

Modern Mall's Promotion Quality Evaluation and Comparison Analysis

ZHANG Deran¹; XIANG Jing^{2*}; ZHANG Dongdong³

¹Zhang Deran, Professor, mainly engaged in Probability and Statistics. Mathematics Department of Fuyang Normal University, Anhui Fuyang, 256603, China.

Email: zhderan@163.com

²Lecture, Mainly engaged in Probability and Statistics, Medical Statistics and Quality of Life.

³Education and Scientific Department of Fuyang Normal University, Anhui Fuyang, 256603, China

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*Corresponding author.

Address: Binzhou medical University, Health Statistics and Epidemiological Office, Shandong Yantai, 264003, China.

Email: xiang_jing@163.com

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Abstract

Modern mall's promotion quality in its wide sense refers to the actual level of consumers' active purchasing as a result of mall's promotion that involves convenient, complete, and safe visible facilities as well as friendly and warm invisible service. In the light of the components of modern mall's promotion quality, the author established a comprehensive quantified evaluation model that can provide a mall with promotion quality evaluation and multi-malls with promotion quality comparison analysis.

Key words: Modern mall; Promotion quality; Comprehensive evaluation; Evaluation components; Evaluation model

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INTRODUCTION

The modern mall is an open system that keeps exchanging and communicating with the external environment on material energy and information when running. So its survival can not separate from its surroundings. With the end of insufficient economy and the coming of buyer's market, consumers' needs become complicated, varied and individualized. In this case, to promote mall's new and better development, it seems the only way to make use of market and find positive opportunities. For mall's managers, the administration decision should be rooted on the proper dealing with the internal and external environment. In a word, the most important thing for modern mall management is to actively modify the internal environment according to the movement of the external environment.

The core of modern mall's external environment is the quantity of market demands, including material demands and spirit demands. Correspondingly, the core of the internal environment is mall's sale that involves material sales and spirit sales. To acquire timely, accurate, reliable, and applicable decision ground, the mall itself should often analyze and evaluate the major factors that can influence sales.

1. COMPREHENSIVE EVALUATION OF A MALL'S PROMOTION QUALITY

1.1 Evaluation Factors of Sales Quality

There are a lot of factors related to sales. Some are inevitable, some are random, and some are mutually transformed. A parting from random factors, those important factors mainly comprise visible facilities and

invisible service. The former should be complete and safe, and the latter friendly and warm. The specific connotation is as follows:

Convenient: refers to the superior situation and easy access. Once the consumer wants to purchase, he will naturally and decisively choose the mall.

Complete: refers to the verified goods and abundant storage. The consumer can buy everything he needs.

Safe: refers to the cheerful environment, including the facilities and proper goods price. The consumer can feel happy and enjoy homelike warmth and security in the mall.

Friendly: refers to attendants' friendly, warm, attentive service. The consumer can feel like talking with his family.

Warm: refers to timely service that aims at consumers' need. The consumer will enjoy beauty while purchasing.

1.2 Comprehensive Evaluation Model of Promotion Quality

1.2.1 Determine the Factor Group U of Promotion Quality Evaluation

By the analysis, given the promotion evaluation factors' group is U, $U=(u_1, u_2, u_3, u_4, u_5)=(\text{convenient, complete, safe, friendly, warm})$

1.2.2 Determine Grade Group V of Promotion Quality Evaluation

Given the V of promotion quality evaluation grades' group is V, V can be complicated or simple in accordance with actual situation. Usually, V is supposed to be $V=(\text{Best, good, common, poor})$

1.2.3 Determine the Weight of Every Factor

Because evaluation factor is not the same important as valued thing. Therefore each factor's performance is also unilaterally dissimilar to the overall performance's influence. So, before synthesis we should determine the fuzzy weight vector, and define $A = (a_1, a_2, a_3, a_4, a_5)$ ($a_i > 0$ and $\sum a_i = 1$), a_i is the i-factors and reflects on a trade-off factors.

There is a variety of methods for determining Weight, such as expert's estimation, the analytical hierarchy process. We consolidate full account of the survey information to customers over the years and expert views, and make sure joint weighting method is desirable. According to investigators shopping centers to record and expert's advice, make $A = (0.20 \ 0.25 \ 0.25 \ 0.15 \ 0.15)$.

1.2.4 Certain Fuzzy Relationship with Matrix r

To Promotion quality of mall, evaluation factors and relationship between evaluation grades, from U to V of the fuzzy relation, fuzzy evaluation matrix can be described, with R as follows:

$$R = (r_{ij}) = \begin{pmatrix} r_{11} & r_{12} & \dots & r_{1m} \\ r_{21} & r_{22} & \dots & r_{2m} \\ \dots & \dots & \dots & \dots \\ r_{n1} & r_{n2} & \dots & r_{nm} \end{pmatrix}$$

r_{ij} is the degree of membership of V_j , and R determination is also the multi-ways. Author considers using weighting adjustment rank appraisal frequency method to be more reasonable under usual situation. Its concrete procedure is to survey 60 customers at the mall in different time and space, and comprehensive factors in the evaluation of U as following tables.

Table 1
60 Customers Evaluation of U

Grade	Best	good	common	poor
Gactor				
convenient	2	40	18	0
complete	1	48	11	0
safe	10	40	10	0
friendly	10	35	15	0
warm	5	40	15	0

Invite six experts, and make results of evaluation as following table.

Table 2
6 Experts Evaluation of V

Grade	Best	good	common	poor
factor				
convenient	0	5	1	0
complete	0	4	2	0
safe	1	5	0	0
friendly	1	4	1	0
warm	1	5	0	0

Define $\alpha = 0.3$. Because $r_{ij} = \alpha \times \frac{v_{ji}}{60} + (1-\alpha) \times \frac{v'_{ji}}{6}$ (v_{ji}

is number of custom and v'_{ji} ' is number of experts). Calculate R is

$$R = \begin{pmatrix} 0.01 & 0.783 & 0.207 & 0 \\ 0.005 & 0.707 & 0.288 & 0 \\ 0.167 & 0.783 & 0.05 & 0 \\ 0.167 & 0.642 & 0.192 & 0 \\ 0.142 & 0.783 & 0.075 & 0 \end{pmatrix}$$

Certainly, component member of judges are possible to be customers or all be experts, and weight is same.

1.2.5 Choose all into Operator, and Make Fuzzy Multi-Evaluation

Use fuzzy mathematical model to calculate

$$B = A \circ R = (0.20 \ 0.25 \ 0.25 \ 0.15 \ 0.15) \begin{pmatrix} 0.01 & 0.783 & 0.207 & 0 \\ 0.005 & 0.707 & 0.288 & 0 \\ 0.167 & 0.783 & 0.05 & 0 \\ 0.167 & 0.642 & 0.192 & 0 \\ 0.142 & 0.783 & 0.075 & 0 \end{pmatrix} = (0.091 \ 0.743 \ 0.166 \ 0)$$

Because $0.091+0.743+0.166+0=1$, we can know that for the promotion of quality shopping centers, with 9.1% of people think that the "best", with 74.3% of people think "good" and 16.6% said "generally." By the maximum

membership degree principle, the mall's marketing quality evaluation should be "better."

2. PROMOTION QUALITY EVALUATION ON MULTI-MALLS DURING THE SAME PERIOD AND ON ONE MALL DURING DIFFERENT PERIODS

The above model is easy to operate. Though it looks a bit crude, it is very useful for malls to frequently reflect on management. Besides, the proposed model can be applied to promotion quality comparison analysis during the same period on one mall as well as multi-malls. In this case, just grant corresponding marks to the evaluation group and the promotion quality standard will be a specific number. For example, "best" is 7, "good" is 5, "common" is 3, "poor" is 2, then $C = (7\ 5\ 3\ 2)^T$, so the final mark for the mall's

promotion quality evaluation is:

$$Q = B \cdot C = (0.091\ 0.743\ 0.166\ 0)(7\ 5\ 3\ 2)^T = 4.85$$

By this step, it becomes easy to make comparison.

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