

Introduction

The short video industry is an important product of the current mobile Internet era, and its content can be uploaded to an independent short video platform or a comprehensive short video platform by ordinary users, professional users or professional institutions. Launched in September 2016, Tik Tok is a representative enterprise in the field of short video. By January 2020, the number of daily active users of it had exceeded 400 million. However, due to the small differences of various short video software, the competition in the short video industry is quite serious, so user satisfaction is related to the enthusiasm of users to continue to use the short video platform.

Mathematical Formulas

$$W_i'' = 0.5(W_i + W_i') \quad (1)$$

W_i : Subjective weight of primary and secondary indicators

W_i' : The normalization process obtains the entropy value of the first-level indicator

$$V_{total} = \sum_{j=1}^n b_j v_j \quad (2)$$

v_j represents the comprehensive evaluation value, and b_j represents the evaluation level.

Research Questions

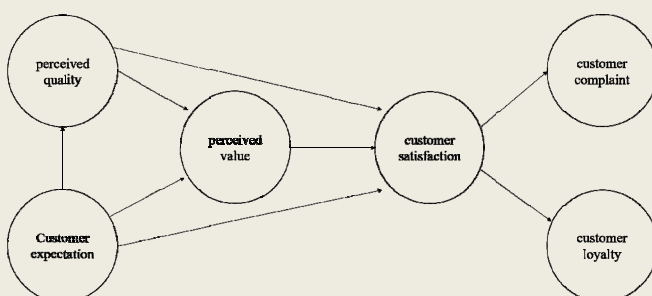
The investigation is based on the user satisfaction index model in America, and we constructed a new satisfaction scale based on the development characteristics of Tik Tok industry and the status of the platform, which affects the users' satisfaction from seven dimensions: perceived video content, perceived convenience, perceived business, perceived social interaction, perceived service quality, customer expectation and perceived value.

Methodologies

We determine the data source through questionnaire survey, use SPSS, excel analysis tools, and use weighted average method to improve fuzzy comprehensive evaluation to quantify satisfaction, not only obtaining the overall satisfaction of the users, which is 3.543, but also getting the satisfaction of all dimensions. Finally, we put forward some reasonable suggestions to improve Tik Tok satisfaction.

Figures

Figure 1. ACSI model



Conclusion

1) The overall satisfaction of Tik Tok is 3.543, indicating that users of Tik Tok relatively recognize the overall image of Tik Tok. However, it also reflects that Tik Tok cannot give users great satisfaction in some aspects, and there is still room for improvement.

2) The highest rating of perceived video content is 3.632, indicating that Tik Tok users are most satisfied with the video content. Tik Tok video content is rich and can basically meet the needs of most users.

3) The satisfaction of perceived convenience and perceived social contact was the lowest, both of which were 3.263. Tik Tok mainly relying on convenient operation design meets user psychology, but feels portability satisfaction index is low, due to the fact that users of Tik Tok are less satisfied with its secondary indexes video sharing (need to save local before sharing) and traffic consumption (compared with TV series and movies, audio and video traffic consumption of the same length of time is more).

4) Customer satisfaction and perceived value are higher than overall satisfaction. The expected satisfaction of customers was 3.626, and the perceived value was 3.581, both of which were higher than the average index value of 3.543, indicating that the value of Tik Tok APP was recognized and accepted by users.

5) Perceptive e-commerce and perceptive service quality indicators are lower than the overall satisfaction. The perceived service quality index value is 3.370, which is mainly reflected in the problems of Tik Tok APP, such as miscellaneous advertising content, too many homogeneous videos pushed, and unpractical additional functions. In terms of perceptive e-commerce, the satisfaction rate is 3.540, which is lower than the average index. This is mainly due to the emergence of content e-commerce and celebrity e-commerce.

Tables

Table 1. Reliability analysis table of each dimension scale and total scale

Variable	Item	Cronbach's coefficient	KMO value
Total table	29	0.999	0.911
Perceiving video content	4	0.862	0.872
Perceived convenience	5	0.876	0.746
Perceptive e-commerce	4	0.835	0.837
Perceived social contact	3	0.845	0.735
Perceived service quality	7	0.867	0.781
Customer expectation	4	0.884	0.715
Perceived value	2	0.857	0.869

Table 2. Weights of each first-level index

Indicators	Weight
Perceiving video content	0.150
Perceived convenience	0.054
Perceptive e-commerce	0.068
Perceived social contact	0.035
Perceived service quality	0.116
Customer expectation	0.219
Perceived value	0.358

Table 3. Satisfaction of each level indicator

Indicators	Satisfaction
Perceiving video content	3.6316
Perceived convenience	3.2627
Perceptive e-commerce	3.5404
Perceived social contact	3.2626
Perceived service quality	3.3696
Customer expectation	3.6261
Perceived value	3.5813