

Journal homepage: http://iieta.org/journals/ijsdp

# The Influence of Online Brand Community Identity and Trust on Sustainable Customer Loyalty

Guoling Zhang, Zhongwu Li\*

International College, National Institute of Development Administration, Bangkok 10240, Thailand

Corresponding Author Email: zhongwu.li@nida.ac.th

https://doi.org/10.18280/ijsdp.170533

### Received: 6 June 2022 Accepted: 3 August 2022

#### Keywords:

marketing,	си	stomer	relation
management,	co	ommunity	identity,
community	trust,	innovation,	online
business			

# ABSTRACT

Based on Social Identity Theory and Trust Theory, this paper discusses the impact of online brand community identity and trust on customer engagement, as well as the impact of customer engagement on customer loyalty. The results show that the two community factors have a significant impact on customer engagement, and customer engagement has a positive correlation with customer loyalty. These results reflect that online brand community identity and trust have positive impact on customer engagement, which increases the motivation of customers to participate in community activities, when customers obtain greater satisfaction and perceived benefits from community activities, the satisfaction and perceived benefits can be transformed into customers' sustainable stickiness and loyalty to the brands. In addition, customer engagement plays a partial intermediary role between online brand community identity, trust and customer loyalty. The results of this study are helpful to improve the management of online brand community, provide companies with ideas to improve business model, innovation, and bring new experience and value to companies and customers.

### **1. INTRODUCTION**

In recent years, with the popularization of mobile communication devices and the rapid development of the Internet economy, people's social, consumption, business work and other ways have undergone great changes. According to the 48th Statistical Report on Internet Development in China released by China Internet Network Information Center (CNNIC), as of June 2021, the number of Chinese Internet users was 1.011 billion, including 872 million online payment users and 812 million online shoppers, accounting for 80.3% of the total number of Internet users. It can be seen that online shopping consumption has become the main consumption mode of residents, and more and more consumers choose to make purchase decisions through the information provided by the Internet. As a result, the corporate marketing scene has shifted accordingly: some offline Brand communities have established Online Brand Communities (OBC) to maintain brand-customer relationship, help companies manage consumer relationship and maintain customer loyalty. Online brand community is a portal for companies to communicate with users on the Internet, and a platform for communication and dialogue between brands and customers as well as between customers. It is composed of fans of products or services of specific brands without geographical restrictions [1].

Recent studies have found that antecedent factors such as trust, identity and perceived value affect customer engagement. In turn, engagement influences outcomes such as consumer purchasing decisions, behavioral intentions and company performance [2], community factors are the bonds between social interaction participants, leading to the creation of brand and customer communities. These factors are key drivers of customer engagement in online brand communities [3].

Customer loyalty to the brand is the business goal pursued by companies via establishing brand communities. Members of online brand communities mainly communicate with each other about brand experience and attitude towards the brand through community platforms, which is easier to get more attention from members [4]. However, most online brand community members are "one-time" participants, and customers' persistent intention is generally low [5]. Therefore, how to maintain and improve the sustainable loyalty of community members has become a major challenge for companies [6]. In recent years, the competition of enterprise online brand community is particularly fierce. Companies have invested a lot of money in the establishment and maintenance of their own online brand community, but they still know little about the motivation or successful factors that drive customers' continuous engagement [4]. Many online brand communities only took a few months from germination to disappearance. Hence, in order to successfully attract and retain consumers to participate and maintain customer loyalty, researches on consumers' motivation and behavior are very urgent and important.

Based on the above background, this study aims to explore the internal influence mechanism and path of online brand community on customer loyalty. The purpose includes two aspects: To study how community factors (such as brand community identity and community trust) affect customer engagement and customer loyalty. To explore the impact of community factors on customer loyalty by taking customer engagement as a mediating variable.

To sum up, this study draws on social identity theory and trust theory literature to explore the antecedents of customer engagement from two aspects of online brand community identity and community trust, and takes customer engagement as a mediating variable to explore the impact of brand community factors on customer loyalty. The specific research questions are as follows:

To explore the influence of brand community identity on customer engagement and customer loyalty among online brand community factors. To discover the influence of brand community trust on customer engagement and customer loyalty among online brand community factors. To confirm the influence of customer engagement as a mediating variable on customer loyalty.

# 2. LITERATURE REVIEW

Social Identity Theory (SIT) originated in the early 1970s. It refers to the self-conceptualization and spontaneous categorization of individuals within specific social groups. Once an individual classifies himself or herself as a member of a social group, he or she will have a positive emotion towards the internal group, which helps to improve the attention, engagement and cohesion of the internal group [7].

# 2.1 Online brand community identity and customer engagement

According to social identity theory, members of online brand communities think that themselves as part of a group or community [8]. The cognitive and emotional significance of members' sense of belonging to the online brand communities will produce social identity as a part of personal self-concept. Online brand community members often show similar preferences for the same brand, purchase the products with that brand, share experiences and perceived values, and interact with other members. Recent studies have accumulated evidence on the influence of brand identity on loyalty [9]. Also, online brand community identity develops higher community engagement among community members [10].

In terms of online brand communities, customer engagement refers to the iterative interaction between community members or brands [4]. Engagement is also related to the willingness of members to interact, collaborate and participate in the community [11]. According to the customer engagement, every aspect that affects the iterative relationship between consumer and OBC trust or perceived community experience has an impact on engagement [12]. Brodie et al. [13] believes that engagement is a psychological state that occurs through the interaction with brands and the co-creation of customer experience. Where brand becomes experience, customer engagement must be defined as a behavioral construct [14]. In this study, customer engagement will be expressed as positive behaviors and attitudes towards the brand community.

Users' identity of brand community is an important factor for companies to establish online brand community successfully. The identity of the brand community makes users believe that the interaction in the community is consistent with the personality and values of the enterprise brand [15], and is recognized by other members. Therefore, the more users identify with online brand communities, the more motivated they are to actively participate and continue to participate in community activities by helping other users build relationships [16]. Previous research in the field of online brand community has shown that online brand community identity has a positive impact on customer engagement [17]. Identity with online brand communities is a strong predictor of customer engagement [18]. Therefore, the following assumptions are obtained:

H1a: Brand community identity has a significant positive correlation with customer engagement.

# 2.2 Online brand community trust and customer engagement

Trust involves relationships between individuals, groups and organizations [19]. Trust is a psychological state, including willingness, belief, feeling etc., and expectation that the other party will act honestly [20]. In online brand communities, this state can be defined as community trust. Yeh and Choi [18] proposed two types of trust: community cognitive trust and community emotional trust [21]. Under the condition of Web3.0, scholars define online brand community trust as consumers' belief in the integrity, friendliness and ability of community members, as well as the authority, sincerity and fairness of the community [22]. In an online community environment, trust is a key variable in the customer-brand relationship [23]. Based on the trust theory, this study interprets the trust of online brand community as its members' dependence on each other and its members dependence on companies' brands.

Trust is an essential element of online social commerce, which reduces the uncertainty and perceived risk of online relationships among brand communities. Trust is a motivator and has a positive impact on customers' attitudes and behavior. According to previous studies, trust in online brand communities can influence users' attitudes towards transactions on brand communities [24], Brand business intentions that encourage users to engage and stay engaged [25]. In online brand communities, community trust has a positive impact on customer engagement [26]. Trust is a key factor in building long-term relationships in online brand communities [27]. Therefore, the following assumptions are listed in this paper:

H2a: Brand community trust has a significant positive correlation with customer engagement.

#### 2.3 Online brand community identity and customer loyalty

Previous studies have conceptualized customer loyalty as one of the most important outcomes of customer engagement [28]. Participating members develop a strong psychological connection with the brand community, which increases the likelihood of loyal reactions to it and its products [29]. Loyalty is considered to reflect the structure of three behaviors: willingness to continue paying attention, willingness to buy back and willingness to spread word of mouth [30]. In recent years, the emergence of social media has enhanced customer loyalty and developed the relationship between companies and customers. Internet-based online brand communities can influence customer loyalty. In this study, customer loyalty is defined as the willingness of online brand community members to continuously pay attention to corporate branded products and repeat purchases, and to actively spread word of mouth on products to others [31].

It has been found that brand community identity has a positive impact on brand loyalty. Online brand community identity is a crowd-based phenomenon. Therefore, establishing a good community identity in online brand community can attract users to actively connect, support the community and contribute to the brand. Therefore, companies establish online brand communities to build, maintain and strengthen customer loyalty [32]. The following hypotheses are given for research purposes.

H1b: Brand community identity has a significant positive correlation with customer loyalty.

# 2.4 Online brand community trust and customer loyalty

Brand trust is an important factor in establishing and maintaining lasting customer brand relationships [33]. A high level of trust in a brand will generate favorable attitudes [34]. Previous studies have shown that brand trust is one of the most important Antecedents of consumer loyalty and repurchase intention [35]. Studies have shown that once members feel trusted by the community, they are more inclined to show positive behaviors towards the community brand and other community members [36]. Trust in online brand communities is a direct and indirect antecedent of customer loyalty [27]. Therefore, this paper puts forward the following hypothesis.

H2b: Brand community trust has a significant positive correlation with customer loyalty.

#### 2.5 Customer engagement and customer loyalty

In participating in the online brand community, customers who feel that they produce their own value may experience pleasant emotions [37]. In addition, the reputation or social reputation gained in the community, as well as the satisfaction of helping others and feeling valued, can bring customers psychological satisfaction. These satisfactions positively influence customers' attitudes towards the brand community, which may result in customers visiting the community more frequently and more widely. In addition, the cognitive effort required to generate and process community-related information or information takes a long time on the site [38]. Previous studies have shown that customer engagement has a direct and positive impact on brand community stickiness [39]. Therefore, this paper believes that the higher the customer engagement, the higher the degree of customer loyalty will be:

H3: Customer engagement has a significant positive correlation with customer loyalty.

#### 2.6 Mediation effect

According to the above derivation, Brand community identity has a direct relationship on Customer engagement, and Brand community identity also has a direct influence on Customer loyalty. Many literatures indicate that there is a positive correlation between Customer engagement and Customer loyalty. Therefore, this paper assumes that the following mediating effects exist and are significant.

H4: Customer engagement plays a significant mediating role between brand community identity and customer loyalty.

In the same reasoning process, Brand community trust has a significant direct relationship with Customer engagement and Customer loyalty, which has been supported by many researchers. There is also a correlation between Customer engagement and Customer loyalty. Therefore, this paper makes the following hypothesis about the mediation effect:

H5: Customer engagement plays a significant mediating role between brand community trust and customer loyalty.

#### 2.7 Research model

According to the relationship and path between variables, the following conceptual framework (Figure 1) is constructed and relevant research work is carried out.



Figure 1. The conceptual framework

#### **3. RESEARCH METHOD**

This study used questionnaire survey to obtain data. The research subjects were part of registered users of two mobile online brand communities with large numbers of active members in China, Huawei Pollen Club and Xiaomi Community. With the help of Questionnaire star software, the questionnaire will be sent to Huawei Pollen Club and Xiaomi community after obtaining the consent of the community management personnel. In this study, a convenient sampling method was adopted. A total of 480 questionnaires were issued and 425 valid questionnaires were recovered, with an effective rate of 88.5%.

In this study, SPSS22.0 software was used for descriptive analysis of personal statistical variables and reliability and validity analysis of the questionnaire. Then AMOS22.0 was used for path analysis and hypothesis testing, and structural equation model (SEM) was used for empirical test of the proposed research model.

# 4. RESULT ANALYSIS

In this study, the scale developed by Algesheimer et al. [40] was used to measure brand community identity. Brand community trust comes from Kim and Park [41]; Customer engagement comes from Cheung et al. [42]; Customer loyalty comes from Shin et al. [43]; All items were measured using the Likert Scale, which measures items from "totally disagree" to "totally agree."

### 4.1 Sample descriptive statistics

Descriptive statistical analysis was conducted on brand community usage of demographic data of the sample population, and the results are shown in Table 1 below:

Table 1 shows the demographic characteristics of participants. Among the valid samples, 58.6% are members of Huawei pollen club and 41.4% are members of Xiaomi community. The majority of participants were female, accounting for 51.8%; The main age range is 19-35 years old, accounting for 88.5%, indicating that young people are the main active members of the technology brand community. The proportion of members with a bachelor's degree was 86.8%. In

terms of the time of registering as a member of this community, 63.3% of the members have registered for 1-3 years, and 30.1% have registered for 4-6 years. The frequency of community use was 1-3 times per week, accounting for 56.7%. Most members use the community for 1-3 hours per week, accounting for 58.6%, indicating that most members use the community for no more than 3 hours per week.

# 4.2 Reliability analysis

Reliability refers to the reliability or consistency of the measurement results. Reliability is usually analyzed according to Cronbach's alpha coefficient, and coefficients exceeding 0.70 are considered acceptable. The larger the coefficient is, the better the reliability of the scale is. Among them,  $\alpha \ge 0.9$  indicates high reliability and ideal data effect. The reliability analysis results of this study (Table 2):  $\alpha = 0.976$ , which shows that the scale has good reliability and can be analyzed in the next step.

# 4.3 Validity analysis

Validity refers to the degree to which a measuring tool or

means can accurately measure the things to be measured, that is, validity. Kaiser-Meyer-Olkin (KMO) test, Bartlett sphericity test, variance interpretation rate, factor load factor value and other indicators were used to confirm validity. The value of KMO is between 0 and 1. When the value of KMO is greater than 0.7, it is suitable for factor analysis.

The results of this study can be seen in the following series of tables. KMO=0.967, between 0.7-0.9, bartlett significance =0.000, less than 0.05 (Table 3). When principal component analysis and eigenvalue were greater than 1, four factors were extracted, which were in line with the original dimensions of the scale, and total variance interpretation accumulated 73.062% (Table 4). Table 5 shows the component matrix after the removal coefficient load is lower than 0.5, and four factors are obtained, which are brand community identity (PPSQRT), brand community trust (PPSQXR), customer engagement (GKCY) and customer loyalty (GKZCD). Then, confirmatory factor analysis (CFA) was conducted for the four factors. CR values and AVE values corresponding to the four factors were both greater than 0.5 and greater than 0.9, presenting significance (Table 6), indicating that data aggregation (convergence) is effective. In conclusion, the scale in this study has good structural validity and can be further studied.

Table 3. Validity test

<b>Fable I.</b> Demograph	1CS
---------------------------	-----

Content	Option	Frequency	Percentage	Effective percentage
	Hua Wei	249	58.6	58.6
Community	Xiao Mi	176	41.4	41.4
-	Total	425	100.0	100.0
	Male	205	48.2	48.2
Gender	Female	220	51.8	51.8
	Total	425	100.0	100.0
	19-25	56	13.2	13.2
	26-30	215	50.6	50.6
Age	31-35	105	24.7	24.7
C C	Age 36 and above	49	11.5	11.5
	Total	425	100.0	100.0
	College	24	5.6	5.6
Derma of charaction	Undergraduate	369	86.8	86.8
Degree of education	Master's degree	32	7.5	7.5
	Total	425	100.0	100.0
	Within 1 year	12	2.8	2.8
	1-3years	269	63.3	63.3
Registration time	4-6years	128	30.1	30.1
	6years and above	16	3.8	3.8
	Total	425	100.0	100.0
	1 time a day	55	12.9	12.9
	1-3 times	241	56.7	56.7
Weekly frequency of use	4-6 times	90	21.2	21.2
	Once a week or none	39	9.2	9.2
	Total	425	100.0	100.0
	Less than 1 hour	111	26.1	26.1
	1-3 hours	249	58.6	58.6
Average weekly usage time	4-6 hours	45	10.6	10.6
	7 hours and above	20	4.7	4.7
	Total	425	100.0	100.0

 Table 2. Reliability analysis

Dimension	Cronbach'sa	Cronbach'sα(total)	Variable	KMO test	Bartlett test
PPSORT	0.921			KMO value	Significance level
PPSOXR	0.936	0.074	total variable	0.967	0.000
GKCY	0.953	0.976	PPSQRT	0.861	0.000
GKZCD	0.960		PPSQXR	0.944	0.000
			GKCY	0.951	0.000
			GKZCD	0.956	0.000

Table 4.	Explanation	table	of total	variance

Total Variance Explained												
		Initial Eigen	values	Extracti	on Sums of Sc	uared Loadings	Rotati	Rotation Sums of Squared Loadings				
Component	Total	% of	Cumulative 0/	Total	% of	Cumulative 0/	Tatal	% of	Cumulative 0/			
	Total	Variance	Cumulative 76	Total	Variance	Cumulative 76	Total	Variance	Cumulative 70			
1	19.592	54.422	54.422	19.592	54.422	54.422	7.140	19.832	19.832			
2	2.129	5.915	60.336	2.129	5.915	60.336	6.846	19.018	38.850			
3	1.941	5.391	65.728	1.941	5.391	65.728	6.395	17.765	56.615			
4	1.557	4.324	70.052	1.557	4.324	70.052	4.837	13.437	70.052			

Table 5. Factor loading component table

Rota	ted Com	ponent l	Matrix <sup>a</sup>	
		Comp	onent	
	1	2	3	4
PPSQRT2	0.786			
PPSQRT1	0.761			
PPSQRT5	0.755			
PPSQRT6	0.745			
PPSQRT4	0.714			
PPSQRT3	0.711			
PPSQXR3		0.715		
PPSQXR1		0.710		
PPSQXR5		0.705		
PPSQXR2		0.688		
PPSQXR9		0.685		
PPSQXR8		0.664		
PPSQXR4		0.644		
PPSQXR6		0.642		
PPSQXR10		0.604		
PPSQXR7		0.550		
GKCY3			0.755	
GKCY9			0.749	
GKCY8			0.748	
GKCY6			0.746	
GKCY7			0.726	
GKCY4			0.707	
GKCY2			0.704	
GKCY1			0.701	

00.00	.0 0.0	,10 1,		50.050
65.72	28 6.3	95 17	7.765	56.615
70.05	52 4.8	337 13	3.437	70.052
GKCY	75		0.700	
GKCY	10		0.676	
GKZC	D4			0.780
GKZC	D6			0.735
GKZC	D9			0.730
GKZC	D8			0.725
GKZC	D7			0.696
GKZCI	D10			0.693
GKZC	D5			0.682
GKZC	D1			0.680
GKZC	D2			0.670
GKZC	D3			0.665

# 4.4 Hypothesis testing

Based on the conceptual framework (Figure 1), a structural equation model is established in this study. The relationship between the four variables is shown in Figure 2.

After the model data is modified, the following values are obtained. The model fit CMIN $\vee$ DF=2.963, satisfying CMIN $\vee$ DF<3; indicating that the model fitting index has reached an acceptable range and degree. The root mean square error of RMSEA is 0.068, satisfying the upper limit RMSEA<0.08. The standard of 0.08 indicates that the model fits well. GFI=0.865, NFI=0.900, RFI=0.890, IFI=0.931, TLI=0.924, CFI=0.931, all meet the index greater than 0.80, which further confirms the goodness of fit of the model (Table 7).



Figure 2. Structural model of the study

Table 6. Model AVE and CR indicator results

		Model	AVE and C	R index 1	results			
Factor	Measurement item	Coef.	Std. Error	CR	р	Std. Estimate	AVE	CR
PPSQRT	PPSQRT1	1	-	-	-	0.885		
PPSQRT	PPSQRT2	0.976	0.038	25.436	0.000	0.876		
PPSQRT	PPSQRT3	0.915	0.046	19.995	0.000	0.77	0.66	0.021
PPSQRT	PPSQRT4	0.855	0.045	19.101	0.000	0.749	0.00	0.921
PPSQRT	PPSQRT5	1.001	0.045	22.233	0.000	0.817		
PPSQRT	PPSQRT6	0.877	0.044	19.814	0.000	0.765		
PPSQXR	PPSQXR1	1	-	-	-	0.8		
PPSQXR	PPSQXR2	1.277	0.076	16.865	0.000	0.738		
PPSQXR	PPSQXR3	1.567	0.081	19.298	0.000	0.816		
PPSQXR	PPSQXR4	1.39	0.079	17.589	0.000	0.762		
PPSQXR	PPSQXR5	1.44	0.08	17.975	0.000	0.774	0.507	0.027
PPSQXR	PPSQXR6	1.455	0.084	17.369	0.000	0.754	0.397	0.957
PPSQXR	PPSQXR7	1.326	0.082	16.178	0.000	0.714		
PPSQXR	PPSQXR8	1.538	0.085	18.117	0.000	0.779		
PPSQXR	PPSQXR9	1.726	0.088	19.687	0.000	0.827		
PPSQXR	PPSQXR10	1.548	0.089	17.319	0.000	0.753		
GKCY	GKCY1	1	-	-	-	0.827		
GKCY	GKCY2	1.242	0.059	21.213	0.000	0.836		
GKCY	GKCY3	1.16	0.06	19.396	0.000	0.788		
GKCY	GKCY4	1.219	0.063	19.508	0.000	0.791		
GKCY	GKCY5	1.172	0.058	20.198	0.000	0.81	0.67	0.052
GKCY	GKCY6	1.292	0.06	21.508	0.000	0.843	0.07	0.935
GKCY	GKCY7	1.125	0.055	20.357	0.000	0.814		
GKCY	GKCY8	1.207	0.057	21.352	0.000	0.839		
GKCY	GKCY9	1.222	0.061	20.184	0.000	0.809		
GKCY	GKCY10	1.343	0.065	20.707	0.000	0.823		
GKZCD	GKZCD1	1	-	-	-	0.867		
GKZCD	GKZCD2	0.923	0.044	20.743	0.000	0.787		
GKZCD	GKZCD3	0.994	0.042	23.931	0.000	0.852		
GKZCD	GKZCD4	1.051	0.043	24.439	0.000	0.861		
GKZCD	GKZCD5	1.067	0.045	23.639	0.000	0.847	0 704	0.06
GKZCD	GKZCD6	1.032	0.045	22.88	0.000	0.832	0.704	0.90
GKZCD	GKZCD7	1.005	0.044	23.004	0.000	0.835		
GKZCD	GKZCD8	1.024	0.045	22.566	0.000	0.826		
GKZCD	GKZCD9	1.064	0.045	23.69	0.000	0.848		
GKZCD	GKZCD10	1.002	0.043	23.073	0.000	0.836		

Table 7. Model fit index

Model	NPAR	CMIN	DF	Р	CMIN/DF
Default model	61	1022.388	345	0.000	2.963
Model	NFI	RFI	IFI	TLI	CFI
Default model	0.9	0.89	0.931	0.924	0.931
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	0.068	0.063	0.073	0	

Table 8. Path coefficient analysis of the structural equation

			Estimate	S.E.	C.R.	Р	Label
GKCY	<	PPSQXR	0.495	0.037	13.395	***	par_27
GKCY	<	PPSQRT	0.255	0.033	7.695	***	par_28
GKZCD	<	PPSQRT	0.268	0.039	6.781	***	par_25
GKZCD	<	PPSQXR	0.477	0.05	9.539	***	par_26
GKZCD	<	GKCY	0.291	0.067	4.351	***	par 29

Through the analysis of path regression coefficient, if the P value is less than 0.05, the hypothesis is true; However, if it is greater than 0.05, this hypothesis is not supported. As shown in Table 8, brand community identity (PPSQRT) has a significant positive impact on customer engagement (GKCY) and customer loyalty (GKZCD) (P value<0.05),so H1a and H1b are valid; Similarly, brand community trust (PPSQXR) has a significant positive impact on customer engagement (GKCY) and customer loyalty (GKZCD) (P value <0.05), H2a and H2b hypotheses are valid; Customer engagement (GKCY)

and customer loyalty (GKZCD) had significant positive effects (P value <0.05), H3 hypothesis is true.

The tie-Bootstrap method was used to detect the mediating effect, and it can be seen from Table 9. The P values of PPSQRT=>GKCY=>GKZCDP and PPSQXR=>GKCY=>GKZCD were both less than 0.01 (P value less than 0.05 indicates that the hypothesis is true), indicating that the mediation effect was established and H4 and H5 hypotheses were established. In addition, a and b are significant, and c' is significant, and a\*b and c' have the same

name, indicating that the two mediation paths are partially mediated. As can be seen from Table 10, calculated by formula a\*b/c, the mediation effect of PPSQXR=>GKCY=>GKZCD

was 23.878%, PPSQRT=>GKCY=>GKZCD accounted for 22.744%.

Table 9. Mediating effect analysis

-										
				Summary of med	iation test	results				
Item	c total effect	a	b	a*b Intermediate effect value	a*b (Boot SE)	a*b (z)	a*b (p)	a*b (95% BootCI)	c' Direct effect	Conclusion
PPSQXR=>GKCY =>GKZCD	0.684**	0.65 1**	0.25 1**	0.163	0.03	5.48 1	0	$0.084 \sim 0.203$	0.520**	Part of the intermediary
PPSQRT=>GKCY =>GKZCD	0.287**	0.26 0**	0.25 1**	0.065	0.016	3.97 7	0	0.039 ~ 0.104	0.222**	Part of the intermediary

Note: \* p<0.05 \*\* p<0.01

 Table 10. Mediating effect size results

Mediating effect size results						
Item	Conclusion	c total	a*b Intermediate	c' Direct	Calculation formula of effect	Effect
		effect	effect value	effect	proportion	of
PPSQXR=>GKCY=>	Part of the	0.684	0 162	0.52	a * b / a	23.878
GKZCD	intermediary	0.004	0.105	0.52	a b/c	%
PPSQRT=>GKCY=>	Part of the	0.287	0.065	0.222	a * b / c	22.744
GKZCD	intermediary					%

# **5. CONCLUSION**

The results of this study provide guidance for online brand communities to formulate customer loyalty strategies, help to improve the management level of online brand communities, help to maintain customer loyalty to companies, better maintain the relationship between enterprise customers and brands, develop and expand enterprise brand influence, and contribute to the long-term development of enterprise brands.

The results show that brand community identity and brand community trust have significant positive effects on customer engagement and customer loyalty. Similarly, customer engagement is positively correlated with customer loyalty. This shows that identity and trust in online brand communities have a positive impact on customer engagement, which increases customer motivation to participate in community activities, and customers get greater satisfaction from engagement in community activities, and perceived benefits are translated into stickiness and loyalty to brands and products. In addition, the partial mediating role of customer engagement as a mediating variable also highlights the important role of customer active engagement in the relationship between online brand community and customer loyalty.

According to the research results, this study puts forward the following two suggestions for companies. First, companies should strengthen community identity. Managers can strive to ensure that community members are satisfied with their sense of belonging by providing practical value (such as preferential purchase or priority purchase of scarce and popular products) and hedonic value (such as sharing experience and celebrations). The more members identify with the community, the higher their engagement. Second, community managers should provide mechanisms to strengthen community trust to increase customer engagement. For example, by establishing a rating system to confirm the usefulness of reviews, the system will identify users with the highest ratings and reward them; Create comprehensive user behavior rating standards; In addition, companies should operate and manage honestly and reward loyal customers.

# REFERENCES

- Liao, J., Huang, M., Xiao, B. (2017). Promoting continual member participation in firm-hosted online brand communities: An organizational socialization approach. Journal of Business Research, 71: 92-101. https://doi.org/10.1016/j.jbusres.2016.10.013
- [2] Molinillo, S., Anaya-Sánchez, R., Liébana-Cabanillas, F. (2020). Analyzing the effect of social support and community factors on customer engagement and its impact on loyalty behaviors toward social commerce websites. Computers in Human Behavior, 108: 105980. https://doi.org/10.1016/j.chb.2019.04.004
- Kamboj, S., Rahman, Z. (2017). Measuring customer social participation in online travel communities: Scale development and validation. Journal of Hospitality and Tourism Technology. 8(3): 432-464. https://doi.org/10.1108/JHTT-08-2016-0041
- [4] Baldus, B.J., Voorhees, C., Calantone, R. (2015). Online brand community engagement: Scale development and validation. Journal of Business Research, 68(5): 978-985. https://doi.org/10.1016/j.jbusres.2014.09.035
- [5] Park, H., Kim, Y.K. (2014). The role of social network websites in the consumer–brand relationship. Journal of Retailing and Consumer Services, 21(4): 460-467. https://doi.org/10.1016/j.jretconser.2014.03.011
- [6] Shafiee, M.M., Bazargan, N.A. (2018). Behavioral customer loyalty in online shopping: The role of eservice quality and e-recovery. Journal of Theoretical and Applied Electronic Commerce Research, 13(1): 26-38. https://doi.org/10.4067/S0718-18762018000100103
- [7] Turner, J.C., Oakes, P.J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. British Journal of Social Psychology, 25(3): 237-252. https://doi.org/10.1111/j.2044-8309.1986.tb00732.x
- [8] Sisinni, E., Saifullah, A., Han, S., Jennehag, U., Gidlund, M. (2018). Industrial internet of things: Challenges, opportunities, and directions. IEEE Transactions on

Industrial Informatics, 14(11): 4724-4734. https://doi.org/10.1109/TII.2018.2852491

- [9] Mikal, J.P., Rice, R.E., Kent, R.G., Uchino, B.N. (2014). Common voice: Analysis of behavior modification and content convergence in a popular online community. Computers in Human Behavior, 35: 506-515. https://doi.org/10.1016/j.chb.2014.02.036
- [10] Zeng, F., Li, W., Wang, V.L., Guo, C. (2019). The impact of advertising self-presentation style on customer purchase intention. Asia Pacific Journal of Marketing and Logistics. 32(6): 1242-1254. https://doi.org/10.1108/APJML-03-2019-0150
- [11] Wirtz, J., Den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., Van De Klundert, J., Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. Journal of Service Management. 24(3): 223-244. https://doi.org/10.1108/09564231311326978
- Kurikko, H., Tuominen, P. (2020). Consumer engagement in an online brand community. In Eurasian Business Perspectives, 159-167. https://doi.org/10.1007/978-3-030-35051-2
- Brodie, R.J., Hollebeek, L.D., Jurić, B., Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. Journal of Service Research, 14(3): 252-271. https://doi.org/10.1177/1094670511411703
- [14] Chan, K.W., Yim, C.K., Lam, S.S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. Journal of Marketing, 74(3): 48-64. https://doi.org/10.1509/jmkg.74.3.048
- [15] Pentina, I., Zhang, L., Basmanova, O. (2013). Antecedents and consequences of trust in a social media brand: A cross-cultural study of Twitter. Computers in Human Behavior, 29(4): 1546-1555. https://doi.org/10.1016/j.chb.2013.01.045
- [16] Luo, N., Zhang, M., Hu, M., Wang, Y. (2016). How community interactions contribute to harmonious community relationships and customers' identification in online brand community. International Journal of Information Management, 36(5): 673-685. https://doi.org/10.1016/j.ijinfomgt.2016.04.016
- [17] Martínez-López, F.J., Aguilar-Illescas, R., Molinillo, S., Anaya-Sánchez, R., Coca-Stefaniak, J.A., Esteban-Millat, I. (2021). The role of online brand community engagement on the consumer-brand relationship. Sustainability, 13(7): 3679. https://doi.org/10.3390/su13073679
- [18] Yeh, Y.H., Choi, S.M. (2011). MINI-lovers, maximouths: An investigation of antecedents to eWOM intention among brand community members. Journal of Marketing Communications, 17(3): 145-162. https://doi.org/10.1080/13527260903351119
- [19] Fulmer, A., Dirks, K. (2018). Multilevel trust: A theoretical and practical imperative. Journal of Trust Research, 8(2): 137-141. https://doi.org/10.1080/21515581.2018.1531657
- [20] Corritore, C.L., Kracher, B., Wiedenbeck, S. (2003). Online trust: concepts, evolving themes, a model. International Journal of Human-Computer Studies, 58(6): 737-758. https://doi.org/10.1016/S1071-5819(03)00041-7
- [21] Anaya-Sánchez, R., Aguilar-Illescas, R., Molinillo, S.,

Martínez-López, F.J. (2020). Trust and loyalty in online brand communities. Spanish Journal of Marketing-ESIC, 24(2): 177-191. https://doi.org/10.1108/SJME-01-2020-0004

- [22] Popp, B., Woratschek, H. (2017). Consumers' relationships with brands and brand communities–The multifaceted roles of identification and satisfaction. Journal of Retailing and Consumer Services, 35: 46-56. https://doi.org/10.1016/j.jretconser.2016.11.006
- [23] Hajli, N., Shanmugam, M., Papagiannidis, S., Zahay, D., Richard, M.O. (2017). Branding co-creation with members of online brand communities. Journal of Business Research, 70: 136-144. https://doi.org/10.1016/j.jbusres.2016.08.026
- [24] Hansen, J.M., Saridakis, G., Benson, V. (2018). Risk, trust, and the interaction of perceived ease of use and behavioral control in predicting consumers' use of social media for transactions. Computers in Human Behavior, 80: 197-206. https://doi.org/10.1016/j.chb.2017.11.010
- [25] Yahia, I.B., Al-Neama, N., Kerbache, L. (2018). Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage. Journal of Retailing and Consumer Services, 41: 11-19. https://doi.org/10.1016/j.jretconser.2017.10.021
- [26] Nisar, T.M., Whitehead, C. (2016). Brand interactions and social media: Enhancing user loyalty through social networking sites. Computers in Human Behavior, 62: 743-753. https://doi.org/10.1016/j.chb.2016.04.042
- [27] Nadeem, W., Khani, A.H., Schultz, C.D., Adam, N.A., Attar, R.W., Hajli, N. (2020). How social presence drives commitment and loyalty with online brand communities? the role of social commerce trust. Journal of Retailing and Consumer Services, 55: 102136. https://doi.org/10.1016/j.jretconser.2020.102136
- [28] Thakur, R. (2016). Understanding customer engagement and loyalty: A case of mobile devices for shopping. Journal of Retailing and consumer Services, 32: 151-163. https://doi.org/10.1016/j.jretconser.2016.06.004
- [29] Islam, J.U., Rahman, Z. (2017). The impact of online brand community characteristics on customer engagement: An application of Stimulus-Organism-Response paradigm. Telematics and Informatics, 34(4): 96-109. https://doi.org/10.1016/j.tele.2017.01.004
- [30] Fraering, M., Minor, M.S. (2013). Beyond loyalty: customer satisfaction, loyalty, and fortitude. Journal of Services Marketing, 27(4): 334-344. https://doi.org/10.1108/08876041311330807
- [31] Nadeem, W., Juntunen, M., Shirazi, F., Hajli, N. (2020). Consumers' value co-creation in sharing economy: The role of social support, consumers' ethical perceptions and relationship quality. Technological Forecasting and Social Change, 151: 119786. https://doi.org/10.1016/j.techfore.2019.119786
- [32] Kaur, H., Paruthi, M., Islam, J., Hollebeek, L.D. (2020). The role of brand community identification and reward on consumer brand engagement and brand loyalty in virtual brand communities. Telematics and Informatics, 46, 101321. https://doi.org/10.1016/j.tele.2019.101321
- [33] Santos, Z.R., Coelho, P.S., Rita, P. (2021). Fostering Consumer–Brand Relationships through social media brand communities. Journal of Marketing Communications, 1-31. https://doi.org/10.1080/13527266.2021.1950199

- [34] Kamboj, S., Sarmah, B., Gupta, S., Dwivedi, Y. (2018).
   Examining branding co-creation in brand communities on social media: Applying the paradigm of Stimulus-Organism-Response. International Journal of Information Management, 39: 169-185. https://doi.org/10.1016/j.ijinfomgt.2017.12.001
- [35] Chinomona, R., Dubihlela, D. (2014). Does customer satisfaction lead to customer trust, loyalty and repurchase intention of local store brands? The case of Gauteng Province of South Africa. Mediterranean Journal of Social Sciences, 5(9): 23. https://doi.org/10.5901/mjss.2014.v5n9p23
- [36] Kumar, J., Nayak, J.K. (2019). Brand engagement without brand ownership: A case of non-brand owner community members. Journal of Product & Brand Management, 28(2): 216-230. https://doi.org/10.1108/JPBM-04-2018-1840
- [37] Repovienė, R. (2017). Role of content marketing in a value creation for customer context: theoretical analysis. International Journal on Global Business Management & Research, 6(2): 37.
- [38] Ceyhan, A. (2019). The impact of perception related social media marketing applications on consumers' brand loyalty and purchase intention. EMAJ: Emerging Markets Journal, 9(1): 88-100.

https://doi.org/10.5195/EMAJ.2019.173

- [39] Hapsari, R. (2018). Enhancing Brand Loyalty Through Online Brand Community: The Role of Value Creation Process, Brand Love, and Trust. KnE Social Sciences. https://doi.org/10.18502/kss.v3i10.3405
- [40] Algesheimer, R., Dholakia, U.M., Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. Journal of Marketing, 69(3): 19-34. https://doi.org/10.1509/jmkg.69.3.19.66363
- [41] Kim, S., Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. International Journal of Information Management, 33(2): 318-332. https://doi.org/10.1016/j.ijinfomgt.2012.11.006
- [42] Cheung, C.M., Chiu, P.Y., Lee, M.K. (2011). Online social networks: Why do students use facebook? Computers in Human Behavior, 27(4): 1337-1343. https://doi.org/10.1016/j.chb.2010.07.028
- [43] Shin, J.I., Chung, K.H., Oh, J.S., Lee, C.W. (2013). The effect of site quality on repurchase intention in Internet shopping through mediating variables: The case of university students in South Korea. International Journal of Information Management, 33(3): 453-463. https://doi.org/10.1016/j.ijinfomgt.2013.02.003