

## Association for Information Systems AIS Electronic Library (AISeL)

---

WHICEB 2017 Proceedings

Wuhan International Conference on e-Business

---

Summer 5-26-2017

# The Impact of Consumer-Company Micro Blog Interaction on Consumer Brand Loyalty

Yan Xing

School of Management, Wuhan Textile University, Wuhan 430073, China, [sunflower9721@126.com](mailto:sunflower9721@126.com)

Follow this and additional works at: <http://aisel.aisnet.org/whiceb2017>

---

### Recommended Citation

Xing, Yan, "The Impact of Consumer-Company Micro Blog Interaction on Consumer Brand Loyalty" (2017). *WHICEB 2017 Proceedings*. 10.

<http://aisel.aisnet.org/whiceb2017/10>

This material is brought to you by the Wuhan International Conference on e-Business at AIS Electronic Library (AISeL). It has been accepted for inclusion in WHICEB 2017 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# The Impact of Consumer-Company Micro Blog Interaction on Consumer Brand Loyalty

*Yan Xing* \*

School of Mangement, Wuhan Textile University, Wuhan 430073, China

**Abstract:** Micro blog has become an important platform of consumer-company interaction to enhance brand loyalty. A relational model is proposed to study the influence of company micro blog interaction on customer micro blog stickiness and brand loyalty, based on use and gratification theory, organization support theory and union participation theory. Results show that company interaction tactics include two forms: relational interaction and commercial interaction. Relational interaction positively influences consumers' perceived socioemotional support and perceived information support. Commercial interaction positively influence perceived information support. Perceived socioemotional support and information support are positively related to consumer micro blog stickiness, which is positively related to brand loyalty. In sum, relational interaction is more important in attracting sticky consumers and brand loyalty. Finally, some recommendations are presented for micro blog branding.

**Keywords:** micro blog, interaction tactics, socioemotional support, stickiness, brand loyalty

## 1. INTRODUCTION

Micro blog, a mainstream form of social network sites, is experiencing rapid progress in China and gaining popularity worldwide. As an instant and flexible communication method, micro blog has three main advantages (1) mobile application and 140 words limit facilitates ease of use and high interactivity of micro blog; (2) Micro blog allows strong and weak ties to coexist in users' micro blog main page by following others or being followed by others; (3) based on the feature of viral spreading, micro blog posts have the potential to reach thousands of people at an amazing speed.

According to the China Internet Network Information Center (CNNIC), by the end of 2016, the size of Chinese micro blog users reached 271 million. Now, micro blog has become an important platform of consumer-company interaction. Companies are incorporating the use of micro blog into their brand building, promotion, after sale service, public relation management and value co-creation, discussing diverse topics and communicating feelings with consumers in their micro blog main page. At the same time, for consumers, micro blog reduces the perceived psychological distance since they can aware and comment the activities and status of companies wherever they are. These consumer-company interaction messages are sometimes so powerful that they even reach the mainstream media and the general public. Through viral marketing, consumer-company micro blog interaction influences the effectiveness of micro blog brand building, promotion and public relation.

Despite of the boom of micro blog marketing in companies, the challenge for companies is how to use micro blog to the greatest benefit. In evaluating the effect of consumer-company interaction, most companies regard the number of followers as the most important indicator, some companies even buy followers to boost their popularity. However, these inactive followers only play limited role in brand building, promotion and value co-creation since they seldom forward or comment company micro blog messages.

Micro blog become popular in recent years. Few empirical studies have identified the main types of micro blog consumer-company interaction and their effect on consumers and thus cannot provide effective advices for companies. This paper combines co-creation theory and organization support theory to explore the influence of

---

\* Yan Xing. Email: sunflower9721@126.com

consumer-company micro blog interaction on consumers' micro blog stickiness. This study makes the following contributions: (1) identifying the main types of consumer-company micro blog interaction in the perspective of value co-creation, (2) introducing consumer micro blog stickiness as a mediator between consumer-company interaction and consumer loyalty, (3) testing the influence of consumer-company micro blog interaction on consumer brand loyalty. The results can provide references for companies to better utilize micro blog to attract consumers.

## **2. Theoretical background and the research model**

### **2.1. Consumer-company interaction**

Our study examines consumer-company interaction from an interaction content perspective which is governed by Sheth's (1976) buyer-seller interaction. Three types of interaction are identified: task-oriented, relation-oriented and self-oriented. Task-oriented interaction is purposeful, aiming at accomplishing a task with minimum cost effort and time. Relation-oriented means the goal of interaction is establishing a personal relationship. Self-oriented interaction is more concern about one's welfare, ignoring the feeling of others<sup>[1]</sup>. Similarly, other sales encounter researches agreed that consumer-company interaction consist of social and functional interaction<sup>[2-3]</sup>. In micro blog interaction, the content of consumer-company interaction includes three types: relational interaction, commercial interaction and prize activity.

Relational interaction intends and serves to promote the relationship between the interactants<sup>[4]</sup>. Micro blog consumer-company relational interaction includes two facets: knowledge provision and emotional interaction between company and their consumers. Knowledge provision means companies share views and ideas on general topics such as social trends, life tips, jokes, aphorism, focused social news etc. for discussion. Emotional interaction means companies respond to consumers' comments, expressing their affection and concern toward consumers.

Task-oriented interaction is instrumental. The aim of task-oriented interaction is promoting goods and services<sup>[1]</sup>. Task-oriented content in micro blog includes product recommendation, promotion message, announcements, strengths and competence of the companies, celebrity or hot events or activities that are related to companies, which are helpful for increasing consumers' knowledge about products and companies.

### **2.2. Consumer micro blog stickiness**

Consumer micro blog stickiness is the competence of a company to attract and keep customers in their micro blog website for the purpose of profitability. Number of followers is not a good indicators of stickiness, instead, website stickiness is measured by the willingness to return, prolong the duration of stay and participation in a website<sup>[5]</sup>. Customer micro blog stickiness is measured by consumers' micro blog loyalty and consumer participation in micro blog such as following companies' micro blog, forwarding or commenting micro blog messages.

In the drivers of website stickiness, extant researches study the determinants of stickiness mainly from the perspective of consumers' motivation of visiting a website and perceived value of a website<sup>[6]</sup>. Consumers' motivation of visiting a website include three types: task-related, experiential or meeting the unique needs of customers<sup>[5]</sup>. In the perceived value of a website, besides the website design factors, the content of a website is the most influential factors that affect website stickiness<sup>[6]</sup>. Thus, it is a good perspective to study the drivers of micro blog stickiness from the perspective of consumer-company interaction content.

### **2.3. Value co-creation**

With the development of internet and social media, consumers become "partial employees" of companies, interacting with companies in product design, service delivery and branding. Consumer-company interaction is a mutual learning process and becomes the locus of value co-creation<sup>[7-8]</sup>. Consumer-company interaction

increases company knowledge acquired from consumers and also facilitates consumer-company relationship building. If companies resources such as products, service, information, other resources and competences align with customers' needs, these resources turn into customer perceived value<sup>[9]</sup>.

According to use and gratifications theory, consumers actively choose and use the media to meet their needs or realize their specific objectives instead of using media passively<sup>[10]</sup>. For micro blog, companies express their liking towards consumers, reply consumers, discuss social hot spots with consumers and share valuable life philosophy with consumers. These kinds of relational interaction satisfy consumers' needs in being connected with companies and being a part of community, Company response toward consumer questions provides consumers information needed and makes consumers feel being helped by companies. Consumer-company micro blog relational interaction makes consumers perceive socioemotional support and informational support from companies. Thus, we suggest:

H1: Consumer-brand Relational interaction in micro blog is positively related to consumer perceived socioemotional support.

H2: Consumer-brand Relational interaction in micro blog is positively related to consumer perceived information support.

Task-oriented interaction in micro blog is information richness<sup>[11]</sup>. In micro blog, companies provide product and promotion information to consumers for their purchase decision. Product information decreases ambiguity for better decision. A survey shows that more than half consumers visit social network sites for learning new products and make purchase decision, thus this type of information is valuable for consumers. 51% consumers want to learn general information about companies, information about company strength, such as rewards, competence, favorable consumer feedback, is valuable for consumers<sup>[12]</sup>. Thus, we suggest:

H3: Consumer-brand task-oriented interaction in micro blog is positively related to consumer perceived information support.

#### 2.4. Organizational support theory

Organizational support theory is a well-known social psychology theory of human behavior. Perceived organizational support is socioemotional concern and economic reward employees receive from an organization<sup>[13]</sup>. Socioemotional support is the perception of being cared for, responded, helped, and being a member of a network. Socioemotional support has been used to predict human behavior such as organizational commitment, trust, and member participation. According to social exchange theory and reciprocity, If companies care about employees, such as praising employees, satisfying needs of employees, rewarding employees properly, employees will feel obligations to help the organization reach its goals<sup>[14]</sup>.

Analogous to organizational support to employees, consumers perceive socioemotional support from companies by consumer-company relational interaction such as liking, approval, concern, replying consumers etc. According to social exchange theory and reciprocity, consumers will respond favorably to these micro blog messages. Relational oriented interaction focuses on fostering a strong social bond between the company and consumers and has a positive effect on consumers' positive attitude and web site patronage intentions<sup>[15]</sup>. Based on organizational support theory, union participation theory puts forward that both socioemotional support and instrumentality are part of exchange between the organization and its members<sup>[14]</sup>. The instrumentality of micro blog interaction reflects in the information support, that is, information usefulness of micro blog. Analogue to socioemotional support, information support also has positive effect on consumer micro blog stickiness. Therefore, we suggest:

H4: Consumer perceived socioemotional support is positively related to consumer micro blog stickiness.

H5: Consumer perceived information support is positively related to consumer micro blog stickiness.

The deep involvement of consumers in brand micro-blog positively influences brand loyalty<sup>[5]</sup>. Micro blog stickiness is different from brand loyalty, since some consumers spend their time in micro blog for valuable information or interaction experience instead of purchasing goods or services. On the one hand, consumers' participation enhance their brand experience, including brand perception, brand affect and brand intellectual experience, enhance consumer knowledge and help solve the problem of consumers, and thus enhance the brand loyalty<sup>[5]</sup>. On the other hand, the deep involvement of consumers means that consumers spend time, energy and other sunk costs, which will transform into the consumers' brand commitment, and ultimately affect the brand loyalty of consumers<sup>[16]</sup>. Therefore, we suggest:

H6: Consumer micro blog stickiness is positively related to consumer brand loyalty.

According to the literature and the research hypotheses, this study proposes a research model to understand consumer-company micro blog interaction toward consumer brand loyalty based on value co-creation and organizational support theory. Fig.1 shows the research model.

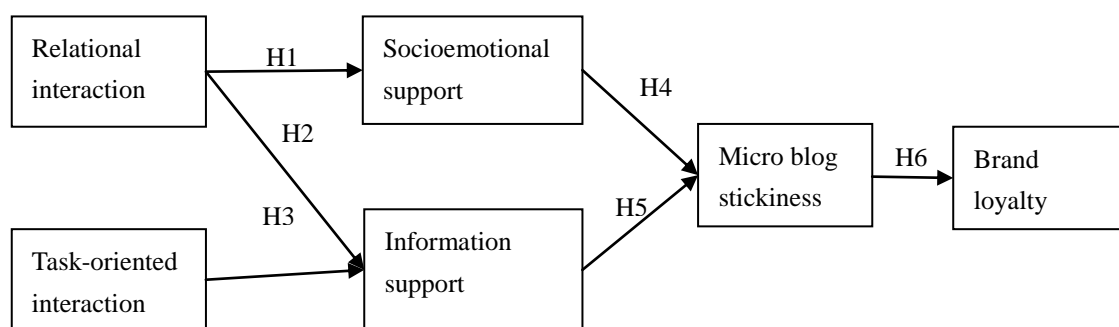


Figure 1 The research model of consumer brand loyalty

### 3. METHODOLOGY

#### 3.1 Variable measurement

This study employed the survey method. There are six variables, and all the variables were measured by four items. The survey instruments for relational interaction, task-oriented interaction, socioemotional support, information support, micro blog stickiness and brand loyalty came from the existing validated scales. Meanwhile, we developed the survey instruments for prize activity according to its definition.

Relational interaction and task-oriented interaction were measured using items from the scale of Williams & Spiro (1985)<sup>[17]</sup>. Socioemotional support was measured using items from Algesheimer, Dholakia & Herrmann (2005)<sup>[18]</sup>. Information support was measured using items from the scale of Mathwick et al. (2008)<sup>[19]</sup>. Micro blog stickiness was adapted from the scale of website loyalty by Lin (2007b)<sup>[20]</sup>. Brand loyalty was adapted from the scale of Oliver (1999)<sup>[21]</sup>.

A pre-test of the survey on micro blog users, professors, and scholars was conducted after completing the questionnaire design. Subsequently, we revised the formal questionnaire based on the respondent comments. The items were incorporated into a seven-point Likert scale, where 1 is “strongly disagree” and 7 is “strongly agree.”

#### 3.2 Data collection

We posted a survey in the biggest market research website in China, *www.sojump.com*. Online visitors were invited to fill out the survey. A total of 453 consumers in 28 provinces of China participated in the survey based on their micro blog interaction experience. We excluded 69 respondents because they had an excessive number of missing responses or answering time was less than reasonable time. In addition, most sociological research

methodologies recommended avoiding surveying children and teenagers, this rule resulted in the exclusion of an additional 7 complete surveys. Our final data set consisted of which 377 consumers or 85% were valid. Table 1 includes the demographics. The sample structure is in accordance with China Internet Network Information Center demographic structure .

Table 1 Sample Structure

Item		Number	Percent (%)	Item		Number	Percent (%)
Gender	Male	185	49.1	Age	18—25	115	30.5
	Female	192	50.9		26—30	174	46.1
Income	1001-2000RMB	71	18.8		31-40	67	17.8
	2001-3000RMB	76	20.2		Older than 40	21	5.6
	3001-5000RMB	103	27.3	Education	High school or below	18	4.8
	>5000RMB	97	25.7		Three-year college	62	16.4
	1001-2000RMB	30	8		Four-year college	273	70.8
					Graduate school or above	30	8

### 3.3 Data analyses

#### 3.3.1 Measurement model

A structural equation modeling technique called Partial Least Squares (PLS) was explored to test the theoretic model. This analytical technique is suited for predictive applications and theory building. The SmartPLS 3.0 software, which was developed by Professor Chin is used.

We adopted Cronbach  $\alpha$  coefficient, composite reliability (CRs) and the average variance extracted (AVE) as the testing standard in order to observe the reliability of the questionnaire. The Cronbach  $\alpha$  coefficient of each variable ranged from 0.841 to 0.907 (see Table 2), which was greater than the 0.7 threshold (Churchill & Peter, 1984), each CR was greater than the 0.7 threshold, and the average variance extracted (AVE) values of all constructs are greater than the 0.5 threshold<sup>[21]</sup>. and the factor loadings ranged from 0.758 to 0.911 (see Table 2) The results support the convergent validity of the measures.

Table 2. Results of Reliability and Convergent Validity Analysis

Construct	Factor Loading	Cronbach $\alpha$	CR	AVE
<b>Brand loyalty (BLOY)</b>		0.908	0.936	0.785
Intend to buy this brand	0.840			
Interested in this brand	0.901			
Like this brand best	0.912			
Prefer this brand	0.890			
<b>Micro blog stickiness (MBS)</b>		0.870	0.912	0.723

Keep on following this company's micro blog	0.853			
Keep on forwarding the message of this micro blog	0.911			
Keep on commenting the message of this micro blog	0.864			
Feel imperfect if not seeing this company's micro blog	0.767			
<b>Socioemotional support (SES)</b>		0.859	0.905	0.704
The topic is related to my needs and interest	0.879			
The content arises my sympathetic reaction	0.880			
Has a good feedback on my comments	0.834			
Message in this micro blog is important to me	0.758			
<b>Information support (INS)</b>		0.887	0.922	0.746
There is abundant information in this micro blog	0.862			
The information in this micro blog is valuable	0.896			
The information of micro blog is important for my decision	0.851			
The information in this micro blog has special value	0.846			
<b>Relational interaction (REI)</b>		0.841	0.893	0.677
This company often discuss hotspot with consumers	0.797			
This company often discuss life tips and aphorism	0.797			
This company often respond to consumers' comments	0.841			
This company often comment consumers' micro blog	0.855			
<b>Commercial interaction (COI)</b>		0.874	0.905	0.704
This company often recommend new products in micro blog	0.863			
This company often show strengths in micro blog	0.843			
This company often show its commercial activities	0.885			
This company often relate to celebrities or famous events.	0.815			

Lastly, we used the test offered by Fornell & Larcker (1981) — the most stringent test — to test the discriminant validity<sup>[22]</sup>. For all possible pairs of constructs, we compared the correlation value between the two latent constructs with the square root of the AVE of each construct. None of the correlation values exceeded the square root of AVE (see Table 3), indicating strong support on the discriminant validity for all constructs in our study. In summary, our results on reliability, convergent validity, and discriminant validity showed the applicability of the structural model.

**Table 3 Results of discriminant validity analysis**

	BLOY	MBS	SES	INS	SOI	COI
BLOY	<b>0.886</b>					
MBS	0.507	<b>0.850</b>				
SES	0.665	0.811	<b>0.841</b>			
INS	0.629	0.789	0.772	<b>0.864</b>		
SOI	0.620	0.690	0.693	0.711	<b>0.827</b>	
COI	0.509	0.587	0.499	0.628	0.656	<b>0.852</b>

Note: The bold data on the diagonal is the square root of the AVE of each variable, and the other data is the correlation coefficient between the variables

### 3.4 Hypothesis testing

As the measurement model exhibits satisfactory properties, we conducted structural model analysis to test our hypotheses by using SmartPLS3.1. The results are shown in Figure 2.

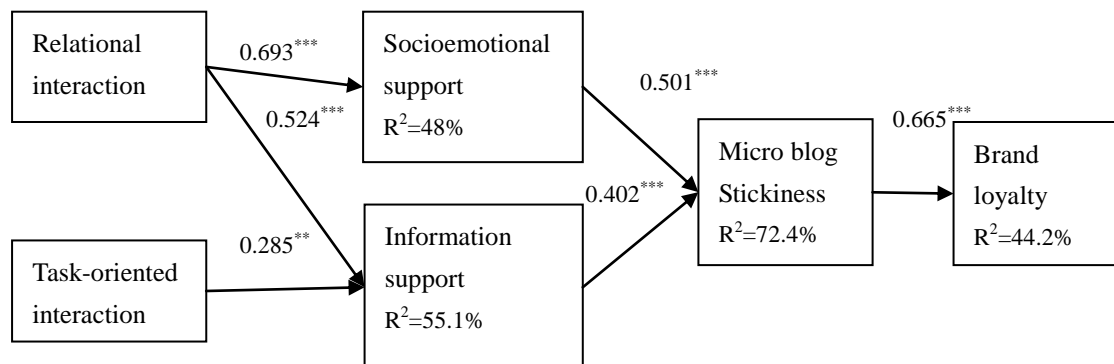


Figure 1 PLS analysis of consumer brand loyalty research

The results show that all of the standardization path coefficients are statistically significant ( $p < 0.05$ ). The  $R^2$  of perceived socioemotional support is a high 0.48, relational interaction and task-oriented interaction explain 55.1% of the variance of information support, socioemotional support and information support explain 72.4% of the variance of micro blog stickiness. Micro blog stickiness explain 44.2% of brand loyalty.

All the hypotheses were supported. Relational interaction has a positive effect on perceived socioemotional support ( $\gamma = 0.693$ ,  $p < 0.001$ ), in support of H1, it also leads to high perceived information support ( $\gamma = 0.524$ ,  $p < 0.001$ ), in support of H2. In H3, we propose that task-oriented interaction is positively associated with perceived information support, and the results support these claims ( $\gamma = 0.285$ ,  $p < 0.01$ ). Socioemotional support and information support relates positively and significantly to micro blog stickiness ( $\gamma = 0.501$ ,  $p < .001$ ;  $\gamma = 0.402$ ,  $p < .001$ ), in support H4 and H5. Finally, the path from micro blog stickiness to brand loyalty is positive and significant ( $\gamma = 0.665$ ,  $p < .001$ ), we also find support for H6.

## 4. Conclusion and discussion

### 4.1 Conclusion

This study investigates the effects of consumer company micro blog interaction on consumer brand loyalty through perceived socioemotional support and information support and micro blog stickiness. Based on the former studies and brainstorm meetings, we classified consumer-company micro blog interaction into two types: relational interaction and task-oriented interaction, then, we developed and tested a framework that examined the determinants of consumer micro blog stickiness and brand loyalty. This enabled us to gain a deeper understanding of micro blog marketing, a new social media marketing platform that can help companies better understand how they can attract new consumers and maintain current customers.

We showed that relational interaction had a strong significant impact on socioemotional support, information support and consumer micro blog stickiness among the two interaction types. This finding extends research on customer relationships and research of online consumer-company interaction<sup>[16,19]</sup>. The results showed that relational interaction was critical for consumer brand loyalty and companies should provide valuable relation-oriented knowledge and respond proactively to consumers, in turn, relational interaction should help consumers follow, forward or actively comment companies' micro blog and enhance companies' ability to keep consumers.



Results also showed that task-oriented interaction had a positive impact on brand loyalty, in line with previous research<sup>[3]</sup>. However, the type is limited compared with relational interaction. The possible explanation is that micro blog provides social network service in nature and consumers pursue keeping a good relationship with humanlike companies in micro blog environment. However, task-oriented interaction is promotion-oriented, only attracting task-oriented consumers who regard micro blog as an information source.

#### **4.2 Research implications**

Our findings contribute to consumer-company interactions by (1) incorporating consumer-company interaction into a value co-creation process, (2) confirming consumer micro blog stickiness and brand loyalty as a criteria for evaluating the effect of micro blog marketing, and (3) confirming the impact of consumer-company interaction on consumer micro blog stickiness.

We show that micro blog should be regarded as a new customer relationship management platform instead of a new channel of network advertisement release since relational interaction plays an essential role in keeping customers. Our results are consistent with relationship marketing literature and consumer-company interaction literature<sup>[3,9]</sup>.

We provide practical tools and evaluating criteria of micro blog marketing. Our results show that among these tools, relational interaction is the most effective, micro blog stickiness and brand loyalty are valuable criterion of evaluating micro blog marketing, extending social media marketing research<sup>[23]</sup>.

#### **4.3 Managerial implications**

Our findings suggest that company should offer trustworthy information tailored to the consumer's individual needs and respond proactively to consumers in micro blog environment. As our findings show, relational interaction is an important element within a company's social marketing and communication strategy in keeping customers.

Our research has several implications for micro blog marketing practice. First, marketers need establish specialized team to analyze the needs and expectations of consumers so that companies can create high-quality micro blog content. According to our findings, although advertisement release is important, it is more important to express internal spirit and values of the company, such as fashion, responsibility, sense of justice, excellence, which should be compatible with that of consumers. The sense of approval and perceived value is an important driver of micro blog loyalty and attachment.

Second, companies should perfect their consumer micro blog feedback mechanism. Micro blog provide a platform of listening to consumers. However, some of problems are tough for micro blog editors to solve. The coordination of marketing department, public relations department, R&D, customer service department etc. is the guarantee of quick response in micro blog. Big companies should open multi-account micro blog according to functional departments or product types so that editors can respond adequately to diverse problems encountered.

#### **ACKNOWLEDGEMENT**

This research was supported by the humanities and social science project of the Ministry of Education under grant 15YJC630151, ; Hubei Provincial Department of Education Humanities and Social Sciences project under grant 15q094; Wuhan Textile University project under grant 153060.

#### **REFERENCES**

- [1] Sheth, J. N. (1976). Buyer-seller interaction A conceptual framework. *Advances in Consumer Research*, Beverlee B. Anderson, Cincinnati, Ohio : Association for Consumer Research(3), 382-386.
- [2] Moschis, G. P. (1985). The role of family communication in consumer socialization of children and adolescents. *Journal*

- of Consumer Research*, 11(4), 898-913.
- [3] Köhler, C. F., Rohm, A. J., de Ruyter, K., & Wetzels, M. (2011). Return on interactivity: The impact of online agents on newcomer adjustment. *Journal of Marketing*, 75(2), 93-108.
- [4] Soldow, G. F., & Thomas, G. P. (1984). Relational communication: Form versus content in the sales interaction. *Journal of Marketing*, 48(1), 84-93.
- [5] Holland, J., & Baker, S. M. (2001). Customer participation in creating site brand loyalty. *Journal of Interactive Marketing*, 15(4), 34-45.
- [6] Lin, J. C. (2007a). Online stickiness: Its antecedents and effect on purchasing intention. *Behaviour & Information Technology*, 26(6), 507-516.
- [7] Prahalad, C. K., & Ramaswamy, V. (2004a). Co - creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14.
- [8] Prahalad, C. K., & Ramaswamy, V. (2004b). Co-creating unique value with customers. *Strategy & Leadership*, 32(3), 4-9.
- [9] Grönroos, C. (1986). The relationship marketing process: Communication, interaction, dialogue, value. *Journal of Business & Industrial Marketing*, 19(2), 99-113.
- [10] Katz E, Blumler J G, Gurevitch M.(1973) Uses and gratifications research[J]. *The Public Opinion Quarterly*, 37(4):509-523.
- [11] Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of Retailing*, 83(3), 359-370.
- [12] Spenner, P., & Freeman, K. (2012). To keep your customers, keep it simple. *Harvard Business Review*, 90(5), 108-114.
- [13] Eisenberger, R., Armeli, S., Rexwinkel, B., Lynch, P. D., & Rhoades, L. (2001). Reciprocation of perceived organizational support. *Journal of Applied Psychology*, 86(1), 42-51.
- [14] Tetrick, L. E., Shore, L. M., McClurg, L. N., & Vandenberg, R. J. (2007). A model of union participation: The impact of perceived union support, union instrumentality, and union loyalty. *Journal of Applied Psychology*, 92(3), 820-828.
- [15] Holzwarth, M., Janiszewski, C., & Neumann, M. M. (2006). The influence of avatar on online consumer shopping behavior. *Journal of Marketing*, 70(4), 19-36.
- [16] Van Dolen, W. M., Dabholkar, P. A., & de Ruyter, K. (2007). Satisfaction with online commercial group chat: The influence of perceived technology attributes, chat group characteristics, and advisor communication style. *Journal of Retailing*, 83(3), 339-358.
- [17] Williams, K. C., & Spiro, R. L. (1985). Communication style in the salesperson-customer dyad. *Journal of Market Research*, 22(4), 434-442.
- [18] 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.
- [19] Mathwick, C., Wiertz, C., & de Ruyter, K. (2008). Social capital production in a virtual P3 community. *Journal of Consumer Research*, 34(6), 832-849.
- [20] Lin, J. C. (2007b). Online stickiness its antecedents and effect on purchasing intention. *Behaviour & Information Technology*, 26(6), 507-516.
- [21] Oliver, R. L. (1999). Whence consumer loyalty. *Journal of Marketing*, 63(Fundamental Issues and Directions for Marketing), 33-44
- [22] Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement errors. *Journal of Marketing Research*, 18(1), 39-50
- [23] Hoffman, D. L., & Fodor, M. (2010). Can you measure ROI of your social media marketing. *MIT Sloan Management Review*, 52(1), 41-49.