# CASE STUDY OF RENOVATION DESIGN PLAN OF GOLF CLUB HOUSE BY COLOR MARKETING METHOD AND KANSEI VALUE EVALUATION ANALYSIS

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#### ABSTRACT

Improvement of customer satisfaction and facilitation of corporate activities are important in making goods and events. In the current market, we cannot deal with customer satisfactions and purchasing promotions merely by customer benefits such as functionalities and prices. We need customer benefits to improve sensitivity value and empirical value that emphasize sensitivity. Comparative analyzes of sensitivity value evaluation were conducted on cases of institutional renovation design based on the previous research results of the author and cases of other competing facility designs. The result became effective data for the research of comprehensive emotional value methodology and the construction of universal model of color, form and material feeling, which are the future research objectives of our authors,

Keywords: KANSEI Value, Visual /design/ image, Color Marketing

# 1 INTRODUCTION

The purpose of this research is to find factors that increase the KANSEI value in the building field. Specifically, it is to verify whether improving the KANSEI value of facility design leads to improvement of customer satisfaction. Research by analytical approach of stimulus characteristics regulating color preference such as hue, lightness, saturation and study by a psychological approach to verify cognitive processes leading to personal color preference

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formation process or color preference expression in the field of sensitivity engineering / cognitive science are a useful research result. However, many mention only the preference of color, study of three elements of color, form and material and study the relationship between these three factors and palatability, sensibility value and purchase intention are few.

In this research, focusing on the relationship between elements of color, form and material (sense). Study on subjects of the clubhouse of a golf course designed and built by a color marketing method and the existing clubhouse of a golf course considered as a competitor in the field. Then, we carry out comparative analysis by using sensitivity evaluation values for them.

By conducting this analysis, it can be considered that it is possible to verify that the sensitivity value creation based on the color marketing method is more effective.

## 2. Example of repair based on color marketing method

In this paper, we will focus on the clubhouse renovation of the golf course and analyze the clubhouse after the renovation. In this section, we conducted the facility innovation plan for clubhouse renovation and the clubhouse renovation based on it, so we summarize the outline. For renovation (design and construction) based on color marketing method, first, establish a facility innovation plan. The purpose of the facility innovation plan is to raise the experience value for the visual design image of the facility by improving the sensibility value and to raise the evaluation on the facility design. For that reason, we plan a rebuilding plan by means of color marketing method in accordance with sound management revenue, incorporation of next generation members, and budget amount for said renovation. Next, implement the planning process. First, the evaluation items of the clubhouse of the golf club will be formulated. Following that, we will investigate the actual condition of the facility, inspection of competing facilities, sensitivity analysis on visual /design /image, visual /design /image analysis of the whole market, building trend analysis, hearings to the person concerned with the facility and grasp the differences and improvement points from the facilities to be compared. Based on the analysis results, regarding the clubhouse of the golf course to be analyzed in this study, we decided the direction of the concept of facility innovation to natural + modern + classic. At that time, the three images were represented by three different attributes.



#### Three visual design images and composition of colors, forms, materials

Fig. 1 Visual design image and three element composition

# 3. Method of comparative analysis

We investigated how the clubhouse, which was refurbished based on the color marketing method, recognizes the sensitivity value intended by the designer and how much satisfaction degree was improved by the renovation. We also investigated the existing clubhouse of the golf club that is regarded as a competitor in the same field as the comparison target.

In the questionnaire survey contents, with respect to the two facilities of the facility which were refurbished based on the color marketing method (abbreviated as the facility) and the competitive facility, the facility members were assigned to be the respondents, the variable 22 items as the sensitivity evaluation items were evaluated in five stages, and questionnaire was carried out. The facility: 55 respondents, competing facility: 30 respondents. Most of the club users of golf courses are men and females are extremely few. Competition facility are located in the competing commercial area, this is member system, and have selected the same condition that they are carrying out renovation. In the analysis method, F test is first carried out, after confirming whether the P value is significant or not, then t test is carried out, estimation of causality between the estimation for each sensibility information and the attention variable from the average value and standard error went.

## 4. Result of comparative analysis

With respect to the results of the sensitivity evaluation items according to the concept of the example, the sensitivity evaluation item "having sense of unity" was a significant difference \*\*\*, and exceeded the average value at the facility. "Natural" was a significant difference \*\*, which exceeded the average value in the facility, and the difference with competing facilities was also

large. "Modern" was a significant difference \*\*\*, which slightly exceeded the average value at the facility, but the average difference from competition was large. "Clear" had a significant difference \*\*\*, which was much larger than the average value, and there was also a big difference in the comparison with the average value with the competition. "There is no significant difference in the facility "serenity", but both the facility and competing facilities exceed the average value. There is no significant difference in "there is a formality", both the facilities and the competing facilities are below the average value. Regarding the results of other sensibility evaluation items, there was no significant difference in either "flashy", "cute", "wild", "sober", "active", "brilliant " or "decorative". Both facilities are lower than the average value, but "There is movement" both are lower than the average value. "Elegant" is below the average value at the facility. "Dynamic" has a significant difference \*\*\*, which exceeds the average value at the facility. "Casual" has a significant difference \*\*\*, although there are significant differences in the two facilities, both were below the average value.

Three variables, "I like", "I am satisfied", "I want to introduce it to my friends / acquaintances", are the ones I especially focused on in this research. "Like" has a significant difference \*. In the facility, it exceeds the average value. "Satisfied" has a significant difference \*\*. Satisfaction with the facility is well above the average value, there is a big difference from the average value of satisfaction of competing facilities. "I want to introduce to friends / acquaintances", there is no significant difference. Although the result shoes that there is no significant difference, the facility is far above the average value.



Table 2: Frequency distribution table of average values and standard errors of the institutional and competitive facilities' emotional value evaluation items etc.

# 5. Consideration

In this research, an example that intentionally embodied the concept by a combination of color, form, material (sense) was taken as a research resource. Based on the analysis results, the intentional sensory value evaluation items (including the concept) were significantly larger than the average value, and there was a significant difference from the competition. I recognize that it is a big natural image, a clean image. "calm" of the facility has no significant difference, but since it is much larger than the average value at the facility, it recognizes that it is a calm image. In the results of other sensitivity evaluation items, there was a significant difference in "quiet" "dynamic" "casual" "moving" "active" "elegant". However, except for "quiet" and "dynamic", it is lower than the average value, and it is inferred that not much recognition is done. We were able to find a big difference from the competing facility in comparing the average values for "liked", "satisfied", "want to introduce to friends and acquaintances", which are variables of interest. In "likes", it was found that the preference for the facility image is stronger than the competitive facility.

"Satisfied" also has a significant difference, with the average value the difference between the facility and competition is large, in the facility. It was inferred that the satisfaction level increased considerably, even though it was much larger than the previous evaluation  $(2.5 \rightarrow 4.5)$ . "I want to introduce to friends / acquaintances" did not have a significant difference, but the average value is high in the facility and it can be judged that consciousness is strong. It is speculated that those who do not receive education such as in design can support common recognition between feeling image language and created visual design image. It is also speculated that the sensibility value evaluation item as a concept contributes to a remarkable improvement in favor and satisfaction with the facility. At the same time, as a result of comparing "sensibility value evaluation item intentionally incorporated in the facility", "liking" or "satisfied" of the competing facility, the average value was also low, so that the sensibility which is the concept of the facility, it is suggested that value evaluation items are effective for satisfaction and palatability in clubhouse design.

# 6. Conclusion and future tasks

It was possible to demonstrate that the sensibility values of the designed examples are recognized and evaluated by the users in the same way and lead to high evaluation of facilities such as "satisfaction" and "liking" to facilities. I adopted the sensitivity evaluation language which is also used in the building field, but it seems to be a factor as well. It was able to produce results as one of the research on the creation of KANSEI value of customer benefit centered on sensitivity. However, in the questionnaire survey and the method of taking data, the number of comparative analyzes was small, and comparative analysis by the same subject was not possible. In the future, we would like to conduct researches that can obtain more informed knowledge by increasing the number of comparable examples and analyzing by comparative answers of the same subjects.

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