

The Fourth Industrial Revolution and its Impact on the Profession of Real Estate Agent

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Abstract—The Fourth Industrial Revolution has brought significant changes for the society as a whole, generating great impacts on the ways people relate to each other and even on the ways of consuming, moving, learning, banking and working. Such changes, emphasized in the 21st century, are capable of automating processes to replace people, which may cause some professions and jobs to disappear in the mid-term. This transformation results in changes on how we live, providing both benefits and damage. This work aims to understand such changes and its relation to some professions, especially real estate agents. These professionals need to reinvent themselves in order to adapt to this new scenario and preserve their space in the job market. The results show that in order to survive the digital transformation, which has become faster due to the pandemic, real estate agents need to study, adapt and become a 4.0 professional, by adopting behaviors that meet the customer's wishes and make a difference in the moments of purchase and sale. The profession will not stop existing, but people who are unable to adapt to these changes will no longer have space in the market.

Keywords—Fourth Industrial Revolution, housing market, realtor

I. INTRODUCTION

Since the beginning of the 21st century, significant technological and social changes have been happening, causing intense impact on the consumer's habits: There are new ways to buy, pay, move, get accommodation and entertainment, communicate, live, study, access products and services and even use anything without the need to buy it, due to new possibilities of rental [1].

These wide-ranging changes are so extensive that, with the emergence of constant innovations, many once considered modern habits of the 21st century's 2nd decade, may quickly become old-fashioned. Klaus Schwab explains, in the book "Shaping the Fourth Industrial Revolution", that this phenomenon, called The Fourth Industrial Revolution, reshapes the global economy and the societies as a whole. Systems used in 2020, for example, that seem to have long life ahead, will all be completely transformed: From the ways goods and services are produced and delivered, to the way we communicate [1].

To soothe the impacts, it is essential that leaders in all social and economic spheres urgently build themselves the capacity of managing the risks and complexities of this change.

It's also possible to notice that the working class has been affected in all the important technological revolutions. This is due to the fact that human work is replaced by automation and by the so-called creative destructions, which eliminate ways of producing and making business [2].

The job market has already gone through gigantic changes, but since they have been slow, their impacts haven't been proportionally so expressive. At the beginning of the 19th century, agriculture in the U.S.A used 90% of the country's workforce; today, it's only 2% [3].

Moreover, while some professions stop existing, new ones appear, or they do not exist yet. This subject already calls attention within companies and universities and is the main focus of several studies searching for answers on how the future will be like, with regard to the job market and the destination of careers. One of them was released in 2019, named "The Skills Revolution", by ManpowerGroup, identified that 64% of the companies stated that they will not decrease the number of jobs. Another 19% said they plan to increase their workforce, while only 12% intend to reduce their teams [3].

The report "The Future of Jobs" (2016) goes against this information and points out that the Fourth Industrial Revolution, promoted precisely by the dissemination of technology and the Internet, will result in the elimination of more than 5 million jobs. The material shows that areas such as computing, mathematics, architecture and engineering will generate more than 2 million jobs [4].

Another 2017 study by the University of Oxford predicts that the unemployment levels will be staggering in developed countries over the next 25 years. According to the survey, the rate can reach 47%, mainly impacting the manufacturing industry [5].

Nevertheless, while the Fourth Industrial Revolution can generate unemployment, it also highlights opportunities. A study commissioned by Dell Technologies for the IFTF (Institute for the Future), released in 2017, indicates that 85% of professions in 2030 haven't been created yet.

Furthermore, consumers are increasingly demanding: They are well informed and more aware, have less time to lose, are less patient, want to use things rather than having them. They

value the experience of shopping and consumption. Therefore, it's to notice that this change of behavior was caused by a phenomenon that happened very fast, together with the technological development - the dissemination of the Internet - which gives access to information, reference and price research, exchange of ideas, purchases and even reputation analysis [4].

It is proven that, in the 20th century, consumers were easily influenced by marketing campaigns and listened to authorities and experts. This scenario, however, changed very quickly and in a short time - the first decades of the 21st century. The same author states that recent surveys, carried out in different sectors of the economy, point out that the majority of the consumers believe more in their social circle (friends, family, followers of social media), than in the marketing strategies of companies, a trend that also gave rise to businesses like TripAdvisor and Yelp, platforms for seeking reputation, but with "strangers", making the convincing job more difficult for brands [6].

Now, being more sure of what they want and totally involved with this disruptive process, consumers have adopted new habits that have directly affected many products and services. These habits put into question the existence of professions and things regarded back in the 20th century as impossible to live without, such as the taxi, which gave place to Uber, telephone calls to order food were replaced by a click in an app, the video-rental stores lost market to Netflix and songs are all available on Spotify. These new resources have technology involved, but as a mean, not as an end, since the end is always the consumer[5].

Besides that, digital innovations can provide countries with long-term prosperity. In the ranking of innovations with greater relevance are: mobile Internet, automation, the Internet of Things, cloud computing and even 3D printing. All these new features have been available for some years, but only now have started to cause significant impacts [6].

Following all the changes mentioned above, the real estate market was also severely impacted by technology. The Brazilian housing demand demonstrates the size and the potential of the real estate market in the country. A study commissioned by The Sao Paulo State Housing Union (Secovi - SP) has regarded the demands for residential real estate in Brazil. The study has been conducted by the University FGV (Fundação Getúlio Vargas) and has been released in the Real Estate Market Yearbook 2018, only considering the years 2015 to 2025. According to the study, it's estimated that 14.5 million houses will be built, around 1.5 million units a year. The study considered different social, economic and demographic factors, such as population dynamics, evolution of the household supply, evolution of the number of family arrangements and GDP. Such factors are considered as being driving forces for housing demand [7].

The Secovi (2018) union considers the outlined scenarios perfectly feasible, taking into account the amount of new family arrangements per year in Brazil, as well as people who decide to move from a rented residence to their own one. During the period of the previously mentioned study, 39% of the 14.5 million necessary housings in Brazil (5.7 million) will be located in the Southeast, 21% (3 million) demanded in the State of São Paulo and 9% (1.3 million) in the Metropolitan Region. Not to mention commercial real estate [7].

An example of how the markets are going to react to the automation and usage of artificial intelligence, and how it questions the existence of professions as the real estate agent is the following: Is it necessary to maintain a face-to-face relationship in order to buy real estate or are the information and platforms available on the Internet enough to safely purchase and make a good deal? [7].

Regardless of these great transformations, the real estate agent as a professional remains an important element for the real estate market, overcoming the automation barriers and limitations whilst helping people achieve their dreams. After all, it may be that most people buy a single house in their life, and unlike buying a pair of shoes, this transaction requires commercial experience and the ability to enchant and engage the public, qualities often found in a professional real estate agent [8].

This work therefore aims to study how the technological changes impact the real estate agent's professional practice.

It has the specific goal of: A. Academically studying the service and retail marketing omni-channel, as well as new technologies in the real estate market; B. Understanding how technological changes impact the real estate agent's performance; C. Understanding how these professionals can combine innovation and new technologies to continue doing their work in a more efficient, modern, fast, informative and humanized way.

As a basis to support the study, a quantitative survey will be carried out with 90 real estate agents from different Brazilian States, to understand their behavior towards innovations and how their profession can be impacted or even stop existing due to technology.

After some years in a severe crisis, the Brazilian real estate market, which has a direct and positive impact on the country's economy - also because of its construction industry -, shows signs that an economic upturn is coming. As made public by the UOL web-portal in 2019, the construction industry should push the Brazilian GDP and investments upwards in 2020. Director of Economic Policy of the Central Bank of Brazil, Fabio Kanczuk, said in his statement published in a news article on December 12, 2019, that "The Investment must positively surprise us in 2020 and grow 4.1%, driven by the real estate market". The Central Bank of Brazil estimates that the country should grow 2.2% this year. With the market warming up again and the construction of new units to meet the country's housing demands, the real estate sector shall bring more investment and create new jobs in Brazil [9].

II. THEORETICAL FRAMEWORK

A. Retail Marketing

Since the beginning of time, mankind has developed negotiation techniques, in order to satisfy people's basic needs, such as food. Over time and with the evolution of mankind, human needs began to increase, desires started to appear and the development of businesses started. Things that until then were only used for proper consumption began to be sold and

exchanged (clearly a commercial transaction) and this is how the retail trade started [10].

The revolutions brought professionalization and large-scale production, causing the segment to be solidified worldwide as one of the economy's flagships [10].

Retail definitions are different when considered to the letter. Important authors, however, have similar explanations - Retail briefly consists of directly selling products and services to the end consumer. Retail traders are responsible for providing products and services to better satisfy consumers. The sector does not exclusively cover products offered in points of sale, but also a wide range of services, such as pizza delivery, flight tickets and even haircuts [11].

The digital transformations changed the retail market's work approach. Companies - from multinational giants to small enterprises and businesses - are betting in new contact channels and formats to attract the final consumer and win the great sales battle. Retail is believed to be something simple in its essence, which becomes challenging and complex in the moment of doing it, due to the fact that there are a lot of people interacting among each other between product and sale [12].

This kind of trade has been changing in recent years to keep up with technological evolutions and meet the new consumer profile, giving rise to new ways of providing consumer service and performing sales, everything in order to improve brand positioning, create closer relationships, attract buyers and keep them loyal. The changes brought by the Fourth Industrial Revolution are impacting the economy, but these changes should be even more significant for the retail market. According to Dart (2014), at least 50% of the retailers and consumer-goods companies will not survive the next years [13].

It's not an easy task in any field of work to efficiently keep a working business with a healthy financial life. This scenario can be even more challenging for companies that sell products and services to the end consumer. Making plans, strategies and anticipating trends are essential attitudes for those who aim to succeed in this branch. When searching for intelligent growth with profit, five key pillars are mandatory to be studied, evaluated and implemented: 1) Relationship to the product, 2) The role of the stores, 3) Experience, 4) The integration with the digital world, 5) The purpose and culture [12].

In retail, whether buying in person or online, having a good experience is at the top of the ranking of criteria considered by customers when choosing a brand that delivers a concrete product, or a subjectively invisible service. From day one, the quality of the service provided is evaluated as a crucial factor, taking the whole path, from payment to after-sales support, into consideration. Keeping consumers satisfied by providing a positive and memorable experience is no longer a differential, but an obligation that assures a brand to survive and occupy a privileged position in the consumer's mind [14].

In the Brazilian market, buying real estate means going through a long, bureaucratic and complex journey, where in the end, the buyer - often exhausted and unsupported - Doesn't feel like their dream came true, but like having experienced an enormous headache. This complexity starts in the moment of

product disclosure, frequently conducted in a way that ignores essential information to solve doubts of consumers in different stages of their purchase journey [15].

The post-purchase phase, in addition, is pointed as the most neglected step of the entire journey. With the sales agreement signed, the majority of the sales chain's members (Real estate agents, construction and property development companies) abandons the consumer with no understanding of the processes involved, giving rise to many comings and goings for buyers, who get completely lost in the face of the complex steps involved until the purchase is completed [15]. Not only in the real estate market, but in any other field of work, providing a good customer experience is an essential responsibility of retail marketing, without generating value for consumers and taking care of their needs and expectations, it's not possible for any company to enhance its sales [16].

B. Service Marketing

When it comes to sales promises from companies, the consumer's expectations should be identical, but the practical reality is very different. The buyer of a service doesn't always receive what they should and expect to receive, there is a big difference between what is offered and what is actually delivered by the companies. The service marketing aims to reduce this difference in this scenario, by offering solutions that address this gap and generate real value for the customers [17].

Selling a service is certainly more difficult than selling a product. This is due to the simple fact that we are able to measure, touch and physically evaluate a product, while services, as explained by the marketing specialist Daniela Khauaja, are intangible. In an interview to the Brazilian business magazine Exame (2011), Khauaja said that "the service is something indivisible, because it's generally produced and consumed at the same time. The fact that a service depends on who is offering where and when, is highly variable and not possible to be stored, therefore, it's nature is perishable." [18].

In addition to that, she also says that the consumer evaluates the quality of a service every time it's delivered, that's why it's so important for service providers to pay attention to their customer's level of satisfaction. According to Khauaja, "There are five key factors of service quality: Reliability, Security, Response capacity, Empathy and Intangible items" [18], it's the salesperson's job to make what is offered real for the potential buyer to understand [18].

Even for a company that sells products, service marketing is an important thing to pay attention to. For a series of fields of work, recurrent maintenance is a source of income for companies. In this regard, Dell is a case of success: The company's technical support service, available by phone and on the internet. To make this success a reality, excellence starts in the manufacturing phase. Each equipment ordered receives a code, a sort of ID, that saves all the device's history: Period of warranty, event report and useful life [19].

When a customer faces a technical issue or any doubt regarding the device's operation, the code gives access to a series of answers and specific instructions for their equipment. If the customer calls the support service by phone, mentioning

their device's code solves 70% of the problems without a technician, and if the customer actually needs a technician, the professional arrives well prepared, with all the components and information necessary to address the issue [19].

For a customer who, despite the technology, is in search of someone to help when in need, looking for fast and efficient solutions, this kind of support is a source of great satisfaction, by making processes easier, faster and less bureaucratic [19].

The Real Estate Agent has the mission of providing a consulting service and the necessary support for buyers. A work that consists of mediating the sale of a property, giving support and guidance to salespeople and customers, so that a very professional sales transaction happens safely and according to the law. Moreover, by understanding their customer's needs and desires, real estate agents humanize these transactions, offering purchase options that suit these needs. This requires a sincere and close relationship (face-to-face if possible), something that no automation is able to replace [8].

In the universe of services, having a good reputation is the best way to advertise. To provide a good consulting service, a real estate agent shall not only know the product on sale, but also possess general knowledge in Real Estate Law, financial mathematics, engineering, economics and ethics. This set of capabilities will give the customer the security and support needed to make a good deal [8].

Information and digitalisation are accelerating everything, in ways that vary according to the economic sector and profession. However, with aggressive impacts and significant results, which require a different approach with a hybrid performance, that combines physical and digital platforms. The digital world is speeding up the creation and growth of products, companies and industries. Besides an omni-channel performance, recognizing these changes and knowing how to choose the strategy and which marketing channels to adopt can be decisive for survival [20].

C. *Omni-channel Marketing*

Nowadays, the consumer is not the same as in the 20th century. With the internet, the consumer has become more empowered and demanding: Provided with the possibility to compare and a lot of information to question brands, consumers may even destroy the reputation of a product or service that doesn't deliver what is promised, or even the least expected: A good service. Another one of the new consumer's characteristics is not knowing what they want, allowing brands to offer what they still don't know they need [21].

If the consumer is no longer the same, the once successful methods and channels adopted by companies are also not attractive anymore, retail as a whole needs to be reinvented, bringing buyers unlimited possibilities. This new landscape of the market gave birth to omni-channel marketing. This term, in English language doesn't only mean selling both physically and online [20], adopting omni-channel marketing to integrate multiple channels, so that one complements the other, offering an unique and continuous experience to the consumer. According to the author, providing many channels where the

buyer can buy whenever they want and how they prefer to buy, leads to a 30% longer customer life [6].

When a company evolves to the point of adopting an omni-channel marketing strategy, it leaves a series of past dogmas and stigmas behind and becomes able to offer a product and a complete experience to the consumer, regardless of the channel used for the conversion. There are several ways to adopt this strategy; the consumer can first see the product at the physical store and then buy online or vice versa, but more complex and very effective combinations are also available, according to the authors of 25 Need-To-Know MBA Models [20].

For example, an Internet user is impacted by an advertisement and gets introduced to a product while surfing on the internet. At another point, that same product appears to this user in another type of media, on television for example, the user then associates it with the advertisement seen on Instagram. From that moment on, the user may start to consider the purchase of that product or service that they perhaps didn't need or even know. An interest has been generated through different channels, which made the potential customer advance in the purchase journey [20].

In addition to that, more than 70% of consumers do not leave home to buy something without previously consulting on the internet, whether on websites, apps or social media. Another important aspect of this strategy has been mentioned in the book "Marketing de Varejo" ("Retail Marketing" - 2019, FGV University Press, Brazil, not published outside of the country): The omni-channel era includes data action, where the consumer's profile is tracked and segmented in order to provide targeted offers, like Netflix, which accurately offers titles based on the user's tastes. The same happens with Spotify, which recommends songs based on analyzed behaviors on the platform and accurate profile analysis. All of this represents an important set of actions that together complete the omni-channel marketing, which is important and efficient regardless of the market segment, the difference is in the way it's done [22].

Integrated technology and the usage of data to evaluate and segment are not just about increasing the digits in retail sales, but mainly to ensure best consumer experience, which not only aims to retain customers, but also to generate positive word-of-mouth [2].

Not only in real estate, but almost for every market segment, offline media helps make a brand or product known, but a large part of sales is made by digital means.

Traditional models of publicity and advertising are considered, at best, a sort of noise, and at worse, are completely invisible. The astronomical amount of content produced and received every day by consumers, makes their attention and absorption of information even more disputed and valuable. The efficiency of the channels adopted for each type of business fluctuates a lot. To always be looking for and testing technologies and platforms is the secret of having permanent advantage and growth [23].

Like all other segments, the real estate market suffered important transformations in the last few years, many of them causing people's work to be questioned. The only way to survive

in the face of these changes is to efficiently adapt to whether technological or procedural transformations. If real estate agents have an omni-channel vision and know how to use new tools they will not only be able to stand out, but also have competitive advantages [8].

Furthermore, the world stopped in 2020. Absolutely everything was closed, schools, churches, stores. Empty streets, isolated people, astronomical numbers of deaths. But this is not a war. The damage is caused by the COVID-19 pandemic, which started in China and quickly spread across all continents.

A disease that has shocked the world and brought a series of social and behavioral changes with it. It has accelerated transformations and generated long-term impacts in many markets, businesses have been closed and companies and careers have been rearranged. Although the pandemic is still a very new and uncertain topic, it sped up the digital transformation in several countries (including Brazil) to meet the needs of working, communicating and even having fun. Solutions until then considered taboos became a reality and are now treated as normal, such as distance learning, home office, telemedicine, online happy hours and much more. These changes also impact the real estate agent's job.

III. MATERIAL AND METHOD

In this study, the method adopted was quantitative research, with the goal of identifying the real estate agent's work profile and its relationship to technology, in order to understand how these professionals are adapting to the changes and investigating if this profession can survive.

As for the goal, this research is classified as a non-probabilistic (judgement and convenience) sample. The type of sample was chosen due to the fact that the interviewed people were not randomly selected, which reduces the probability of interference in the results [24].

This is an exploratory descriptive study, a type of research that has the purpose of describing an episode by verifying detailed information [24]. Exploratory research is focused on obtaining inspirations or deeply understanding the nature of a situation, providing qualitative data [25].

The technical procedure chosen for data collection was Google Forms, a free service that enables the creation of forms and storage in the cloud. The fact that it's an online tool allowed to expand the universe of research and to have access to real estate agents from diverse parts of Brazil.

The data collection instruments were the forms, made of written and multiple choice questions, which were used for the collection of data, and answered directly within the platform. The questions were designed according to the work's object of study. The form has many advantages, such as simultaneously reaching a higher number of respondents from a bigger geographic area, obtaining faster and more precise answers and less risk of distortion because there is no interviewer [24].

The survey link was sent via e-mail and whatsapp to the target audience, mostly composed of self-employed real estate agents, employees and/or partners of real estate companies, and

owners that also work with sales. The data were collected from January to April 2020 and analysed by the platform's available tools, such as graphics and spreadsheets, with the security necessary to validate the information.

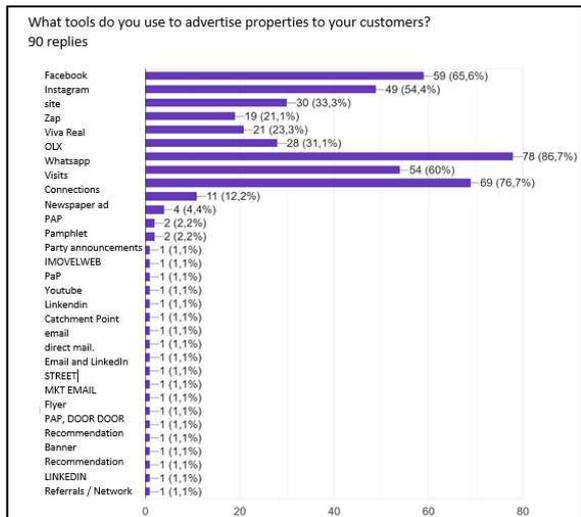
IV. RESULTS AND DISCUSSION

The respondents are part of different age groups: Aged 25-35, 35-45, 45-55, and above 55 years, with professional experience as real estate agents that varies from 1 month up to 20 years. 13% of them are owners or partners of real estate companies, 30% are self-employed and 56,7% are real estate company representatives. The survey showed that 5.6% of these professionals deal with Minha Casa, Minha Vida (was a housing program launched back in 2009 by the Brazilian Federal Government, which has subsidized the purchase of houses and apartments for families with a total monthly income of up to BR\$1.800 and also makes it's purchase easier for families with an income of up to BR\$9.000. Nowadays, the Brazilian President Mr.Bolsonaro intends to redesign the program, with the new name "Minha Casa Verde e Amarela" - My Green and Yellow house - A Reference to the colors of the Brazilian Flag) consumers, 12.2% of them serve Class A buyers - high-standard properties, 32.2% sell to Class B buyers and 46.7% of them work with different consumer profiles, that is, people from diverse social classes, who demand different real estate standards.

16 of the 90 respondents work as real estate agents alongside another profession, such as real estate appraiser, speaker, professor, urban traffic manager, architect, government employee, photographer, App driver, nurse, marketing and product advisor, expert assistant, construction work manager and psychologist.

Although 100% of the respondents have answered that digital tools help in sales, not all of them have answered that they use these tools, either to advertise products or to manage their customer portfolio and their customer relationship.

Chart 1: Tools used for real estate of Brazilian advertisement*

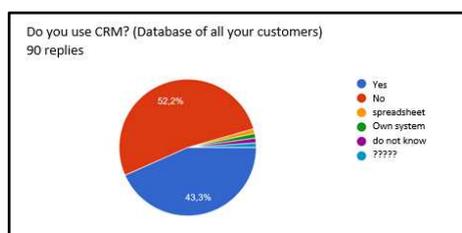


SOURCE: Made by the authors (2020).

*The chart's items are, from the top to the bottom: Facebook, Instagram, Internet Page, OLX (Vertical Portal), Whatsapp, Customer Visiting, Phone calls, Newspaper Ads, PAP (Door-to-Door), Advertisements in Parties, Distribution of Flyers, Direct Mailing, Email, PaP (Door-to-Door), LinkedIn, Email + LinkedIn, Network + Recommendation, Marketing Emails, Streets, LinkedIn, ImovelWeb (Real Estate Portal), Recommendation, Youtube, Banner, Flyer, Door-to-Door, Point of Sale.

When asked if they use CRM, 52.2% of respondents said no, and 43.3% said yes. The others were not familiar with this tool, that has the main goal of organizing their customer base, helping with workflow and sales management.

Chart 2: Usage of Customer database



SOURCE: Made by the authors (2020).

32% of the respondents that do not use CRM (15 respondents), said that they use notebooks or schedules to keep their customer base and their respective data. Other 18 respondents (38%) that don't use CRM said that they use other tools, considered digital, for this type of decluttering, such as excel spreadsheets, online platforms for task management, cell phone and email schedules or real estate agency systems.

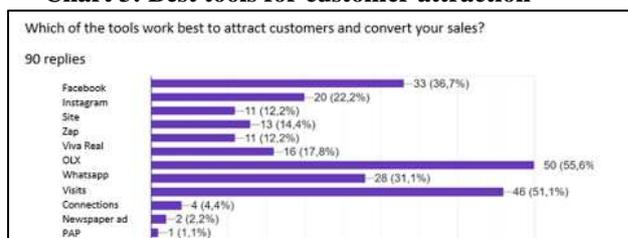
Besides the risk of losing space in the market, real estate agents that don't know to use technology to their own advantage

are automatically stopping their own performance from increasing. Drawing a parallel to other fields of work and professions, it's worth considering that the need for information continues to exist exactly as it did before the internet, but printed means of information no longer meet this need; they have been replaced by similar products, available on the internet. Publishers of printed encyclopedias that didn't switch to digital were crushed by the rise of the internet, many other market segments, such as newspapers, cars and services, have similar examples [26].

A multiple question has been placed about which tools the real estate agents use to advertise their products, that is, the respondents could select more than one option. The seven most chosen answers, talk about the most used digital tools. Whatsapp comes as first, pointed out by 86.7% of the real estate agents, in the second place, Facebook, selected by 65.6% of the respondents, Instagram comes in the third place, chosen by 54.4% of the interviewees. An internet page comes next, with 33.3% of preference. The vertical portal OLX has the fourth place, corresponding to 31.1% of the answers, in the fifth place comes the Brazilian real estate portal Viva Real, by the real estate holding called Grupo ZAP, and as next, ZAP, part of the same holding and chosen by 21.1% of the respondents. Offline means, such as phone calls and newspaper advertisements were also covered by the research and also had a great percentage of choice: 60% for phone calls and 12.2% for newspaper ads. Other non-digital tools such as distribution of flyers, direct mailing, banners and brochures also appear in tinier percentage.

When questioned about which tools they believe to be the most effective to attract customers and generate sales, 55.6% of the interviewed estate agents answered Whatsapp and 51.1% of them said phone calls. Facebook (36.7%), Instagram (22.2%), internet page (12.2%), vertical portals (Zap – 14.4%, Viva Real - 12.2%, OLX – 17.8%) and visits (31.1%) also appeared in the list.

Chart 3: Best tools for customer attraction



SOURCE: Made by the authors (2020).

It is suggested to real estate agents to use digital tools more and to better fill up their companies CRM, because not keeping updated means lagging behind and losing their jobs.

V. CONCLUSION

Consumers have been empowered by all the transformations brought by the internet and the democratization of technology, they now adopt a new posture towards the choice of products and services. Criteria such as quality and price are considered an obligation, and the value delivery is what now makes the

difference. Needs and channels have also been adapted and the digitalization has impacted all segments, creating new ways to interact with the public, show products, develop marketing actions and even exist, now that physical points of sale are not necessary anymore. New professions, products and services have also been created, which provides new business opportunities. This wave of transformations has directly impacted the real estate market, which has an enormous relevance for the Brazilian economy, but that is very traditional and resistant to innovation.

The research carried out in this work emphasizes the resistance and hardship of real estate agents. Their profession is considered at risk by many future scholars, who argue that they will be replaced by robots.

Although the interviewed real estate agents see the digital tools as an ally to optimize workflow management, increase efficiency and improve sales conversion, many of them still rely on traditional non-digital means, like phone calls, which represent 51.1% of the answers to the question "Which tools are the best to attract customers and convert sales?". Phone calls may work for two reasons: first because they do not use other means and second because they are not able to measure or compare, or because they are complementing other actions. For example: when a customer that receives a call and gets interested in buying a property had already got to know it through an internet advertisement or because they have searched for it on their own and were already provided with enough information to make a decision.

Just a phone call is not enough to convert a sale. The purchase of a property involves a complex process, composed by many steps, such as Discovery, Interest, Desire and Action. A call is just one of many actions, like disclosure, attraction, visit scheduling. Therefore, the usage of digital channels have been standing out in the real estate market. They allow the real estate agent to gain in scale and to attract more customers in this process.

The present work makes it possible to conclude that in order to survive the digital transformation, especially now that they are faster due to the pandemic, real estate agents need to study, adapt and become 4.0 professionals, by adopting behaviors that meet the customer's wishes and make a difference in the moments of purchase and sale. Their profession will not stop existing, but professionals who are unable to adapt to these changes will no longer have space in the market.

For future studies, it's recommended to apply the impacts of the fourth industrial revolution in other professions, or to more deeply understand the hardships, barriers and facilities of the real estate agents in the face of new technologies that came to revolutionize the real estate market.

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