Research on the Impact of Interaction on Customer Engagement in Network Community

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Abstract. With the advent of the era of web 2.0, network information technology tends to interact with human beings in real time, which makes the interaction in the network community more frequent, real-time and closer. As an external clue, the interaction in the network community plays a very important reference role in influencing consumers' purchase decisions. This paper mainly focuses on the relationship between the two interactions (customer-customer, enterprise-customer) and customer engagement, and explores its internal relationship. The research finds that the interaction in the network community is positively affecting the formation of customer engagement, and puts forward relevant marketing suggestions based on the research conclusions, which provides theoretical basis for enterprise decision-making and follow-up related research.

Introduction

Along with the popularity of the Internet and the development of social media, interactive activities such as communication, trading, and other activities in people's daily lives have gradually shifted from the traditional offline to online. More and more people carry out interpersonal maintenance and expansion through the Internet. Many enterprises and businesses are grasping this big change, adapting to the development trend, and turning the direction of marketing strategy to the major online platforms in the Internet\(^1\). Therefore, the related research work around online marketing is of great significance.

Nowadays, the center of marketing has been transformed from goods to services, and the intangible value of the transaction process has become crucial. Customer engagement is the key factor of the enterprise marketing, which has become the hot topic.. Through the research on related literatures, the research on customer engagement is not very deep.In order to make the research more targeted and specific, this paper focuses on the interaction in the online community\(^2\). Enrich the research field by conducting corresponding research on customer engagement.

Although the research on customer engagement is increasing, there are few studies on customer engagement for the interaction. This study focuses on exploring the impact of interactions on customer engagement, analyzing the impacts of different customer outcomes resulting from different interactions, and summarizing the types of interactions that are beneficial. This paper clarifies the specific meaning of the online community, and at the same time, through the in-depth study of the interaction in the online community, this interaction is more clear and is conducive to further research in this field in the future.

Literature Review

Network Community

The development of science and technology has led to the change of social structure and social relations, a new social form—the network society has gradually emerged, and the network community has gradually grown.

The rise of new things has attracted countless scholars. Most researchers conduct research on the
online community through literature summarization and qualitative analysis. The online community is a virtual social group that interacts on the Internet platform. The main medium of this kind of network interaction is the Internet, and finally formed a group of people with common goals and the same group consciousness and relatively stable relationship[3].

Network community is a new group, which is different from the real group. And it will grow stronger with the continuous development of the Internet industry, which will have a far-reaching impact on the future society.

**Interaction**

By summarizing and summarizing the relevant literature, the interaction relationship studied by academia can be divided into two categories: customer-enterprise interaction and customer-customer interaction.

George and Mink[4] point out that customer-customer interaction is any form of individual or group interaction in which some customers communicate when goods and services are sold or used.

Bruhn and others[5] mainly study the mechanism of interaction. According to the principle of social interchange, customer interaction is divided into two or more processes of information sharing and interaction between consumers using the same brand on the online platform of B2B brand. ZL Li[6] classifies the types of interaction according to the main characteristics of interaction, scene, contact mode, content characteristics, event type, degree and the final effect of interaction.

**Customer Engagement**

With the rapid development of socialized commerce, some new marketing methods are constantly emerging, and the hotspots of marketing concern are constantly changing and updating. Customer engagement is a new hotspot of discussion.

Customer engagement has become a hot topic in academic circles. Aul has studied customer engagement from three aspects: emotion, cognition and behavior. It concludes that customer engagement is a comprehensive manifestation of psychology and behavior. It describes the degree of attention and intensity of participation of customers in organizational providing and initiating activities[7].

With regard to media fit related to customer engagement, Calder and Metahouse pay more attention to consumers' inner feedback when using online media. They distinguish media fit from simple likes, and point out that fit is a stronger state of communication between media and consumers rather than a single likes[8]. On the concept of customer engagement, Patterson believes that customer engagement is the expression of the relationship between customer and service provider's behavior, emotion and cognition[9]. Vivek believes that customer engagement is the customer's active participation in the organization, which increases the strength of organizational contact[10]. Hollebeek proposes that customer brand fit is the customer's emotional, cognitive and behavioral activities in the brand interaction, thus showing the motivation, brand association and dependence[11].

Although there are many studies on interaction and customer engagement, there are few studies on the relationship between them. Therefore, this paper explores the impact of interaction on customer engagement, and studies customer engagement more pertinently, enriching the relevant research on customer engagement.

**Research Hypothesis**

This research is under the background of the Internet, taking the network community as the main research object, and choosing customer engagement as a hot marketing topic for research. According to the relevant literature and social phenomena, the marketing method of interaction in the network community has a certain impact on achieving customer engagement, and different types of interaction have an impact on the degree of customer engagement[12]. This study will study from the two perspectives of customer-customer interaction and enterprise-customer interaction, and select three dimensions of customer engagement to test: cognition, emotion and behavior[13].
In the network community, customers will communicate with each other independently, and will voluntarily publish their experience or feelings about the use of a brand or enterprise's products. Whether good comments or bad feedback is an interaction, it will have a certain impact on the customer engagement of a brand or enterprise. In the online communication platform, when customers discuss a brand or product, they will naturally exchange some information related to the enterprise or brand, such as the historical information of the enterprise or brand, the current situation of development and so on. When meeting a good product or brand, some customers will instinctively and voluntarily recommend it to other customers. After communicating with other customers, most people will increase their trust and love for a brand or enterprise when they get good comments or positive energy information from other customers.

Therefore, the following hypotheses are proposed:

H1: The customer-customer interaction has a positive impact on customer cognition.
H2: The customer-customer interaction has a positive impact on the emotion between customers and enterprises.
H3: The customer-customer interaction has a positive impact on the behavior of customer engagement.

In order to improve brand recognition and popularity, enterprises will actively participate in the interaction of network groups and actively initiate interaction, which will inevitably have an impact on customer engagement. Enterprises carry out online activities and offline activities for the same purpose, are to improve customer attention, expand publicity, promote sales and so on. When the enterprise sends some articles or videos related to the enterprise directly, it will be more authentic and let customers know the enterprise more directly. Some online activities, such as forwarding and accumulating, are direct ways to let more customers pay attention to and understand the enterprise. It is a good marketing method to let customers participate in the activities carried out by the enterprise and feel the culture and products of the enterprise. Through carrying out online activities, the role of publicity and promotion has been achieved, so that enterprises can have better sales of products.

Therefore, the following hypotheses are proposed:

H4: The enterprise-customer interaction has a positive impact on customer cognition.
H5: The enterprise-customer interaction has a positive impact on the emotion between customers and enterprises.
H6: The enterprise-customer interaction has a positive impact on the behavior of customer engagement.

Empirical Analysis

In this survey, the main way is to send questionnaires online. A total of 255 questionnaires were collected, of which 240 were valid and 15 were invalid. The qualified rate of the questionnaires was 94.12%.

Reliability Analysis

The reliability coefficient of the Interactive Relations Scale is 0.796, which is greater than 0.7. Therefore, the reliability quality of the research data is good and can be used for further analysis. The reliability coefficient of customer engagement scale formed by customer-customer interaction is 0.853, which is greater than 0.8. This shows that the reliability of the research data is high and the internal consistency of the data is good. The reliability coefficient of the customer engagement scale formed by enterprise-customer is 0.860, which is greater than 0.8. Therefore, it can be concluded that the research data have high reliability quality and high internal consistency.

Validity Analysis

The results show that the similarity values of all research items are higher than 0.4, which indicates that the information of research items can be effectively extracted. In addition, the KMO value is 0.859, greater than 0.6, which means that the data is valid. In addition, the explanatory rates of
variance of the three factors were 24.920%, 23.129%, 16.528% respectively, and the explanatory rates of cumulative variance after rotation were 64.577%>50%. It means that the amount of information can be extracted effectively.

**Regression Analysis**

We use regression analysis to test the hypothesis and draw the following conclusions.

**Table 5. Regression analysis of customer-customer interaction and customer engagement.**

| Dependent variable | B     | t     | p      | VIF  | R²       | Adjustment R² | F     |
|--------------------|-------|-------|--------|------|----------|--------------|-------|
| Cognition          | 0.429 | 5.835 | 0.000**| 1    | 0.224    | 0.217        | 34.047**|
| Emotion            | 0.218 | 3.072 | 0.003**| 1    | 0.074    | 0.066        | 9.435**|
| Behavior           | 0.295 | 4.326 | 0.000**| 1    | 0.137    | 0.13         | 18.711**|

Independent variable: customer-customer interaction

* p<0.05 ** p<0.01

**Table 6. Regression analysis of Enterprise-Customer interaction and customer engagement.**

| Dependent variable | B     | t     | p      | VIF  | R²       | Adjustment R² | F     |
|--------------------|-------|-------|--------|------|----------|--------------|-------|
| Cognition          | 0.653 | 7.978 | 0.000**| 1    | 0.35     | 0.345        | 63.650**|
| Emotion            | 0.673 | 6.456 | 0.000**| 1    | 0.261    | 0.255        | 41.680**|
| Behavior           | 0.492 | 4.688 | 0.000**| 1    | 0.157    | 0.15         | 21.981**|

Independent variable: Enterprise-Customer interaction

* p<0.05 ** p<0.01

From Table 5 and Table 6, we can see that the model has passed F test, and the P value is less than 0.05. Combining with the correlation coefficient and other data, we can conclude that the independent variable has a significant positive impact on the dependent variable, assuming that H1, H2, H3, H4, H5 and H6 are all valid.

**Conclusion**

Based on the theory of many scholars, this paper makes a more detailed study of customer engagement, and studies customer engagement from the interaction of network communities, which opens a new perspective of research.

This paper mainly studies the impact of interaction on customer engagement in the network community. In the study, the interaction is divided into two categories: customer-customer interaction and enterprise-customer interaction, and customer engagement is measured through three dimensions of customer cognition, emotion and behavior. Through the form of questionnaires to collect effective data, analyse data, and find the final result of the study. Both types of interaction have positive effects on the three dimensions of customer engagement. Based on the results of the comprehensive study, we conclude that the interaction in the network community has a positive impact on customer engagement.

According to the research conclusion, this paper draws the following marketing enlightenment:

(1) Enterprises can use online interactive activities to promote the formation of customer engagement and ultimately achieve marketing objectives. Traditional marketing methods are also applicable to the Internet, but the form has changed. Off-line interactive activities such as leaflets, press conferences and lottery can be flexibly converted into online interactive activities such as forwarding praise, live interaction, online lottery, and have better publicity effect.

(2) Enterprises should properly carry out online activities, not too frequently. Surveys have shown that too many online activities can create a certain degree of disgust and loss of novelty among customers, which in turn plays a hindrance role. Therefore, enterprises should carefully consider the cycle and frequency of interaction when making activity plans.

(3) Enterprises should ensure the authenticity and efficiency of their activities. Since not all people believe in the network information completely, we should pay more attention to the
authenticity. In sending articles, videos and other information, we should consider whether the facts are consistent and not exaggerate the information too much. Otherwise, it will easily cause customers to question and reduce the trust of enterprises. In the lottery and other activities involving prizes, money and personal interests, we must keep our promises and do what we say, otherwise it will seriously affect customers’ brand loyalty.

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