

# The Research on E-commerce Applied in Real Estate Enterprises

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**Abstract.** This paper introduces E-commerce conception first, and clear up the possibility and necessity of which the real estate corporations apply e-commerce to conduct their business. Then, this paper analyzes the three modes of group procurement, Property Management and internal management information system in E-commerce environment. This paper also points out the problems of E-commerce applied in the estate corporations, such as there are differences between virtual and reality, the contents used E-commerce in estate field are not enough, some consumers have no confidence in E-commerce in real estate field, the demand of E-commerce is not enough in the estate market, etc. This paper proposes strategies and suggestions to solve the above problems. The paper provides some references for promoting the traditional conducting modes of the estate corporations, improving the level of estate management, work efficiency and the competitive competence of the estate enterprises in the market, so that can promote whole estate enterprises conducting modes transforming, developing and maturing.

**Keywords:** E-commerce, Real estate, Enterprises, Application

## 1. Introduction

E-commerce refers to the use of the Internet as a tool, so that buyers and sellers can carry out a variety of commercial and trade activities even though they are not face to face. E-commerce covers a wide range, and there are generally five modes, which are Business to Business, business to Consumer, Consumer to Consumer, Business to Government, and Business Process. Business to Business, Business to Consumer, Business Process are the three primarily modes among them. With real estate line developing, the traditional business modes more and more can not meet the companies' innovative and efficient requirements, and some powerful enterprises gradually introduce e-commerce to resolve this contradiction. This paper offer some research to some extent on the issues, which are necessity and possibility of real estate companies introducing e-commerce, e-commerce modes of the main business of real estate companies, existing problems and relative countermeasures. The paper provides the real estate enterprises with some references to make better use of e-commerce to serve them.

## 2. The Necessity and Possibility of Real Estate Enterprises Introducing E-Commerce

**Necessity of Real Estate Enterprises Introducing E-Commerce.** (1) E-commerce is an important technique method in real estate business development. The area within the city and off-site the city can share real estate resources information. To set up the information communication channels directly among real estate management agencies, developers, and investors.<sup>[1]</sup> The information communication channels play market media role, and make the product sales and service more professional. The rules, such as the real estate corporations' information release, the two corporations sign the contract and collect amounts, registration, permit issuance, and so on, will greatly simplify through real estate e-commerce system, and shorten the business cycle, so that the working efficiency greatly improved.

(2) Developing digital communities and intelligent real estate community will strengthen constructing information technology for the enterprise's own. The subject of the products and services developed by

developer of real estate are all electronic in the future. Real estate companies must improve their information systems to track customers, and offer e-commerce mode of Business to Consumer services to the community, so that they can conduct more effective and attentive customer management.

(3) Real estate enterprises realize information and works connected with e-government office docking and improve work efficiency for by using e-commerce. When the real estate enterprises develop projects, they relate to many departments of land, water, electricity, environmental protection, green, safety, road, ect. The developing processes are more complicated. With the trends of the government's active implementation of e-business, real estate companies' own construction of information technology will greatly improve their work efficiency.

(4) Using e-commerce in real estate complies with the consumer psychology of business forms. Property has some characters as a special commodity, such as the locating fixity, the durable use, long product development cycle, non-continuous production, and the long waiting time of the cash proceeds. Real estate consumers choose goods carefully. Information available releases on web in text, pictures, video and other forms. Consumers select to rent or buy a houses by inquiring through the Internet, browse. Real estate e-commerce plays a unique role in real estates market and it cannot substitute for other Medias.

**Possibilities of Real Estate Enterprises Introducing E-Commerce.** (1) Technology-based conditions are ripe. For computer hardware and software developed and network technology spread fast, they have made goods sell or buy online in a reality. Trading certification online, the signing of the contract, currency and other functions in the technology has been already quite mature. New network technologies, such as virtual reality technology, simulation technology, three-dimensional panorama technology and son, can offer a full range of feelings to house-buyers through the virtual network platform, and make the object functional value assessment of property and the order approved.<sup>[2]</sup>

(2) Real estate area with great potential development. The main function of e-commerce is that it can greatly simplify merchandise trade links, so that the transaction process can become simple. In terms of other commodities, the largest shortage of e-commerce is difficult to solve their lack of logistics. As far as real estate products concerned, the logistics problem does not exist as they are with special attributes, and information flow and money flow are the main problems. Therefore, e-commerce in real estate transactions has huge potential and obvious advantage.

(3) Real estate and e-commerce have the same developing trends. Real estate and e-commerce both belong to the city's sunrise industry. As real estate development promotes economic and society development and improves living standards, real estate plays an important role and more and more attention to it has been paid. E-commerce as a new technology, it plays a strong role in promoting economic development, trade, and more and more enterprises conduct their business using gradually e-commerce technology. Both trends are consistent; you can borrow each other for common development.

### **3. The Main Business of Real Estate E-Commerce Business Model Innovation**

At this stage, we must adopt a pragmatic attitude to do e-commerce, and try to use e-commerce in links of most likely to cut transaction costs and create value for customers. The estate companies can construct e-commerce business model in three aspects, the group purchasing, property services and constructing internal management information system.<sup>[3]</sup>

**E-Commerce Model in the Area of Procurement.** Real estate companies should team up with other enterprises and build e-commerce platform of materials' buy. Real estate enterprises procurement scope is wide and has many suppliers. Except for few big real estate enterprises with a better internal supply chain management systems, many real estate enterprises are poor concentration and more than 90% of them are SMEs. These enterprises have unnecessary losses more than 15% in the procurement each year, for their procurement scattered and relatively small amount make it difficult to form bargain power of suppliers. Therefore, it has obvious benefit for the real estate business to carry out group purchasing. This innovation e-commerce model in Figure 1:

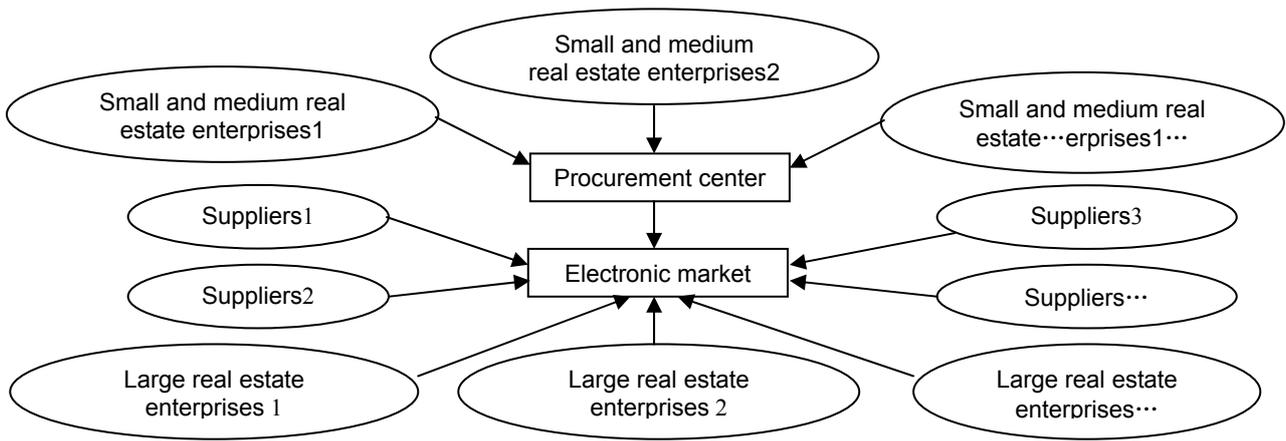


Figure 1 E-commerce model in the area of procurement

The electronic market in Figure 1 is a virtual e-commerce platform; the enterprises in the lines can make transactions online after logging platform. The powerful leading companies together set up platform, and it is as the core to form a chain covering the building materials industry, decoration industry, real estate and household products manufacturing, ect. The e-commerce platform will include the most of the buying and selling businesses. This mode ensures that the transaction between the purchaser and the supplier can carry out in terms of audited and the agreed price and it dramatically reduces procurement costs.

**E-Commerce Model of Property Management Area.** Now constructing "digital city" has incorporated into development planning in many cities. The digital network infrastructure investment is growing, and many cities have begun to attempt in "intelligent demonstration area", "digital demonstration plot".<sup>[4]</sup> This forced the traditional property management as soon as possible to transform the electronic management of property. The transformation of electronic property management which is web-based information system will be digital community service center platform, and behavior of household's complete transactions in Business-to-Consumer of e-commerce by platform this in the future. All the requiring information of the households brings together to property management platform through community centers terminal portal in this mode. The centre according to the requirements of the community household to conduct transactions with the trading platform and form large transactions, thereby reducing costs. Finally, the physical distribution services complete within their communities through the community centers, and indirectly complete Business-to-Consumer e-commerce. Users only pay a service charge to the property management center. Suppliers are selected by the Property Management Center after audited to make sure value for money. The center platform and development of enterprise ERP system can connect seamlessly, and it can give feedback terminal tenants to the enterprises. This innovation e-commerce model in Figure 2:

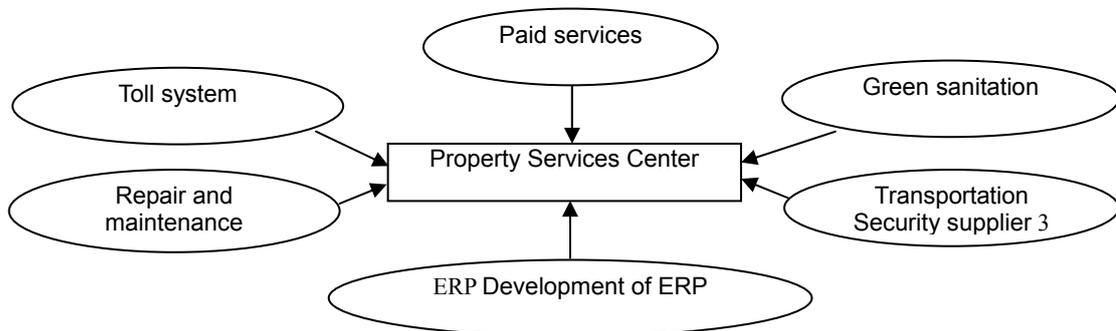


Figure 2 E-commerce model of property management area

**E-Commerce Model of the Internal Management.** In e-commerce ages, real estate enterprise set up management information system is by ERP system constructed itself first, and then takes advantage of Internet technology to join the functions together as followings, supply chain management, customer relationship management, property management, project management, business intelligence, e-commerce, full-featured, integrated office automation, ect. The enterprise management information system makes

resource and data share in enterprises and meet fully flexibility and personalized service of network economy.<sup>[5]</sup>

**Enterprise Resource Planning System (ERP).** ERP can recognize and plan the requirements of all the resources, such as procurement, construction, and sale and so on. ERP brings Suppliers, collaboration manufacturers, users and even competitors into the resources of management, and ERP plan effectively and control various scattered sites and property management by making use of the WEB way. The system includes function modules, such as human resource management, financial accounting, cost management, project management, decision support and management, ect. Each part of function modules control and manage whole process of business in the proper use of e-commerce.

**Supply Chain Management System (SCM).** The system includes inventory management, purchasing management, sales management, transportation logistics and sales analysis system. It manages effectively logistic flows, tracks materials' state, and place. SCM analyzes the history data of buy and sales progress, and assesses effectively supplier performance. SCM regulates business activities from logistics to avoid the loss of resources.

**Customer Relationship Management system (CRM).** CRM will record and track the every customer's situation, needs, deal, and whole process of service. It also provides the information that customers are most concerned, such as corporate real estate development environment, room type, place, three-dimensional simulations show, contrast of similar to the real estate, ect. CRM understand the personal information needs of each user. In addition, CRM also supply information of competitors, so that enterprise can make market analysis and forecasting.

**Property Management System ((EM).** The system real-time tracks community dynamics of property services management which is under the jurisdiction, the use of the service facilities and agencies, each user's needs and new recommendations. The system can also analyze the efficiency of the use of community resources and find resources rationally.

**Project Plan and Management System (PPM).** The system includes budget management, schedule management, labor management, material management modules. The system can send real-time construction-site conditions; convene network meetings, issue engineering decisions in time, and schedule remote resource.

Real estate enterprises lie in the heart of the system under the supporting of new fully integrated system. The system receives information from different systems, and processes the information after analysis, and so that can plan, organize and control the enterprises. Consumers or customers can know well characteristics of real estate and price via the Internet in the truth simulation cell, and proposes personalized interior construction plans and renovation programs, and they can also place preliminary orders on-line or place directly electronic order. Developers may issue materials' procurement and construction instructions by the ERP system, complete material procurement through electronic means and pay, control work progress by PPM. The system not only can help enterprises accomplish progress payments, last accounts of the electronic payment reconciliation and final settlement, but also can meet customer needs by an interactive interface of CRM. It enables suppliers, developers, builders and customers tightly integrated by supply chain, and then enable companies to decrease operating costs, quickly adapt to customer needs, and improve market competitiveness and economic efficiency.

## **4. The Real Estate E-Commerce Problems and Countermeasures**

### **The Main Problems Existing in E-Commerce of Real Estate**

**Virtual and Real Exist Conflict.** Although the network can offer customers with the shape show of real estate all-round and all the bases reasonable to buy, it can not offer to experience of customers, emotional experience of comprehensive about real estate site. The above experience is very important for the customers to buy particular product of real estate. Customers may give up buying because of the vision out of window, or even next door neighbors. Furthermore, the characters of network are large coverage, speed of information dissemination, while characters of real estate is fixity and regional source, so virtual and real exist conflict.<sup>[6]</sup>

**E-Commerce Level of Development is not High and Applied Limited Scope.** From the number of web-sites, the enterprises which build an independent site are not 3% of total business. The volume of e-commerce business is a small proportion of the total. E-commerce mainly applies to real estate information dissemination and e-mail, while quite few in dealing transactions. E-commerce in real estate has a much gap to realize real deal, follow-up services, process integration and the network of market value. Some people are lack of awareness of e-commerce importance. Companies have not yet been fully accepted the concept of online marketing.

**The Form of E-Commerce Application is not Rich.** Currently the existing e-commerce site, whether real estate portal, corporate site, sales online and intermediary agent or property management, , in whole, most are still at an early stage business, ideas to explore a single model, similar functional design, and lack of brand appeal and so on.

**Inadequate Social and Economic Environment, Lack of Market Demand.** According to statistics from China Internet Information Center, 68% of internet users are under 30 years old, and accounting for 13% of the students, the most are low-income persons. The purchasing power of users is not high, for the general merchandise like this, not to mention tens of million of real estate, which development of e-commerce space s are greatly limited.<sup>[7]</sup>

### **The e-commerce development strategy in real estate enterprises**

Government guides to support e-commerce used in the real estate operation. Build macroeconomic framework and plans to develop real estate. To organize and coordinate the relationship among real estate management and development companies, real estate administration, the relevant departments, as they offer the conditions for effective cooperation and policy support to solve key issues existed of developing effective e-commerce, and play the full role of each participating entity to urban real estate e-commerce system.

Organize and coordinate all aspects of the relationship together to build the overall framework of urban real estate e-commerce market. Government should set up e-commerce market framework, which consists of property management, real estate development enterprises, e-commerce operating companies and financial institutions and the other aspects. Real estate management companies should set up a range of contacts with administrative departments and market media by taking advantage of business networking, and broaden business information channels and maximize the scope and volume of business, embody its main role. E-commerce operators should play its role in technical supports and technical developing. The role of banks and other financial institutions operating in the market is mainly credit guarantees and intermediary settlement.<sup>[6]</sup>

Development of information technology as the guide, actively explore the real estate e-commerce development. Priority to developing basis for business information services and platform construction, encourage and guide real estate enterprises of conduct and management to build information technology and capital investment, so that they can really feel the efficiency and convenience from e-commerce, and grasp more opportunities through access to information. The real estate management and sales development process realizes business transactions online step by step. The development model is a gradual process of development. To setup pilot business, and explore actively and improve them constantly.

Emphasized the effectiveness of business development, develop the market brand, advocacy and outreach. When designing and setting up real estate e-commerce systems, the first thing , that designer should fully take into account is the enterprise's business needs and business goals, and then realize them by choosing developing techniques methods and tools. As far as marketing companies concerned, the real role of e-commerce is money savings to enterprises of staff, cost and management efficiency, and this is the purpose of e-commerce technology applied. To strengthen universal access to e-commerce promotion in real estate field, so that more consumers and business can approve and control e-commerce means.

In the rapid development of network technology and e-commerce technology application expanding environment urban real estate enterprises improve business operating mode of operation, enhance management and efficiency by using the technology of e-commerce. Using e-commerce methods can significantly improve the management efficiency and market competitive ability, and make further

development of urban real estate. The perfect combination of real estate and e-commerce will create new miracles in modern urban development and bring even more attractive prospect.

## 5. Conclusions

The author proposes e-commerce applications models of different business when studying e-commerce applications in the real estate business. The author finds some issues in the current e-commerce applications of the real estate field, and puts forward countermeasures. The article has some reference value to some extent. The paper makes conclusions as follows:

1 E-commerce has applied to some extent in the fields of materials procurement in real estate, marketing, brokerage, property management and other aspects;

2 E-commerce applications in the real estate industry are still in its infancy, and need to strengthen the immature areas.

3 With successful application of information technology in many industries, and some companies, e-commerce of real estate has become an irreplaceable important means in real estate fields. Many real estate companies to devote more attention to the eyes of e-commerce, for it has relatively low-cost, business methods beyond the constraints of time, and it enable enterprises to get a huge profit in the business.

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