The Influencing Mechanism of Perceived UGC Quality on Gen Z Consumers' Loyalty – An Empirical Analysis

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Abstract. Generation Z consumers are low loyalty characterized. They often collect detailed information on UGC's APP or website. The study demonstrates that UGC content can influence Gen Z purchasing decisions and can lead to consumer loyalty to the app. This study uses community interaction and community identification to explore the impact on customer loyalty and uses variables such as the community climate that Gen Z cares about, perceived UGC quality, and online word of mouth as the antecedent variables that affect community interaction. The research data was collected from 364 Gen Z respondents from the Guangzhou Higher Education Super Center and analyzed using structural equation modeling. It turns out that supportive climate ($\beta = 0.25$, $p < 0.001$), controlling climate ($\beta = 0.18$, $p < 0.001$), and perceived UGC quality ($\beta = 0.44$, $p < 0.001$) had positive effects on community interaction. Community interaction ($\beta = 0.78$, $p < 0.001$) affects community identification, and community identification ($\beta = 0.82$, $p < 0.001$) affects customer loyalty. However, community interaction is not affected by online word of mouth ($\beta = 0.17$, $p > 0.05$).

Keywords: Generation Z · community interaction · community identification · perceived UGC quality · customer loyalty · online word of mouth

1 Introduction

China's Generation Z (Gen Z) population is enormous, currently 149 million. Due to policy reasons, most of them are only children, so they receive financial support from their parents and family members and have strong spending power [17]. Gen Z expects a better life and is more willing to spend time and money than their parents to find what makes them happy. Traveling has become an essential activity for them to learn new things and enjoy life [30]. They like to try new things and their attitude towards brands is not as loyal as in past generations, because Gen Z sees brands as a business marketing strategy and considers them Unreliable. Therefore, this study has essential implications for exploring how to improve Gen Z loyalty.

Since Gen Z cannot live without the Internet, they are constantly living together with the Internet, social media, and their applications such as mp3 players, text messages, mobile phones, PDAs, YouTube, IPADs, media technologies. Their friendship is mainly

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on social media, so they like interacting with others in the brand community. In terms of tourism, they rely on user-generated content (UGC) websites and travel review platforms to assist them in gathering information and making travel decisions [4]. Therefore, when consumer (traveler) empowerment has increased in terms of travel choices and destinations while the role of hospitality and tourism-related enterprise in influencing consumers' travel resolution has diminished [24]. To respond to such reduced control over travelers' choices, tourism-related companies must develop a deeper knowledge of the determinants of UGC usage and adoption. Such knowledge would help hospitality and tourism firms prompt UGC and online reviews accordingly and adopt better strategies for effective and triggering travelers' choices and behaviors [12].

Although the population change has an immediate or indirect effect on tourism, recent research on Gen Z has focused on market surveys that cover effective marketing and advertising, with just a few of them in the academic literature [28]. This study was carried out to reveal the customer loyalty of Gen Z in UGC travel Apps. Therefore, this study integrates market research information characteristics of Gen Z to do the research. Many market surveys pointed out that Gen Z is the generation that needs more emotion. Because when they are in a virtual world, they need to gain recognition by participating in a certain group, but how can they feel recognized? How do we make them want to interact? Do recognition and interaction increase customer loyalty?

In order to answer the above question and better understand the reasons why Gen Z wants to engage with the community, this research starts from the emotions of Gen Z. They use comments and images to express their thoughts and feelings in the community, if the others also feedback on the images or comments to express their feelings, they feel that the atmosphere of the community is excellent and willing to stay longer. If the content of UGC is unreal, only to promote its strong points and unable to propose the shortcomings of the tourist destination or the matters that should be paid attention to, then consumers will not patronize this community again because they think that the quality of UGC is not excellent. Online word-of-mouth is when consumers make purchase decisions based on the experience of other buyers. If buyers are willing to answer questions, consumers will often use the website. As Gen Z consumers enter the market, companies are paying more and more attention to how to retain Gen Z consumers. Researchers are exploring many marketing combinations. This research starts from the perspective of community interaction and community identification and hopes to give more inspiration to the company at e-commerce marketing.

2 Literature Review and Hypotheses Development

2.1 The Positive Effects of Community Climate on Community Interaction

Consumers' participation in the community is likely to improve the consumers' understanding of the brand/community, reducing uncertainty, and increasing the predictability of brand/community behavior [5]. So, community interaction means that the communication efficiency of the community is achieved through interactivity [27]. For community members, community interaction is used to obtain relevant information about the brand/community [19]. Organizational climate is one of the most essential contents of the organizational environment, which has a direct relationship with employee behavior.

It's how employees integrate into their organization and goal [26]. Churchill et al. [9] conceptualize organizational climate as the aggregates of the social variables, which make up a worker's job environment. Scholars propose that the online brand community climate refers to the climate elements that brand community members participate in the events, activities, and procedures of the virtual brand community, and form their cognition of the characteristics of the community environment, which in turn will affect the feelings and behaviors of the members [10].

The online brand community is a relatively relaxed organization. Customers gather because of their worship for the brand and become a member of the community. Based on these characteristics of the brand community, this study refers to the views of Wang et al. [36] and divides the community climate felt by community members into a supportive climate and a controlling climate. Community members have equal status, free speech, and low closeness, and most communicate anonymously [41]. Most of the posts of Gen Z on the Internet hope to resonate with another member or find the same hobbies. If the community managers manage the community well and formulate some corresponding control measures, the members feel that the community managers encourage with equal status, development of friendly relations, freedom of speech, free exchange of information, and other supportive climate, the members willing to make frequent speeches in the community and enhance interaction with other members. Furthermore, when community managers control some insulting, illegality, cyberbullying, verbal abuse, and other control climate, members feel that the community review mechanism is very immediate and are more willing to participate in community interactions [36]. Accordingly, the first and two hypotheses are proposed.

H1: Supportive climate has a positive influence on community interaction.
H2: Controlling climate has a positive influence on community interaction.

2.2 The Positive Effects of Online Word of Mouth and Perceived UGC Quality on Community Interaction

Word-of-mouth (WOM) refers to "the communication process between the communicator and the recipient of the brand product or service without commercial intentions." Previous research indicates that consumers regard online WOM as a much more reliable medium than traditional media (e.g., television, radio, print advertisements, etc.) [8]. It is thus considered one of the most influential sources of information on products and services [39]. Zhang considers that the more active consumers get online WOM information from a certain brand, the stronger the willingness of information recipients to join the brand, and the stronger the desire to pay attention to and communicate with brand members [25]. Therefore, in UGC travel applications, Gen Z exchanges information with community members through online WOM, understands the experience of travel itineraries, tries to find travel advice, etc., all of which help to increase the interaction among community members [31]. Accordingly, put forward the following hypothesis:

H3: Online word of mouth has a positive influence on community interaction.

According to Turban and Gehrke [33], if a website provides high-quality information, consumers will continue to use this website in order to obtain more useful information, which is also the primary reason for consumers to continue to use [21]. Uotila and Melkas [35] defined information quality as users' consciousness of the information by information systems and believe that its fundamental factors include readability, completeness, reliability, and trustworthiness [38]. Tseng et al. [32] propose that perceived information quality is the consumers' that the information on a website is credible, reliable, easy to understand, and helpful for consumers' to make travel itineraries. To find out if Gen Z consumers expect a high information quality when using UGC travel Apps, this study put forth a new concept of perceived UGC quality and cited the argument above by Tseng et al. [32] to define it as "Gen Z consumers self-perceive that the information on a UGC travel app is true, reliable, easy to understand, pragmatic, and helpful for making a travel itinerary."

Wei and Tang [37] believe that the better the quality of user original content information, the better it will be able to arouse consumers' common sense and will be willing to share their ideas so that it improves the interaction of user groups. Therefore, when Gen Z finds that the UGC content of travel apps truly expresses the conditions of travel destinations and shares travel experiences and itinerary design points, Gen Z will be willing to interact with UGC authors and community members to share travel and itinerary designs experience and answer questions from other members. Therefore, this study proposes the following hypothesis.

H4: Perceived UGC Quality has a positive influence on community interaction.

2.3 The Positive Effects of Community Interaction on Community Identification

According to the research of Algesheimer et al. [2], online community identification means that community members agree to the community's norms, traditions, rituals, goals and wishes to promote the development of online communities and feel a sense of identity and belonging in the community. In other words, community members have social values and shared values [40]. Muniz and O'Guinn [22] pointed out that the higher frequency of community members participating in community activities or sharing community information, the constant interaction will generate shared values and preferences for the community, thereby enhancing the group's sense of identity. Wherefore, Gen Z through the Internet not only enables community members to communicate and share information on UGC travel Apps but more essential, generates and absorbs the knowledge from community members [29]. The use of that created knowledge further sustains the interaction and creates a critical mutual trusting partner image from the exchange, thus increasing the identity of the community [7]. Accordingly, the hypotheses are proposed.

H5: Community interaction has a positive influence on community identification.

2.4 The Positive Effects of Community Identification on Customer Loyalty

Consumer retention is a complex procedure and a key point to the success of an organization [6]. Loyal customers are less sensitive to price changes and motivate latent

customers to use specific supplier services by spreading positive word of mouth [1, 20]. Therefore, loyal consumers are considered wealth to an organization. On social networks, consumers are identified by their profile, so they are socially visible because they tend to current their actual self Habibi et al. [13]; thus, Gen Z tends to choose brands community they perceive as having the same values at UGC travel Apps. Consumers with stronger brand identification are more prone to engaging in brand community activities, such as supporting UGC travel Apps goals and products, protecting its reputation, and becoming loyal [15]. Accordingly, the following proposition is supply:

H6: Community identification has a positive influence on customer loyalty.

3 Research Methods

3.1 The Measures

This research adopts the measurement question brought forward by former scholars, and all scales include multiple items. First, use the supportive climate (SC) and the controlled climate (CC) problems raised in Zhao and Jing [41] research, six items respectively. Second, measurement of Online WOM (OWOM) comprises three items that were used in the research of Cheung and Thadani [8]. Third, the measurement of perceived UGC quality (UGCQ) comprises three items which were modified from the research of Uotila and Melkas [35]. Fourth, measurement of community interaction (CIN) includes four items which were adapted from the study of Kozinets [19]. Fifth, measurement of community identity (CID) comprises four items which were modified from the studies of Algesheimer et al. [2]. Finally, customer loyalty (CL) is measured using a three-item scale rewrite from Kressmann et al. [20]. There was a total of 23 measurement questions in this study, which were measured using a 7-point Likert scale, with 1 indicating strongly disagree and 7 indicating strongly agree.

3.2 Data Collection and the Sample

Since the selected variable has been considered well inspect in the prior studies, the current scales of each variable were righteous with small changes to fit the context for this research. Furthermore, the investigation includes a spectrum of demographic questions. This research was used convenience sampling, and the sample was randomly selected from November 25, 2021, to January 10, 2022, at the Guangzhou Higher Education Mega Center. To enhance the effective survey response rate, in this study the research team used a face-to-face method to randomly search for consumers who had used travel apps and explained the research objectives, questionnaire content, and preparation and recovery of the questionnaire. The questionnaire in this study uses an anonymous method. Respondents have questions and are unwilling to answer them. We will not compel them to comply with research ethics. This study collects total of 364 valid questionnaires, which a response rate of 90.7%, of which 37 surveys had missing values and were given up from more analysis because of incomplete responses. According to Hair et al. [14] suggested that the minimum sample size of available questionnaires should preferably be no less than 305. The sample size of this study meets the requirements of scholars.

4 Empirical Results

4.1 Convergent and Discriminant Validity and the Results of the Measurement Model

Confirmatory factor analysis (CFA) was used in this study to validate factor loadings and evaluate model fit for the seven constructs in the study (see Table 1). First, in terms of reliability, Cronbach's alpha value of this study is between 0.82 and 0.91, and scholars have proposed that the alpha value is greater than 0.7 to meet the requirements [23]. Second, in this study, two tests, CR and AVE, were used to examine the convergent validity of the construct. CR estimates ranged from 0.82 to 0.93, with AVE values

Table 1. Measurement model and confirmatory factor analysis

Factor/ Cronbach's α	Items/Standardized Factor Loadings		AVE	CR	Mean	SD
Supportive climate α = 0.82	SC1	0.87	0.610	0.82	5.18	1.030
	SC2	0.85			4.90	0.993
	SC3	0.85			4.99	1.072
Controlling climate α = 0.91	CC1	0.91	0.770	0.91	5.97	1.185
	CC2	0.92			6.07	1.137
	CC3	0.93			6.16	1.129
Online word of mouth α = 0.84	OWOM1	0.82	0.650	0.85	5.56	0.990
	OWOM2	0.89			5.08	1.077
	OWOM3	0.90			5.13	1.062
perceived UGC quality α = 0.87	UGCQ1	0.82	0.642	0.88	5.07	1.003
	UGCQ2	0.87			5.10	1.039
	QUGC3	0.88			5.25	1.018
	QUGC4	0.85			5.27	1.024
Community interaction α = 0.87	CIN1	0.91	0.758	0.93	5.53	1.129
	CIN2	0.91			5.52	1.114
	CIN3	0.89			5.49	1.132
	CIN4	0.90			5.46	1.086
Community Identification α = 0.90	CID1	0.87	0.756	0.90	4.96	1.149
	CID2	0.88			5.24	1.077
	CID3	0.89			5.19	1.085
	CID4	0.87			5.13	1.105
Customer loyalty α = 0.84	CL1	0.89	0.650	0.85	5.04	1.130
	CL2	0.89			5.05	1.133
	CL3	0.84			4.78	1.192

Table 2. Descriptive statistics and correlation of study variables

Constructs	M	SD	1	2	3	4	5	6	7
SC	5.02	0.89	1.00						
CC	6.07	1.06	0.40	1.00					
OWOM	5.26	0.91	0.56	0.43	1.00				
UGCQ	5.17	0.87	0.50	0.40	0.68	1.00			
CIN	5.50	1.01	0.48	0.46	0.56	0.56	1.00		
CID	5.13	0.97	0.57	0.35	0.55	0.57	0.73	1.00	
CL	4.96	1.01	0.51	0.27	0.55	0.51	0.56	0.71	1.00

greater than 0.5 between 0.610 and 0.770 [3] in line with Hair et al. [14]. Third, the correlation coefficient of this study is less than 1. The respective correlation coefficients are more minor than Cronbach's alpha value and AVE, indicating that the measurement model has excellent convergent validity (see Table 2) [11]. Therefore, the CFA model of this study meets the criteria suggested by Hu and Bentler [16]. Furthermore, this study's χ^2/df ratio of less than 3.0 indicates a higher mode fit. Finally, the RMSEA = 0.059, CFI = 0.97, IFI = 0.96, and NFI = 0.97 of this study also meet the requirements of Kline [18], indicating that the research architecture has a good model fit.

4.2 The Results of the Structural Model

This study used the SEM to examine the model as relationships between climate, online WOM, perceived UGC quality, community interaction, and community identification as well as customer loyalty. The result of the analysis is as follows: the RMSEA 0.061, under the cutoff point of 0.08, the chi-square/degrees of freedom (χ^2/df) ratio of 2.359 (χ^2 = 566.23; df = 240), which is less than 3, the NFI is 0.97, and CFI is 0.98, both of which are over of 0.90 [16]. Therefore, the measurement model showed a satisfactory goodness-of-fit index. Among six hypotheses, five were statistically supported. The exception is H3 (Table 3). Online WOM was found to exert no significant influence on community interactivity. From the interview, because Gen Z consumers are suspicious of online WOM, they worry that online WOM is a kind of the company's marketing method; they also have doubts about the interaction between community members, thus they think UGC information, and their own experience are more credible. For example, some of the companies in China's online shops hire public relations or advertising companies and let these companies create many accounts and then use those accounts to purchase the product in their store and reply with positive content on the store's product page; another way is will pay the rebate or refund as a bonus if the real customer makes a wonderful reply in product page, this kind of marketing method cause consumer lose confidence in WOM.

Table 3. Hypothesis test results

Hypothesized path	Standardized estimate	t-value	Hypothesis supported
H1: SC → CIN	0.25***	3.20	YES
H2: CC → CIN	0.18***	3.65	YES
H3: OWOM → CIN	0.17	1.37	NO
H4: UGCQ → CIN	0.44***	4.10	YES
H5: CIN → CID	0.78***	15.52	YES
H6: CID → CL	0.82***	14.27	YES

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

5 Conclusion, Implications, Limitations and Future Research

5.1 Conclusion

Gen Z consumers live in an online world where they collect vast amounts of information anytime, anywhere, and they do not trust traditional marketing campaigns. They think of UGC as more authentic information, they like a good community climate, and they are willing to interact with others in the community. Therefore, this study uses community climate, community interaction, online word-of-mouth, and perceived UGC quality to explore the impact of community identification and consumer loyalty. This study finds that community climate and perceived UGC quality has a significant impact on community interaction. Community interaction has a significant impact on community identification. In addition, When Gen Z consumers of community identification with significant impact on consumer loyal. However, online word-of-mouth will not have an impact on community interaction. The main reason is that many Gen Z consumers believe that online word-of-mouth is mainly created, by merchants using marketing methods, and there are many false elements, so they do not want to think about online word-of-mouth. They are ṇreluctant to interact with others in the community or discuss word of mouth.

5.2 Theoretical Implications

The challenge for a travel App manager is converting Gen Z consumers' sense of identity with the UGC travel Apps community into consumer-travel App relationship loyalty so that the company can increase profits. In a competitive environment characterized by the growing number of travel apps and Gen Z users' skepticism of brands and commercials [34], the UGC travel app community has ample environment to foster and enhance emotional connections with users and let them identify with the community. Furthermore, perceived UGC quality and community climate impact community interaction. Community managers should tend to create a supportive and controlled climate that is fair, equal, open, and respectful of each other, and learn how to publish creator incentive programs. When members post topics, they can get points rewards to encourage Gen Z consumers to participate in social interaction. Review the keywords of malicious and

undesirable speech and respond to the reported content promptly to form a good control atmosphere and improve the interaction between UGC travel Apps members. Let Gen Z users rate UGC quality content, reward excellent UGC providers, improve the quality of community content, and encourage Gen Z consumers to be willing to consult publishers and participate in the interaction.

5.3 Research Limitations and Future Research

Despite efforts to control the research process, this study suffers from the following shortcomings and limitations: 1. Because this study targets explicitly Gen Z consumers, it is not possible to expand the scope of the study beyond the current sampling frame. In the future, researchers can compare differences between different generations. 2. This study is only for college students in Guangzhou. The sample size is small and cannot represent the entire Chinese Gen Z consumers. In the future, researchers can compare whether there are differences in how university students use travel apps in different regions. 3. While the ability of the model to predict customer loyalty is essential, other factors can be added to enhance the predictive ability of the proposed model. For example, brand preference is a relatively new construct in the customer behavior literature, and little literature addresses it. Brand experience has a lot of traction in marketing practice. Many marketing researchers say that understanding how Gen Z consumers experience brands and use them to develop goods and services is critical to developing sound marketing strategies. Factors such as the need for uniqueness, perceived community brand similarity, and perceived membership similarity can also be added to understand better how to increase Gen Z consumer loyalty. Finally, the research focuses on UGC travel applications, and results may vary by industry. Future researchers can conduct research in other fields such as e-commerce.

References

1. Akbar MM, Parvez N (2009) Impact of service quality, trust, and customer satisfaction on customers loyalty. ABAC J 29(1):24–38
2. Algesheimer R, Dholakia UM, Herrmann A (2005) The social influence of brand community: evidence from European car clubs. J Mark 69(3):19–34
3. Anderson JC, Gerbing DW (1988) Structural equation modeling in practice: a review and recommended two-step approach. Psychol Bull 103(3):411–423
4. Ayeh J, Law R (2016) Investigating cross-national heterogeneity in the adoption of online hotel reviews. Int J Hosp Manag 55:142–153
5. Ba S (2001) Establishing online trust through a community responsibility system. Decis Support Syst 31(3):323–336
6. Bowen JT, McCain SLC (2015) Transitioning loyalty programs: a commentary on the relationship between customer loyalty and customer satisfaction. Int J Contemp Hosp Manag 27(3):415–430
7. Casaló LV, Flavián C, Guinalíu M (2010) Relationship quality, community promotion and brand loyalty in virtual communities: evidence from free software communities. Int J Inf Manag 30(4):357–367
8. Cheung CMK, Thadani DR (2012) The impact of electronic word-of-mouth communication: a literature analysis and integrative model. Decis Support Syst 54(1):461–470

9. Churchill Jr GA, Ford NM, Walker Jr OC (1976) Organizational climate and job satisfaction in the sales force. J Mark Res 13(4):323–332
10. Dong XB, Chang YP, Lin X (2018) Research on the influence mechanism of virtual brand community climate on customer loyalty. Chin J Manag 15(11):1697–1704
11. Fornell C, Larcker DF (1981) Evaluating structural equation models with unobservable variables and measurement error. J Mark Res 18(1):39–50
12. Gupta A, Dogra N, George B (2018) What determines tourist adoption of smartphone apps? An analysis based on the UTAUT-2 framework. J Hosp Tour Technol 9(1):50–64
13. Habibi MR, Laroche M, Richard MO (2014) Brand communities based in social media: how unique are they? Evidence from two exemplary brand communities. Int J Inf Manag 34(2):123–132
14. Hair JFJ, Black WC, Babin BJ, Anderson RE (2010) Multivariate Data Analysis: A Global Perspective, 7th edn. Pearson Education, Upper Saddle River, NJ
15. He H, Li Y (2011) CSR and service brand: the mediating effect of brand identification and moderating effect of service quality. J Bus Ethics 100(4):673–688
16. Hu LT, Bentler PM (1999) Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. Struct Equ Model 6(1):1–55
17. Kantar & Tencent (2018): 2018 China's Gen Z, White Paper. https://socialone.com.cn/z-gen-consumption-2018/
18. Kline RB (1998) Principles and Practice of Structural Equation Modeling. Guilford Press, NY
19. Kozinets RV (2002) The field behind the screen: using net-nography for marketing research in online communities. J Mark Res 39(1):61–72
20. Kressmann F, Sirgy MJ, Herrmann A, Huber F, Huber S, Lee DJ (2006) Direct and indirect effects of self-image congruence on brand loyalty. J Bus Res 59(9):955–964
21. McKinney V, Yoon K, Zahedi FM (2002) The measurement of web-customer satisfaction: an expectation and disconfirmation approach. Inf Syst Res 13(3):296–315
22. Muniz AM, O'Guinn TC (2001) Brand community. J Consum Res 27(4):412–432
23. Nunnally JC (1978) Psychometric Theory, 2nd edn. McGraw-Hill, NY
24. O'Connor P (2010) Managing a hotel's image on trip advisor. J Hosp Mark Manag 19(7):754–772
25. Park DH, Lee J, Han I (2007) The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement. Int J Electron Commer 11(4):125–148
26. Payne RL, Pugh DS (1976) Organizational structure and climate. In: Dunnette M (ed) Handbook of Industrial and Organizational Psychology, pp 1125–1172. Rand McNally, Chicago
27. Rice RE, Love G (1987) Electronic emotion: socioemotional content in a computer-mediated communication network. J Commun Res 14(1):85–108
28. Robinson VM, Schänzel HA (2019). A tourism inflex: generation Z travel experiences. J Tour Futures
29. Romm CT, Pliskin N, Clarke RJ (1997) Virtual communities and society: toward an integrative three phase model. Int J Inf Manag 17(4):261–270
30. Skift (2017) U.S Millennials Travel the most but Gen Z is on the Rise. https://skift.com/2017/
31. Srinivasan SS, Anderson R, Ponnavolu K (2002) Customer loyalty in e-commerce: an exploration of its antecedents and consequences. J Retail 78(1):41–50
32. Tseng LY, Chang JH, Zhu YL (2021) What drives the travel switching behavior of Chinese Generation Z consumers. J Tour Futures 1–6
33. Turban E, Gehrke D (2000) Determinants of e-commerce website. Hum Syst Manag 19(2):111–120
34. Tuškej U, Golob U, Podnar K (2013) The role of consumer–brand identification in building brand relationships. J Bus Res 66(1):53–59

35. Uotila T, Melkas H (2008) Complex knowledge conversion processes and information quality in regional innovation networks. Knowl Process Manag 15(4):224–234
36. Wang Q, Fan WF (2019) Virtual brand community and user innovation from the perspective of value creation. Enterp Econ 5:20–26
37. Wei RQ, Tang FC (2016) The social influencing mechanism of user-generated content on online purchasing-an empirical study based on social E-commerce platform. East China Econ Manag 30(4):124–131
38. Wilkinson GL, Bennett LT, Oliver KM (1997) Evaluation criteria and indicators of quality for internet resources. Spec Issue Web-Based Learn 37(3):52–59
39. Zhang HY, Zhou TR, Huan Y, Tang XF (2014). Research on the influence of online word of mouth on consumers' online behavior. J Manag World 3
40. Zhang Y, Li BX, Liu JP (2017) Model and mechanism of customer participation in brand value co-creation under network environment: a case study of Xiaomi phone: a case study of Xiaomi phone. J Beijing Technol Bus Univ (Soc Sci) 32(1):61–72
41. Zhao JB, Jing FJ (2016) The influence of online brand community climate on the customer innovation behavior. J Manag Sci 29(4):125–138