Value Orientation, Internet Usage, and Online Shopping Adoption: A Structural Equation Modeling Investigation on Chinese Consumers

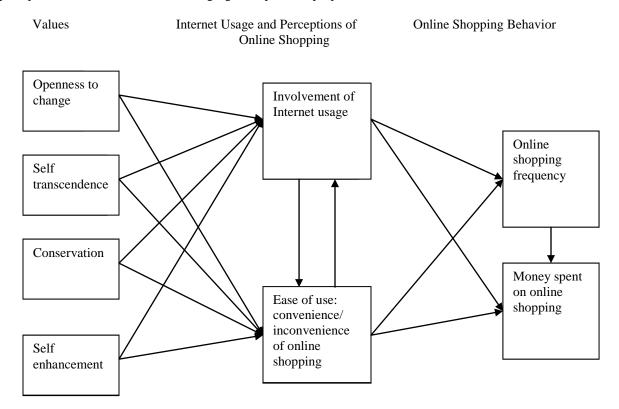
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Purposes

The research aimed to combine two of today's most salient phenomena in contemporary China: the rise of the consumer society in China and fast growing Internet accessibility. The purpose of the study was to investigate the impact of Chinese consumers' values on their Internet usage and online shopping behavior.

Background and Theoretical Framework

In light of the theories of technology (Internet in particular) adoption and related empirical studies, the factors explaining Internet usage and its specific implications (e.g., who does and does not shop online) can be physical, psychological, and social or cultural in nature. However, the importance of consumer lifestyle and a more fundamental aspect of consumers' characteristics, that is, their value orientation, have not been fully explored in Internet usage and online shopping studies. The current research proposed a model which is based on the tenets of the Technology Acceptance Model (TAM) (Davis et al., 1989), that is, consumers' perceptions of technology determine their usage. More importantly, consumers' values, as conceptualized with Schwartz's (1992) Universal Value Structure, were added into the model as precedents to consumer internet usage as well as online shopping perception and behavior. The following figure depicts the proposed model:



Design/methodology/approach

The current study was based on responses from a sample of 1,620 respondents in five Chinese cities: Beijing, Shanghai, Guangzhou, Chengdu, and Changsha. It was a randomly condensed dataset of 2005 CIS (China Internet Survey) data, which is a part of World Internet Project that advocated by the UCLA Center for

Communication Policy. It should be noted that the data is being used as a secondary data source and that the authors of the current study had no control over the data collection process. Descriptive statistics were used to measure the respondents' characteristics. Factor analysis was used to identify the respondents' value structure. In addition, binary logistic regression analysis was used to estimate the effect of value orientation on the probability of becoming an internet user/online customer, after controlling demographic variables. Finally, a Structural Equation Modeling was conducted to describe the direct and indirect causal effects among the participants' value orientation, perception of Internet and online shopping, and online shopping behavior.

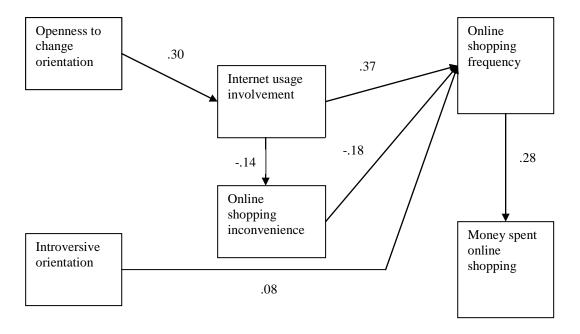
Findings

The 'Internet Users' category was composed of 818 individuals (50.5% of the sample) who had used Internet. The 801 individuals who had not used Internet represented the 'Internet Non-users.' There was one missing observations. With regard to the observed demographics between the two groups, the Internet Users had a lower mean age (29 vs. 45, t=29.4. p < .001) and a higher mean monthly per capita income than Internet Non-users (1294 vs. 1095 Yuan, t=3.25, p < .001). In addition, compared with non-users, a greater proportion of Internet Users had higher educational level and a lower percentage had lower educational level. Also, a majority of Internet Users were married (60.1%), whereas a majority of Internet Non-users were single (87.5%). The differences in those demographic characteristics indicate some evidence of a "digital divide" in Internet usage. Among the Internet Users, there were only 28% of online shoppers.

Second, Factor Analysis of the 19 items regarding consumer values was employed. Four factors, that is, four types of value orientation were extracted using varimax rotation: Openness to Change Orientation, Introversive Orientation, Conservation Orientation, and Social Orientation.

Third, according to the logistic regression analysis, being male, having higher education level, being a student or having an 'openness to change orientation' will increase the probability of one's becoming internet user. Also, having higher education level and/or higher income, being the member of the Party, have more internet usage experience or having an 'introversive orientation' will increase the probability of one's becoming online shopper.

Last, the result of the Structural Equation Modeling is shown in the following figure:



The result indicates that consumers' values significantly affect their Internet usage and online shopping behavior. Specifically, one of the consumer values, Openness to Change Orientation, positively affects respondents' internet usage involvement, which has a positive effect on their frequency of online shopping. Also, a direct positive influence of respondents' Introversive Orientation on their online purchase frequency was found. The respondents' Internet usage involvement also significantly affects their perception of ease of online shopping: the more they involved in Internet usage, the less inconvenience they perceive about online shopping. In addition, the respondents'

perceived online shopping inconvenience negatively affect their online shopping frequency. Finally, the respondents' online shopping frequency positively affects the money they spend online shopping.

Conclusion, implications, and contributions

The current study demonstrates the relevance and importance of consumers' value orientation with regard to consumers' Internet usage and online shopping perception and behavior in contemporary China. This study expands the TAM and diffusion theory of Rogers (Rogers, 1962) by adding individuals' basic value orientation in explaining the adoption of new technology. Researchers and marketers should not simply examine consumers' demographic and socioeconomic characteristics and their attitudes and perceptions, but recognize the importance of understanding a more fundamental factor: their value orientation. This study also contributes by modeling a combination of consumer value structure and online perception and behavior.

Research limitations

Firstly, consumer value orientation was only regarded as a precedent of perception and behavior and assumed to be stable in this study. However, the internet usage or online shopping behavior may also have an effect to change one's value orientation gradually. Therefore, the bidirectional relationship between value orientation and online shopping perception and behavior should be considered in future study. Secondly, some important aspects of consumers' perceptions about Internet and online shopping in particular, such as 'perceived risk' or 'trust in e-commerce transaction,' which have been found important, were not included in the questionnaire and should be investigated in future research. Thirdly, the sampling frame in this study consisted only the consumers in five big cities in China. Future research with a more diverse population is needed.

References

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