

# Impact of Digital Marketing on Real Estate Market in China

Siyi Li

Department of Commerce, University College Dublin, Dublin, Ireland

siyi.li@ucdconnect.ie

**Abstract.** The real estate market of China plays an outstanding role in the country's economy as well as among the biggest one in the world. The rising of purchasing power due to the increasing economy and urban population accelerate the development of property market in China to a great extent. Digital marketing has emerged for promotion of products and services, which attracts the attention of realtors and brokers in the real estate market in the era of big data. This paper examines the impact of digital marketing on real estate market in China, especially for the consumer behaviours and businesses. The study makes the utilization of both primary data and secondary as well as one case to check the condition of Chinese real estate and digital marketing condition. Mathematical tools (e.g., Excel and JASP) are implemented for the data visualization. According to the analysis, digital marketing has great impact on the Chinese real estate market. It will promote consumers' intention to purchase housing properties based on the precisely product and service targeting and quality provided. For real estate enterprises, it will reduce their cost of advertising, improve the efficiency to reach their audience as well as acquire higher transaction volumes. However, without suitable digital marketing strategy, it may lead to adverse consequences. These results shed light on enhancing awareness of effect of the digital marketing on the real estate market in China.

**Keywords:** Digital marketing; Real Estate Market; China.

## 1. Introduction

On account of rising property values and low loan rates, real estate investing is becoming increasingly popular. However, the process of buying and reselling the real estate as an investment has existed through a long time. Alexander the Great acquired land by defeating the Persians and made the deal with another group of people, which made him considered to be the first investor of the real estate market [1], which happened in the 334 BBC. Although the exchange processes of land and properties didn't seem like currently, it was a symbol of the evolution of real estate market. Dated back to the 1900s, the concept of real estate started to grow. Many things human beings are familiar with at present were created during that time, e.g., the mortgage association, the second loan market as well as the multiple listing service. Dwight D. Eisenhower signed legislation that combined the best characteristics of real estate and stock-based investment to create a new way of producing income, making it simpler for the majority of shareholders to work cooperatively for real estate projects, results in a greater real estate industry and the seek for alternative markets worldwide [2]. Greater opportunities were available for personal interested in property investing, e.g., television shows that integrated marketing techniques with the real estate businesses.

The combination of economy and rising population made land-use expansion a hot market during the nineteenth and early twentieth centuries. As a country with a large population, the Chinese government began developing real estate in 1981 [3]. New regulations were released to help real estate corporations pass through the hard time during 2008 economic recession. Since then, the residence price has grown rapidly and the Chinese real estate market expanded at a particularly fast speed. In order to slow down the speed, the Chinese government introduced austerity measures [4]. Although the global economy is not flourishing as before, the Chinese property market is still vital. For the reason of urbanization and provincial governments, the real estate prices are relatively high in Chinese market. Following the Chinese central government's easing of previous initiatives to tighten loan rates, boost deposits, and impose restrictions on real estate markets, the markets had noticeably low growth [5-7]. The government adopted a variety of initiatives to encourage property purchases by the year 2016, such as lowering taxes on property sales and regulating land sales for new

development projects. China's property market is currently one of the world's largest. According to the People's Bank of China (PBOC), direct investment in real estate will hit \$1.18 trillion in 2020, accounting for 7.4 percent of GDP [8].

The promotion of products via the internet or other digital technologies or electronic media is known as digital marketing. By the Institute of Digital Marketing's official definitions, digital marketing is the use of digital platforms to promote advertising products and services to targeted customers and businesses [9]. Marketing has gone through four stages of evolution: the production era, the sales era, the marketing era, and the marketing company era. Digital marketing evolved from traditional marketing accompanied with the development of technology [10]. Because the world relies on the internet today, it is a trend for the business to adopt digital marketing which helps them reach target customers at a lower cost with a better conversion rate [11]. As in every industry, digital marketing has no doubt become increasingly important in real estate industry. The real estate market increased by 2.3% by 2020, with more residential and non-residential buildings were set up [12]. For such a huge market of real estate, it is quite important for the business to stand out to catch their customers' eyes. People's behaviour of looking up search engines for information makes it clear that digital marketing is a vital strategy that can help promote brand awareness and keep it unique as well as becoming easier to reach target customers [13]. Digital marketing is quite useful in real estate market after the full understanding of your goals and the market mechanism. Nearly 86.4% real estate agencies applied digital marketing through the channels (e.g., twitter, WeChat and Facebook), which to a great extent influenced consumer's buying behaviour in that market as well as transaction of the business [14]. For scholars specializing in marketing research, they always put emphasis on American real estate market for which was deemed at the most lucrative market in the world [15]. As the booming development, purchasing power of buyers and the market size of China has also grown rapidly. It has become another dominant market which cannot be ignored by the international business community [16].

Chinese real estate market is among the most attractive ones in the world. This is not only resulted from the process of urbanization for such massive population, but also for the rising economy in China. For those who with leisure money in China, they have the desire and treasure to buy the real estate property. Digital marketing is one of the most common marketing strategies at the moment. Many corporations use this method to reach their consumers and realize their goals. On contrary, despite bringing huge benefits from digital marketing on real estate, it can also lead to certain disadvantages.

This paper will summarize relevant literature and deliver both primary and secondary data to analyse the impact of digital marketing on the Chinese real estate market. Then, the paper will illustrate the fundamental characteristics of Chinese real estate market, the general concept of digital marketing, the application of digital marketing in Chinese real estate market such as how consumer behaviour and business being affected by the marketing strategies as well as the positive and negative sides of applying digital marketing in real estate market in China.

## 2. Data & Method

The data of this study mainly sourced from two ways, which are respectively the primary data and the secondary one. For the primary data, it is collected from the questionnaires responded by 90 people living in China with basic information of real estate and digital marketing. The respondents no doubt have the latest information and understanding of Chinese real estate market for the question given for them and they can help to confirm the findings and data collected from database. As the sample selected for people are residents in China, the frequency and correlation analysis will be applied based on different questions they answered. For the secondary data, it is mainly collected from the database. The data of Chinese real estate market and the digital marketing condition and environment will be illustrated with the charts. By facilitating the uses of Excel and JASP in the analysis process, responses will be quantified.

Besides the data mentioned above, one case is picked for the analysis of the impact of digital marketing on the real estate market. Case study is used for discovering or learning the truth of the digital marketing on the property market, especially for its impact on the real estate businesses. Vanke is a major Chinese residential real estate developer, which sells and manages properties in most Chinese cities. In 2020, the southern Vanke sales team successfully used digital marketing tactics on their marketing activities. This case can help individuals understand how powerful digital marketing can be and what the outcomes will be.

### 3. Empirical analysis

#### 3.1 Frequency analysis

Primarily, the social demographical of the survey is presented. According to the analysis, there are 61 females and 39 males responding to the questionnaires, with respectively 61% and 39% of the total sample. The age of people participated in the survey ranges from under 18 to above 46. The largest percentage of age group is those who are at 18-25, followed by people who are at their 26-35. Among the people who did the survey, nearly 45% of them have the bachelor's degree and the second largest group is ones with postgraduate degree or above, which has a sufficient knowledge storage and cognitive ability to some extent. For people has diploma and are at high school or below education level, they lie the percentage of 17.73%, 12.22%, respectively.

People's consideration of the question opinions is divided in to five answers, which respectively is strongly disagree, disagree, neutral, agree and strongly agree. They have corresponding scores which ranges from 1 to 5. The sum of every question for each section is supposed to people's acquisition of certain parts, which is used for the correlation analysis. According to frequency analysis, more than half of the participants agree or strongly agree with the ideas that they are familiar with the usage of social media compared to the average person, peers and other ones. Regarding to the mean scores for the three questions, which are 3.76, 3.74 and 3.74, those number illustrates that interviewers have medium or above knowledge of the application of social media.

As for people's accessing towards electronic devices in their daily life, only 5.55% of people who strongly disagree and disagree that they own electronic devices. From the investigation towards these people, they mostly are at high school or lower educational level, who are limited using phones or computers by their parents. In addition, large proportion of people agree with the idea that electronic devices play a vital role in the life. The mean scores for the two questions are high, which is 3.89 and 3.81.

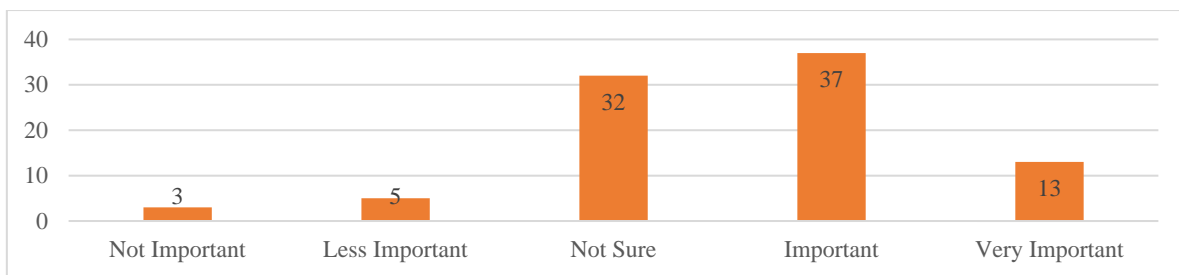
Regarding to people's attitudes towards digital marketing service quality in Chinese Real estate market. 31.11% of participants agree the service is reliable and helpful, and 51.11% of whom give the neutral position for this opinion. 26 out of 90 people think the digital marketing service is professional, though 11 people among those have the opinion that it doesn't seem like that. For their inquires that the service responded, most people give recognition on this, but there are also small number of people who hold opposite ideas.

For digital marketing convenience, according to the survey results, over half of the respondents regards the digital marketing platform and environment as comfortable and reliable. However, several people stand on the opposition of these opinions for they think the structure of digital marketing still has the space to be improved.

Different from the responses collected in the questions mentioned above, more people select disagree and strongly disagree for their feelings of digital marketing on real estate. It can be inferred that certain ways in digital marketing to reach customers give them the feeling of being disturbed and unpleasant. On this basis, people just list a small proportion compared to all participants. It still should be paid attention to the tactics taken to attract consumers.

### 3.2 Correlation analysis

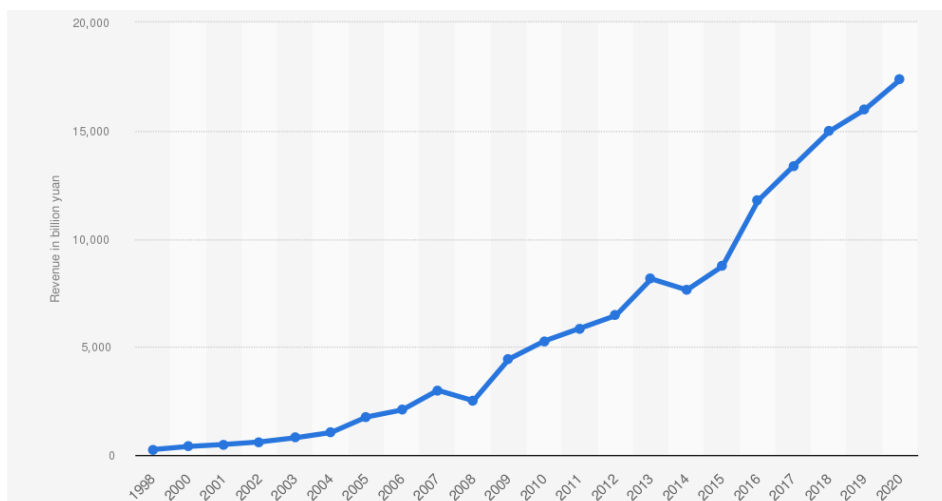
First of all, the people’s knowledge of social media and their attitudes towards the digital marketing in real estate in China are presented. According to calculations, the Pearson’s correlation coefficient is 0.861, which shows strong relationship between the two factors. People who have higher acquisition of knowledge towards social media usually have better attitudes towards real estate digital marketing. This study also estimates the relationship between access to mobile devices with people’s satisfaction. People’s access to electronic devices and their degree of satisfaction correlated positively from the table and graph with the Pearson’s correlation coefficient of 0.887. It indicates that most people who have access to the electronic devices tend to be satisfied with the digital marketing on real estate projects to some extent. The correlation between digital marketing service quality and people’s attitude towards real estate digital marketing is also calculated. For this part, it is correlated positively as well with the Pearson’s correlation coefficient of 0.874. It illustrates that high-quality real estate digital marketing can provide people with high sense of satisfaction. Moreover, digital Marketing service convenience and people’s satisfactory degree are correlated positively with the Pearson coefficient of 0.881. It demonstrates that people tend to be satisfied with the digital marketing in real estate which provides them with great convenience. From the data shown in the Fig. 1, it demonstrates that most respondents believe that digital marketing in Chinese real estate market is important, which indicates there must be certain benefits of using digital marketing in the property market in China.



**Fig. 1** Importance of digital marketing in Chinese property market

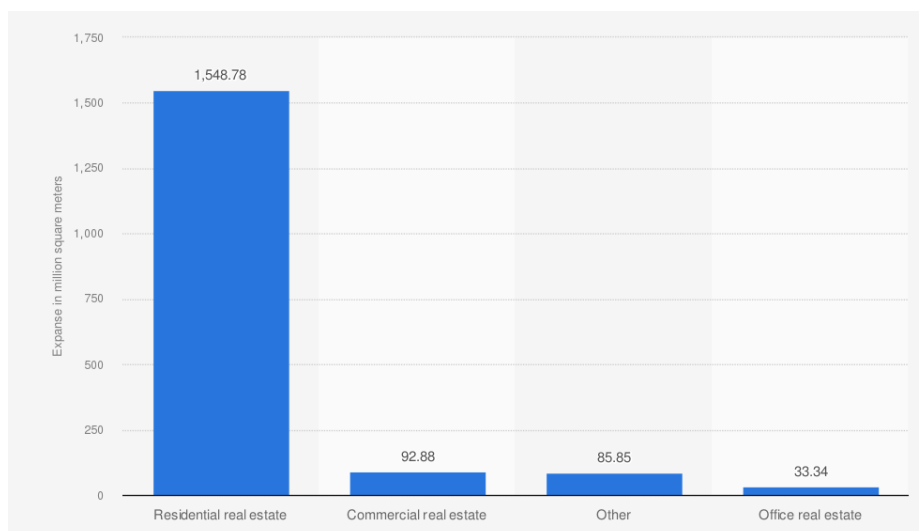
### 3.3 Analysis of secondary data (Figure 2-6)

China's property market has been an essential part of the national economy since the government began opening its markets in the 1980s. Nowadays, the property sector continues to provide a substantial contribution to the economy, depending on the industries covered. In China, real estate transactions generate a considerable amount of revenue [7].



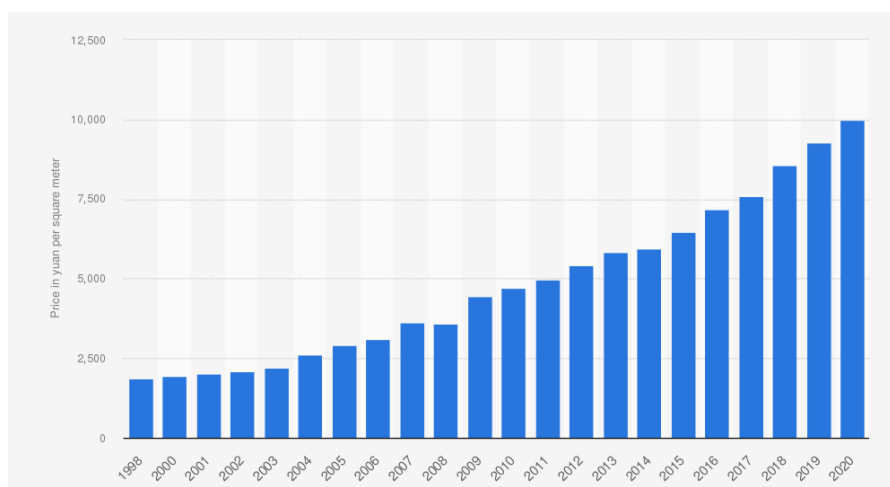
**Fig. 2** From 1988 to 2020, sales income from commercialized real estate sold in China (in billion yuan). Source from: National Bureau of Statistics of China

Total sales of residential real estate, office real estate, commercial real estate, and other forms of real estate generated by Chinese real estate developers are included in this statistic. As shown in Fig.2, it indicates that real estate sales revenue in China has been consistently growing from 1998 to 2020. The entire sales income from commercialized real estate sold in China is estimated to be over 17.36 trillion yuan in 2020. According to the PBOC, the Chinese real estate market is so enormous that it accounts for more than 20-30% of total Chinese GDP [6].



**Fig. 3** Floor space of real estate sold in China in 2020, by use (in million square meters). Source from: National Bureau of Statistics of China

For real estate floor area sold in China 2020, there are nearly 1550 million square meters of space sold as illustrated in Fig.3. Among the space, the residential real estate lies the proportion of around 90% of all floor area sold in Chinese housing market. Compared with other types of real estate, residential real estate is much more preferable. To some extent, people now prefer to buy residential real estate for investment instead of a commodity. The value of investing in residential real estate is really considerable and may be a reason of the high ratio of residential housing among all real estate. There is no doubt that homeownership is dimed as a key vehicle of wealth creation and a status symbol in China [5].



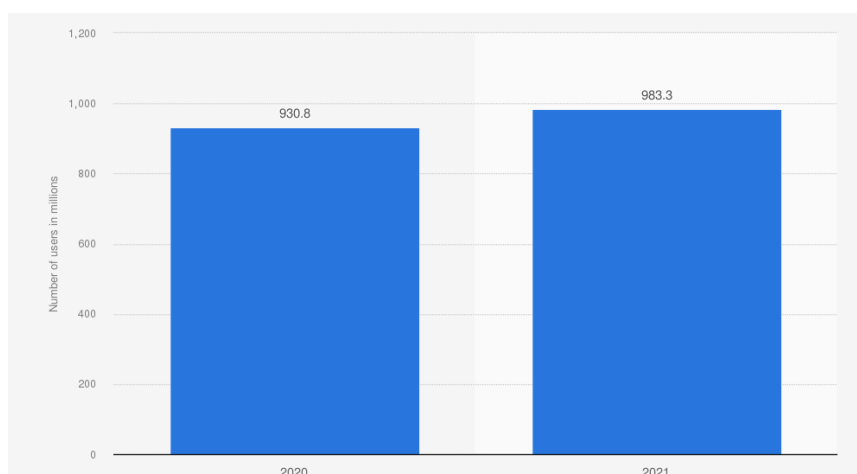
**Fig. 4** Between 1998 and 2020, the average sale price of real estate in China (in yuan per square meter). Source from: National Bureau of Statistics of China

As depicted in Fig.4, the average price of real estate in China was more than 9,900 yuan per square meter in 2020. Since the 1998 housing reform, property prices have continuously risen, promoting a

culture of speculation among property buyers and developers. Housing was thought to be an investment, with owners expecting annual price rises. The price bubble and potential long-term maintenance issues of most high-rise apartments are a cause of concern for the long-term development of the Chinese economy.

According to the facts shown above, real estate in China is a vibrant and essential sector that has been considered as a major driver of economic expansion. Its economic position is exacerbated further by the way it interacts with numerous segments of society, ranging from homeowners to local governments. Take the homeowners as an instance. China has one of the highest rates of homeownership in the world, with 90 percent expected by 2020. This is due in great part to the perception of property as a causality of economic stability and security. This problem has a cultural component as well, since having a property is usually considered as a necessity for marriage, particularly for men. As a result, families and friends would pool their resources to assist their offspring buy a home to aid them with marriage and family possibilities. The cultural component, on the other hand, is sometimes exaggerated, especially given that homeownership is an essential middle-class signifier in many areas of the world. It is also obvious that purchasing a home is increasingly regarded as a wise financial investment.

Real estate is on the vital position of Chinese economy. For the buyers of real estate, they need to make clear about what type of real estate they want to buy. For real estate businesses, it is necessary for them to know how to target and make effective marketing towards their customers in Chinese real estate market. Digital marketing, in its wider definition, relates to advertising given via digital avenues such as search engines, websites, social media, email, and mobile applications. Digital marketing is the way through which businesses promote their products, services, and brands using various online media platforms [9]. Contemporarily, it can be claimed that people rely on the electronic devices. Digital marketing is becoming one of the most effective way to reach their target audience.

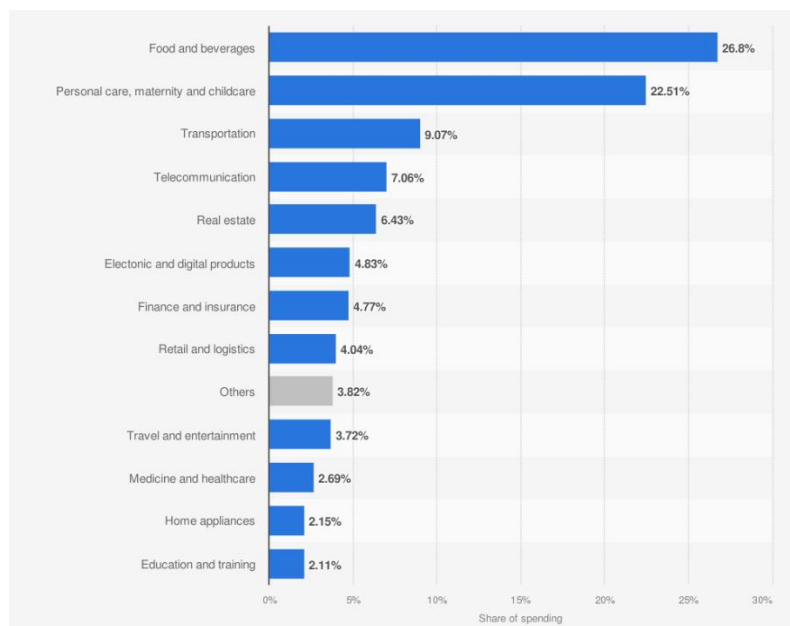


**Fig. 5** Number of active social media users in China in 2020 and 2021 (in millions). Source from: National Bureau of Statistics of China

From 2020 to 2021, it can be seen from the Fig.5 that the user number of social media in China is rising, from 930.80 million to 983.30 million. The active user number of social media in China illustrates that social media has already become a vital part for people's daily life in China. Most young people in China have access to the social media, especially for the main consumers of the current retail market. It can be inferred that digital marketing can be a useful tool to get access towards their target customers in the market.

The statistic listed in Fig.6 shows online advertising expenditure as a proportion of total advertising expenditure in China in 2018, by industry. From the figure, it can be seen that the application of online advertising covers almost all industries. For the real estate industry, it lies 6.43% of the total advertising expenditure in China, which is the fifth largest proportion among all types of online

advertising. There is no doubt that online advertising plays an important role in Chinese industries. For real estate market in China, the impact of online advertising and digital marketing cannot be ignored. Owing to current environment that most people look up search engines for information instead of face-to-face consulting, digital marketing keeps the real estate business establish brand awareness and keep it unique and emerge in front of customers through online channels [12]. No doubt, digital strategies will help business to improve the chance of getting found by potential customers.



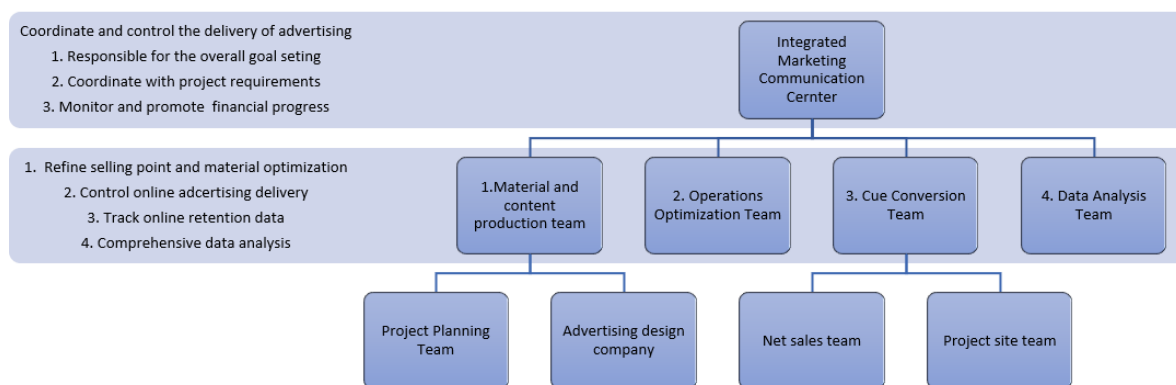
**Fig. 6** Online ad spending as proportion of total advertising expenditure in China in 2018, by industry. Source from: National Bureau of Statistics of China

For consumers in Chinese real estate market, their behaviors are being greatly influenced by the digital marketing strategy applied by the real estate businesses. The digital marketing service quality and convenience will alter their intention to buy the property of that business. Besides the external factors, consumers' internal knowledge and access towards the digital devices impact their purchasing behaviors. Wise customers usually think twice for the benefits and drawbacks of the information digital advertising brought them for the housing property. From Chinese real estate consumers' study, it not only makes the housing business aware of the importance of the digital marketing quality and service, but also reminds the consumers themselves of getting more understanding of the property market and social media before attracting and intending to buy a kind of real estate. They ought to be rational consumers, despite influenced by the marketing strategy with empty mind.

#### 4. Case analysis

China Vanke is a major real estate developer in China. Its business involves selling, managing and developing housing property in most cities in China with the service of investing, trading and consulting. The goal of Vanke is to become the leading product and service quality provider for their customers. In order to acquire customer pain points and satisfy their various needs, Vanke did great efforts, particularly for the digital marketing. The Southern Vanke team rebuilt their digital marketing strategy structures and achieved great success in 2020 [17]. Southern Vanke Team set up the middle office and implemented the 'District – City Company - Project' management strategy to achieve the goal of their new online marketing strategy. Their mission is to respond to the market demand in time with almost no waste.

As presented in Fig.7, there are two key operating jobs in middle office of Vanke, which are the promotion specialist and online customer service. Promotion specialists are responsible for online advertising delivery to ensure the high customer retention for online promotion. They are supposed to witch limited promotion fees to potential customers and making sure the accuracy of target consumers by advertising content, titles and pictures. Online customer service is used to learn about customer purchasing demand and fund, which helps to improve the matching of the suitable products. In order to gain online customers, Vanke applies ‘2+5’ strategy to concentrate advertising delivery and acquire the traffic. ‘2’ refers to the main social media in China, which are the WeChat and Toutiao and ‘5’ refers to the Tiktok, Baidu, Netease, Zhihu, local media professional. From the digital marketing on the seven platforms, great success was achieved. The project of Huizhou Vanke Charm City received 3800 batches of customers online. Even during the epidemic period, it achieved acquiring Shenzhen customers in short term with long distance and delivered a large number of customers. The total achievement of the Vanke Southern Team for the digital marketing strategy is really impressive, which is concluded in the Table 1.



**Fig. 7** The organizational structure of China Vanke’s marketing team

**Table 1.** The achievement of Vanke Southern Team’s digital marketing strategy

Annual online customer acquisition	719 thousand
Card Customers	35 thousand (8.8-yuan / 9.9-yuan card owner)
Enterprise WeChat Customers	1.26 million
Online Exposures	7.4 billion
Total online transaction volume	13.4 billion
Total Cost	288 million
Average cost of acquiring customers	263 yuan/ piece
Transaction fee efficiency ratio	2.15%

Although the transaction fee efficiency ratio 2.15% is now very low, the good cost performance of digital marketing application on real estate can be seen compared to the average distribution in the industry 2%-5%. The well-designed digital marketing strategy exactly helps Vanke southern team to reduce cost and increase the efficiency of gaining customers. From the case, it demonstrates that the digital marketing really brings a great impact for the real estate business. The technology changes the traditional way of gaining market study data and channels of questions. Instead, consumer data can be gained from their past purchase behaviors and recordings. Through the information technologies and means, the real estate can realize the connection building with customers. Digital marketing provides more precise services towards customers, e.g., the personalized service to find out the actual demand of the consumers. In addition, the long-term stable relationship with customers can be established more easily. The consumer retention can be strengthened through the way of digital marketing, which is also an important factor for real estate enterprise development. More importantly, the marketing sales are greatly reduced by the digital ways. The big data era provides more

opportunities for the real estate enterprise marketing. Digital marketing makes the service of housing business more personalized and the more durable relationship with their customers as well as saving the total cost with high efficiency.

However, challenges always come with opportunities. For successful digital marketing, the company should set up reasonable and suitable advertising structure and actions to achieve their marketing goals. For example, the step of digital marketing may involve identifying niche market, customer positioning, doing platform advertisement as well as immediately following up with the data gained and customers. Besides, higher requirement is asked for the enterprise and their employees. The transformation from traditional marketing towards digital ones should be taken place. The core mind of the marketing groups is supposed to become more creative and keep track of the stage. More professional quality and technology are called for as well.

## 5. Suggestions

In the Chinese real estate market, digital marketing is a new tool to promote property sales and investment towards consumers. For consumers, they can be easily targeted and positioned according to their past purchasing behaviours and records. The housing service and products recommended to them fit their current stage, which to some extent relieve their stress of making choices. Besides, the impressive advertising for real estate have access to them easily through digital platform, which makes them easily be attracted and even cause impulse purchase for the players in the industry told them the products are affordable. Chinese real estate consumers should become rational about their decision making towards housing property buying and they should strengthen their knowledge on the digital platform and the housing industry so as not to be perceived by fake advertising.

Digital marketing helps business in real estate to save their cost and improve the efficiency. However, they need to promote their technology in the digital words in order to precisely target their audience and analyse reliable data. The employees in the marketing department should adapt new technologies and develop personalized construction towards their customers. In addition, the digital marketing strategy should be well-structured before implementation.

## 6. Limitations & Prospects

When collecting the data of questionnaires, there should be the problems that participants may have inadequate understanding of the real estate market, which causes data deviation. Besides, respondents may have subjective thought and answer to the questions with untruthful answers. Due to the time limitation, the data size is still too small for the overall consumer analysis for the digital marketing impact on Chinese real estate market. The secondary data collected from Statista database is not the latest one, but only found in the year 2020.

For the future, more responses should be collected on the questionnaire questions given as well as the sample should be restricted to people who have deep understanding of real estate market or people who work in the real estate industry, which may provide a more precise data for analysis. The secondary data for the digital marketing and Chinese real estate market should be updated to the newest one.

## 7. Summary

In summary, this paper investigates digital marketing's impact on Chinese real estate based on primary and secondary data as well as the case. According to the analysis, digital marketing has affected the Chinese property market on both the consumer's side and corporation's side. It will enhance consumer's willing to buy as well as help save businesses 'cost and improve the chance to gain potential customers. Currently, academic experts in real estate always put more emphasis on the American market. This study can make up the lack of study on the Chinese property market, which is also a charming market. Digital marketing as a new marketing tool is studied on the Chinese real

estate industry to provide reliable evidence for people for further studies. According to this study, there should be certain limitation of uncertain objectivity. The drawbacks of digital marketing on the real estate market are not discussed specifically. The two parts can be improved by the future deeper study in this field. Overall, these results offer guideline for future study about the marketing's impact on Chinese real estate market.

## References

- [1] Real Estate Digital Marketing and SEO on Google - Top Real Estate Rep / Houston, Texas 2020, Normans Media Ltd, Coventry.
- [2] Geltner, D. & De Neufville, R. 2018, Flexibility and real estate valuation under uncertainty: a practical guide for developers, Wiley Blackwell, Hoboken, New Jersey.
- [3] Aveline-Dubch, N. 2016, Introduction to the Special Issue - Land and Real Estate Development in the Greater China: Land and Real Estate in Northeast Asia, New Approaches in an Era of Financialization, Issues and studies - Institute of International Relations, vol. 52, no. 4, pp. 1
- [4] Muszynski, O. Cinar, M.E. 2022, Practice Briefing China's commercial real estate recovery, REITs and tax policies, Journal of property investment & finance, vol. 40, no. 2, pp. 263-274.
- [5] Neil Gough. Idle Home Builders Hold China's Economy Back. The New York Times. By some economists' estimates, real estate and related industries account for more than 20 percent of China's gross domestic product, 11 June 2015.
- [6] Bishop, Bill. "China State Media on Corruption And Cooling Off The Real Estate Market". Sinocism. Archived from the original on 31 August 2010. Retrieved 3 July 2022.
- [7] Jiang, J. 2021, Can real estate regulatory policies constrain real estate risks to banks? Evidence from China, Journal of Chinese economic and business studies, vol. 19, no. 1, pp. 35-53.
- [8] Heffernan, Shayne. "China, The World's Largest Real Estate Market". Ebeling Heffernan. Archived from the original on 4 March 2010. Retrieved 2 July 2022.
- [9] Saura, J. R. "Using Data Sciences in Digital Marketing: Framework, methods, and performance metrics", Journal of innovation & knowledge, vol. 6, no. 2, pp. 92-102, 2021.
- [10] Zahay, D. 2020, Digital Marketing Management, Second Edition: A Handbook for the Current (or Future) CEO, Business Expert Press, S.l.
- [11] "How Social Media Can Help Businesses Win Loyal Customers | The Manifest". themanifest.com. Retrieved 2 July 2022.
- [12] Xie, Z. Li, R. Research on the Basic Logic and System of Real Estate Digital Marketing Professional Group Based on Information Technology, IEEE, 2021, pp. 459.
- [13] Matidza, I., Ping, T. Nyasulu, C., Use of digital marketing in estate agency industry in Malawi, E-Learning and Digital Media, vol. 17, no. 3, pp. 253-270, 2020.
- [14] Manrai, A. K. Special Issue: Digital Marketing and Online Consumer Behavior in China", Journal of global marketing, vol. 32, no. 5, pp. 303-305, 2019.
- [15] Americas' Real Estate Marketing Industry Leader to Visit Top Panama Real Estate Developer Clients and Participate in ELDI 2015 2015, NewsRX LLC.
- [16] Packard, Simon. China Overtakes U.S. in Attracting Most Property Investment. Bloomberg, 3 March 2010.