

A STUDY ON MUTUAL COMMUNICATION SYSTEM BUILDING FOR CUSTOMER SATISFACTION

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ABSTRACT: With the help of information and technology development since 2000, there have been increasing number of community forums for communications among future residents through on-line webs after the contracts for purchases have been signed. However, more complaints are being filed since the construction companies take less care of them in the nation. Therefore, a mutual communication system is to be proposed in this paper in order to reduce the complaints in advance due to improper communications, to improve the customer satisfaction, to analyze the troubles for communication, and to provide solutions for better mutual communications

Keywords: Communication System, Customer Satisfaction

1. INTRODUCTION

Home buyers have to purchase the apartments based on the model house or the information from builder's product catalogue since the distribution of residential apartments is conventionally done before the construction begins in Korea. In addition, even after the distribution contracts are signed, customers are not supposed to have information other than construction progress, pictures of construction field, etc. Therefore, the problems occurred during the construction are figured out only when the construction is about to be done by the customers, which arises many public complaints or even social conflicts.

Recently, however, many customers are willing to have an on-line forum of their own after the distribution contracts are signed. In addition, they started to pick out the problems which do not satisfies the customer's needs and request the amendments to the builders.

Since the future home owners have less information than the builders from the contracts to the finish of construction, the quality of products are always below the expectation level for satisfaction.

Therefore, in this study, the problems caused from the discrepancies of information are to be figured out existing in the building and distribution of residential apartments and new way of information system to be suggested between the customers and providers.

First of all, the characteristics of housing market are to be analyzed and suggestion to be provided for improvement through understanding the problems arising between the providers and customers under the circumstances.

2. THE CHARATERISTICS OF HOUSING MARKET

The apartments are for investments as well as

dwellings in Korea. It doesn't need to say that those two difference characteristics do not appear to be exactly the same from place to place. Note that the apartments are more likely for investments in the metropolitan area. Most people know that the apartments are actually provided only after one to two years later since they sign on the contracts. Therefore, the supply is not supposed to be swift. The demand for housing is instantly affected by economic condition while the supply can not be followed as such. In Korea, the demand has almost been surpassed supply. Therefore, there is a special requirement to buy the newly distributed apartment such as savings account for application.

The newly distributed apartments are only given to the one who are holding the saving account for application. In addition, people are given the chances to apply for buying the apartments based on the public notice for distribution along with website information, catalogues for distribution, model house, etc. When the number of application is more than the supply, they draw the lottery to randomly select the floors and locations of the apartments. If the applicants do not like the floor or the location of the house which are randomly drawn, they have the right to deny the purchase while losing the chances for application for many years to come. The contracts for distribution are made between the builders and customers, which cause misunderstanding about the lawful matters from time to time.

As a result, the housing market for apartments is totally oriented to the suppliers, which leaves only disadvantages to customers. In addition, the buyers are not supposed to request any change in the plan.

3. STATUS OF INFORMATION TRANFER SYSTEM

Concerning information of housing to buy, consumer

primarily depends on sales catalogue, sales home page, model house. Sales catalogue, not standardized, provides unit housing information like plan, home networking system, HVAC equipments, etc. and apartment complex information like site plan, landscape gardening, parking space, community facilities, etc. and location information like transportation, surrounding facilities, etc.

Sales home page provides 3 D animation showing inner parts of unit with no difference from sales catalogue. Model house provides typical unit type showing real sized insides with a scale-down complex model.

After sale contraction, most of construction companies in nation provide monthly site progress and site photos on their home pages and give information toward consumer's question through Q&A. In below figure 1 on sales catalogue, anyone could not know the real sizes of spaces.

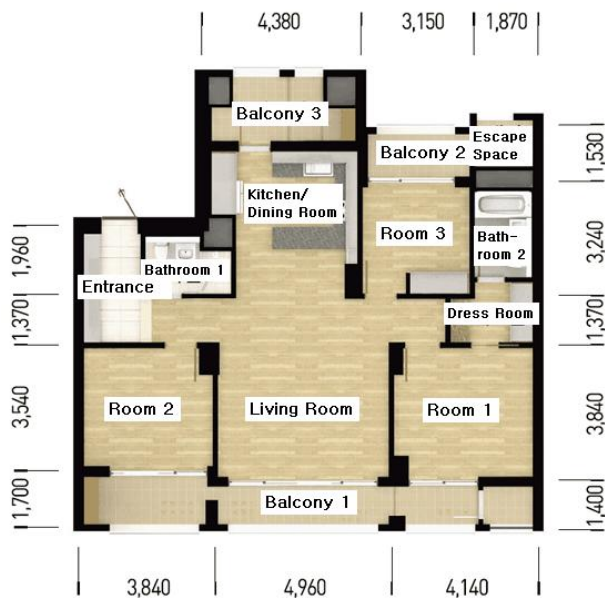


Figure 1. Unit plan sample on sales catalogue

4. HOUSING PERFORMANCE GRADING INDICATION SYSTEM

The government has put new regulation called housing performance grading indication system in effect since January 9, 2006 for apartment housing with more than 2,000 units and since January 1, 2008 with more than 1,000 units, to give objective criteria of housing performance level to consumers.

This system was introduced after Japanese's but Korean performance means for the worst unit among units, while Japanese performance indicates each unit performance. Housing performance grading indication system consists of 5 main performance parts, 14 performance categories and 20 detailed performance lists.

5 main performance parts are Noise and Acoustics(Light-weight impact sound control, heavy-weight impact sound control, sound control of toilet, sound control of party wall), Long-life(flexibility, remodeling & maintenance, durability), Landscape & Indoor Environment(landscape, formaldehyde control &

ventilation, daylighting, thermal environment), Welfare & Barrier-free(playground and community center, welfare space, barrier-free design), Fire Safety(fire safety, safe place, fire-resisting quality)

But this system also seems to cause another conflicts between supplier and consumer because the performance of housing is not for consumer's housing, respectively, but the worst unit of regarding complex. And the performance level makes the consumer confused due to inexact meaning. For example, each level of from 1 to 4 of heavy impact sound insulation of floors does not indicate how consumer sounds according each level due to lack of related studies.

5. PROBLEMS OF HOUSING SALES INFORMATION

Problems of housing sale information seem to be uncertainty of subjects for providing information, lack of concreteness of information contents, limit of information provided to consumers. In case of housing built by private companies, developer and construction company exist separately and practically sales have been conducted in name of construction company's housing brand, which often cause consumer to misunderstand the other party on sale contract as construction company, instead of developer. And sale agent contracted with developer or construction company, executes guiding activities but, in reality, answer of guiding helper in model house to consumer's question often misleads consumer to believe formal answer in the capacity of construction company. Generally, specification of computer is standardized but information for housing far more expensive than computer should be detailed but extremely limited to consumer.

The most representative sample of incomplete information is space size of each unit plan on sales catalogue or sales home page. Each space size was presented in wall centered dimension instead of inside dimension, so consumer can not exactly recognize space size like room, living room, etc.

Lack of information means for ceiling height, pipe line for air conditioner, location of electric outlet, etc., with, specially, public space.

According to questionnaire survey of 200 apartment inhabitants in the metropolitan area conducted in 2005, information which was incomplete and not expressed in process of consumer information collecting activities, revealed out inside dimension of each space and finishing material and ceiling height(28.8%), parking capacity and access from parking lot to entrance of building(21.3%), floor area ratio and the building-to-land ratio and green tract-to-land area(17.0%), slope of complex(16.5%), surrounding comfort facilities and schools(16.3%).

And the information to be provided in the future was reported impact sound insulation of floors(35.4%), quality and price of finishing material(34.9%), inside dimension of each space(10.5%), floor area ratio and the building-to-land ratio and green tract-to-land area(10.0%), ceiling height of each space(6.1%), parking capacity and structure(3.1%).

6. STATUS OF CONSUMER'S INFORMATINO TRANSFER

Recently, community forums for communication among future residents through on-line web increase to protect consumer's rights and interests and cultivate mutual friendship. These community forums utilize cafes provided by portal sites like Doctor Apart, Boodongsan Bank etc. These forums serve as gate for collective complaining toward construction company with sensitive reaction on outsider's approach.

But these forums serve as smooth communication tool of information with construction company for construction improvement to enhance convenience, and for better design of community facilities.

Representatives of future residents are selected through on-line webs and they play the role of finding fallacies and improvements on approved drawing and requesting for improvement or change but, in most cases, some requesting due to selecting delay of representatives could not be reflected in process of construction because of concrete pouring work already continued, such as electric and mechanic equipment lines embedded in concrete structure.

7. SUGGESTION OF MUTUAL INFORMATION TRANSFER SYSTEM

The information for purchasing houses tends to be kept only by the suppliers. In some cases, the advertisement for distribution or public notice may have false information which may cause a lawful dispute in return. The suppliers do not prefer to provide much information to customers in order to avoid any lawful trouble. In the contrary, the customers want correct information since the value of the proper is usually far more than their income level. Once they sign on the contract, they desire to change the design or plan to increase the value of the proper as much as possible.

Therefore, standardized or government approved catalogues should be made for the reliability of information given from the builders. In addition, they should contain the information about the size of plan, exact area, etc. The plumbing for air-conditioner, the location of plugs, and others should be decided in the model house.

After the sign on the contract, on-line forum should be promoted to reflect the customers' needs to the construction. Builders do not provide the on-line community prior to the finish of construction. Therefore, many future owners are using the conventional web portals such as Daum or Dr. Apart.

These separations of information between the builders and customers may cause troubles such as discredit for builders. In addition, those troubles do not tend to be resolved by themselves. Since there is no connection between the builders and customers, even a very minor change is not easy to be applied during the construction.

In order to resolve the problems, an integrated information system between the builders and customers is required from the contracts to actual moving-in. In

other words, on-line system in the construction field needs to be integrated with current on-line buyers' forum. The integrated information system consists of on-line buyers' community, public virtual space, and field information system from builders.

The on-line buyers' forum or community has web menus such as public notice, free writing board, discussion board, FAQ, on-line poll, gallery, downloads, etc. while the field information system by builders provide the information about construction. In order to guarantee the anonymous opinion, on-line security has to be made between the builders and customers.

The future residents are to be encouraged to join the on-line web community when signing on the contracts. In addition, it has to be made within a month when the president for the web community is selected by voting. An agreement should be made between the future residents and the builders about the management of the system. The most important to be kept is that both sides have to respect the other's opinion. One way for reliance between the builders and future residents is to meet face to face. Probably, off-line meeting for once a month is desirable.

The construction company should provide construction schedule as well as the deadline for any plan for change. The committee of future residents shows their opinion by on-line voting for pertinent matters. For example, the changes for plumbing type should be made at least two months prior to the start of construction through on-line voting.

The on-line voting has many advantages such as saving in time since it is using emails or other similar type of deliver opinions. In addition, the president of future residents' committee should attend the mock-up tests in the field to reflect any debate.

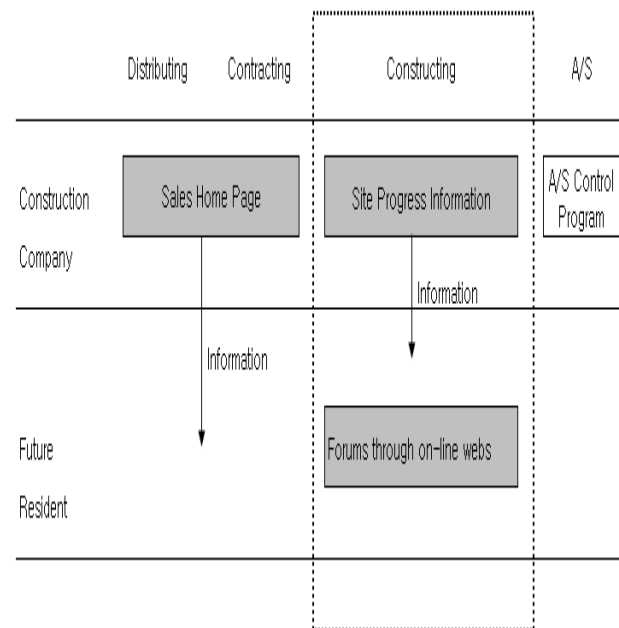
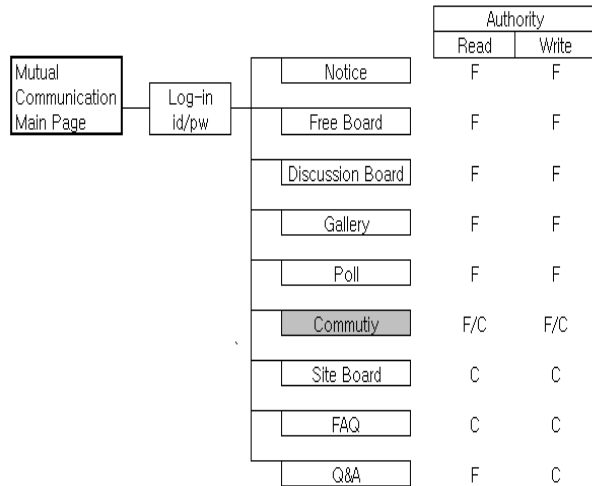


Figure 2. Status of information transfer through on-line webs.



※ F : Future Resident, C : Construction Company

Figure 3. Mutual information transfer system during construction

8. CONCLUSIONS

The future residents for newly distributed apartments have more complaints about the lack of information for purchasing houses, mistakes or disaffection for designs, which ultimately lowers the customers’ satisfaction in recent housing market in Korea.

In order to resolve the issue and raise the customers’ satisfaction, an information system to provide correct or standardized sizes for plan, height, or areas should be provided. In addition, the system should be made in such a way that a mutual communication is possible between the builders and future residents since they sign on the contracts to buy. In the system, the design plans, construction materials, or others are expected to be made or selected with ease.

In order to reduce the unnecessary costs from public complaints, such information system should be made and applied. Since it has never been practiced, the government may recommend an exemplary test-bed.

In the future, the housing market should be in such a way that customers can buy any type of residential apartment at proper prices regardless of existing regulations such as special savings account for distribution. In addition, the suppliers’ market with many arbitrary requirements is supposedly changed to buyers’ market in which the apartments are provided by private sectors.

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