch with multiple clients at once,
- Clients expect it,
- Building relationships/networking,
- Promoting listings.

A large percentage, 79% of brokers and managers have company web sites.

For Lead Generation & Listings, Referrals, repeat business and the Internet remain the top three most important methods of generating leads. Internet, however, is rated significantly less important than in 2011; 52% considered this "very important" in 2012, versus 61% in 2011.

4.2 Detailed and present technologies in Real Estate

The Real Estate professionals are seeing their customers using the Internet to conduct their own searches and occasionally find a home for themselves. Industry observers say that online searches never fully replace brokers or agents, but the Real Estate professionals see the need to incorporate

technology rather than seeing it as a complement to the way they already do business, (Haman, 2013).

4.2.1 Mobile Technologies

Today there are new mobile technologies and applications (Apps) using blogs, social networking, smartphones, tablet computers, QR codes, and GPS technology that are changing the way brokers communicate with clients and do business in Real Estate, (Goodwin and Stetelman, 2013) and we may say that there is no business at premium target without these technologies including the most new ones like Augmented Reality (AR) or 3D models.

Nowadays, as it is possible to put almost of all applications into a mobile platform, it is imperative for brokers to understand that people can get information about properties anywhere at any time, old information and irrelevant one can be boring and also a way to lose a client and so, relevant information allows the broker to use more effectively the marketing budget for each listed property to know clients preferences and establish a good relationship with them through networking and other technologies or applications and techniques.

4.2.2 Cloud computing

One of the new technique and services is Cloud Computing that has been adopted from several important enterprises like Microsoft and Skydrive, Google and Google Drive, Portuguese Telecom (PT) and MEO Cloud, iCould from Apple, Dropbox and others. Several servers support data and applications and allow clients to be free from the hurry of disk space or data or SW update. Other must in this option is that we can access information from the Cloud at any time and updated and synchronized it since we have Internet and services available.

In this technique, file sharing can be synchronized and saved on the cloud so it can be accessible to all computers, phones or tablets automatically. Photos, documents videos and other files can be available wherever and whenever it is needed and it can be especially helpful when working on team projects. People can upload files to share, co-workers can make changes to those files and everyone has access to the information at any time, (Hagblom, 2012).

4.2.3 Social networking

Social networks are a dynamic process, a high effective communication tool with a fundamental need of consumers involvement (Internet Advertising Bureau (IAB), 2010), helping organizations to communicate the offers of their latest products, content and exclusive events, enabling a communication one-to-one to a huge audience like never before.

Using social media is a good way to obtain and give information. People use Facebook to build a stronger presence on the Internet, and LinkedIn is a platform for networking and recommendations in a professional atmosphere and Twitter is used in a small writing. Social media platforms like Twitter and Facebook are becoming a fundamental part of the Real Estate. Many brokers use their Twitter and Facebook accounts to publish the completed transactions, explaining details of a location or to place interesting articles related to commercial Real Estate and become a resource for people in the industry, (Hagblom, 2012).

• In Real Estate in Portugal

It appears that Facebook is one of the most important social networks in Portugal: For communication and entertainment; as an important way to companies / brands; advertise their products / services interact with their customers / consumers.

In 2012, from Florentino and Casaca (2013) work, in a sample of 500 Real Estate Mediation Companies the results concerning Social Networking was: total of companies owning a website: 74 (15%); 12% use Facebook; 4% use Twitter; 1 percent go for LinkedIn; less than 1 percent prefer Youtube. In general, it seems these Real Estate Companies do not have corporate websites and if they do, they do not make use of social networks, particularly those that are not franchised.

4.2.4 Global positioning systems (GPS)

One example for GPS importance says, according statistics from 2009 of Real Estate & Construction, that GPS technology lets buyers search Real Estate listings from any cell phone. Clients can access the exact location, displays details about the property, such as the price, number of bedrooms and baths, mortgage, and taxes. "While driving through neighbourhoods, the GPS link lets lookers pull the data of the exact property they are at. It can also show nearby houses for sale on a map. When the user wants to see a home, the "Call to See" button connects them directly to an agent". This application has a licensing fee to Smarter Agent (2014) to affiliate the product with his company, (Yohem, 2010).

The ESRI app is a specific application to support a client who is asking about the demographics of an area. With the ESRI app, an agent can drop a virtual "pin" on a location and get information such as average income, median age, business listings, crime indexes, retail areas, consumer spending and marketing potential, (Hagblom, 2012).

4.2.5 Quick Response code (QR code)

Present in Real Estate in recent years QR code is a reality for nowadays. With the inclusion of these codes on posters and flyers property, agents are able to quickly connect with potential buyers. A QR code can provide additional information on a property, contact an agent or take users to a website with all information, all at the touch of a finger. This is one more way of using smartphone or tablet that makes information immediately accessible, (Hagblom, 2012).

4.2.6 Augmented Reality (AR)

AR is a really new technology but tendency is difficult to point, we do not know if it will be adopted or not by Real Estate. Augmented reality is a view of the real world environment whose elements are augmented by computer generated graphics. Augmented Reality (AR) refers to computer research that aims to produce information systems that merge real world information with digital information.

In 1997, Ronald Azuma does not limit AR by the technological hardware, he said that an AR system contains the following characteristics: 1 - Combines real and virtual; 2 - It interacts in real time; 3 - It is registered in 3-D, (Ford and Tobias, 2008).

Mobile Realty Apps' augmented reality technology shows customers home listings simply by aiming their iPhone, iPad, or Android. As a "home hunter" pointing smartphone or tablet down the street, we can see a view of the street and information on all the houses for sale popped up. There's even a radar display that show the direction and proximity of nearby properties for sale (Mobile Really Apps, 2014).

Others SW developers system are dealing with exclusive mobile marketing platform which combines, augmented reality, geo-targeting, geo-fencing, real time analytics and cloud based digital video. Real Estate industry will now be able to use the power of mobile augmented reality technology bringing pictures of properties to life in a video (Augmented Reality Trends, 2014).

Here are a few other ways in which realtors can benefit from this augmented reality (Augmented Reality Trends, 2014).

- Faster communication with customers which will have more relevance;
- New listings and clients can be generated;
- With geo-fencing, the right message can be delivered to the right person and that too at the correct time;
- It can create a mobile strategy in less than 48 hours;
- A realtor will be able to rule the Real Estate market with his/her mobile device;
- With augmented reality, we can make our logos, images and our listings interactive;
- We can communicate with prospective buyers instantly.

The role of augmented reality in Real Estate can vary depending on available technology and the creativity of designers. Using augmented reality in Real Estate is one way in which realtors hope to help potential buyers identify new homes. Beyond finding houses, augmented reality can also be used to help potential buyers see their own lives in homes decorated by another person. With new advances in this technology, it may be possible to use augmented reality in other ways in Real Estate.

People often use augmented reality on their phones, providing a mobile window through which they can receive information about the world around them. Realtors hope to use this window to facilitate housing searches, allowing potential buyers to find out information about houses around them on the go. This use of augmented reality in Real Estate works by overlaying information about available houses on images of those houses when the phone is pointed toward the dwelling. In some designs, buyers can also see photos of the insides of houses while looking at them outside from their phones (Wisegeek, 2014).

Using this solution a potential customer can faster evaluate all benefits of the building and literally "feel" the "view out of the window". For a Real Estate firm this solution is an innovative method for presenting a building. It can be used at trade fairs and sales offices and does not require traditional architectural model making (Augmented Pixels, 2014).

Augmented reality (AR) is a cutting-edge technology that allows for a digitally enhanced view of the real world, connecting us with more meaningful content in our everyday life. With the camera and sensors in a smartphone or tablet, AR adds layers of digital information, videos, photos, sounds, directly on top of items in the world around us.

4.2.7 Some characteristics of technologies in Portugal

In Portugal we do not have much more statistics in this area, Real Estate statistic data are rare in general, only the National Statistic Institute (INE) has some information and other information are sporadic, but for Premium segment there are a few or rare studies. From their studies, (Florentino and Casaca, 2013) pointed evidences from studies made in 2012/2013 for three samples of mediators and agents from Real Estate which resume is in following table.

Table 1 – Three samples from a study in RE companies in Portugal

Samples	49 RE companies on the web	53 RE companies in Lisbon on Yellow pages	500 Registered RE companies in Lisbon
Total of companies owning a website	30 (61%)	16 (30%)	74 (15%)
Total of companies without website	19 (39%)	37 (70%)	426 (85%)
Advertising on Facebook	3 (10%)	3 (6%)	9 (12%)
Advertising on Twitter	1 (3%)	2 (4%)	3 (4%)
Advertising on LinkedIn	1 (3%)	1 (2%)	1 (1 percent)

The conclusion from these three samples shows that advertising on Social Networks are low and Facebook with an average around 9,33% is more used than Twitter with an average of use around 2%. Websites owned by RE companies are also low especially in small companies.

4.2.8 Some characteristics of Social Networking Users (SNU) in Portugal

- In 2009 a small number of well-known networks entered into the life of approximately 1.7 billion Internet users from 216 countries (CIA, 2009) and 2.4 billion in 2012
- In 2009, according to the CIA, 5.168 million people used the Internet in Portugal, more than half of the population, 5.9 million in 2012³
- In 2010, in Portugal, about 56.4% of Internet users had accessed social networks (UMIC, 2010): 60.7% women and 52.3% men
- In 2011, there were 59% of Internet users in Portugal (5%)
- 3 million people accessed SNU in 2011, (Marktest Consulting, 2011) and 4.66 million almost 55% in 2012⁴

5 The impact of new technologies in Sotheby's, Engel & Völkers and Remax Golden Line

In this study we try to understand some Real Estate enterprises cases, enterprises dealing in Premium target and traditional ones, in order to understand how they deal with news technologies and with their clients. Real Estate enterprises in premium target are somehow different from traditional enterprises in traditional targets. Here we analyse some characteristics of top premium enterprises and particularly Engel & Völkers and a traditional one RE like, Remax Golden Line.

Analysing REALTOR® (2013) report and the websites from de most important Real Estate enterprises it can be said that technology both innovative and traditional is been used in this sector:

- Interactive 3D models of all types of Real Estate give us a unique perspective as we are inside the houses or other places.
- Diverse Software that helps homeowners organize and manage their home
- MLS real-time buyer marketplace for agents.
- Software that matches home buyers and sellers with agents, based on skill, location and experience
- Local search and discovery mobile app that provides a live view into thousand cities
- Neighbourhood discovery tool that uses social data to provide recommendations
- Estate CRM & Contact Management Software Systems
- Live Chat on line

However, traditional Real Estate franchised brokers from popular enterprises like, REMAX or Century21 have the same strategy for new technologies, although for each franchised case, values of investment and options related with ICT choices can be different. It seems that both are using the same approach for new technologies.

5.1 Best solutions for Sotheby's

The Sotheby's International Realty network currently has more than 12,000 sales associates located in approximately 600 offices in more than 45 countries and territories worldwide, and places over 7,500 referrals every year⁵.

9

³ Internet world stats (2013). Statistics online 10-05-2013 from http://www.internetworldstats.com/europa.htm#pt

⁴ Ibidem

Both traditional and digital ways can be offered by Sotheby's, including digital marketing, QR code, 3D modelling, Digital Tour among other techniques. The quite good quality of Soltheby's site showing amazing properties it is a guaranty of the luxury they offer and put clients in contact to the new cut-of-edge technology.

Sotheby's has SIR Mobile, an apps for on Android, iPhone, iPad or Blackberry to connect clients with their "global Real Estate experts no matter where you are". This application can offer: GPS search, find the closest homes, search globally in 45 countries, driving directions to the home of interest, social sharing on Facebook and Twitter, tap to connect; call or email.

5.2 Best solutions for Engel & Völkers generally and in Portugal

In a continuing processing to update services and modernization, in 2103 Engel & Völkers has hired Propertybase Real Estate CRM which has several services used by Real Estate developers, sales agents and property brokers for residential and commercial projects all over the world.

Engel & Völkers offers in return for payment fee a complete package for their partners:

- A system solution and marketing tools called "Global Office" Real Estate agent software that enables a better optimally service to their customers whilst at the same time agents organize clients shop;
- An high-quality property descriptions, brochures, mailing campaigns, print and online ads that provides diverse target group-specific marketing opportunities;
- An agent sub domain including a link via the Engel & Völkers website and using Engel & Völkers web-based print shops, can be possible to create several marketing tools;
- An online Merchandising Shop offers diverse, attractive products and Engel & Völkersbranded customer gifts;
- "E&V Life" Intranet application can be accessed from anywhere in the world and contains plenty of material to support you in developing comprehensive Real Estate and marketing expertise;
- It is available CRM tools as well as innovative mobile services and connections with social networks.

5.2.1 Answerers from the questionnaire

In order to enhance this study it was applied a questionnaire for Engel & Völkers to collect information related to ICT, investment, future trends and other particularities of their business. In this way we could get secure and accurate information from one Portuguese franchised broker from Engel & Völkers.

The following table reveals the present information on investment in ICT, selling values and quantities, mentioning also de Golden Visa values.

Table 2 – General Investment including Golden Visa

Premium Enterprises	2011	2012	2013	2014*
Quantity of Selling	10	6	19	11
Selling volume (Euros)	5.157.560€	2.645.000	21.396616€	5.556.000€
Golden Visa - Quantity of Selling	-	-	5	5

⁵ http://www.sothebysrealty.com/eng/worldwide-presence, 02-05-2014

10

Premium Enterprises	2011	2012	2013	2014*
Golden Visa - Selling volume (Euros)	-	-	4.685.000€	2.960.000€
Investment in IT/IS ** (global) (Euros)	9.000€	20.000€	12.000€	17.000€
Percentage of Investment in IT/IS (global) in global investment %	12%	55%	22%	-
Investment in IT/IS (Mobile) *** (Euros)	25.000€	28.000€	19.000€	6.500€
Percentage of Investment in IT/IS (Mobile) in global investment %	-	-	-	-

^{**} Technology equipments

Information related with clients:

- The average of clients is not specified;
- Clients tools available in house: Today the most important is the internet in its various aspects
- Average time spending with clients per week (in hours); Not quantify
- Percentage of time spending with clients per week (in %): 80%
- What you think that is your best value to clients: Service tailored to the needs

The main technologies used by this broker are: most important - Quick Response code (QR code); second in equal proportions - Cloud computing, Social networking, Global positioning systems (GPS) and with less importance all the rest - Data Bases, Listing (properties, selling, events, etc.), Forms, Contracts, Enterprise Site, email and Mobile technologies

The most valuable technology tools that they used last year:

- Real Estate software for forms and contracts: Iwork, Ilist, Iconnect Word; Excel; Zip;
- Software and desktop tools and other property management software: Adobe; Own software company, Global Office 3 (GO3);
- Mobile apps such as Dropbox, e-Key apps, Evernote, Google Maps: DS file; Div. App's Apple; My Cloud; Whatsapp; Vibe; Dropbox; Skype;
- GPS App: Maps (Apple);
- Electronic tablets (tablets, iPad, etc.): no response (NR);
- Databases and property listing sites (as local MLSs, Realist public records database, Trulia, Zillow and REALTOR.com®; etc.): Own software company, Global Office 3 (GO3)
- CRM or ERP solutions: NR;
- Social media sites like Facebook and Twitter or other: Facebook; Twitter; Pinterest; Linkedin; google+; podcast;
- Cloud Computing (Skydrive, GoogleDrive, MeoCloud, others): Mycloud; DS File;
- Email (Gmail, yahoo, etc.) which one?: Enterprise domain;
- Cell phone / smartphone contact (apple, android, blackberry, other): iphones;

Activities question: Which of the following activities do you engage in for work purposes using a mobile device, activity - % percentage?

- Communicate with clients: 50%
- Take / post photos / videos: 10%
- Read / Consume news: 20%
- Manage documents: 5%
- Cloud computing interchange: 5%

^{***} Real Estate Portals and mobile communications

- CRM (Customer Relationship Management) Top Producer and e-Edge (Keller Williams, others): 10%
- Social media sites like Facebook and Twitter, other: 5%
- Global positioning systems (GPS): 10%
- Quick Response code (QR code): 5%
- Augmented Reality (AR): 0%
- Create listings: 0%
- Other, please specify: NR
- I rarely use a mobile device for work (why?): 0%

Detailed activities question: Which of the following activities do you engage in for work purposes using a social networking: Activities – Yes or No, comments and % if possible?

- Communicate with clients explain, show products / services 5%
- Free advertising: no
- Visibility/Exposure/Marketing: 17%
- Get information / opinions / suggestions from clients: 3%
- Take / post photos / videos: 14%
- Read / Consume news: 10%
- Manage documents: no
- Create listings: no
- Promoting listings: 7%
- Clients expect it: 14%
- Get clients together (sense of community): 14%
- Building relationships/networking: 17%
- Other, please specify: NR

Social Networking question: How comfortable are you using social media? The response was "Comfortable".

ICT best solutions of your company question: In social networks we generalize information. About 20% of information is dedicated to the core business and to the disclosure of the remaining properties in more or less equally to general. The rest of the information is about the company, about the Real Estate sector on activities and events in the Lisbon area and about general issues (politics, holidays, curiosities, etc.). We have a specific program of dissemination in social networks that automates the publications through the choice of fonts and themes and days and hours of publishing that ensures the constant presence of the company in these networks.

Differentiation question: What do you think about other opportunities for this business and why is your enterprise different from the others: We focus on themes of Lifestyle, not only by GG magazine that is published by the company, but also through the disclosure of articles and topics on Social Networking.

Future question: What do you think about the future, investment, technologies, information, digital marketing, other methods or techniques? Reinforce the use of iPads; replace the printed information by digital format.

Other information: Changed in recent weeks, our server started to work on Cloud in order to all consultants have permanent access to documents and company information.

5.3 Best solutions for Remax – Golden Line

Following the same strategy applied for RE premium case, we also applied the questionnaire for Remax Golden Line, a traditional RE to collect information related to ICT, investment, future trends and other particularities of their business. Also we could get secure and accurate information from one Portuguese franchised broker in traditional segment. At the end will be able to compare these two cases.

Operating for more than ten years of experience in Oeiras / Cascais area, the franchised broker office Remax Golden Line selling a volume around 825.000 Euros in 2013 are investing in Social Networking and Mobile technologies. Their Information System (IS) created and maintained by Remax workers is centralized and it is the same for all franchised Brokers, although the effort to be different and to invest differently in new technologies.

So, we are using Remax Golden Line, a traditional broker, to compare them with Engel & Völkers to see differences between both brokers.

5.3.1 Answerers from the questionnaire

We have no information about values of selling in money or quantity, Remax Golden Line only answered the other questions.

Information related with clients:

- The average of clients is 100 per month;
- Clients tools available in house: The highest percentage of customer contacts is through internet web site Remax and portals where this site exports its property portfolio;
- Average time spending with clients per week (in hours); between 3 to 4 hours
- Percentage of time spending with clients per week (in %): 40%
- What you think that is your best value to clients: Classified information, expertise / know-how, qualification and attendance

The main technologies used by this broker are: Social networking (please refer the most used) - with Facebook; Data Bases for Mailings; Listing (properties, selling, events, etc.) for Mailings; Contracts, where everything begins and the Enterprise Site, the best contact engine.

The most valuable technology tools that you used in the last year:

- Real Estate software for forms and contracts: Iwork, Ilist, Iconnect Remax Internal Systems;
- Software and desktop tools and other property management software: Adobe (PDF), Microsoft Office (word/excel/ppt/outlook), Winzip;
- Mobile apps such as Dropbox, e-Key apps, Evernote, Google Maps: Several different "Clouds", Google Maps, Google Earth;
- GPS App: Google Maps;
- Electronic tablets (tablets, iPad, etc.): no response (NR);
- Databases and property listing sites (as local MLSs, Realist public records database, Trulia, Zillow and REALTOR.com®; etc.): Iwork (Remax Internal System);
- CRM or ERP solutions: Iwork (Remax Internal System);
- Social media sites like Facebook and Twitter or other: Facebook;
- Cloud Computing (Skydrive, GoogleDrive, MeoCloud, others): no response (NR):
- Email (Gmail, yahoo, etc.) which one?:Remax e-mail (powered by webmail);

• Cell phone / smartphone contact (apple, android, blackberry, other): Android.

Activities question: Which of the following activities do you engage in for work purposes using a mobile device - activity - % percentage?

- Communicate with clients: 50%
- Take / post photos / videos: 5%
- Read / Consume news: 0%
- Manage documents: 0%
- Cloud computing interchange: 0%
- CRM (Customer Relationship Management) Top Producer and e-Edge (Keller Williams, others): 0%
- Social media sites like Facebook and Twitter, other: 10%
- Global positioning systems (GPS): 5%
- Quick Response code (QR code): 0%
- Augmented Reality (AR): 0%
- Create listings: 0%
- Other, please specify: NR
- I rarely use a mobile device for work (why?): NR

Detailed activities question: Which of the following activities do you engage in for work purposes using a social networking: Activities – Yes or No, comments and % if possible?

- Communicate with clients explain, show products / services digital marketing: yes, to post new listings or sold properties
- Free advertising: yes
- Visibility/Exposure/Marketing: yes
- Get information / opinions / suggestions from clients: no
- Take / post photos / videos: yes
- Read / Consume news: yes
- Manage documents: no
- Create listings: no
- Promoting listings: yes
- Clients expect it: yes
- Get clients together (sense of community): yes
- Building relationships/networking: yes
- Other, please specify: NR

Social Networking question: How comfortable are you using social media? The response was "Extremely comfortable".

ICT best solutions of your company – explain: Website Remax, the largest real estate portal in Portugal that generates visits and contacts, presence on Social Networks (Facebook), next step: the development of Android and iOS applications (occurring now).

Differentiation question: What do you think about other opportunities for this business and why is your enterprise different from the others: The brand differentiation, layouts, graphics and advertisements, where the key of our highlight will be starting a "brand within the brand".

Future question: What do you think about the future, investment, technologies, information, digital marketing, other methods or techniques? Future will be in mobile segment, virtual tours, and 3D.

5.4 Portugal situation for studied brokers

In Portugal, these brokers use all central applications, as they have to pay a fee according the franchising contract they also have the right to use central Information Systems. So, it is a global world of businesses with good solutions, powerful strategy that can be a good solution for small enterprises who deal in a million Euros business. Whoever, franchised companies usually add more applications to their IT infrastructure, according their own rules of doing business and IT budget.

As it appears, the main Information System (IS) is ruled in the same way in all franchised enterprises studied here. The differentiation is more or less regarding investment of each franchising in IS/IT and new technologies and applications. For RE premium or traditional targets, it seems that strategies are similar and the amount appears to be distinguished.

6 Future

More and more innovation are coming like Beacon Technology, somehow like QRcode, but instead of a code, Beacons are small sensors that can be placed in a location to send personalized location-based information to a user's mobile device. Developers are using Cloud Computing as a solution to be adopted in the future gathering each time more and more services to Real Estate business. Mobile applications (Apps) seem to be an obligation in future as its characteristics allow flexibility, up-date, freedom and mobility among users.

7 Conclusions

Case collection and journal articles are hard to find in this area of technology and Real Estate (RE) companies. However, scientific articles begins to exist, mostly related to higher education in RE, applications, equipment and software providers that seem to be interested in this business and provide us some important information. Many applications can be related with RE, like AR, 3D simulation models and QR code.

Today's mobile and social networked society studies are rare for Real Estate Premium target but it is important to understand how these new technologies combined with old ones are making the difference, in a difficult and complex situation in Portugal, dealing with deep economic and social problems.

We can think that RE Premium can be different and rule business differently from others RE traditional brokers however, from this study it appears that strategy is identical for both targets. Both are investing in new technologies and information, applying methods and similar techniques, only being different due the amount of investment.

From the standpoint of RE companies, social networks and mobile devices are one of the most important targets of investment. These companies seem to be focusing on mobile applications, mobile communication and social networks as an alternative way to boost and get in touch with potential new customers, new promotions and marketing through these channels and means. Companies in general seem to be very interested in new technologies, new applications, platforms, Social Networking, new ways of communicating, marketing and doing business.

Mobil technologies put us anywhere any time and so business strategies are trying to get the best way to archive it. Applications that once were fixed are now mobile and examples like smartphones, ipads / tablets, laptops or other mobile devices are part of our lives nowadays. Databases and applications tend to move to cloud computing technology. The commitment to improving reality is accompanied with virtualization (AR), 3D models, QR codes and interactivity that help these brokers to better sell their products and services under the quality of those services or products.

Databases, good quality images, contacts with customers, personal and social relationships with customers are ingredients to be closer to customers and this can be enhanced by technology and its quality. Traditional media are driven to a more innovative way to communicate like social networks that can bring modernity and be closer to the customer. This relation can be "translated" into a better business understanding and further a better understanding of what customers want. It can be a mean to know where they are or want to be or even, what they want to buy.

The two case studies, one on premium target and another in the traditional segment seems to heavily invest in technologies and in most current solutions to be closer to its customers and keep pace with technological innovations. The difference seems to lie in the amount of investment that RE companies in premium segment do and want to transmit over RE companies in the traditional segment. In any case, there is a high importance given to social networks and mobile technologies. In RE premium segment image quality, 3D, AR or Cloud Computing also appears to be important.

8 Limitations and recommendations

There are few scientific studies in this area referring technology and Real Estate (RE) companies. The existing studies are mostly related to higher education courses in RE. There are some reports, statistics and articles from highly regarded associations like REALTORs, official statistical agencies that allow credible research. However, it is not easy to get information from RE companies and so studies have limited or scarce information. All these difficulties should not constrain studies and research so that it can improve business processes, trends and future perspectives that can help these companies. Importance of IT / IS and it's potential for marketing, decision making and improvement of business processes should not be apart.

References

- Augmented Pixels (2014). Software provider. Online 11-05-2014 from http://augmentedpixels.com/usecase/real-estate-sales/
- Augmented Reality Trends (2014). Software provider. Online 09-05-2014 from http://www.augmentedrealitytrends.com/augmented-reality/real-estate-augmented-reality.html
- Chain Store Ag (2009). Cut back on luxuries. Online 03-04-2014 from http://www.chainstoreage.com/article/cut-back-luxuries. News March 31, 2009.
- Florentino, Teresa and Casaca, Joaquim (2013). *Social Networks on the Web in Real Estates in Portugal*. ERES 2013 Vienna Austria. European Real Estate Society 20th Annual Conference 3rd-6th July 2013. http://library.eres.org/cgi-bin/rsa98.pl?conf=ERES2013&type=showabstr&nr=61.
- Ford, James K. and Höllerer Tobias (2008). AR and the Workplace. Augmented Reality: Information for Workplace Decision-Makers, Managers, Workers and Researchers. University of

- California, Santa Barbara. Online 11-05-2014 from http://www.cs.ucsb.edu/~holl/pubs/Ford-2008-ARChapter.pdf
- Goodwin, Kimberly R. and Stetelman Sarah E. (2013). Perspectives on Technology Change and the Marketing of Real Estate. Journal of Housing Research Volume 22 Issue 2, 91-107.
- Hagblom, Jason, (2012). How technology is changing commercial Real Estate. Nov. 12-18, 2012 The Enterprise.
- Haman, Kim (2013). Luxuryhomes. Orange county business journal, august 5, 2013. Local breaking news: www,ocbj,com
- INE (2012) Evolução do Parque Habitacional em Portugal 2001 2011. Edition 2012 EPHPT_2001_2011. Online 02-05-2014 from http://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_b oui=149380925&PUBLICACOESmodo=2
- Internet Advertising Bureau (2010). Guide to social media: become part of the online community. Online in 21 August 2010 from http://www.iabuk.net/en/1/socialmediahandbook.html Internet world stats (2013). Statistics online 10-05-2013 from http://www.internetworldstats.com/europa.htm#pt
- Mobile Really Apps (2014). Apps Provider. Online in 11-04-2014 from http://www.mobilerealtyapps.com/features/homespotter-augmented-reality-apps-for-real-estate-brokers-and-mls/
- PRN NewsWire (2013). Newspaper online. Online in 09-03-2014 from http://www.prnewswire.com/news-releases/150000-real-estate-agents-shift-focus-from-web-to-social-media-establishing-new-possibilities-for-real-estate-marketing-186299781.html
- Realtor® (2013). Technology Survey Report 2012.
- SEF (2014). Golden Residence Permit Programme (ARI) I data from 08th october 2012 to 31st march 2014. Online in 25-04-2014 from http://www.sef.pt/documentos/56/Dados_ARI_mar2014_EN.pdf
- Smarter Agent (2014). Smarter Agent is a mobile application pioneer that has created the first scalable mobile cascading Platform as a Service (PaaS) that enables widespread content distribution to consumers through native and HTML.5 apps. Apps Provider. Online in 05-04-2014 from http://home.smarteragent.com/
- Social networking, viral marketing and the ability to establish higher quality opportunities at lower costs are driving the marketplace for 2013. Online in 05-04-2014 from http://www.ereleases.com/pr/150000-real-estate-agents-shift-focus-web-social-media-establishing-possibilities-real-estate-marketing-96571
- Stair, Ralph & Reynolds, George (2011). Principles of Information Systems. Cengage Learning, Inc; 10th edition (1 Jan 2011). USA.(p. 31)
- Wisegeek (2014). What Is the Role of Augmented Reality in Real Estate?. Online 02-05-2014 from http://www.wisegeek.com/what-is-the-role-of-augmented-reality-in-real-estate.htm.
- Yohem, Roger, (2010). TERRITORIAL NEWSPAPERS The Daily Territorial. Inside Tucson Business. Online in 01-04-2014 from http://www.insidetucsonbusiness.com/.