

Consumer Purchase Intention Research Based on Social Capital and Cognitive Response

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Abstract: Based on the stimulus-organic-response model, this paper establishes a model to study the factors influencing consumers' purchase by combining relevant theories. The results show that the cognitive response determines consumers' purchase intention, and the structural dimension and cognitive dimension of social capital significantly affect the cognitive response, while the relationship dimension has no significant impact on the cognitive response.

1. Introduction

Why do social e-commerce companies show up in the remaining few market share and show strong strength? By using social media to enhance social interaction, social e-commerce companies enhance the flow of information between consumers and make consumers' attitudes toward goods change, thereby supporting customer decision-making and assisting consumers in online shopping. Based on social capital theory and cognitive response, this paper studies the impact of virtual social capital on cognitive response from the network recommendation on social platforms, and then explores the influence of social capital on consumers' purchase intention with cognitive response as an intermediary, enriching and supplementing the existing research system of social e-commerce.

2. Research model and hypotheses

Lin & Lu (2011) pointed out that in social e-commerce environment, consumers will voluntarily join different online communities or online organizations based on their own interests in social networks, and receive or send similar information resources [1]. On social networks, user-generated content interactions gradually form small groups with shared language and shared vision. Organizations can reach consensus and reduce perceived barriers based on shared language, vision, and presentation rules, and achieve a shared vision of the organization's members. The shared language includes not only the information and evaluation of the same product by users on the social e-commerce platform, but also public terms, communication modes and specifications. A shared vision is the utility and goal that members of the group want to achieve by purchasing products. In the social e-commerce environment, consumers join different organizations according to their own preferences. Because they share a common vision and goals, consumers are willing to share the information they have and are willing to trust information posted by others. The standardized use of these vocabularies can improve the quantity and quality of online word of mouth, thus providing a more efficient and convenient way for consumers to understand product information.

H1a: Shared language is positively associated with consumers' cognitive response.

H1b: Shared vision is positively associated with consumers' cognitive response.

The relationship dimension refers to the resources that are generated by the relationship and act through the relationship, which is expressed as the recognition and trust formed by the group

members in the long-term information interaction process. The goodwill and trust of group members to other members in the network environment have a significant impact on the dissemination and acquisition of their knowledge. In the group organization formed by the network recommendation on the social e-commerce platform, the users are more willing to receive relevant information and publish comments on the product because of trusting other members. When members have a higher recognition of the group and consider themselves as a part of the group, they are more willing to share product information with others. Whether the user is intimate with other members or in order to maintain their status in the group, they will promote their participation in sharing product information. The higher the level of participation, the more in-depth awareness of the product will be generated.

H2a: Trust is positively associated with consumers' cognitive response.

H2b: Recognition is positively associated with consumers' cognitive response.

The interaction between social networks is the main channel for disseminating information: the higher the level of interaction, the greater the impact of information released by users on consumers. The closer the social relationship between members of the information exchange, the stronger the frequency and depth of information exchange. Chiu et al. (2006) pointed out that the interaction between individuals in social networks has an important impact on the number of knowledge sharing of community members [2]. On the social platform, the convenient interactive channels and high degree of user association enable users to spend time interacting with other people in social interactions, consumers will be able to obtain useful information of products more easily and improve their cognition of the product.

H3: Social interaction is positively associated with consumers' cognitive responses.

According to the relevant theories of consumer behavior, consumers' perceptions of product information and shopping experience are one of the important factors affecting individual behavior, and they are the basis and motivation of forming consumers' willingness to purchase. The important role of cognitive attitudes in predicting the use of information systems, and that cognitive attitudes have a positive impact on motivating users to use information systems. Stronger the cognitive reaction, the stronger the purchase intention. Network users can obtain cognitive responses of commodity information and evaluation through social interaction, which can enhance consumers' willingness to purchase.

H4: Consumer cognitive response is positively associated with purchase intention.

3. Questionnaire design and data collection

Shared language, Social interaction, Recognition, Trust, Shared vision were modified from Chiu et al. (2006) [2]. Cognitive response was measured using the scale modified from Shih et al. (2013) [3]. Purchase intention was measured using the scale modified from Bansal & Voyer (2000) [4]. The online and offline methods are used to formally distribute the questionnaires. The online questionnaires are not distributed to the survey group, and the data of different ages and occupational respondents are collected through relatives and friends. The offline paper questionnaire is mainly for college students. A total of 267 valid questionnaires were obtained, including 50 paper questionnaires.

4. Data analysis

4.1 Reliability analysis

We assessed the reliability of the questionnaire with Cronbach's alpha and composite reliability (CR), which required values to be higher than 0.7 for each factor. SPSS 22.0 was used to analyze the collected data and the calculation results were summarized in Table 2. It can be seen that the reflective constructs in our study achieved scores above the recommended value of 0.7 for Cronbach's alpha and composite reliability (CR), and the alpha values of the shared vision and social

interaction relationship were higher than 0.8. This indicates that the data collected by the table was of good reliability and the inherent quality of the model was ideal.

Table 1 Results of confirmatory factor analysis.

Construct	Indicator	Standard loading	AVE	CR	Cronbach's a
SL	SL1	0.57	0.505	0.750	0.726
	SL2	0.81			
	SL3	0.73			
SV	SV1	0.77	0.573	0.801	0.801
	SV2	0.76			
	SV3	0.74			
TR	TR1	0.64	0.517	0.761	0.755
	TR2	0.75			
	TR3	0.76			
ID	ID1	0.68	0.524	0.767	0.765
	ID2	0.75			
	ID3	0.74			
SIT	SIT1	0.61	0.584	0.805	0.795
	SIT2	0.87			
	SIT3	0.79			
CR	CR1	0.80	0.712	0.881	0.883
	CR2	0.86			
	CR3	0.87			
CBT	CBT1	0.71	0.524	0.767	0.767
	CBT2	0.70			
	CBT3	0.76			

4.2 Validity analysis

For construct validity, both convergent validity and discriminant validity were examined. Convergent validity was confirmed by examining both the average variance extracted (AVE) and indicator loadings. As shown in Table 1, the standard loadings of all items and the AVE values were higher than the recommended level of 0.5, indicating that the convergence validity of the questionnaire is better, that is, the higher the correlation of the questions with the same variable, the better the questions are set. The values on the diagonal in the table are square roots of AVE values calculated in Table 1, and the values at bottom left are correlation coefficients between the variables calculated by AMOS. The discriminant validity is supported when the square root of the AVE for each construct is greater than the correlations between that construct and other constructs. It can be concluded that the questionnaire used in this study has good validity can be obtained.

4.3 Model fitness test

The fitness index is used to evaluate whether the established model and the path analysis results of questionnaire data collection are compatible with each other. The actual and recommended values of the model fit indices are listed in Table 2. Except for GFI and NFI, the other fit indices of the model were better than the recommended thresholds, and the value of GFI is very close to the recommended value. Therefore, it can be considered that the overall fitness of the established model is good, which can be used to verify the research hypothesis and carry out the next path test of the model.

Table 2 Measures of the model fit.

Fit index	χ^2/df	GFI	AGFI	CFI	NFI	RMSEA
Recommended range	<3	>0.90	>0.80	>0.90	>0.90	<0.08
Actual value	1.938	0.893	0.857	0.931	0.869	0.059

In this paper, AMOS(version21.0) is used to analyze the path of the structural model, and the standardized path coefficient and significance coefficient between the variables are calculated. In addition, The results of R2 show that the model accounted for 52% and 39% of the variances in purchase intention, cognitive appraisal respectively, which indicate an acceptable level of explanatory power. Fig. 1. Shows the standardized path coefficients and significance coefficients. If the p-value of the standard path coefficient is greater than 0.05, and is shown as "ns" in Fig. 1, it means that the significance test has not been passed and the correlation between the two variables is not significant. According to the data in Fig. 1 ,all hypotheses are valid except H2a and H2b.

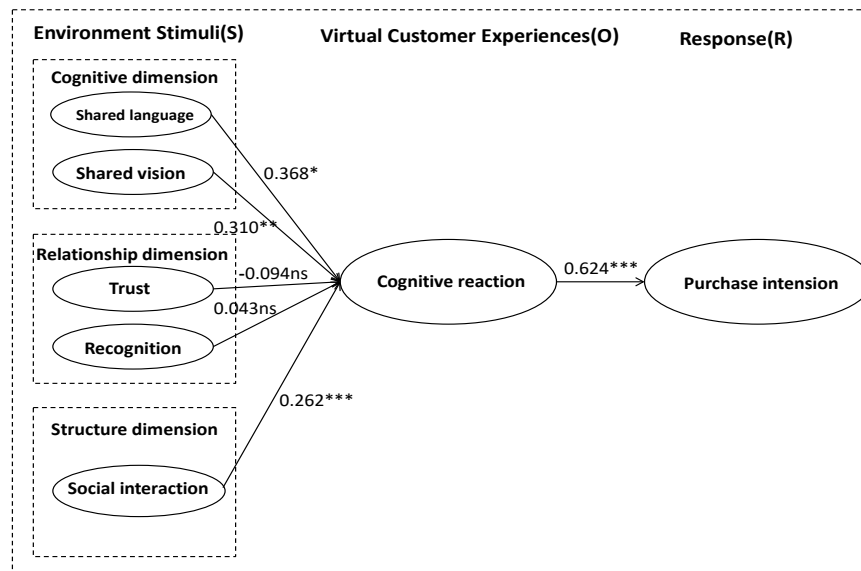


Fig.1 Results of the research model tests. *, $p < 0.05$, **, $p < 0.01$, ***, $p < 0.001$;

5. Summary

It is concluded that if consumers have shared language and shared vision in the social e-commerce platform, they are more likely to gain knowledge of commodity information and shopping experience, and their purchase intention will be enhanced. The stronger the social interaction relationship among the consumers, the easier it will be to increase the cognition of consumers, and the willingness to shop will also be correspondingly enhanced. When socialized e-commerce enterprises are organized and operated, they should pay more attention to the operation of network platform and the maintenance of social relations within the various groups of the platform.

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