

Quality of Service as a Vector of Development of Real Estate Industry

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Abstract

Objectives: To study the role of service quality for development of the real estate industry. **Methods/Statistical Analysis:** Apart from the general scientific methods of research (induction, deduction, analysis, synthesis, etc.), the authors use the method of economic and mathematical modeling for developing the mechanism of management of service quality at the real estate industry companies. **Findings:** The article is devoted to analysis of the global tendencies of development of the real estate industry and transformation of demand for service quality in the conditions of service economy, as well as modeling of the mechanism of managing the service quality at the real estate industry companies. The key idea and hypothesis of the research consists in the fact that service quality is a vector of development of the real estate sphere in the modern conditions. As a result of the research, the authors came to the conclusion that only the best service guarantees the growth of competitiveness and profitability of the real estate industry companies. **Application/Improvements:** The conclusions, received by the authors, expand the existing concept of service economy. Practical recommendations could be used in the activity of modern companies of the real estate sphere for increasing the quality of their service and their competitiveness.

Keywords: Quality of Service, Real Estate Industry, Vector of Development

1. Introduction

At present, service industry develops faster than production industry. The level of development of service industry competitiveness is one of the main parameters of development of socioeconomic complex of any country. Enterprises try to create conditions, form the system of sales, and develop the methodology of actions for provision of competitive position of the service in the market¹.

The extent, to which they successfully solve this task, influences not only the well-being of the enterprises, but the state of the economy in the country in a whole. One of the main components of the service industry is the real estate industry. Under conditions of service economy, there is a substantial change of demand for services to the side of strengthening of requirements to their quality. This article is devoted to the research of the role of quality of service in the development of the real estate industry.

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2. Global Trends of Development of Real Estate Industry and of Transformation of Demand for Quality of Service in View of Service Economy

The world economy demonstrates stable trends for reducing its speed; however, these factors do not necessarily negatively influence the real estate market. Beginning from the end of the last year, the rating agencies constantly understated the forecast to the dynamics of development of world economy due to the crisis which manifested in some countries of the European Union. Nevertheless, beginning from 2012, the forecasts started to change for the better. These improvements were related to the lightening of monetary policy of global central banks and allocation to financial institutions of additional amounts which are to be used for bailout of some banks and financing of real sector²⁻⁶.

All these events in the global economy made a positive influence on the real estate market. Since the start of 2012, the secondary market of the US revived, and increase of sales by 4% as to December 2011 is expected. The situation in the real estate market of the USA is beginning to stabilize, and this is primarily due to the decrease of unemployment rate and availability of housing credits^{7,8}.

The quantity of houses for sale was at its bottom level for the recent 5 years. This parameter cannot be deemed as negative, for the growing offer in the real estate market of the USA during pre-crisis years was due to huge quantity of houses put for sale due to loan debts. Peak of prices for real estate in the USA was observed in 2006, and after that the prices dropped down, which became a reason of crisis in mortgage sector. Nowadays, the quantity of houses put for sale due to mortgage debts is rather large, but the quantity of nonpayers decreases, which is a positive trend.

The tendencies of global real estate market and crisis events in the global economy could not but influence the real estate market of Russia. The 2014 parameters show that borrowing capacity of Russia's population went back to the pre-crisis level. By the end of 2013, the

index of non-performing loans was just 10%. From the total amount of credits, the mortgage has a share of RUR 1.5 trillion, and the mortgage sector shows the improvement of problem loans. The experts state that Russian real estate market shows buoyancy, and the loan debtors have already started to pay off debts by means of selling their apartments⁹.

Reduction of the cost of mortgage credit led to the fact that 2011 became a record year as per given mortgage loans. Mortgage rates reached their minimum of 11% per annum. This tendency ensures the further increase of mortgage credits, though there is a small possibility of increase of rates to 12% per annum, which may slow the growth of real estate market¹⁰.

Current state of the market of internet promotion of real estate in Russia is characterized by drastic rise of interest to the Internet from the clients and realtors which are the main advertisers in this market. The basis is a mutually stimulating two-sided process of growth of interest of the society to the Internet in general and efforts of providers for availability and width of channels.

Thus, there appear favorable conditions for turning the Internet into the leading channel of promoting realtor services and real property. According to the Scan-Market agency data, the sources of information, used by the clients of Moscow real estate agencies, are distributed in the following way. The first place is traditionally occupied by recommendation from friends. However, the second place is already taken by the Internet, which became a total surprise for real estate experts and adherers of traditional outdoor advertising and advertising in the trade press. By representation in the group of clients of real estate agencies, the Internet is in advance of these two informational channels (outdoor advertising and advertising in the trade press) combined¹¹.

Web-pages perform the role of collectors of information about offers, helping the potential clients to find it in the limited number of places. The main difference of Russian web-pages from the Western ones is that the largest Western portals are owned by the famous professional noncommercial associations. For example, the biggest aggregator of real estate information, web-site Realtor.com, which is owned by National association of realtors.

The web-site contains information on more than 2 million houses and apartments in North America¹⁰. At the same time, the site of Russian guild of realtors does not feature a dynamic base of these objects. This empty niche is occupied by commercial portals, created for gaining profit in the market of online advertising. The main task of typical Russian portal is to create an advertising space on the basis of more or less complete collection of the objects of this market¹¹.

Thus, the main sections in the structure of each such portal are not strategic, technical, or service - as in the West - but commercial section and section of advertisers support. It's obvious that with such approach, the domestic portals yield to the Western ones as to the convenience and quantity of original and useful services for clients. Another consequence is the competition between portals and web-sites of large real estate companies. A positive role of Russian portals consists in the fact that they help small and medium companies to enter the Internet; these companies are not able to occupy the leading positions in the Internet all by themselves. A part of the clients of these portals (e.g., certain developers) do not have their own web-sites at all. Sometimes, the main competitive advantage of a Russian portal is a channel for attraction of target audience through its belonging to large news or search portal ("RBK-real estate", "Rambler-real estate"). However, whatever the scheme, a necessity to sell a lot of advertising substantially worsens the consumer features of the information at the domestic portals¹².

The next important information aggregator is online versions of printed media. For example, they include the site of the newspaper "From Hand to Hand" in Moscow and "Real Estate Bulletin" in St. Petersburg. A key advantage which provided these resources with a leading position in their markets is combination of the conception of newspaper of free ads with online version. Thanks to this symbiosis, it was possible to cover the huge part of the market, including the audience that wasn't familiar with the Internet. The commercial model in the part relating to b2b segment of these sites is similar to the portals of the first type - sale of advertisement to market members. However, it strives to cover the b2c sector, offering private clients the service of SMS-payment for their services.

However, the profits from these schemes are much lower than profits from traditional sale of online advertising to real estate companies.

Recently, a threat to the above absolute attendance leaders is presented by professional online realtor catalogues, such as Winner in Moscow and KRIS in St. Petersburg. These systems, which are prototypes of Western MLS, are peculiar for their support of unique target audience which is not characteristic for Western market, i.e. a group of so-called "unofficial" realtors. "Unofficial" realtor is, as a rule, an employee of real estate company who works in his private capacity. Having a rather nice object, which was found by his own means (relatives, friends, and recommendations), a realtor cannot advertise it at the corporate site or in the paper of free ads, as there is a huge chance that he would be "singled out" and fired. The chances to sell the object and anonymity of the seller are more guaranteed if he uses professional networks. For example, Winner and KRIS cover upto 80 % of the seller's market in two Russian capitals. The members of the network are professionals who represent the most of the realtor community, as big companies also have to join them, in order to have access to all offers in the market.

The last group is constituted by the projects which aim to win their audience by means of uniqueness and convenience of representing the information, variety of analytical services, specific positioning, and choice of narrow target audience. These are the following projects: Realty.msk.ru, g2p, Arendator, Cottage, Kvadroom, Dometra, etc. Most of them are affiliated by one or another real estate company. At present, this model isn't so successful in Russia, as in the Western countries, and cannot occupy the substantial share of the market. It appears to be connected with absence of readiness to risk a significant capital in view of unstable real estate market in Russia. To understand how this situation may change in future, it is necessary to consider the main innovational tendencies which are manifested in the online segments of realtor market of Russia and Western countries.

Nowadays, a trend for constant availability of the Internet and its resources for a wide circle of users are very important. This turns the Internet from means of search for required information into environment which

contains primary irreplaceable services. A user cannot do without tools which are given to him by the internet sphere and tries to gain access to the services any time anywhere. This need is served by all developments in the sphere of convergence of mobile and internet technologies: broadband Internet on the mobile phones, smartphones, and iPads, navigational services on the basis of GPS, services of SMS-notification about important events in the Internet, various systems of instant messages, like ICQ and Skype. This tendency of internet services for real estate shows that in short term a wide expansion is expected from the versions of sites and services which are adapted for mobile devices. Also, the services allowing instant reaction to important informational events through SMS will be in demand.

For example, an SMS to a client, notifying him that there is a bid for his real estate - with a client's phone number which the agent may call in several seconds after a client sends a bid. There already exists a service which notifies the agent that a visitor is looking at the page with his object on the company's site for more than three minutes and allows him to instantly contact him with the help of a dialog window. MikeMontsko, the president of one of the departments of REALTOR portal of national association of realtors, mentioned a service which would be a further innovation that is planned to introduce this year. A client who has a mobile phone with GPS, being anywhere in the USA, presses the button and gets a list of objects which are for sale in close vicinity. One more push of the button - and he gets the price and additional parameters. Push of the call button - and the client has a connection with the realtor who posted the information about this object⁸.

A second tendency is more and more generalized aggregation of data. A client isn't comfortable when, looking for an object; he has to check dozens of the agencies' pages or real estate portals. That's why the current need is the concentration of necessary information on one page. The issue is how exactly should the transition from dispersion, in coordination and oversupply of data to a unified database be done. Here, in the analysis of the close future of domestic internet market, we will use the overview of main players of Western, particularly American, market.

Recently, new business models have been surprising particularly the stable real estate market of the West by means of excellent innovational services. They are oriented primarily at the b2c segment. These include the sensational project of English company www.foxtons.co.uk which on the border of the centuries offered twice as cheap fee for realtor services, at the expense of optimized technology of objects promotion on the basis of the innovational web-site. These include www.Trulia.com which provides for real estate companies and clients a convenient service of objects search on the basis of cartographic service Google Maps. Another example is the company www.Zillow.com which triggered the rumors that the traditional realtor business would soon be dead at all.

It introduced the way for utilizing the potential demand for real estate services. An owner of the object can (just of curiosity) post the information about his house, as of potentially for sale, on the online-map Google Maps and then get specific offers with prices. This system is actually a kind of auction. Similarly, potential buyers can check on the map the houses which they would like to own. And then, unexpectedly, the owner of this house might decide to move under the pressure of attractive prices. This new service is named "MakeMeMove". All of it makes the services of the realtor for choosing or selling an object unnecessary - and they have occupied a great part of the structure of services of real estate agents¹³.

The third type of aggregators is franchise networks, in which the well-known principle (franchise was being sold in 1851 by the founder of sewing machines empire Zinger) is recreated thanks to internet technologies. Indeed, the possibilities for copying technologies are limited only by the volume of a market. An addition of a new partner to a franchise network is actually treated as the sending a password for access to corporate network which contains the whole block of actual and constantly updated information as to the standards of the master-office work. Franchise networks, as a rule, have centralized databases, thus contributing into the expansion of realtor informational archives.

Five years ago no one in the USA saw an alternative to large realtor associations which stood the test of time.

However, the market doesn't stand still. New technologies provide new possibilities. "That's what clients want from us!" say the members of the round table in Orlando - the leading specialists of internet real estate. Despite the unpredictability of market changes, most of them agree that in the near future small and medium online-resources would be merged by large ones, and the real estate market would be a battlefield of giants. The users will vote with feet for the most convenient service which would not only gather, process, and present the maximum amount of possible information about the market, but use the energy and enthusiasm of thousands of users for improving their online-resource.

Ideologists of CRM (customer relationship management) put the stage of cooperation with a client on the highest level of client-company relationships that provides the company, which supports these relations, stability and prosperity. Thanks to the Internet, a client and seller get a technical possibility for such cooperation for the first time. They are no more on the different sides of the barricades, from where they cautiously study each other. Thanks to Web 2.0 technology, a page visitor is a co-author of the information, increasing the trust of other community members. Even now the clients can post objects and bids on the web-sites (www.Zillow.com), comment the objects (Trulia voices), ask questions and answer the questions of other visitors (Renting & Real Estate space on Yahoo!), discuss companies and services (www.ActiveRain.com), and evaluate the offered services (www.Zestimate.com). Publicity and transparency, dictated by the Internet, turn any manipulative technologies into ineffective ones and make the companies play fair.

An important trend of the recent year is a quick expansion of online TV on the basis of flash technology. On the web-site www.Optimumhomes.com, the objects with videos are watched in average 16 times more often than other objects. Online TV will also enable interactive video, when a client guides a man with a web-camera along the route, with the help of the page.

A client is going to be the most privileged member of this market. Modern technologies allow him to use the convenient mechanisms of search through all market information and also analytical tools which allow taking

reasonable decisions on the basis of predetermined criteria. Real estate web-pages will become not only databases, but also comparative analytical systems for support of optimal decisions. A client will be aware of all stages of a deal, which he will be able to track online¹⁴.

Realtors are turning not into brokers, but into consultants. The availability of information decreases its share in added value of realtor's service. At the same time, the abundance of information devaluates it in view of absence of mechanisms of choice, analysis, and generalization. Realtor will become a functional analyst, helping the client realize his needs and find the best solution to them. Ofcourse, intellectual saturation of the future work of realtor and usage of modern technologies take the status of this profession to the level of consultants and lawyers.

3. Modeling the Mechanism of Quality of Service Management at Real Estate Enterprises

Analysis of activities of real estate enterprises showed that, in spite of constant need for services by population and organizations, the actual volumes of their consumption decrease. The reasons for that are primarily growth of prices for services and their low quality. It should be also noted that categories "price" and "quality" are in close interconnection, but quality is one of the determining factors in competitive struggle of enterprises for the services consumers.

The analysis of the current mechanism of quality of service management shows that the quantitative and qualitative factors create contradictory situations which consist in the fact that the enterprise tries, first of all, to increase the volume of services provided, and the issue of quality is secondary. Moreover, there are cases of providing low quality services, i.e. services that do not correspond to the existing standards and regulations. All of it proves that economic goals of service producer and service consumer do not coincide, which leads to the decrease of efficiency of functioning of service production and consumer service. In this regard, a necessity for

congruence of interests between the enterprise and service consumer as to the quality level arises, which is one of the most important ways of increasing competitiveness and efficiency of enterprise's functioning.

Modeling mechanisms of cooperation for services quality management is viewed on the typical example, when there is an enterprise for providing a service in the sphere of real estate and several consumers. The task of choice of quality of service level, provided by an enterprise, at the set market price and expenses, is described by the following model:

$$\left\{ \begin{array}{l} f(y,w)=P*y-m(y,w)\rightarrow\max; \\ y^o=Q-x_c; \\ w_0\leq w\leq w_1. \end{array} \right. \quad (1)$$

where $f(y,w)$ - profit from the realization of service;
 y - actual volume of services, provided by enterprise;
 y^o - optimal volume of services, provided by enterprise;
 w - service quality level;
 x_c - demand for service from consumers;
 P - service price;
 $m(y, w)$ - enterprise's cost for providing service;
 Q - largest possible volume of service providing by enterprise;
 w_0, w_1 - collar and cap of service quality level.

(1) Shows that if the demand for service x is less than largest possible volume of services ($x_c < Q$), then optimal volume of rendering services corresponds to the demand for it and equals $y^o = x_c$. And if $Q < x$, then largest volume of rendering services equals $y^o = Q$.

$$M(y,w)=m_y*y+m_w(w-w_0)+FC \quad (2)$$

Where m_y, m_w - costs per unit;

FC – constant costs.

Assuming that increase of the level of quality leads to the demand for services increase according to the equation

$$x_c = x_0 + b(w - w_0) \quad (3)$$

where $b > 0$ - coefficient, describing the growth of demand for service resulting from the growth of its quality level;

x_0 – demand for service from consumers at the collar of quality level. Considering (2), (3), the task (1) can be presented in the following way:

$$\left\{ \begin{array}{l} f(w)=(P-m_y)x_0+[(P-m_y)b-m_w]*(w-w_0)-FC\rightarrow\max; \\ w_0\leq w\leq w_1. \end{array} \right. \quad (4)$$

Solution to the optimization model (4) is determined from equation:

$$\left\{ \begin{array}{l} w_0, \text{ if } [(P-m_y)b-m_w] < 0 \\ w = w_0, \text{ if } [(P-m_y)b-m_w] \geq 0 \end{array} \right. \quad (5)$$

The found solution (5) shows that if the growth of enterprise's profit from increase of demand for service is less than expenses for increase of its quality level, then the enterprise tries to sustain the service quality level at the collar. If the growth of profit from increase of demand exceeds the expenses, then the enterprise tries to sustain the level of service quality at the collar.

A manufacturer, setting the largest level of service level, suffers losses, and a customer, realizing this strategy, receives effect which equals

$$\Delta F(w) = F(w_1) - F(w_0) = Pd * \Delta w, \quad (6)$$

For balance of target functions, it is necessary that consumer's effect would exceed the losses of manufacturer:

$$\Delta F(w) > \Delta f(w) \quad (7)$$

Condition (7) shows that coordinated cooperation exists, if manufacturer's profit exceeds the amount of costs per unit of production quality. In order to coordinate economic interests of consumer and enterprise by means of service cost, it is necessary to have two prices: higher with production of service of high quality and lower with quality of service that corresponds to the collar. The amount of necessary price change of service can be found with the help of equation

$$\Delta f(w) \leq df/dP * \Delta P \leq \Delta F(w) \quad (8)$$

Developing this in equation, we receive:

$$[(m_w - P - m_y)b(w_1 - w_0)] / [x_0 + b(w_1 - w_0)] \leq \Delta P \leq P/b - x_0 / [b(w_1 - w_0)] \quad (9)$$

Thus, a manufacturer, by choosing the amount of price change from range (9), creates the conditions, in which it is economically profitable for the enterprise to produce such a service, and for customer - to buy it.

4. Conclusion

Basket of factors which determine the competitiveness of specific product (service) and of market subject is so significant and unique that there appears a necessity for choosing the most important one. Under the conditions of competitiveness, the developed countries of the world perceive the quality as a strategic commercial imperative and the most substantial source of national wealth. To a

large extent, the quality determines the country's prestige, serves as a basis for satisfaction of needs of every person and society as a whole, and is a very important component of competitiveness. Only on its basis the enterprise can survive under the conditions of competitiveness and gain necessary profit - therefore, it is obvious that activities on increase and provision of service quality in view of market relations should be top-priority.

Under the conditions of service economy, a significant role belongs to the quality of provided service, which is especially actual for real estate. Level of consumer culture has grown substantially. At present, good service increases the value of any product, material or nonmaterial, for consumer; it directly influences the volume and frequency of purchase and, consequently, defines its loyalty. It is safe to say that high-quality service and attention to consumers' demands are added value of product that is reached cheaply. Good service, assistance in solving consumer's problems, and individual approach are the principles which increase profitability and competitiveness of an enterprise of service industries. It is known that bad service pulls the enterprise back. Good service allows it to maintain its positions in the market. And only the superior service guarantees the increase of competitiveness and profitability of the service industry enterprise.

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