THE EMPIRICIAL RESEARCH OF THE BANK SATISFACTION USING THE MOTIVATION-HYGIENE THEORY—TAKING XI`AN AS EXAMPLE

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ABSTRACT

The traditional satisfaction theory believes that the degree of the clients' satisfaction would affect their purchasing actions, so the enterprises should adopt the necessary measures to improve the clients' satisfaction, further to boost up the competition force of the enterprises. Using the survey of the satisfaction regarding the bank service in Xi`an as example and using the fuzzy-cluster analysis measure, this paper finds that the phenomena of the satisfaction more meet the description of the Motivation-Hygiene Theory, and suggests that the enterprise should distinguish the motivation factors and hygiene factor rightly to use enterprise's resources effectively.

SUMMARY OF THE TRADITIONAL SATISFACTION THEORY

The traditional satisfaction theory believes that the clients' attitude includes three level: positive, adiaphorous, negative，homologous the level of the satisfaction of the clients' include: satisfactory, generic and dissatisfactory. The degree of the clients' satisfaction would affect their purchasing actions, so the enterprises should adopt the necessary measures to improve the clients' satisfaction. However upgrading the clients' satisfaction means improving the attitude of the clients' to product/service. The customer behavior theory consider：the cognizance and the sensibility are the key factors affecting the clients' satisfaction，however the cognizance is the factor directly affecting the clients' satisfaction. The cognizance of the clients' attitude is the faith of clients' to certain product/service，the aggregation of the faith to the various attributes of the product/service. As the formula (1)：

$$S_b = \sum_{i=1}^{n} W_i (X_{ib} - I_i) \tag{1}$$

S_b: the clients' satisfaction to the certain brand b；W_i：the coefficient of the i attribute of the brand b；
N: the amount of the attributes considered；I_i: the clients' expectative behaving of the i attribute；
X_{ib}: the clients' actual feel of the behaving of the i attribute;
X_{ib}- I_i>0，the behaving of the i attribute will boost up the clients' satisfaction to the brand b；
X_{ib}- I_i=0，the behaving of the i attribute will do nothing to the clients' satisfaction to the brand b；
X_{ib}- I_i<0，the behaving of the i attribute will depress the clients' satisfaction to the brand b.

Most enterprises take the survey of the satisfaction, in order to find the orientation of improving the products/services，raise the clients' satisfaction，boost up the competition force.

ANALYZING SATISFACTION WITH MOTIVATION-HYGIENE THEORY

As a service industry，the clients' satisfaction to the service will directly affect the development of the bank. Each bank more and more recognizes the reaction of the clients, the banks also one after another raise the clients' satisfaction from various aspects. The writer carried out a survey regarding the satisfaction to the bank service in Xi`an, survey 200 (individual) samples, and the indexes of general satisfaction, selecting rate/per 100 people, business kinds, convenience, public image, famous, security, service quality, charge criterion, staff quality, foundational facilities. According to the traditional satisfaction theory, the general satisfaction has a positive correlation with business kinds, convenience, public image, famous, security, service quality, charge criterion, staff quality, foundational facilities, i.e. these indexes will facilitate the general satisfaction. But the result of the survey has great difference even contrary with expectation.

Why there is so great difference between statistic result and theory? This paper thinks the main problem exists in the classifying the satisfaction of the traditional theory，the traditional theory believes that satisfaction and the dissatisfaction are a entia, but the clients consider them respectively, like the description of the motivation-hygiene theory. In the management，Fredrick Herzberg advanced the motivation-hygiene theory，and believed that the factors affecting the people's attitude included motivation factors and the hygiene factors. The motivation factors are the factors which will generate the satisfactory feel or the feel of not getting the satisfaction, but not generate the feel of the dissatisfaction；the hygiene factors are the factors which will not generate the feel of the satisfaction, so can play the prompting effect, however lacking of these factors will arouse the dissatisfaction. The distinguishing the motivation factors and the hygiene factors can generate two gemination groups: satisfaction—no satisfaction, no dissatisfaction—dissatisfaction.

The paper thinks that the factors affecting the clients` satisfaction can also be differentiated to motivational attributes and the hygienic attributes, thereinto if the hygienic attributes were worse, it will generate the dissatisfaction of the clients, but if those attributes would be satisfied, it can eliminate the dissatisfaction of the clients，but can not raise the satisfaction of the clients; however if the motivational attributes were worse，it will depress the satisfaction of the clients but not generate the obvious dissatisfaction，and those attributes would be improved，would raise the satisfaction. This time the former formula one will transit to：

$$S_b = \sum_{i=1}^{n} W_i (X_{ib} - I_i) \qquad (2)$$

Thereinto: $i_1 \ldots i_m$, attributes are hygienic attributes, for these attributes: when $X_{ib} - I_i < 0$，$0 < W_i < 1$；when $X_{ib} - I_i \geq 0$, $W_i = 0$; Others are motivational attributes, when $X_{ib} - I_i < 0$，$W_i = 0$；when $X_{ib} - I_i \geq 0$, $0 < W_i < 1$.

According to the motivation-hygiene theory, we can advance the following assumptions：

First assumption: the clients' satisfaction of the bank service submits to the motivation-hygiene theory;

Second assumption: the degree of the clients' satisfaction has a obvious correlation with the motivational attributes, however a unobvious correlation with the hygienic attributes；

Third assumption: the degree of the clients' dissatisfaction has an obvious correlation with the hygienic attributes, however an unobvious correlation with the motivational attributes.

The difference of the motivational attributes and the hygienic attributes can be found according on the correlation coefficients of subentry indexes and general satisfaction, if correlation coefficient is bigger than 0.5, the attribute the motivational, otherwise the attribute is hygienic.

TESTING ASSUMPTIONS

According to these above assumptions, we advance the following testable deductions, i.e. the satisfactory clients' motivational attributes have a high correlation with satisfaction, and however the dissatisfactory clients' hygienic attributes have a high correlation with dissatisfaction.

To test the deductions, firstly divides the clients into the satisfactory clients group and the dissatisfactory clients group according on the general satisfaction. In two different clients respectively review the correlation degree between satisfaction and subentry indexes to ascertain the motivational attributes, review the correlation degree between dissatisfaction and subentry indexes to ascertain the hygienic attributes.

Table 1：The correlation coefficient respectively between satisfaction, dissatisfaction and subentry indexes

	business kinds	Conveni- ence	public image	famous	service quality	security	charge criterion	staff quality	facilities
satisfaction	0.832	0. 323	0.853	0.805	0.798	0.436	0.350	-0.302	0.185
dissatisfaction	0.365	0. 891	0.264	0.315	0.403	0.50	0.672	0.763	0.650

Then, we discuss the clients group who evaluate the service of the banks as generic. In the survey the degree of the satisfaction includes: most satisfactory, satisfactory, generic, dissatisfactory and most dissatisfactory. If the satisfaction and dissatisfaction are two independent units, this group client should also be divided into two classes: the satisfactory clients group and the dissatisfactory clients group. And the classification of the clients group who evaluate the service of the banks as generic will raise the correlation degree between satisfaction (dissatisfaction) respectively with motivational attributes and hygienic attributes.

There are 20 samples evaluate the service of the banks as generic in the survey, so can ascertain discussion field $U = \{x_1, x_2, \cdots, x_{20}\}$ .Discuss the similitude degree between the satisfactions of random two samples with the distance formula(3).

$$r_{ij} = 1 - C\sqrt{\sum_{k=1}^{m}(x_{ik} - x_{jk})^2} \tag{3}$$

Then the problem transits to 20-ranks matrix dynamic cluster analyzing problem, build fuzzy similitude matrix R_{20x20}, can know there must be a minimal natural number k(k≤20)，makes the transferring closed matrix be existing: $t(R)=R^k$， for all the natural numbers (L)which greater than k, there permanently is $R^l=R^k$, so $t(R)$ is the fuzzy equivalence matrix. The paper get the transferring closed matrix $t(R)$ with square method：

$$R \rightarrow R^2 \rightarrow R^4 \rightarrow \cdots \rightarrow R^{2^i} \rightarrow \cdots \tag{4}$$

When firstly appear $R^k \circ R^k = R^k$（indicating R^k have transferring character），R^k is the transferring closed matrix $t(R)$ wanted（omitted）.Aiming at this fuzzy equivalence matrix, respectively seek λ-cutting matrix (R_λ) for $\lambda = \{1,0.8,0.6,0.4,0.2\}$. We find the amount of the sample belonging to different λ value（see table2）:

Table 2：The amount of sample belonging to different λ level

λ	1	0.8	0.6	0.4	0.2
Sample amount	0	8	10	11	19

From above table, can know that the samples that evaluate the service of the banks as generic can segment into two obvious different groups. Respectively sort two groups into the satisfactory group and the dissatisfactory group, re-review the correlation degree between general satisfaction and subentry indexes, sorting the samples which $\lambda \geq 0.8$ into the satisfactory group, sort the samples which $0.4 \geq \lambda \geq 0.2$ into the dissatisfactory group can get the following table3:

Table3：Adjusted correlation coefficient respectively between satisfaction, dissatisfaction and subentry indexes

	business kinds	Conveni-ence	public image	famous	service quality	security	charge criterion	staff quality	facilities
satisfaction	0.893	0. 351	0.872	0.843	0.826	0.531	0.346	0.016	0.152
dissatisfaction	0.383	0. 901	0.310	0.392	0.401	0.55	0.832	0.863	0.792

From above table, can find the correlation between general satisfaction and subentries indexes are clearer, indicates that can separate satisfaction and dissatisfaction into two independent units. From above tables we can get the conclusion: business kinds, public image, famous and service quality are the motivational attributes; convenience, charge criterion, staff quality, foundational facilities are the hygienic attributes. However Chinese banks have strong background of state-own, have the support of national credit, so the security has not been considered much by the clients.

CONCLUSION

How to improve the clients' satisfaction and where improves from? Should be considered seriously by each bank. The distinguishing of the motivational attributes and the hygienic attributes will be helpful to the banks to utilize resources effectively, hold the keystone, arrive the expectative aim. For the hygienic attributes, should get or exceed little the average level of the industry, however the motivational attributes should emphasize the innovation, in order to raise the clients' satisfaction. Finally, the banks should be on to that the weightiness of the various attributes in the clients' mind will change along with the change of the circumstance, at the same time the breakthrough of the science and technology will make functions more easy realize, so raise the weightiness of some attributes, or depress the advantage of some attributes, form the dynamic change among the motivational attributions and the hygienic attributes. It need market research to find the emphases of the work.

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