

Research on the Evaluation of Customer Satisfaction in B2C E-commerce Enterprises

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Abstract. This paper, by using Chinese customer satisfaction index evaluation model, conducted research on the evaluation of customers' satisfaction towards B2C E-commerce enterprises and presented the customer satisfaction evaluation results for six enterprises with higher market occupation. The evaluation results indicate that Jingdong ranked top (77.6 points), followed by Amazon and Meituan, and Taobao was listed in the last place with 74.2 points. Also, the paper made an analysis of major evaluation indexes.

Introduction

In recent years, E-commerce has witnessed a rapid development and played an increasingly important role in people's daily life. However, ensuring complaints have influenced the healthy development of E-commerce and even national economy. Thus, it has become a focus of research for the current academia and industry to develop the E-commerce satisfactory to customers or improve E-commerce customers' satisfaction. 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 B2C E-commerce 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:

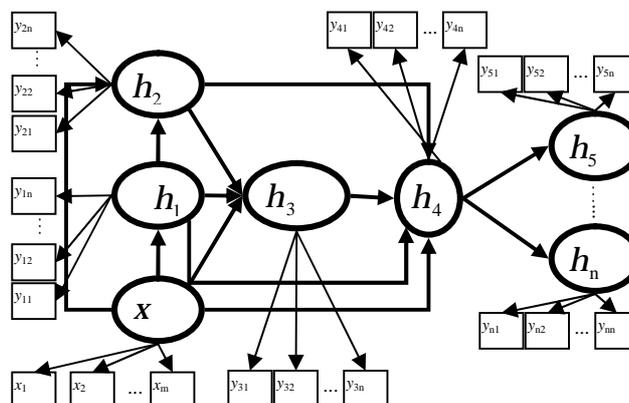


Fig. 1 Example of Customer Satisfaction Evaluation Model

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:

$$h = Bh + \Gamma x + z$$

Where, h means endogenous latent variable; x means exogenous latent variable; B means relationship between endogenous latent variables; Γ means impact of exogenous latent variable on endogenous latent variable; and z 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:

$$X = \Lambda_x x + d$$

$$Y = \Lambda_y h + e$$

Where, X means the vector formed by exogenous indexes; Y means the vector formed by endogenous indexes; Λ_x means the relationship between exogenous and endogenous indexes, or factor loading matrix of exogenous index on exogenous latent variable; Λ_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 B2C E-commerce enterprises, the evaluation model is shown in Fig. 2.

Fig. 2

Product type
Purchasing procedure
Product quality
Shipping package
Delivery speed
Online customer service
Overall perceived quality
Perceived quality
Overall expected quality
Expected quality
Overall image
Service characteristics
Brand image
Overall satisfaction
Satisfaction compared to others (similar E-commerce enterprises)
Satisfaction compared to ideal services
Satisfaction compared to the expected
Customer satisfaction
Perception towards price under

given quality
Perceived value
Customer loyalty
Willingness to repurchase
Customer recommendation

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 B2C 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. Jingdong ranks top with highest customer satisfaction with 77.6 points, followed by Amazon and Meituan, and Taobao is listed in the last place with 74.2 points.

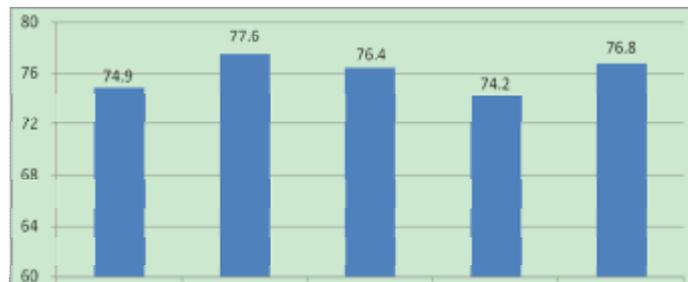


Fig. 3 Evaluation Result of Customers’ Satisfaction towards B2C E-commerce Enterprises

Dangdang
Jingdong
Meituan
Taobao
Amazon

Table 1 Customer Satisfaction Evaluation Result in Terms of Major Indexes

Brand	Service Type	Purchasing Convenience	Product Quality	Shipping package	Timeliness of Delivery	Security	Attitude of Service Personnel
Dangdang	74.07	77.73	76.57	76.9	76.76	76.71	76.67
Jingdong	75.46	78.88	76.39	78.94	77.66	77.03	77.08
Meituan	75.93	82.28	77.53	74.95	76.03	77.53	77.15
Taobao	83.49	84.71	61.49	71.26	67.07	73.73	72.8
Amazon	74.03	79.71	78.8	80.37	78.2	78.26	76.51

Among the customer satisfaction evaluation result in terms of major indexes, Taobao ranks top in service type (83.49) and in purchasing convenience (84.71); Amazon ranks top in product quality (78.8), in shipping package (78.2) and in security (78.26); and Metuan ranks top in the attitudes of service personnel (77.15).

Summary

This paper, by using Chinese customer satisfaction index evaluation model, conducted research on the evaluation of customer satisfaction in B2C E-commerce enterprises, presented the customer satisfaction evaluation results for six enterprises with higher market occupation and made an analysis of major indexes.

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