

# Research on Customer Satisfaction Evaluation in Mobile Phones Industry

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**Keywords:** Mobile phones; Evaluation; Customer satisfaction

**Abstract.** This paper, by using Chinese customer satisfaction index evaluation model, conducted research on the evaluation of customers' satisfaction towards mobile phones enterprises and presented the customer satisfaction evaluation results for six enterprises with higher market occupation. The evaluation results indicate that Huawei ranks top with highest customer satisfaction with 78.87 points, followed by Apple and Oppo, and Samsung is listed in the last place with 71.99 points. Also, the paper made an analysis of major evaluation indexes.

## Introduction

In recent years, mobilephones has witnessed a rapid development and played an increasingly important role in everyone's daily life. There are so many mobilephone brands and styles in the market. How to choose from them for the customers and which can meet their demands is becoming more and more important. Thus, it has become a focus of research for the current academia and industry to develop the products satisfactory to customers. Among the researches on customer satisfaction in recent years, there are some typical examples: Dong Xuecheng et al. focused on the research on E-commerce customer satisfaction evaluation model; Zha Jinxiang et al. emphasized the interaction of E-commerce customer satisfaction evaluation indexes; and Zhao Jiayin et al. laid an emphasis on E-commerce customer satisfaction evaluation practice.

This paper, by using the Chinese customer satisfaction index evaluation model, made an survey on the customer satisfaction of mobilephones customers. It proves through practice that the model is both feasible and rational and the evaluation result is comparable among industries and regions.

## Evaluation Model

The example of Chinese customer satisfaction evaluation model structure is shown as follows:

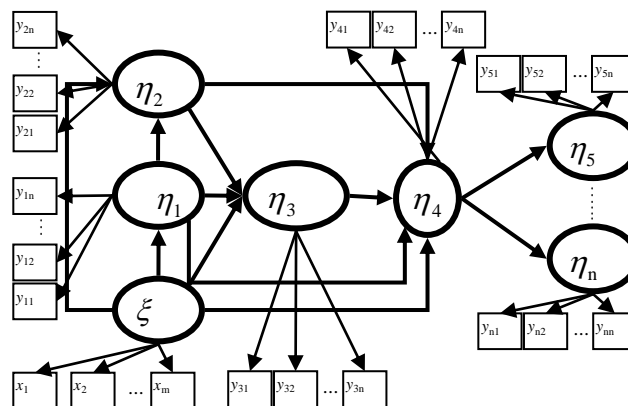


Figure 1. Finite Example of Customer Satisfaction Evaluation Model

Where, circles indicate latent variables; the arrows between circles indicate the causal relationship among latent variables; rectangles indicate observable variables; and the arrows between rectangles and circles indicate the observable variable-latent variable response relationship.

The example of mathematical form for structural equation is shown as follows:

$$\eta = B\eta + \Gamma\xi + \zeta$$

Where,  $\eta$  means endogenous latent variable;  $\xi$  means exogenous latent variable; B means relationship between endogenous latent variables;  $\Gamma$  means impact of exogenous latent variable on endogenous latent variable; and  $\zeta$  means residual of structural equation, which reflects the parts that are unable to be interpreted in equation and subject to independent normal distribution with average value being zero.

The example of mathematical form measuring the equation is shown as follows:

$$X = \Lambda_x \xi + \delta$$

$$Y = \Lambda_y \eta + \varepsilon$$

Where, X means the vector formed by exogenous indexes; Y means the vector formed by endogenous indexes;  $\Lambda_x$  means the relationship between exogenous and endogenous indexes, or factor loading matrix of exogenous index on exogenous latent variable;  $\Lambda_y$  means the relationship between endogenous index and endogenous latent variable or factor loading matrix of endogenous index on endogenous latent variable.

Specifically, as for mobile phones, the evaluation model is shown in Fig. 2.

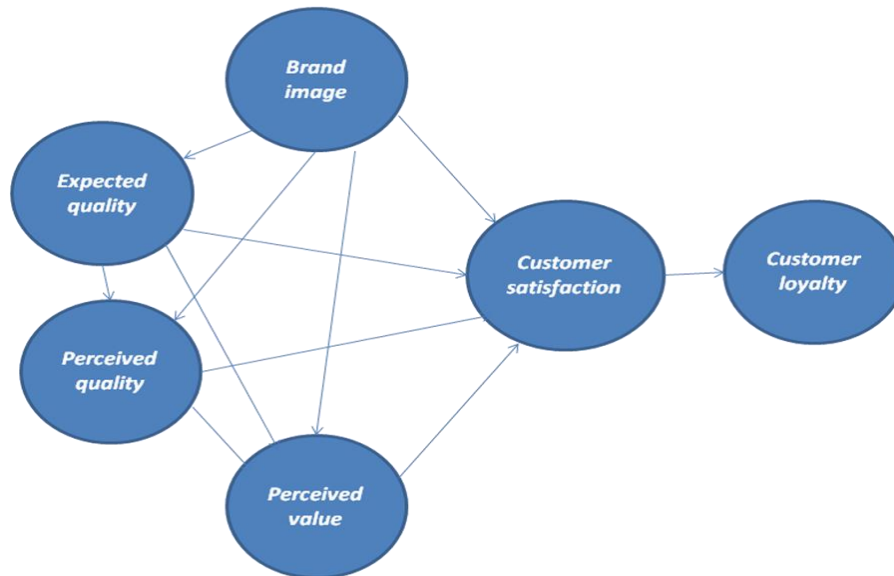


Figure 2. Finite Customer Satisfaction Evaluation Model in Mobile Phones Industry

Where, brand image covers customers' evaluation on the overall image of the Company and on the conspicuousness of brand characters; expected quality includes evaluation of customers on the overall expected quality, expected customized quality, expected product reliability and expected service quality; perceived quality includes the evaluation on the overall perceived quality and several quality indexes in relation to quality; perceived value includes the evaluation of customers on the service price of the enterprise under given quality; customer satisfaction includes customers' overall satisfaction on brand service, satisfaction compared with the expected, satisfaction compared to other brands and to ideal services; and customer loyalty includes customers' possible willingness to repurchase brand services and to recommend.

**Result**

This survey is made by combination of computer aided phone interview system and online survey and covers Mobile phones enterprises with market occupation ranking top 6 in the 250 major cities of China. Around 250 valid questionnaires were distributed to each enterprise. The respondents were individual consumers aged 18 to 70 who have used the brands surveyed in the previous one year.

The result of calculation is shown in Fig. 3. Huawei ranks top with highest customer satisfaction with 78.87 points, followed by Apple and OPPO, and Samsung is listed in the last place with 71.99 points.

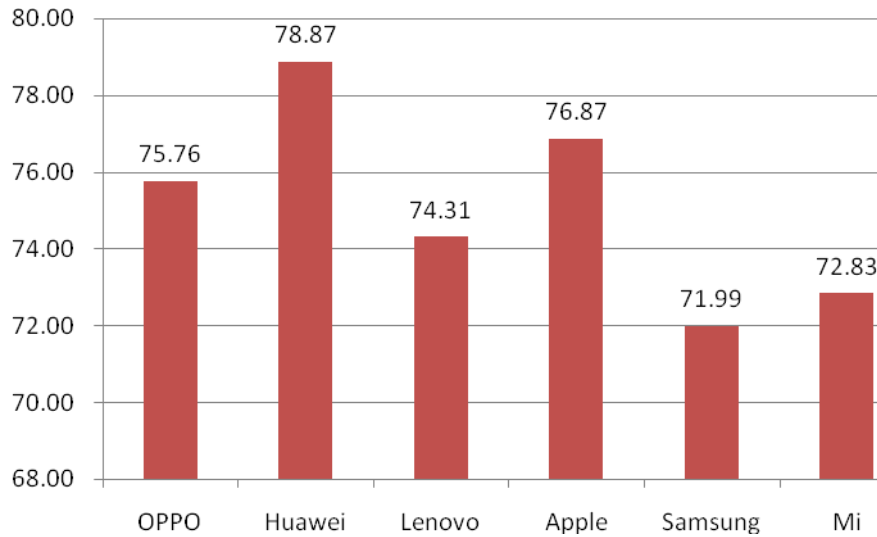


Figure 3. Finite The Result of Customer Satisfaction

Table 1 Customer satisfaction evaluation result of major indexes

Indexes	OPPO	Huawei	Lenovo	Apple	Samsung	Mi
Overall brand image before burchasing	76.16	80.35	76.04	78.59	72.47	74.78
Overall brand characteristic before burchasing	75.90	78.38	75.67	80.64	74.76	74.39
Customized expected quality	79.23	80.75	78.18	82.16	74.06	77.78
Reliability expected quality	75.75	79.72	77.19	81.53	76.16	75.01
Expected quality of service	79.80	78.31	78.32	79.29	75.82	77.29
Overall expected quality	79.35	80.82	77.73	82.02	74.76	75.75
Overall perceived quality	77.52	79.06	77.20	78.54	72.78	73.63
Customized perceived quality	77.74	79.24	74.64	80.69	71.89	74.06
Reliability perceived quality	77.44	80.38	75.65	80.15	71.02	73.89
Service perceived quality	75.38	77.95	76.42	75.83	72.44	73.30
Perceived value	71.37	76.06	69.67	69.32	67.02	72.01
Overall satisfaction	76.25	79.70	75.06	76.86	72.95	73.71
Satisfaction compared to the expected	73.05	76.99	74.12	73.79	70.00	72.31
Satisfaction compared to others (similar mobile phone enterprises)	76.55	79.08	73.48	79.82	71.64	72.76
Satisfaction compared to ideal services	77.31	79.51	74.54	77.01	73.20	72.53
Willingness to repurchase	51.88	63.11	44.97	48.50	48.02	47.27
Customer recommendation	69.02	76.49	70.40	64.53	63.39	65.79

## **Summary**

This paper, by using Chinese customer satisfaction index evaluation model, conducted research on the evaluation of customer satisfaction in mobile phones enterprises, presented the customer satisfaction evaluation results for six enterprises with higher market occupation and made an analysis of major indexes.

## **Acknowledgement**

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