

LITERATURE REVIEW OF NETWORK PUBLIC OPINION ABOUT THE E-COMMERCE

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ABSTRACT

In recent years, many scholars in the field of e-commerce network public opinion have been engaged in research. Network comment has a great impact on the development of e-commerce businesses. Since the total number of Internet users in China ranked second in the world and along with the rise of e-commerce, the future of China's online shopping continues to grow and develop to become an inevitable trend, the study of e-commerce network public opinion is necessary. In order to facilitate in-depth study of scholars on this issue, this paper attempts to sort the overview of scholars from domestic and abroad, and according to the current development of e-commerce network public opinion and what I have learned then summarized all these viewpoints.

Keywords: E-commerce, Network public opinion.

1. THE VIEWS OF NETWORK PUBLIC OPINION IN E-COMMERCE THAT WAS PUT FORWARD BY THE DOMESTIC SCHOLARS

At present, the number of online shopping user in China is growing in a fast speed, as shown in Chart 1 and Chart 2. Once people make online shopping, they will make a comment on the purchase of goods, and their comments directly affect the electricity supplier of enterprise Therefore, it is very necessary to research the e-commerce network public opinion.

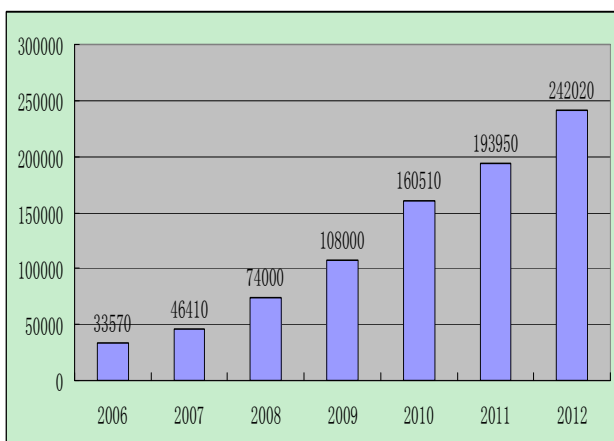


Figure 1. The number of online shopping user (Thousand)

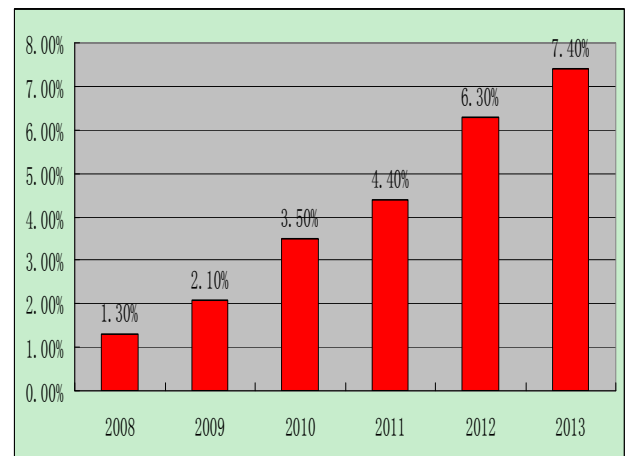


Figure 2. Online shopping occupies the proportions of net purchase total retail sales in social consumer goods in 2008—2013 years

(Data sources: CNNIC, China's online shopping market research report, 2012, March 2013)

In China, the concepts of public opinion appear in ancient times, some dynasties ruling class is also more emphasis on discovery and divert public opinion, but the basic theory systematic study of public opinion appeared relatively late. Wang Laihua's book "Introduction to public opinion research" introduce Public Opinion Research Institute of Tianjin Academy of Social Sciences was established in 1999, which is the first named agency in public opinion research, it is mainly in the field of public opinion on the basic theory of a study, the researchers Public Opinion published a study of

the basic concepts and theories monograph "Introduction to Public Opinion Research theories, methods and practical focus" [1]. Network public opinion research monographs have Liu Yi "network public opinion research Introduction" PR Public Opinion Research Institute, Communication University of China, established in 2005, its research mainly includes multiple directions of public opinion, the crisis early warning, which publishes a variety of public opinion report, held a variety of public opinion forum, for a number of government departments, institutions and provide a public opinion consulting; China international Public Opinion Research Center, Shanghai international Studies University, founded in 2008, the use of their language advantages, the research aimed at the international public opinion; 2009 Shanghai Jiao tong University public opinion and public opinion research center was established, it is mainly for the government. It's government policy that requires research status and development trend of public opinion, from the government's public policy formulation, implementation and evaluation to help decision-making [2].

Zhou Rujun, Wang Tianqi think that the formation of a network of public opinion mainly due to social conflicts, extensions and contingencies and other factors stimulate personal opinion. In the e-commerce form a network of public opinion is also mainly due to the buyer and the seller in the transaction is completed, the product quality and service quality to make comments. The buyer is ultimately given "Good", "Average" or "Poor" depends not only on product quality and service quality, but also depends on many uncertain factors such as the buyer's personal feelings [3].

Zhang Yongfeng through the "Travel News" event network public opinion information in the "quantity" and "quality" of the comb and analysis, pointed out that the views and positions expressed by the network of public opinion tends to its roots and point to phenomena and problems still exist in real life [4]. Cao Jinsong pointed out that, according to the time axis of the analysis, the development of a network of public opinion has "spread - Focal length - hot - the popular" four stages and "broke, sublimation, the continuation of the" three marks" [5]. Network public opinion tends to spread in e-commerce is no so-called propagation stage, because most buyers purchase goods only after confirmation of completion of the transaction simple and gives comments, and they will not be repeated comment, even though they can append comments, but commodity buyers do not have problems in the shelf life is not go append comments. And for consumers to purchase goods online, they are no comments qualifications. This is different from the general current events, not anyone anywhere can make a comment.

In recent years, there are several famous experts in the field of information security, through the joint several domestic universities and research institutions, mechanisms and evolution of the Internet public opinion to find the theory and techniques to predict the point of view of natural science research, and the establishment of the Beijing Jiao tong University Internet Public Opinion Research Center, launched a work in theoretical and practical aspects of technology, and achieved gratifying results. Visible, the network of public opinion is about what kind of impact on the real world have or how to achieve effective network media guide and other issues of common concern by the people, governments began focus more from the point of view of natural science research on public opinion, and not limited to the social sciences. With the popularity and increasing number of Internet users in the

future networks will become public to express their views of the major media. The network public opinion will become the main form of public expression and political participation in current affairs and other social issues. Internet public opinion will have broad application prospects in future business development in China, but network public opinion research also at a primary stage in China, in order to apply the more precise, capability, we still have a long way to go, this is the majority of scholars need to continue to learn and improve, research and innovation.

Highly educated people is a major component of China's among Internet users, accounting for more than 90% of the total number of Internet users, this ratio is close to the United States and other developed countries. It is precisely because of its high academic and other features, so they pay more attention to current events and other social and political issues; their enthusiasm about participating in the network of public opinion is also high. Their insights far beyond the traditional public views on social issues are often able to make a quality in-depth advice. Thus, the network of public opinion in the Internet age will play an increasingly important role.

Wang Jin pointed out that "the analysis of network-based fuzzy inference intuition situation and threat assessment Public Opinion Research," a paper network public opinion trend analysis is based on data collected over the front of public opinion carried out, but also the network threat assessment on the basis of public opinion. Currently, a large part of the network of public opinion theoretical research in the social sciences, and technology mainly in the network of public opinion data collection, to extract information on the research topic detection and tracking technology, the lack of an overall trend of public opinion grasp [6]. It's also pointed out that the future trend of China's network public opinion will grasp the overall direction of public opinion towards the trend of development, which is also helpful to an expert in the study of the future aspects of network public opinion pointed out the road.

Peng Dan pointed out that public opinion once appeared on the network, its spread will definitely have our lives more profound impact on public opinion through the dissemination of research to find the regularity of the network can be for some in the "network-based review of Internet public opinion research" in an article may lead to a stable social mention in advance warning to take appropriate measures for the relevant departments to provide advice, thus affecting the spread trend of network public opinion, which is making decisions for the government, purification and prosperity network, building a harmonious society has a very important significance [7]. It can be seen in e-commerce network public opinion can also lead to some unexpected phenomena, such as the information in the wave of globalization, the development of Chinese e-commerce market is also great. Only in 2011 one year transaction volume of e-commerce is about 6 trillion Yuan. In 2012 year the transaction volume of e-commerce nearly 8 trillion Yuan. Alibaba Group "Taobao" and "Tmall" in November 11, 2012 "Singles" of the day's total sales to reach staggering 19.1 billion Yuan, a figure even beyond the New World Department Store, Wangfujing Department Store and other national department store group's total sales. "Taobao system" electricity supplier in 2012 will exceed trillion in annual transaction volume, which is equivalent to the total annual turnover of eBay and Amazon, and nearly 2 percent of China's GDP. It is precisely because

“Taobao” and “Tmall” With the network platform to seize the “double-eleven” This marketing point, coupled with the rapid spread of public opinion, it was such a high record miracle in the history of sales.

Wen Tao, one of domestic scholars define the service based on the customer’s brand equity. What bring added value service brand is differentiated effect of the customer due to customer service in mind, the existing brand knowledge resulting from the reaction of the essence of brand marketing [8]. It is not difficult to explain why the majority of buyers are willing to go to “Taobao” on the brand’s flagship store and consume, because in their subconscious the brand loyalty has been formed in their mind; they believe that only quality products such as the flagship store in can guaranteed, and the price is relatively reasonable.

In the article “Sina network analysis of public opinion” Zhang Lanlan said that the news spread immediate, fast, convenient and characteristics of the rapid spread further promote the development of the network of public opinion, public opinion on the news network has become the most influential public opinion a force [9]. In the e-commerce network public opinion also has strong influence on consumers when they want to go shopping on “Taobao”. What the buyers most concerned is the seller’s credit rating, while the seller credit rating is measured by the buyer’s comments, which is opposed to traditional television, radio, newspapers and other media, the civilian population is no longer just a recipient of a variety of information, ideas, and more participants, and participation of the majority of users can cause strong reactions, trigger unexpected phenomenon.

Zhang Liang and Zhang Simin in “network public opinion monitoring and analysis system based on data mining” think that in order to analyze the network of public opinion, public opinion analysis engine technology is indispensable, it is also the core technology of public opinion analysis system [10]. The most common use in e-commerce is “Alipay” and other online transfer technology, which can promote the transaction smoothly and ensure the security during the transactions at the same time; it will reduce or avoid the unnecessary loss of property between buyers and sellers.

Sina online news article take the “Village police chief suspect because the son of a leading exam is set to cover a fugitive,” as the study sample, the propagation of a network of public opinion research found that network news published public opinion influenced the time, and access to information and easy-degree positive correlation; network public opinion influenced by network public opinion incidents involving regions, but also a positive correlation between Internet penetration; network public opinion influenced by the use of media types, Internet users is the main mobile phone users and increased gradually; network public opinion netizens attitude affected the mood of easy points to government agencies and the community, showing one-sided trend. Take “Taobao” as an example. Whether the buyer receipt the goods and make comments in time, it is also influenced by time, place, convenient to use the degree of media, and the buyer’s emotional factors when received the goods. If time and space, the media all are allowed to use the words of buyers are likely to promptly click the “completion of the transaction” and make a comment. The review is good or bad with the receipt of the goods is also triggered by emotions, buyers feel extremely satisfied or very satisfied with is most likely to give comments on the goods, and the goods received often

feel bad do not bother to participate in reviews, the buyer can only wait for the automatic completion of the transaction.

Ye Kaili and Zhang Yifan wrote the “Research and Countermeasures on e-commerce credit evaluation system analysis – take “Taobao” as an example,” this article pointed out that the evaluation of “Taobao” existing permissions set unreasonable. The reason is that the current evaluation system is a one-time assessment, which means if consumers purchase some goods, they only have one evaluation opportunities. After the evaluation, only consumers give bad evaluation that they have the opportunity to change the assessment. But if the consumers give good evaluation, when they find some problems or find that the goods are defective, it can not change the evaluation. This set is unreasonable; resulting in some of the goods, there are some problem in the quality guarantee period is difficult to get consumers to meet their own interests. And this set is not only difficult to evaluate the authority to maintain consumer interest in the business over consumers, and may confuse other potential consumers in this spending.

In the article “Research and Countermeasures on e-commerce credit evaluation system analysis - take “Taobao” as an example,” Ye Kaili and Zhang Yifan also pointed out that on the “Taobao” the evaluation is difficult to verify the authenticity of the user [11]. The credit rating is an expression of recognition, but there are a lot of consumers do not take it seriously. They simply give a “favorable” or “Poor”, rarely evaluated to fill in the details of the text. It is difficult to the potential consumers to know the quality of a commodity, largely through a detailed evaluation of the text, rather than simply to see “positive feedback” of a commodity. Among them, the purchaser will require real-name authentication seller shop, shopping does not need to confirm the identity of the buyer, evaluate and score it gives unable to visit. Evaluation of a commodity so freely, in fact, makes the “credit rating” and did not play its full role. So buyers specification will fill in the evaluation carefully, but not be arbitrary, the buyer knows the seller is most concerned about “positive feedback”, some buyers obviously very satisfied with the goods received, but they given “Poor” sellers get extra gifts promised, the purpose is to wait for the seller to contact their own change “poor” into “Good”. Therefore, strengthening the buyer authentication, no authentication is necessary, so as to ensure the purchase of credit reciprocity. There are some buyers of the goods occurred during the late logistics, logistics officers of commodities “wrestling hit”, etc. are not satisfied or dissatisfied with the courier service, which gives the buyer the seller “Poor”, which for the seller is very innocent. The reason is to set the lack of scientific evaluation of the project, could not be broken down, evaluate the project simply had no logistics for the evaluation of the project, so the buyer can only put dissatisfaction to sellers, which also affects the seller credit rating. Of course, there are some sellers of commodities indeed some problems, but the use of own friend to get “praise” for their aim is to attract other potential consumer spending. There are some sellers also use own friend to defeat competitors to make a difference in assessment, in order to obtain unfair competition. This will not only contrary to business reputation, but also stand on China’s laws contrary, all of these should be fully checked, registered at the beginning of the seller should be repeatedly stressed that an order prohibiting, if the similar situations appear again must increase the punishment.

Sun Yong also came up with his viewpoints in the article “Taobao suppliers based on AHP improved credit evaluation system,” this article make some description on the store’s credit rating of “Taobao”. The credit evaluation solves the information asymmetry problem between customers and businesses. So that customers can quickly and objectively find high quality of service, high-credit business in numerous businesses [12]. It seems that the credit rating not only reflects the seller’s product quality, but also reflects the service levels, speed of delivery, etc., it will help buyers to choose, in the shops selling the same merchandise to choose their own most concerned about factors such as: the price factor, deliver speed or their favorite brands.

Currently, although public opinion research network in our country has made some progress, but compared with the international advanced level there is a huge gap, so we need to strengthen research in this field, to keep pace with the development of international standards. Now I will collect the views of network public opinion in e-commerce that was put forward by the abroad scholars

2. THE VIEWS OF NETWORK PUBLIC OPINION IN E-COMMERCE THAT WAS PUT FORWARD BY THE ABROAD SCHOLARS

In other countries, from the early 20th century, public opinion this concept is widely used. From 1933 United States set by George Gallup began testing the public opinion and set up a test of the American Public Opinion (The American Institute of Public Opinion) in 1935, when the test results of public opinion and governments in many countries to provide a reference for decision-making [13]. After World War II, government agencies, academic institutions dedicated to the study of public opinion began, researchers have established more representative of the organization, the American Association for Public Opinion Research (AAPOR) and the European public opinion analysis centers and other research institutions [14].

Network public opinion trends forecast refers to the analysis of the document on the network, using the existing model of network public opinion trends to predict future ways to get its spread in the future data. Wüthrich and others analysis the online famous economic articles and study predicts the daily stock market index, and they have achieved good results. Feldman, who carried on by a well-known magazine articles news analysis, has been the theme of the relative distribution of the country, people; stock between laws got some trends. Because foreign scholars have made certain achievements in the propagation of network public opinion, and all of these are very useful for us to lay the foundation for the further research, we found that the existence of deficiencies in their summary of previous experiences, and they have great efforts to improve our network public opinion.

In the article Quality of experience Defining the criteria for effective interaction design described that the user visited e-commerce site, if a user successful purchase goods online once, then the possibility of him became a regular user of online shopping is about 50% [15]. It means that consumers, especially primary care shopping experience, products and services for the business if consumers provided sufficient satisfaction, then they most likely to buy something again. Conversely, if consumers do not find the ideal online

merchandise, coupled with cumbersome payment process, and they worried about being cheated businesses have such similar experiences may lead to loss of customers, leading to the loss of benefits. So the first consumer online shopping experience is good or bad is very important for e-commerce sites. This requires e-commerce companies to efficiently identify the initial experience of the consumer, to meet the needs of these consumers, which can attract these consumers, will they become potential customers, bring economic benefits for the enterprise.

Joseph Pine and James •H• Gilmer joint preparation of the “experience economy” support the description that consumption is a process; the consumer is the process of “product”, because when the process is complete, the memory will be long-term preservation of the process “experience” [16]. Users are willing to pay for such experience, because it comfortable, rare, can not be copied, nontransferable, fleeting, and service for me, and the moment is unique. More importantly, the critics acknowledged, the core elements of the knowledge economy is the human ability to create, and create exactly the experience of sublimation products. It means that now the consumers are not only focus on the product itself, they pay more attention to the process of business and consumer services in pleasure at the same time to obtain a satisfactory product, because that will allow consumers to feel timeless obsession . It will give businesses provide ways to meet consumer demand and ensure the product quality, while more attention to their own services, enabling consumers to the unique characteristics of services for businesses never forget. As a result, consumers will need the network platform to share their unique experience, the propagation velocity of the network can be imagined, which undoubtedly is for businesses to advertise.

In 2000 Riley & De Chernatony visited 20 brand experts, found that many experts believe that the service brand and product brand has many physical similarities, they are very similar in concept, which will be linked with the customer’s emotional and products. So the seller “Taobao” focus on product quality, brand can also design their own unique brand of service to cater to the current service requirements more discerning consumers.

According to NEC Research Institute and Inktomi’s recent results show that, at present at least one billion web pages on the Internet needs to be indexed. The existing search engines can only index of 500 million pages. Half still not indexed. It is not primarily because of technical problems, but all the information online businesses do not want to radiate products now online. So when consumers shopping online, they have to search many websites and then go on a site search until they find the price of satisfaction with the goods. However, consumers may purchase price satisfied only the first step of the goods, they also consider a range of issues traded security, distribution of timeliness. And finally when they receive goods, different consumers for the same piece of merchandise also hold different views, and someone give value for money merchant star praise, while some consumers think that the commodity unpleasantness giving commentary on business . What exactly is one of the criteria? What is the value for money of their goods or really difficult to measure? This requires the establishment of uniform standards to constrain consumer online reviews to ensure that the interests of businesses. However, due to many types of online sales of merchandise, variety, which requires in-depth study to set the standard.

Table 1. Public opinion research contrast evaluation in domestic and abroad

	Abroad	Domestic
The development of network public opinion research	Started earlier, the initial development begin in mid-19th century, in mid-20th century have got great success	Start later, began in the 20th century
The content of network public opinion research	Mainly on the main object of public opinion research relations between opinion polls and public opinion, the media and decision-making, particularly with regard to research and practice polls, has formed a complete system of theory and application	The main concept definition and Discrimination public opinion, public opinion information work, Public Opinion mechanisms, networks and other public opinion, public opinion is based on the information the government to carry out the work, the study is relatively shallow level
The purposes of network public opinion research	In addition to services outside politics, socio-economic, cultural and also has a wide range of applications	Major service in politics, government policy objectives as a guide for the government in power service
The current situation of network public opinion research	More advance, more systematic, more widespread application	Still in the stage of study and reference

3. CONCLUSIONS

Overall, the network public opinion ideas, concepts, or research methods, foreign domestic appear earlier and better than domestic, but due to the different areas of expertise and researchers have learned from each other, so it may spawn many other studies methods later. No matter what kind of

method is suitable for the study as long as the content, the research can contribute is worth and further exploration is necessary.

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REFERENCES

1. Wang Laihua, Introduction to Public Opinion Research in China [M], Tianjin: Tianjin Academy of Social Sciences Press, 2003.
2. Liu Yi, Public Opinion Research Network Introduction [M], Tianjin: Tianjin People's Publishing House, 2007.
3. Zhou Rujun, Wang Tianqi, Network Public Opinion: A New Field of Modern Ideological and Political Education [J], *Ideological and Theoretical Education*, 2005 (11).
4. Zhang Yongfeng, "Travel News" Network Public Opinion to Resolve the Incident [J], *Now the Media*, 2008 (9).
5. Cao Jinsong, Development Law Network Public Opinion [J], *News and Writing*, 2010 (5).
6. Wang Jin, Analysis and Threat Assessment Technology Research Based on Intuitionistic Fuzzy Inference Network Public Opinion Trend [D], *PLA Information Engineering University*, 2011.
7. Peng Dan, Network Comments Network Public Opinion Research Based on Hefei University of Technology [D], 2010.
8. Wen Taojing, What Affect the Customer Experience on Service Brand Equity - Empirical Research Department Stores Based on Dalian: Dalian University of Technology [D], 2007.
9. Zhang Lanlan, Sina Network Public Opinion Research [D], Analysis of East China Normal University, 2011.
10. Zhang Liang, Zhang Simin, Study Based on Data Mining Network Public Opinion Monitoring and Analysis System [J], *Commerce*, 2009, 11:310.
11. Ye Kaili, Zhang Yifan, Problems and Countermeasures Research on E-Commerce Credit Evaluation System Analysis - A Case Study in Taobao [J], *Commodity and Quality*, 2012 (5).
12. Sun Yong, Taobao Suppliers Based on AHP Improved Credit Evaluation System [J], *Commerce*, 2012 (4).
13. American Association for Public Opinion Research [EB/OL]. <http://www.aapor.org/>. European public opinion analysis center [EB/OL]. http://europa.eu.int/comm/public_opinion/index_en.htm.

14. Alben L., Quality of Experience. Defining the Criteria for Effective Interaction Design, *Interactions*, vol. 1996, 11-15.

15. B. Joseph Pine, James H. Gilmore, Experience Economy. Machinery Industry Press, 2002.