

# ***Digital Transformation of Real Estate Industry: Opportunities, Challenges and Strategic Suggestions***

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**Abstract:** After more than 20 years of rapid development, China's real estate industry has changed from an incremental market to a stock market with a gradual slowdown in growth. As the 14th Five-Year Plan for national information states that China will insist on the strategy of digital transformation, it is the right time for real estate industry to carry on a digital revolution. This paper illustrates the current challenges confronted by real estate enterprises, including the confusion of digital transformation, complex data sources, the lack of professional talents and duplicated organization systems. Also, to overcome these challenges, this paper provides practical suggestions on how the real estate industry can conduct digital transformation. This paper aims to provide significant insights into current situation of real estate industry and give guidance to help the industry process digital transformation.

**Keywords:** Digital transformation; real estate; strategic suggestions

## **1. Introduction**

In the past years, developers in real estate industry always won effortlessly due to China's land policy. The industry falls behind in the aspect of digitalization compared with other industries. Mainly because developers earned a lot in past years and ignored the significance of transformation. Besides, the digitalization in real estate industry started too late due to its heavy asset and personalized and experiencing purchase process. However, its golden age gradually comes to an end. Nowadays developers are confronted with several challenges. Firstly, lack of management institutions and methods, and chaotic business process. Secondly, the real estate industry enters into the era of stock and comes to post-epidemic era, real estate companies begin to transfer from urban developers to urban operators [1]. To solve above problems, digital transformation becomes a must to realize refined management which will be the core competitiveness in the future.

Driven by information technological revolutions and customers' changing demand, digital transformation plays a more important role in all industries. It delivers deep insights to inform real-time decision-making, improves efficiency and productivity and satisfies customers' personalized demands. According to Chinese Enterprises Digital Transformation Research by Institute for Global Industry, Tsinghua University, all industries are exploring the method of digitalization. Take manufacturing industry as an example, it occupies the first place among 14 industry categories in the number of companies developing digitalization, which reaches 42.3%. Digitalization in manufacturing industry helps to develop intelligent products and mass-produce personalized products;

realize smart management so that products yield is improved by 1%; provide smart after-sales service to create new profits for companies; coordinate industrial chain to improve resource utilization by 40% [2]. Digital transformation of real estate refers to the application of digital technology and concepts to the whole life cycle of real estate project investment, construction, planning, design, construction, sales and operation, which can help enterprises achieve efficient, intelligent and controllable decision-making and management, and is an important support for enterprise refined management. Thus, digital transformation is also the inevitable trend of the future development of real estate enterprises.

On the basis of discussing the concept of digital transformation, this paper analyzes the problems faced by the digital transformation of the real estate industry at present, and provides relevant strategic suggestions.

## **2. Connotation of digital transformation**

With the development of information technology and promotion of the internet and internet of things, digital transformation is playing a more and more important role in global development [3]. However, before the period of digital transformation, we have also experienced the era of digitization and digitalization. Digitization, digitalization, digital transformation, these three concepts look similar, but they are totally different. It is necessary to define them respectively as many companies do not realize the differences of them.

Digitization is creating a digital version of analog or physical things in order to save, process and transfer information. It aims to connect people, process and things to provide intelligence and actionable insights enabling business outcomes. Digitalization refers to enabling, improving and transforming business models based on digitization. It aims to create new opportunities of profits and values. Digital transformation is a kind of new information technology which not only improves traditional engines and drives new growth, but also reverses the thinking logistics, value concept, production mode and innovation mode, and it often involves organizational changes of enterprises.

In general, digitization transfers offline business to online data, digitalization transfers online data to online business and digital transformation is an overall enterprises digitalization including digital business model, digital operation model and digital talents and skills [4, 5]. In the era of digital economy, digitization is not simply equal to digital transformation, but a foundation to realize final digital transformation by promoting digitalization. Thus, the real estate industry needs to undergo a complete digital transformation, not just simply convert something non-digital into a digital format.

## **3. Challenges faced by the digital transformation in the real estate industry**

Since 2020, the real estate industry has invested huge resources to process digital transformation. Plenty of enterprises invest over 100 million yuan, while the whole industry invested over 20 billion yuan [6]. However, during the transformation, the industry confronts with several challenges.

Firstly, executives are confused with concepts of digitization, digitalization and digital transformation. At present, most real estate companies are only devoted to reshaping and optimizing business processes by digitization. For example, as a digital solution supplier, I often communicate with project leaders of real estate companies. They believe moving offline data to online and collecting scattered data together is digital transformation. But digital transformation also energizes new business, promotes platform economy and sharing economy, interconnects all industries with the help of new technologies including but not limited to cloud computing, mobile internet, big data, artificial intelligence and blockchain [7]. Besides, they do not trust the guidance of data, instead, they prefer to rely on their experience. It is necessary to change their outdated ideas and help them to distinguish concepts of digitization, digitalization and digital transformation. Only when real estate

companies deeply understand digital technologies, development trend and operation strategies, can they take action to formulate the development route of digital transformation.

Secondly, complex data sources make less effective information extraction. With the background of big data, real estate companies no longer collect data information from single source and structure, instead, they learn to combine structural and non-structural data with the help of internet technology. However, due to the complex business model, collecting and processing multi-dimensional data has become a challenge for real estate enterprises. Meanwhile, it is more difficult to filter and extract time-effective information, as most real estate companies lack a complete and effective data system, data is always unregular, redundant and isolated [8].

Thirdly, lack of professional talents. In past years, the real estate industry developed fast, while at the same time competitiveness becomes fiercer and fiercer. However, outdated talent cultivation system and unenlightened technology directly result in a lack of digital talents. It is reported most executives in real estate companies are transferred from the majors of engineering construction, project management and statistical operation, which do not match current technological talent demands [6].

Fourthly, duplicated organization flow and redundant functional departments. It is clearly stated that most giant property companies own a complex organizational structure just like an old man, moving slower and slower. For example, once a project is set up, it will experience the process of research, analysis of competitive products, cost evaluation, project management and so on. All the above processes are isolated and may duplicatedly raised or approved. If this continues, the companies are no longer adjusted to the digital world and will be soon replaced.

#### **4. Suggestions on the path of digital transformation of real estate industry**

Digital transformation is a long-term and systematic project, involving all aspects and all fields of enterprise management and operation. To conduct digital transformation in real estate industry, there are several suggestions for real estate companies.

First, around the whole process of data collection, storage, processing and application, comprehensively improve digital technology capabilities. Real estate companies should follow the procedure of digital transformation and enhance technical skills. Informatization is the most basic part of digital transformation. It aims to cover all business themes, provide adequate data and improve data search and utilization efficiency. It is reported many top real estate companies have established a data warehouse system as their first step. Companies should clearly define the target of mass data collection and understand how it will solve the current dilemma. Though many companies begin to develop function systems like OA, CRM, ERP to realize so-called digital transformation, the systems are all independent and isolated, which means data in different systems are unable to communicate with each other. So data isolation should be avoided and data consistency should be ensured for further development. For technical department, it is important to elaborate data index. For example, in the business of property sales, the data should be detailed to room instead of block.

On the base of an accurate and complete data index system, real estate companies can apply to different business mode. For the land purchase part, investment department does not need to spend too much time surveying land one by one offline. Instead, they can create an algorithmic model with a business-related data index to determine which city they will choose. With big data, they can search for mass information like surrounding facilities, building stock, average housing price, etc in a short time. While all the above information used to cost one employee more than one week. So it is necessary for property companies to improve their data mining technology as data is the foundation. Also, algorithms model shall be optimized, which can assist decision-making.

Second, strengthen the training and introduction of digital technology and management talents. It is necessary to recruit a group of professional people from the internet industry and reuse their

experience of digital transformation in the industry of real estate. Besides, consider to change human resource strategy, performance evaluation, incentive systems and provide trainings in digital transformation, which can not only improve the overall digital level but also promote talent optimization. Also, combining the knowledge of real estate industry and digital transformation becomes more and more important. The executives in real estate industry shall be taught with digital knowledge, which helps them deeply understand current technology trends and push them the direct right way towards digital transformation. While imported digital talents shall be taught with real estate knowledge, which enables them to learn the industry characteristics and find the right digital solution to industry pain points.

The good news is that some top enterprises have realized the problem and taken actions to change the current talent dilemma. Take Country Garden Holdings as an example, it has conducted elaborating management of talents since the end of 2020. Group headquarter directly interfaces with regional GM, while it used to be full of redundant functional departments. It is urged that one project limits 3 employees and hierarchy shall be reduced to shorten decision-making link. This change sets a good example for the whole real estate industry.

Third, restructure the company's organizational system according to the new digital business model. Companies should redefine current business running models and clearly illustrate the relationship among business models, process and organizational structure, as well as the interaction among employees, teams and departments. By combing all business flow, several process with similarity can be combined. For financial sharing system, it plays a role as center in the process of trading, data providing and decision-making. Hence, financial employees can find impact factors by data analysis and will take action to solve problems as soon as possible. In addition, since employees are often accustomed to the previous organizational structure, enterprises should often guide employees to adapt to the new operation and management model in the process of digital transformation, encourage organizational culture innovation, and break the barriers to transformation caused by the old organizational culture.

## 5. Conclusion

There is still a long way for real estate industry to conduct digital transformation. For enterprises, they need to continuously input human resources and financial resources. For the whole industry, it needs time to prove the results brought by digital transformation. It is believed that only by keeping up with the pace of the times, accelerating the digital transformation, paying attention to and innovatively solving the problems existing in the transformation process, can real estate enterprises have a broader development space. And the property industry will find a totally different way to develop and will create a new situation. After digital transformation, the industry will enter into the era of intelligentization, which may change people's daily life and make a different world.

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